



ICMAI

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

भारतीय लागत लेखाकार संस्थान

Statutory Body under an Act of Parliament
(Under the jurisdiction of Ministry of Corporate Affairs)

Guidance Note

on

Cost Control Strategies in the Banking Sector

Banking, Financial Services & Insurance Board

THE INSTITUTE OF COST ACCOUNTANTS OF INDIA

(Statutory Body under an Act of Parliament)

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Mission Statement

"The CMA professionals would ethically drive enterprise globally by creating value to stakeholders in the socio-economic context through competencies drawn from the integration of strategy, management and accounting."



Vision Statement

"The Institute of Cost Accountants of India would be the preferred source of resources and professionals for the financial leadership of enterprise globally."

About The Institute

The Institute of Cost Accountants of India is a statutory body set up under an Act of Parliament in the year 1959. The Institute as a part of its obligation, regulates the profession of Cost and Management Accountancy, enrolls students for its courses, provides coaching facilities to the students, organises professional development programmes for the members and undertakes research programmes in the field of Cost and Management Accountancy. The Institute pursues the vision of cost competitiveness, cost management, efficient use of resources and structured approach to cost accounting as the key drivers of the profession. In today's world, the profession of conventional accounting and auditing has taken a back seat and cost and management accountants are increasingly contributing toward the management of scarce resources and apply strategic decisions. This has opened up further scope and tremendous opportunities for cost accountants in India and abroad.

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Message from President, ICMAI



The Institute of Cost Accountants of India (ICMAI) is pleased to present the Guidance Note on Cost Control Strategies in the Banking Sector, a timely, practical and forward-looking resource developed by the Banking, Financial Services & Insurance (BFSI) Board of the Institute to strengthen cost discipline and enhance profitability across India's banking sector.

In today's dynamic Indian banking environment, institutions are navigating digital transformation, evolving regulatory frameworks, and emerging risks. While investments in technology, cybersecurity and compliance remain essential to sustain resilience and customer trust. They must be balanced with disciplined cost management and strategic resource allocation. This Guidance Note offers practical, standards-based methodologies to help banks achieve that balance through process centralisation, hub-based transaction processing, calibrated branch rationalisation and rigorous third-party spend control.

The case studies and recommendations presented herein spanning activity-based costing, driver-based forecasting and efficiency levers are designed to deliver measurable benefits in margin improvement, capital efficiency and operational robustness. The document serves as a value-adding reference for bankers, regulators and advisors committed to building a sustainable, competitive and well-governed Indian banking ecosystem.

This publication stands as a testament to the CMA profession's enduring responsibility and proactive contribution to national financial strengthening, offering practical, research-backed and forward-looking solutions to support efficiency, governance excellence and sustainable growth across the Indian banking landscape.

Sincere appreciation is placed on record to the BFSI Board for their thoughtful leadership and dedicated efforts in bringing this publication to fruition. Their considered guidance, domain expertise and steadfast commitment have ensured that the Guidance Note addresses the evolving needs of the Indian banking system while upholding the highest professional standards of the Institute.

It is expected that this Guidance Note will serve as a trusted and widely referred resource for all stakeholders working toward a more robust, competitive and transparent Indian banking sector.

Jai Hind!

CMA TCA Srinivasa Prasad
President
The Institute of Cost Accountants of India

Message from Vice-President, ICMAI



The evolving Indian banking ecosystem—encompassing public sector banks, private sector banks, small finance banks, payments banks, cooperative banks, and rapidly expanding fintech-led institutions—demands a renewed emphasis on strategic cost management and financial efficiency. In this dynamic environment, the role of Cost Management Accountants (CMAs) has become increasingly pivotal in supporting banks as they navigate expanding operational requirements, heightened regulatory expectations, technological transformation, and intensifying market competition.

Across the industry, rising operating expenditures, substantial investments in digital infrastructure, and the need for continuous innovation place pressure on margins and long-term profitability. As financial institutions work to strengthen asset quality, enhance customer experience, and reinforce risk governance, structured cost management offers a powerful lever to sustain competitiveness and operational resilience.

CMAs bring specialised expertise in translating financial data into actionable insights, enabling banks to allocate resources effectively and manage costs with precision. The application of Activity-Based Costing, Cost-Volume-Profit analysis, and advanced financial modelling equips banking leaders with clear visibility into cost drivers, product-level economics, and efficiency opportunities. These tools empower institutions to refine pricing strategies, streamline processes, optimise delivery channels, and ensure that investments—especially in technology, cybersecurity, and service innovation—yield maximum value.

By fostering a culture of disciplined financial management, CMAs contribute meaningfully to enhancing productivity, strengthening governance frameworks, and supporting sustainable profitability across the entire Indian banking landscape. Their role remains essential in guiding institutions toward operational excellence while advancing the broader objectives of India's financial sector.

I extend my sincere appreciation to the Banking, Financial Services & Insurance Board for its dedicated efforts in bringing this valuable publication to fruition, which will meaningfully benefit both the CMA profession and the wider banking community.

We hope that this publication would be immensely helpful to all the concerned stakeholders and information seekers.

CMA Neeraj Dhananjay Joshi

Vice President
The Institute of Cost Accountants of India

Preface



It gives me great pleasure to present this authoritative handbook — Guidance Note on Cost Control Strategies in the Banking Sector — a focused, practitioner-ready compendium that addresses one of the most pressing priorities for banks today: strengthening efficiency while sustaining compliance and growth. This volume distils sectoral insights, verified data and practical tools to help banking leaders convert analytical rigour into measurable operational improvement.

Banks operate in an environment of rising compliance costs, rapid digital transformation and intense competition. Against this backdrop, disciplined cost management is not merely an exercise in savings; it is a strategic lever for profitability, resilience and competitive advantage. This handbook combines analytical clarity with practical frameworks, such as activity-based costing, cost-to-income benchmarking, treasury optimization, ALM levers, and branch rationalization, along with case studies and toolkits that practitioners can use immediately.

A special strength of this volume is its emphasis on operational realism. The chapters on ATM and cash logistics, locker operations, outsourcing governance, and NPA resolution are grounded in field visits and institutional experience. The guidance on digital enablement, productivity improvement and energy optimisation is forward-looking and aligned with how banks must reconfigure their cost base for the next decade. Equally important are the sections that outline governance mechanisms — cost audit, internal controls and reporting templates — which ensure that cost discipline is sustainable and auditable.

Cost and Management Accountants (CMAs) are central to this agenda. Their expertise in costing, controls, and financial analysis positions them uniquely to partner with senior management in embedding a cost culture across functions. This handbook provides CMAs with the analytical vocabulary and practical checklists required to lead cost transformation initiatives and to align operational efficiency with regulatory and strategic objectives.

I place on record my sincere appreciation to the author, CMA (Dr.) P. Siva Rama Prasad, whose deep domain expertise, practical experience and analytical rigour have materially enriched this handbook. His clear, practice-oriented insights demonstrate how disciplined costing and managerial analysis can strengthen transparency, pricing discipline and decision-making across banking operations.

I also place on record my sincere gratitude to Shri Dinesh Kumar Khara, Former Chairperson, State Bank of India; Ms. Padmaja Chandru, Former MD & CEO, Indian Bank; CMA Mohan Tanksale (Former Chairman and Managing Director (CMD), Former Chief Executive, IBA, CBI, Mumbai) and CMA Dinesh Chander Bajaj, Chief Adviser (Cost) (Retd.), Ministry of Finance and President, The Institute of Cost Accountants of India (2000–01), for their insightful review and constructive guidance, which have significantly enhanced the depth, rigor, and practical relevance of this publication. I further acknowledge CMA (Dr.) Kenchappa Balu, Former CGM RBI, for his visionary counsel and strategic perspective, and CMA Kishore Bhatia, Practising CMA, for



sharing his immense knowledge and articulating, with clarity and foresight, the expanding scope of CMAs in cost control strategies in Banks. Their collective contributions have meaningfully strengthened the quality and applicability of this volume.

I am sure that senior bankers, operational leaders, treasury and ALM experts, auditors, regulators, consultants, and CMAs would find this guidance paper to be a useful resource. More significantly, it will facilitate data-driven, well-informed decisions that improve resilience, accountability, and efficiency throughout the financial sector. I trust that this handbook will be utilized extensively as a guide and a roadmap, helping institutions to better control expenses, enhance the efficacy of their services, and make the banking industry more resilient and competitive.

We dedicate this Guidance Note to the ever cherishing memory of the doyen of our profession CMA N K Bose, Former President of the Institute in his birth centenary.

With best wishes,

CMA Chittaranjan Chattopadhyay

Chairman, Banking, Financial Services & Insurance Board

Foreword



Rising operating costs, rapid digitalization, mounting competition are redefining Indian Banking Sector. Financial sector in general and Banking sector in particular is undergoing profound transformation driven by Regulatory changes and paradigm shift in the eco system.

To effectively meet the competition and to live up to expectation of Regulators and Investors, Cost Control has emerged not merely as an administrative function but as a strategic cornerstone of financial resilience and sustainable profitability. This Book on Cost Control Strategies in the Banking Sector has been prepared to offer a comprehensive, data-driven, and practitioner-oriented framework for strengthening cost management across banks in India.

To effectively practice cost control and to ensure right pricing of the products and services, due emphasis is required to be accorded to the right identification of cost and to effectively control the same. There is a felt need to clearly identify the Cost Centres and right mapping of these Cost centres in the organisational Structure.

Various Chapters in this Book, collectively underscore the pivotal role of structured Costing Systems, process re-engineering, and technology-enabled efficiencies in improving operational outcomes. Beginning with an assessment of the Role and Performance of Banks within the Indian Economy, the Book highlights recent trends in Public Sector Banks during FY 2021– 2025 and emphasizes the importance of Return on Assets, Net Interest Margin and Cost to Income Ratio as critical measures of profitability. An analysis of Private Sector Banks further illustrates how modern business models and productivity-focused strategies can significantly elevate performance outcomes. Quest for adoption of Artificial Intelligence (AI) essentially emanates from the need for conserving the cost of operation and enhancing productivity

Subsequent chapters delve into the architecture of costing policies, the strategic value of Cost Audits, and the importance of Budgetary Control Systems for transparency and efficiency. The document also examines the Cost-to-Income Ratio as a primary indicator of Operational Efficiency and applies tools such as Cost-Volume-Profit analysis to aid managerial decision making. Several sections draw upon real-world data, field interactions with bank officials, and insights from practicing Cost and Management Accountants to contextualize practical challenges and opportunities.

A distinguishing feature of this Book is its granular examination of major operating cost components including Rent, Taxes, Electricity, and other “Third costs” and its articulation of actionable strategies such as workspace optimization, digital substitution, energy-efficiency measures, and branch rationalization.

Banking sector leverage vast and varied distribution network and also offers wide range of products and services. Profitability of each of the product / services differs. Likewise different distribution channels have varied cost structures. It is incumbent for Banks to consciously marry the product and distribution channel for achieving the optimum outcome.



The Book further explores advanced themes such as Cost-Benefit Analysis for Delivery Channels, outsourcing models, third-party product evaluation, ATM efficiency, Rural Financial Inclusion initiatives like KCC-ATM integration, and automated Income-leakage under modern CBS Environments.

Collectively, the insights presented aim to equip Banking Professionals, Policymakers, Auditors, and financial managers with a robust reference framework for improving Cost Discipline and strengthening Institutional competitiveness. By integrating quantitative analysis, international practices, and field-based observations, this book aspires to contribute meaningfully to ongoing efforts to Modernize Cost Management in Indian Banking and to support Institutions in achieving long-term operational excellence.

*Shri Dinesh Khara
Former Chairperson of the State Bank of India*

*Station: Mumbai
Date: December 27, 2025*

Foreword



The Indian banking sector today is at a critical juncture in its journey, with rapid digital transformation, rising customer expectations, increasing competition and continuously evolving regulations rendering both revenue and costs highly volatile. While banks have made remarkable progress in technology adoption, risk management, and financial inclusion, the challenge of controlling operational costs remains central to sustaining profitability and long-term stability.

Against this backdrop, cost control or more aptly, cost optimization has become a strategic imperative, influencing every aspect of banking operations from branch management and treasury decisions to outsourcing, and digital delivery channels. There is a felt need for a compendium on the realistic costing aspects or pricing of services in the banking space. Every bank has its own internal guidance notes on maximization of returns while minimising the cost. Are we able to get the full return on our spend? This question is always agitating bankers' minds.

This Guidance Note on Cost Control Strategies in the Banking Sector has been conceptualized and developed to bridge this gap. Drawing upon extensive data from the industry, and its own expertise, the ICAI offers a comprehensive, structured, and practical framework to understand, evaluate, and manage the cost architecture of modern banking. This enables us with a pricing tool for various services too which is a maze even for veterans.

The book gives a comprehensive guidance on all major heads of operational expenses- audit and compliance costs, manpower and training expenditure, technology investments, electricity and rental outlays, ATM and cash management costs, treasury and capital management strategies, cost implications in NPA resolution etc. Special emphasis has been placed on contemporary themes such as automation, AI-enabled monitoring, centralized processing, outsourcing governance, and the evolving role of CMAs in strengthening cost governance.

Efficient Cost Management ensures that Banks remain competitive, technologically agile, and customer-centric. It also underscores the importance of structured Costing Policies, Cost Audits, Activity-Based Costing (ABC), ALM-driven Cost Control, and the possible future role of Chief Cost Controllers in the Indian banking ecosystem.

I find this Guidance Note an essential aide de memoir to seasoned bankers and Cost Professionals and also to start ups in the Fintech space, research scholars and students of finance etc. Its insights are crafted not just to inform, but to encourage thoughtful implementation that strengthens institutional resilience and delivers value to every stakeholder.

With great optimism, I present this Guidance Note to the Banking Fraternity, trusting it will inspire meaningful cost transformation across the sector.

Padmaja Chunduru

Cost Control Strategies in Banks, Former MD & CEO of Indian Bank

Date: 18th Dec 2025

Book Review

Guidance Note on Cost Control Strategies in the Banking Sector

The Guidance Note on Cost Control Strategies in the Banking Sector, published by The Institute of Cost Accountants of India (ICMAI), is a timely and authoritative contribution to the evolving discourse on cost efficiency and operational excellence in Indian banking. At a time when banks are navigating rising operational expenses, competitive pressures, and the urgent need for sustainable profitability, this publication offers a comprehensive roadmap to embed cost discipline across all layers of banking operations.

A notable strength of the publication is its clear articulation of why Indian banks must urgently adopt structured costing frameworks and institute cost audit practices—methodologies long established in manufacturing and services but insufficiently leveraged in the financial sector. The Guidance Note argues convincingly that cost accountants must be brought into the mainstream of bank Management, not only at corporate offices but also at zonal and regional levels, supported by a dedicated Cost Control Department headed by a 'Chief Controller of Cost'. This call for institutional reform is grounded in detailed analytical chapters that demonstrate precisely where and how inefficiencies currently arise.

Across 27 well-organized chapters, the book covers a broad spectrum of cost components ranging from traditional operating expenses like rent, electricity, staff Productivity, and audit expenses to emerging considerations such as digital channels, energy-as-a-service models, outsourcing, and FinTech-enabled delivery systems. Each chapter combines conceptual clarity with practical insights. For instance, the analysis of the Cost-to-Income Ratio (CIR) integrates regulatory considerations with real-world data; sections on cost audits, cost-benefit analysis, and treasury systems provide actionable guidance; and discussions on ATMs, rural banking, third-party products, and call centers reflect a deep understanding of sectoral shifts.

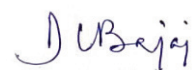
Particularly noteworthy are the chapters that place cost control within strategic frameworks, such as Asset-Liability Management (ALM), treasury risk management, mergers, automation, and Customer Value Proposition (CVP) analysis. The book successfully moves beyond mere cost-cutting to promote a culture of efficiency, transparency, and data-driven decision-making. It successfully demonstrates how disciplined costing practices can improve profitability, enhance customer service, and strengthen competitive positioning.

The concluding chapters underline the indispensable role of cost accountants in modern banking. By highlighting tools such as Activity-Based Costing (ABC) and emphasizing the need for real-time analytics and continuous monitoring, the Guidance Note positions Cost Management Accountants (CMAs) as key contributors to banking reforms and financial stability.

Overall, this publication is both timely and visionary. It fills a longstanding gap by providing banks, policymakers, and professionals with a structured framework for cost control, an area where Indian banks currently lag behind global best practices. The writing is lucid, the analysis is rigorous, and the recommendations are practical.

The Guidance Note is not merely a reference manual; it is a call to action for banks to embrace cost consciousness as a strategic imperative.

This book is highly recommended for banking professionals, policymakers, regulators, cost accountants, and scholars seeking to understand or implement cost optimization strategies within the Indian banking ecosystem.

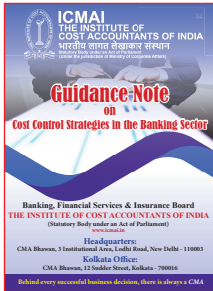


CMA Dinesh Chander Bajaj
Chief Adviser (Cost) (Retd.) Ministry of Finance
President, The Institute of Cost Accountants of India (2000-01)

New Delhi
Dated 6th December 2025

***Congratulations from him to BFSI Board of ICAI
to bring out the publication***

Book Review



Title of the Book: ‘Guidance Note on Cost Control Strategies in the Banking Sector’.

Published by: The Institute of Cost Accountants of India, Kolkata.

The Guidance Note on Cost Control Strategies in the Banking Sector presents a timely and comprehensive blueprint for strengthening cost management practices across Indian Banks. At a time when the Banking Industry faces mounting operating costs, technological disruption, and regulatory intensity, this publication provides a structured, evidence-based, and practitioner-oriented framework to help Banks improve operational efficiency and enhance profitability.

The Volume begins by reaffirming the pivotal Role of Banks in India's Economic Development, supported by performance insights of Public Sector Banks and the growing importance of Return on Assets (RoA) as a Profitability Benchmark. Through Sectoral Comparisons, it highlights how New-generation Private Sector Banks consistently outperform legacy institutions due to efficiency-led Business Models, emphasizing the need for robust Costing Systems and dedicated Costing Departments in all Banks.

A key contribution of the Guidance Note is its Systematic Coverage of Costing concepts relevant to Modern Banking. Chapters on Costing Policy, Cost Audits, and Cost-to-Income Ratio (CIR) provide practical methodologies for identifying inefficiencies and strengthening margin discipline. The note underscores how Digital Transformation, process automation, and data-driven decision-making can be harnessed to reduce avoidable expenditure.

Operational Areas that significantly influence banking costs are examined with remarkable depth. The discussion on Schedule-16 Operating Expenses often referred to as “Third Costs” offers actionable insights into managing Rent, Electricity, Taxes, and Administrative Overheads. The Chapters on energy efficiency, branch rationalization, centralized locker management, audit cost rationalization, ATM viability, and cash management introduce innovative strategies supported by real-world observations, cost-benefit assessments, and international benchmarks.

The Guidance Note also focuses on emerging Cost Drivers such as Call Centre Expenditure, Advertising Outlays, and Costs Associated with Selling Third-party Products. It advocates a shift toward AI-driven Customer Support, data-backed Marketing, and more rigorous Cost-benefit Analysis for outsourced activities. Particularly noteworthy is the suggestion for Banks to explore bank-owned Outsourcing Subsidiaries, an approach aligned with Global Best Practices.

One of the Strengths of this publication lies in its Integration of Practical field insights gathered from Bank Officials, Branch Visits, CMAs, and Industry Reports. This improves the applicability of the frameworks proposed and ensures that the recommendations are grounded in real operational environments rather than theoretical constructs. The emphasis on Cost-Volume-Profit analysis, Energy



Audits, Locker Centralization Models, KCC-ATM Integration, and Income Leakage Automation further Strengthens the Document's Relevance.

Overall, the 'Guidance Note on Cost Control Strategies in the Banking Sector' stands out as a valuable reference for Banking Professionals, Policymakers, and Cost & Management Accountants. Its holistic treatment of Cost Control, spanning financial, operational, technological, and strategic dimensions makes it an essential contribution to the evolving discourse on Banking Efficiency. By promoting structured Costing Systems and process-driven management, this publication provides a forward-looking roadmap for Indian Banks aiming to achieve Sustainable Profitability and Operational Excellence.

Mohan Tanksale

Former Chairman and Managing Director (CMD)

Station: Mumbai

Former Chief Executive, IBA

Date: 4th December, 2025

Central Bank of India, Mumbai



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Executive Summary

A Summary of the “Guidance Note on Cost Control Strategies in the Banking Sector.”

The Banking Sector is the backbone of the Indian Economy, facilitating economic growth, financial stability, and public trust. As operating costs rise year after year, efficient cost control has become essential for strengthening profitability, improving service quality, and enhancing competitiveness. This Guidance Note on Cost Control Strategies in the Banking Sector provides an integrated framework for banks to identify, evaluate, manage, and optimize costs across every major operational dimension.

The book begins by highlighting the performance trends of Public Sector Banks (PSBs) and Private Sector Banks, emphasizing the significance of Return on Assets (RoA), Productivity Metrics, Asset Quality Indicators, and the urgent need for structured Costing Departments. It underscores how newer Private Sector Banks consistently outperform Older Ones on Several efficiency parameters, making a strong case for adopting Modern Costing Systems and Process-driven efficiency improvements.

A major Section is dedicated to the development of a Robust Costing Policy, detailing how Cost Control must be strategically aligned with digital transformation, automation, process re-engineering, and capital planning. The importance of the Cost-to-Income Ratio (CIR) is highlighted as a critical measure of operational efficiency. The Guidance Note presents CIR trends for PSBs, examines the composition of operating expenses under Schedule 16, and offers strategies, supported by CVP analysis to reduce CIR without compromising Customer Service or business growth.

A Comprehensive Chapter on Cost Audit outlines how independent cost audits strengthen transparency, ensure fair service pricing, and improve internal accountability. The Book explains the role of Cost Accountants, the need for a dedicated Costing Department, and the use of Budgetary Controls to monitor Cost Behaviour across Branches and Departments like Central Processing Centres, Regional Office, Zonal Office, Head Office etc.

To support evidence-based decision-making, the Guidance Note includes detailed methodologies for Cost-Benefit Analysis (CBA). It provides practical CBAs for alternative delivery channels versus branches, outsourcing activities,

third-party product distribution, and even centralized locker operations, all of which help banks prioritize high-value initiatives while reducing wasteful expenditure.

The book dedicates multiple chapters to major cost categories under “Third Cost,” such as electricity, rentals, and infrastructure expenses. It explains how banks can minimize occupancy and energy expenses by optimizing branch locations, adopting hybrid work environments, shifting to smaller digital-enabled branches, implementing energy audits, and leveraging renewable energy sources. Real-life cases, such as ICICI Bank’s successful locker centralization model, illustrate how operational restructuring can reduce cost leakages and improve profitability.

Another focus area is Cash Management, including ordering and carrying costs of Cash at Branches and ATMs. The Guidance Note suggests optimum Cash-holding Strategies, forecasting tools, and effective ATM deployment, especially in Rural Areas where ATM-linked KCC and SHG withdrawals enhance Financial Inclusion at lower per-transaction cost.

Operational Cost domains such as Audit Expenses, Call Centre operations, training costs, advertising, outsourcing, and third-party product sales are analysed in depth. For each, the book provides cost-control methods, CBA frameworks, and specific roles for Cost Accountants in enhancing efficiency. The shift toward AI and ML-based continuous monitoring systems is also emphasized, particularly in income leakage audits, where automation significantly reduces manual effort and recurring costs.

Strategic Cost Drivers such as NPA Resolution, Treasury Operations, Asset-Liability Management (ALM), and Cost of Capital are critically examined. The Guidance Note discusses how improved ALM Analytics, Real-time Treasury Systems, derivative-based interest-cost management, efficient refinance utilization, and prudent capital structuring help banks lower financial costs and strengthen profitability. It also explains the relative cost-effectiveness of NPA recovery mechanisms such as SARFAESI, DRT, IBC, and the use of Business Correspondents and DRAs.

The book also examines Cost Efficiencies arising from Mergers and Acquisitions, including Economies of Scale,



IT Integration, elimination of duplication, and enhanced network productivity. Pre-merger and Post-merger roles for Cost Accountants are clearly outlined to ensure smooth transition and Cost Realization.

Across the Guidance Note, the recurring theme is that Cost Accountants and the Costing Function must play a Central Role in the transformation of the Indian Banking Ecosystem. Their expertise in ‘Activity-Based Costing’, Performance Analytics, Product Costing, Process Evaluation, and Cost Optimization provides Banks with the Granular insights needed to compete in a Technology-driven, High-regulation environment.

In its entirety, this Guidance Note presents a detailed and actionable roadmap for Indian Banks to reduce controllable costs, enhance operational efficiency, and strengthen overall profitability, while supporting National Goals of Digitalization, Financial Inclusion, and Customer-centric Service Delivery.

The ultimate expectation is that these Cost Control Strategies will be effectively adopted across the Banking Sector, yielding benefits for Customers, Shareholders, Regulators, and the Indian Economy at Large.



Chapter 1

Lifeline of Indian Economy



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Banks are often called the “Lifeline” of India’s Economy because they support every aspect of economic activity. They collect deposits, provide credit, enable investments, and support industries, businesses, farmers, and individuals. Their performance directly reflects the Nation’s Financial Stability and Growth.

This Chapter Explains the overall Role of Banks and also discusses:

- ★ The performance of Public Sector Banks (PSBs) from FY 2021 to FY 2025.***
- ★ The importance of Return on Assets (RoA) as a key profitability measure.***
- ★ The growing need for a dedicated Costing Department in banks.***

All data presented in this chapter has been sourced from the Indian Banks’ Association (IBA) and the Annual Reports of respective banks.



Lifeline of Indian Economy

Banks are called the “Lifeline” of the Indian economy because they channel savings into investments, provide essential credit to businesses and individuals for growth, facilitate economic transactions, and ensure liquidity, thereby driving overall economic activity and development. A healthy banking system is crucial for a strong economy, with banks acting as the backbone by connecting savers and borrowers and supporting key sectors like agriculture sector, service sector and industrial sector.

How Banks Act as the ‘Lifeline’ of the Indian Economy:

- ★ *Mobilizing Savings and Providing Credit:* Banks accept deposits from the public, secure in the knowledge that their money will be safe and earn interest. They then use these accumulated funds to provide loans and credit to various economic agents, such as businesses and farmers, which are essential for economic expansion and development.
- ★ *Facilitating Economic Growth:* By providing the necessary credit to different sectors, banks fuel industrial growth, agricultural development, and entrepreneurship. This flow of money helps the economy grow, creates jobs, and improves the standard of living.
- ★ *Ensuring Liquidity and Financial Stability:* Banks maintain the liquidity of the financial system, ensuring that there is enough money in circulation for economic activities. Their role in managing money and credit is vital for the stable functioning of the economy and for protecting it from internal and external shocks.
- ★ *Driving Economic Development:* Beyond just managing money, banks contribute to the nation’s broader economic and social progress by providing essential financial services to all segments of society.
- ★ *Supporting Key Sectors:* Banks provide crucial financing for priority sectors, particularly agriculture, which is a backbone of the rural economy. This financial support helps to reduce unemployment and raise income levels.

a) Role of Banks in Indian Economy:

The banking sector is crucial for the Indian

economy because it serves as the backbone for financial intermediation, credit allocation, and capital formation, contributing significantly to GDP and fostering sustainable economic growth. Banks provide financial stability, a platform for inclusive development by ensuring financial access, and facilitate trade and commerce. They enable savings and investment, manage cash and money transfers, and are pivotal in the overall progress of the nation’s economic development.

Roles of the Indian Banking Sector:

- ★ *Financial Intermediation:* Banks act as a crucial conduit, taking deposits from those with surplus funds and providing loans to those who need them, thereby channelling money for productive use.
- ★ *Credit Allocation:* They grant loans to individuals and businesses for various needs, including agriculture, industry, and MSMEs, which stimulates production and income generation.
- ★ *Capital Formation:* By mobilizing savings and allocating them to productive investments, banks play a vital role in the formation of capital, which drives economic growth.
- ★ *Financial Inclusion:* Banks are instrumental in providing access to affordable financial services for every citizen, a key aspect of sustainable development in India.
- ★ *Facilitation of Trade and Commerce:* The sector supports local and international business by providing payment facilities and efficient cash management services.
- ★ *Financial Security and Stability:* Banks secure public wealth, offer reliable remittance services, and facilitate investments in government securities and bonds, enhancing overall financial security.
- ★ *Promoting Digitalization and Innovation:* The sector is embracing digital innovation and structural reforms, leading to increased efficiency and broader customer access.
- ★ *Supporting Specific Sectors:* Banks make special provisions for sectors like agriculture and industry,



and their services are expanding to help Small and Medium Enterprises (SMEs).

Economic Growth and Development:

- ★ **GDP Contribution:** The banking sector's significant contribution to India's GDP underscores its economic importance and its role in maintaining financial stability.
- ★ **Inclusive and Sustainable Development:** By expanding credit access and promoting financial literacy, banks ensure that development benefits reach a wider population, fostering inclusive growth.
- ★ **Enabling Business and Entrepreneurship:** Easy access to funds from banks allows entrepreneurs and businesses to expand their operations, invest, and grow, contributing to a dynamic economy.

b) Types of Banks in India:

In India, Banks are classified into eight types.

1. Central Bank of the Country.
2. Co-operative Banks.
3. Commercial Banks.
4. Regional Rural Banks.
5. Local Area Banks.
6. Financial Institutions in India (Specialized Banks).
7. Small Finance Banks.
8. Payments Banks.

i. Co-operative Banks: Cooperative banks are small financial institutions that work on the principle of cooperation. It was started by a group of people to support the financial needs of a village or a specific community. It is owned and operated by those members who gather resources and provide banking services like savings, loans, etc. It plays an important role in providing credit to agriculture, small industries, and other rural sectors. The Reserve Bank of India, the State Government, and NABARD also regulate Cooperative Banks.

Co-operative banks are classified into two categories. They are:

❖ **Agricultural Credit Institutions:**

- ✓ Short Term Credit Institutions.

✓ State Co-operative Banks.

✓ Central Co-operative Banks.

✓ Primary Agricultural Credit Societies.

✓ Long Term Credit Institutions (Land Development Banks).

❖ **Non-Agricultural Credit Institutions.**

ii. Commercial Banks: Commercial Banks are the profit-making institutions of the country that accept deposits from the general public and lend money in the form of loans to individuals like normal people, entrepreneurs, businessmen, etc. The main aim of commercial banks is to earn a profit by the interest from the given loans. Commercial Banks are regulated by the central bank, the Reserve Bank of India which is the supreme financial authority of India.

The Commercial Banks are classified into various types. They are:

★ **Scheduled Banks.**

✓ **Public Sector Banks.**

✓ **Private Sector Banks.**

★ **Foreign Banks.**

★ **Non-scheduled commercial Banks.**

iii. Regional Rural Banks:

The "One State, One RRB" policy has been completed in the fourth phase of amalgamation, which took effect on May 1, 2025. This process consolidated 26 Regional Rural Banks (RRBs) across 11 states and Union Territories into 11 new entities, reducing the total number of RRBs nationwide from 43 to 28. With each of the 26 states and 2 Union Territories now having a single RRB.

iv. Local Area Banks: Local Area Banks are the only type of Non-Scheduled Banks in India operating in semi-urban and rural areas. Local Area Banks provide the financial requirements of small and marginalized sectors which promote regional development.



- ✳ Local Area Banks were established in August 1996.
- ✳ The Reserve Bank of India (RBI) is the regulator of Local Area Banks (LAB).
- ✳ The main aim of LAB is to bridge the gaps in credit availability and strengthen the credit framework in rural and semi-urban areas.
- ✳ At present, there are only two LABs in India. They are Coastal Local Area Bank Ltd. and Krishna Bhima Samruddhi Local Area Bank Limited.

iv. Financial Institutions in India (Specialised Banks): Specialized Banks are the banks created for performing specific purposes. They are:

- ✳ Export-Import Bank of India.
- ✳ National Bank for Agriculture and Rural Development.
- ✳ National Housing Bank.
- ✳ Small Industries Development Bank of India.

Export-Import Bank of India (EXIM Bank) is a Term Lending Institution while the other National Bank for Agriculture and Rural Development (NABARD), National Housing Bank (NHB), and Small Industries Development Bank of India (SIDBI) are termed as Refinance Institutions for regulatory and supervisory purposes.

v. Small Finance Banks: Small Finance Banks are the banks registered as public limited companies under the Companies Act, 2013. SFBs are licensed under Section 22 of the Banking Regulation Act 1949. After starting their operations as Small Finance Banks, they are stated as Scheduled Banks.

- ✳ Small Finance Banks were established in the year 2016.
- ✳ As of early to mid-2025, there are 11 operational Small Finance Banks (SFBs) in India, though 12 were initially granted licenses by the RBI. These banks were established to advance financial inclusion by providing banking services to underserved segments like small businesses, marginal farmers, and rural households.

vi. Payments Banks: Payment Banks (PB) are like other banks but they operate on a smaller and more restricted scale. Payment banks perform most of the banking operations but cannot advance loans or issue credit cards. Payment banks do not involve Credit risk.

- ✳ Payments Banks are registered as a public limited company under the Companies Act, 2013.
- ✳ PBs are licensed under Section 22 of the Banking Regulation Act, of 1949 with specific licensing conditions to only accept demand deposits and provisions of payments and remittance services.
- ✳ The first Payments Bank in India is Airtel Payments Bank which was started in the year 2016.
- ✳ Payments Banks can accept only savings and current deposits.
- ✳ Payments Banks deposit up to ₹ 2 lakhs per account and it can issue debit cards but not credit cards.

C) Department of Financial Services (DFS):

Under the administrative control of the Department of Financial Services (DFS), a total of 120 organizations fall into various categories, including Public Sector Banks, Public Sector Life Insurers, Public Financial Institutions, Regulators, Regional Rural Banks, DRTs/DRATs, CERSAI, Office of Custodian, Office of Special Court, and Court Liquidator. Below are the details of these organizations:

Public Sector Banks (12):

- ✓ State Bank of India
- ✓ Punjab National Bank
- ✓ Bank of Baroda
- ✓ Canara Bank
- ✓ Union Bank of India
- ✓ Bank of India
- ✓ Central Bank of India



✓ Indian Bank

✓ Bank of Maharashtra

✓ UCO Bank

✓ Punjab & Sind Bank

✓ Indian Overseas Bank

Public Sector Insurers (7)

✓ Life Insurance Corporation of India (LIC).

✓ General Insurance Corporation of India (GIC).

✓ The New India Assurance company limited (NIACL).

✓ United India Insurance Company Limited (UIICL).

✓ The Oriental Insurance Company Limited (OICL).

✓ National Insurance Company Limited (NICK).

✓ Agriculture Insurance Company of India Limited (AICIL).

Public Financial Institutions (7)

✓ National Bank for Agriculture and Rural Development (NABARD).

✓ Export -Import Bank of India (Exim Bank).

✓ India Infrastructure Finance Company Limited (IIFCL).

✓ National Bank for Financing Infrastructure and Development (NaBFID).

✓ Industrial Finance Corporation of India Limited (IFCI).

✓ National Housing Bank (NHB).

✓ Small Industrial Development Bank of India (SIDBI).

Regulators (3)

✓ Reserve Bank of India (RBI).

✓ Pension Fund Regulatory and Development Authority (PFRDA).

✓ x Insurance Regulatory and Development Authority of India (IRDAI).

DRTs (39) & DRATs (5)

Performance of Public Sector Banks at Glance (FY 2021 to FY 2025) Total Deposits of Public Sector Banks

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	36,81,277	40,51,534	44,23,778	49,16,077	53,82,190
Punjab National Bank	11,06,332	11,46,218	12,81,163	13,69,713	15,66,623
Bank of Baroda	9,66,997	10,45,939	12,03,688	13,26,958	14,72,035
Canara Bank	10,10,875	10,86,409	11,79,219	13,12,367	14,56,883
Union Bank of India	9,23,805	10,32,393	11,17,716	12,21,528	13,09,750
Bank of India	6,27,114	6,27,986	6,69,586	7,37,920	8,16,541
Indian Bank	5,38,071	5,93,618	6,21,166	6,88,000	7,37,154
Bank of Maharashtra	1,74,006	2,02,294	2,34,083	2,70,747	3,07,143
Central Bank of India	3,29,973	3,42,692	3,59,296	3,85,011	4,12,697
UCO Bank	2,05,919	2,24,073	2,49,338	2,63,130	2,93,542
Indian Overseas Bank	2,40,288	2,62,159	2,60,883	2,85,905	3,11,939
Punjab & Sind Bank	96,108	1,02,137	1,09,665	1,19,410	1,29,774

(Source: IBA Data)



D) Sources of Funds to Banks in Developed Countries:

Developed countries' banks mobilize other types of deposits besides demand and time deposits, such as Money

Market Accounts which offer higher interest rates than savings accounts but have fluctuating rates, and Negotiable Certificates of Deposit which are uninsured, negotiable, and typically large-denomination time deposits issued by banks.

Deposit Type	Description	Key Features
Money Market Accounts	A deposit account that typically offers higher interest rates than standard savings accounts, but with fluctuating rates that are tied to market conditions.	Limited check-writing privileges, may have higher minimum balance requirements, and are often used for both saving and easy access to funds.
Negotiable Certificates of Deposit (NCDs)	A time deposit that can be sold (negotiated) in the secondary market before its maturity date.	Often issued in large denominations, they are generally uninsured, and can be purchased by institutional investors or wealthy individuals.

Total Advances of Publics Sector Banks

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	24,49,498	27,33,967	31,99,269	37,03,971	41,63,312
Punjab National Bank	6,74,230	7,28,186	8,30,834	9,34,431	10,77,475
Bank of Baroda	7,06,301	7,77,155	9,40,988	10,65,782	12,09,558
Canara Bank	6,39,049	7,03,602	8,30,673	9,31,613	10,49,155
Union Bank of India	5,90,983	6,61,005	7,61,845	8,70,776	9,53,513
Bank of India	3,65,687	4,20,842	4,85,900	5,63,145	6,49,657
Indian Bank	3,62,669	3,89,186	4,49,297	5,14,889	5,71,071
Bank of Maharashtra	1,02,405	1,31,170	1,71,221	2,00,240	2,36,084
Central Bank of India	1,56,579	1,68,174	2,02,984	2,43,406	2,82,420
UCO Bank	1,11,355	1,22,784	1,55,870	1,82,022	2,15,135
Indian Overseas Bank	1,27,721	1,44,244	1,78,053	2,13,319	2,45,555
Punjab & Sind Bank	60,942	63,627	76,819	82,736	97,300

(Source: IBA Data)

E) Uses of Funds of Banks in Developed Countries:

Besides term loans and working capital loans, banks in developed countries offer a wider, more complex range of financing products tailored to different types of borrowers, risk levels, and specific purposes. These include hybrid

loans with both debt and equity features, specialized startup financing, and highly customized options for large-scale corporate transactions.

Hybrid and specialized financing: These products combine features of traditional loans and equity

investments to suit borrowers with specific needs, such as startups or businesses seeking high-growth capital.

✱ **Mezzanine financing:** This is a hybrid of debt and equity that ranks below senior debt (like a conventional bank loan) but above common equity. Because it is a riskier form of lending, it carries higher interest rates and often includes equity warrants, giving the lender the option to purchase shares in the company. It is used for management buyouts, company expansions, or to finance acquisitions.

✱ **Venture debt:** A form of debt financing for high-growth, early-stage companies that are typically backed by venture capital. Unlike traditional bank loans, venture debt is not based on the company's existing cash flow or assets, and it is less dilutive to a company's ownership than raising another round of equity.

Structured and project financing: This advanced category of lending involves bundling and repackaging financial assets into securities and is typically used for complex, high-value transactions that traditional loans can't handle.

Asset-backed securities (ABS): These are securities collateralized by a pool of assets such as loans,

leases, or credit card receivables. This is a tool to raise capital by converting future receivables into immediate cash.

Loan syndication: For very large loan amounts, banks can form a syndicate to provide the financing. This spreads the risk among multiple lenders, allowing them to fund transactions that would be too big for a single bank.

Real estate and consumer loans: Beyond basic mortgages, banks in developed countries offer more specific and flexible property and personal loan products.

Jumbo mortgages: For loans that exceed the standard limits for mortgage financing.

Home equity loans and lines of credit (HELOCs): These allow homeowners to borrow against the equity they have built in their property. A home equity loan is a lump-sum, one-time loan, while a HELOC is a revolving line of credit.

Debt consolidation loans: Used to combine multiple existing debts, such as credit card balances and other personal loans, into a single, new loan.

Factoring: Involves a business selling its accounts receivable to a third party (a "factor") at a discount in exchange for immediate cash.

Credit Deposit Ratio of Public Sector Banks (%)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	66.54%	67.48%	72.32%	75.34%	77.35%
Punjab National Bank	60.94%	63.53%	64.85%	68.22%	68.78%
Bank of Baroda	73.04%	74.40%	78.18%	79.83%	82.17%
Canara Bank	63.22%	64.76%	70.44%	70.99%	72.01%
Union Bank of India	63.97%	64.03%	68.16%	71.29%	72.80%
Bank of India	58.31%	67.02%	72.57	76.32%	79.56%
Indian Bank	67.40%	65.56%	72.33%	74.84%	77.47%
Bank of Maharashtra	58.85%	64.84%	73.15%	73.96%	76.86%
Central Bank of India	47.45%	49.07%	56.49%	63.22%	68.43%
UCO Bank	54.08%	54.80%	62.51%	69.18%	73.29%
Indian Overseas Bank	53.15%	55.02%	68.25%	74.61%	78.72%
Punjab & Sind Bank	63.41%	62.30%	70.05%	69.29%	74.98%

(Source: IBA Data)



F) CD Ratio in Developed Countries:

In developed countries, banking regulations do not typically enforce a specific maximum or minimum limit on a bank's Credit-Deposit (C-D) ratio. Instead of a direct stipulation, regulators use the C-D ratio as an important metric to monitor a bank's financial health, and they enforce other liquidity requirements that indirectly impact it.

Indirect regulation through international standards:

The most significant stipulations affecting a bank's C-D ratio in developed countries come from the global Basel III framework, which is implemented by national regulators. These rules force banks to maintain certain levels of funding and liquid assets, which constrain how much they can lend relative to their stable funding sources. The primary ratios are:

Liquidity Coverage Ratio (LCR): The LCR requires banks to hold a sufficient reserve of high-quality liquid assets (HQLA) to cover their net cash outflows over a 30-day stress scenario. A bank with a very high C-D ratio would need to find significant additional HQLA to satisfy this requirement.

Net Stable Funding Ratio (NSFR): The NSFR requires banks to maintain a stable funding profile, sourced from long-term deposits and equity in relation to their assets and off-balance-sheet activities. A very high C-D ratio indicates a heavy reliance on short-term deposits to fund long-term lending, which is inconsistent with the NSFR's goal of reducing long-term funding risk.

Supervisory oversight: While regulators like the Federal Reserve in the U.S. and the Bank of England in the UK do not set explicit C-D ratio caps, they use supervisory reviews to monitor and assess a bank's risk profile.

Risk indicator: A very high or rapidly rising C-D ratio serves as a "red flag" for regulators, signalling potential liquidity or credit risk. An overly aggressive lending strategy could mean the bank is lending more than it can cover with its deposit base, increasing its vulnerability to a funding crisis.

Required action: If a bank's C-D ratio suggests an increased risk profile, supervisors may require the bank to hold additional capital or adjust its lending practices as part of their Pillar 2 supervisory review process.

Key differences with developing countries: Unlike developed countries, some developing economies may use advisory or targeted C-D ratios to manage policy objectives.

India: Historically, India's central bank, the Reserve Bank of India (RBI), has used advisory C-D ratios, particularly for rural and semi-urban areas, to encourage lending in those regions. However, developed countries like the U.S., UK, and in the EU do not impose such prescriptive targets

G) Strategies to increase CASA Deposits by Indian Banks:

For Indian banks, increasing Current Account and Savings Account (CASA) deposits is crucial for reducing their cost of funds, improving profitability, and enhancing financial stability. Compared to more expensive term deposits, CASA deposits offer banks low-cost, stable funds that can be used for lending.

Product design strategies for demand deposits:

Banks in India are designing innovative products that go beyond simple features to attract new customers and retain existing ones.

Sweep-in/sweep-out facilities: Banks automatically transfer surplus funds from a savings account to a high-interest fixed deposit when the balance crosses a certain threshold. This gives customers the liquidity of a savings account with the higher returns of a fixed deposit.

Zero-balance accounts with add-on benefits: Many banks offer zero-balance or minimum-balance accounts bundled with perks. These can include:

- ✳ Discounted or free courses (e.g., Canara Bank's Canara Aspire for youth).
- ✳ Free credit cards or loyalty programs with cashback.
- ✳ Insurance coverage.

Goal-based savings accounts: Some banks offer features that help customers set savings goals and automate transfers. This encourages the habit of saving and increases the stickiness of the account.

Simplified digital onboarding: To attract tech-savvy customers, especially younger generations,

banks offer paperless, frictionless account opening through Video KYC and mobile apps.

Target customer strategies for demand deposits: Indian banks use a multi-pronged approach to target different customer segments and drive CASA growth.

Retail customers:

✳ **Digital-first engagement:** Using gamified savings apps, mobile dashboards, and AI-driven financial planning tools to increase engagement with tech-savvy customers.

✳ **Financial literacy campaigns:** Raising awareness, particularly in semi-urban and rural areas, about the benefits of savings and digital banking.

✳ **Jan Dhan Yojana outreach:** Using government initiatives to expand their customer base and bring new people into the formal banking sector.

Business Customers (Current Accounts):

✳ **Corporate tie-ups:** Partnering with corporations to offer salary accounts to their employees, which directly increases the savings account base.

✳ **Specialized packages for SMEs:** Providing tailored current account packages for small and medium enterprises with perks such as cash management solutions, payroll services, and overdraft facilities.

✳ **Payment gateway integration:** Seamlessly

integrating current accounts with business management and payment gateway software, making them indispensable for high-volume transactions.

Rural Customers:

✳ **Doorstep banking services:** Extending banking services directly to villages and small towns to help residents open and activate accounts.

✳ **Targeted campaigns:** Conducting special branch-level drives in underserved regions to boost CASA mobilization.

✳ **UPI for small traders:** Encouraging small merchants and traders to open digital current accounts to accept UPI payments, which builds their CASA base.

Channel diversification:

✳ **Digital Advertising:** Running targeted online advertising campaigns on Google and social media to capture customers who are actively searching for new banking options.

✳ **Branch-level incentives:** Offering branch employees incentives for reaching CASA targets, especially in low-penetration areas.

✳ **Tie-ins with local communities:** Investing in community initiatives and partnering with local businesses to build trust and attract new customers.

Number of bank branches of Scheduled Commercial Banks

Year	Rural	Semi-Urban	Urban	Metropolitan	Total
March 2017	49,860	38,931	25,103	26,530	1,40,424
March 2018	50,860	39,616	25,458	26,536	1,42,470
March 2019	51,609	41,031	26,399	27,157	1,46,196
March 2020	52,382	42,213	27,318	28,133	1,50,046
March 2021	52,651	42,441	27,446	28,055	1,50,593
March 2022	53,204	42,443	27,433	28,181	1,51,261
March 2023	54,244	43,745	28,021	29,057	1,55,067
March 2024	55,213	45,101	29,083	30,319	1,59,716
September 2024	55,532	45,557	29,455	30,737	1,61,281

(Source: RBI)



H) Number of Branches per 10,000 population:

As of 2023, India has far fewer bank branches per 10,000 adults compared to many developed nations, which typically have three to ten times as many. The global average is also significantly higher than India's. This difference highlights a disparity in physical banking infrastructure.

Bank branches per 10,000 Adults: India vs. Developed Countries:

India: In 2023, India had approximately 1.45 commercial bank branches per 10,000 adults, based on data from the World Bank. While the number of bank branches has increased over time, India's large and predominantly rural population means that the per-capita availability of physical bank branches remains low.

Developed Countries: In contrast, many developed countries offer a much higher density of bank branches. This provides a snapshot of financial access before the accelerating shift towards online banking.

Figures for branches per 10,000 adults in 2021:

✳ Sweden: 22.48.

✳ United States: 13.83.

✳ Japan: 3.39.

✳ France: 3.33.

✳ Canada: 2.07.

These numbers can fluctuate due to bank consolidation and the shift towards digital banking. For instance, the number of branches in the U.S. has decreased over time.

Rise of Digital Banking: The simple comparison of physical bank branches does not tell the whole story of financial access, especially in the modern era.

Digital Penetration: India's low physical branch count has been increasingly offset by high digital and mobile banking penetration. The widespread adoption of online banking, ATMs, and digital payments has helped bridge the infrastructure gap.

Service Availability: Digital financial tools mean that a person's access to banking services is no longer limited by their proximity to a physical branch. This shift in how banking is delivered is a key factor in how financial inclusion is measured today.

Number of ATMs of Scheduled Commercial Banks (SCBs), Small finance Banks (SFBs), Payment Banks (PBs) and White Label ATM Operators

As on	Off-Site ATMs*	On-Site ATMs	Total ATMs*
31.03.2016	1,10,111	1,01,950	2,12,061
31.03.2017	1,12,666	1,09,809	2,22,475
31.03.2018	1,15,471	1,06,776	2,22,247
31.03.2019	1,15,323	1,06,380	2,21,703
31.03.2020	1,21,086	1,13,271	2,34,357
31.03.2021	1,22,983	1,15,605	2,38,588
30.09.2021	1,25,220	1,15,762	2,40,982
31.03.2022	1,29,766	1,16,794	2,46,560
31.03.2023	1,31,684	1,23,613	2,25,297
31.03.2024	1,27,301	1,26,116	2,53,417
30.09.2024	1,22,779	1,27,929	2,50,708

Source: RBI

* Includes ATMs deployed by White Label ATM Operators

1) Functionalities of ATMs – Indian Banks Vs. Developed Countries:

ATM usage and functionality differ significantly between India and developed countries, driven by varying

economic priorities, consumer habits, and technological landscapes. While developed countries focus on advanced, convenience-driven ATM features, India's ATM network emphasizes financial inclusion and adapts to a large, cash-reliant population transitioning rapidly to digital payments.

Overview of Usage:

Aspect	India	Developed Countries (e.g., US, UK)
Primary Purpose	Predominantly used for cash withdrawals, though digital alternatives like UPI are rapidly growing. ATMs are essential for financial inclusion in semi-urban and rural areas with less banking infrastructure.	Offers a wider range of self-service functions, serving as a supplement to widespread digital banking.
Shift in Use	A more aggressive shift towards digital payments, led by initiatives like the Unified Payments Interface (UPI). Demonetization in 2016 accelerated this trend, though cash usage remains high.	Long-established digital payment systems mean less dependence on cash and, consequently, lower ATM usage. Sweden, for example, has seen cash use drop to less than 10% of transactions.
ATM Density	Historically lower ATM penetration per capita compared to developed nations, but this is expanding, particularly in rural areas. In 2023, India had approximately 25 ATMs per 1,00,000 Adults, compared to a world average of 52.77.	Generally, have a higher ATM density and a mature network, though the number of machines may be declining due to increased digital adoption.

Functional Differences:

Feature	India	Developed Countries
Transaction methods	Leading banks offer cardless cash withdrawals using QR codes or OTPs integrated with UPI and mobile apps. This is a government-backed initiative to boost secure digital payments.	Contactless transactions using NFC-enabled cards and mobile wallets are common, but QR-code-based ATM withdrawals are a more recent development.
Advanced Features	While primarily used for cash, ATMs offer a range of additional services, including: Cash and check deposits Bill payments Card-to-card fund transfers Mobile recharge	ATMs function as "mini-banks" with extensive features like cash recycling, sophisticated biometric authentication, and contactless options. Smart ATMs are more prevalent.
Interoperability	The National Financial Switch (NFS), operated by NPCI, allows customers of member banks to use ATMs across the network for convenient banking. This supports the goal of wider financial inclusion.	Mature, interconnected networks have long provided interoperability, allowing customers to use most ATMs freely, though some non-bank ATMs may charge fees.
Technological Focus	Innovations are driven by the need for financial inclusion and catering to a diverse population. This includes simplified mobile interfaces and integration with government-backed systems like UPI and Aadhaar.	The focus is on convenience and enhancing the user experience with cutting-edge technology. Innovation is largely led by private fintech firms.



Market and Security Considerations:

Aspect	India	Developed Countries
Economic Context	A large portion of the population is still cash-reliant, especially in rural areas, making ATMs a vital access point for banking services.	Mature, mostly cashless economies where digital payments are the norm. ATMs serve a complementary role.
Security Measures	The RBI has implemented strict security guidelines, such as mandatory use of digital locks and comprehensive e-surveillance systems, to mitigate risks. Physical security guards are also common at ATMs.	Standard security features like card readers and PIN pads are supplemented by advanced digital security, including biometric identification.
Market Models	Managed services models are popular, where banks outsource ATM operations to third-party providers to reduce costs, especially for expanding into remote locations.	The market is more integrated with major financial technology providers leading the innovation and implementation of advanced ATM functionalities.

Total Investments of Publics Sector Banks

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	13,51,705	14,81,445	15,70,366	16,71,340	16,90,573
Punjab National Bank	3,92,983	3,72,168	3,95,997	4,20,318	4,97,311
Bank of Baroda	2,61,220	3,15,795	3,62,485	3,69,817	3,85,398
Canara Bank	2,61,690	2,82,013	3,19,038	3,57,454	3,80,343
Union Bank of India	3,31,512	3,48,507	3,39,299	3,37,904	3,54,381
Bank of India	1,87,253	1,74,448	2,04,398	2,27,144	2,59,112
Indian Bank	1,76,537	1,74,559	1,85,988	2,12,554	2,25,303
Bank of Maharashtra	68,112	68,590	68,867	68,274	82,005
Central Bank of India	1,48,582	1,40,787	1,36,583	1,43,923	1,41,435
UCO Bank	93,783	96,874	95,169	92,904	94,272
Indian Overseas Bank	95,494	98,179	94,170	99,632	1,11,045
Punjab & Sind Bank	32,023	42,281	44,838	49,599	46,912

(Source: IBA Data)

J) Banking Book Vs. Trading Book-Indian Banks Vs. Developed Countries:

While the core distinction between a banking book and a trading book is universal in modern banking, significant differences exist between India and developed countries regarding regulatory specifics and overall treasury

management practices.

Banking Book vs. Trading Book: The concept of segregating bank assets into a banking book for long-term holdings and a trading book for short-term speculation is standard practice globally, rooted in the Basel Accords. However, specific rules and regulatory scrutiny vary.

Feature	In India	In Developed Countries
Regulatory oversight	The Reserve Bank of India (RBI) sets stringent guidelines that banks must follow, which aligns with international standards. The RBI defines the exact instruments that must be classified in each book, leaving little room for discretion.	Regulatory bodies like the Bank of England's Prudential Regulation Authority (PRA) implement the Basel framework, including the Fundamental Review of the Trading Book (FRTB). These rules are also very strict, especially after the 2008 financial crisis.
Classification of Instruments	RBI specifies a presumptive list of instruments for each book. For example, unlisted equities and retail credit are typically assigned to the Banking Book, while listed Equities and Financial instruments for short-term resale are in the Trading Book.	The Basel framework also sets out clear criteria for what belongs in each book, with the purpose and intent of holding the instrument being the primary determinant. The distinction is also governed by advanced governance standards and documentation.
Boundary Shifts	Shifting instruments between the banking and trading books is strictly limited and prohibited for regulatory arbitrage. It is permitted only in rare, extraordinary circumstances with prior RBI approval.	The FRTB framework similarly reinforces a strict boundary, making it difficult to shift assets between books to "game" capital requirements. Such changes require justification and robust governance.
Capital Requirements	Under RBI guidelines, capital requirements for market risk in the trading book are separate from the credit risk requirements for the banking book. A standardized approach is used for most banks.	The FRTB framework, based on Basel III, has made capital requirements for the trading book much more granular and risk-sensitive, with some large banks using advanced internal models with supervisory approval.

Indian Banks Treasury Management vs. Developed Countries: Treasury management in Indian banks differs from their developed-country counterparts primarily due to differing regulatory environments, capital market maturity, and ownership structures.

Aspect	Indian Banks	Developed Countries
Regulatory Influence	High Regulatory Mandate: Indian banks are required by law to maintain a certain percentage of their portfolio in liquid government securities as part of the Statutory Liquidity Ratio (SLR). The RBI actively guides interest rate policy, influencing banks' lending and investment strategies.	Market-driven Decisions: While regulators set capital and liquidity rules (like the Liquidity Coverage Ratio), banks have more freedom in their investment choices. Treasury decisions are driven by market opportunities, risk-return profiles, and client needs.
Investment Focus	Sovereign Debt orientation: A significant portion of Indian bank treasury activity involves managing their substantial government securities portfolio. This offers a stable, low-risk income stream but can also create challenges if interest rates move adversely.	Diversified Portfolio: Treasuries in developed countries have a much wider range of investment options. They typically focus on a highly diversified mix of sovereign debt, corporate bonds, asset-backed securities, and complex derivatives.



Aspect	Indian Banks	Developed Countries
Use of Derivatives	Restricted Use: The use of derivatives for hedging and trading is more regulated and less pervasive in India compared to developed markets. There are often restrictions on cross-border transactions and specific account types for non-resident firms.	Extensive Use: Banks in developed countries extensively use a wide array of derivatives, such as interest rate swaps, credit default swaps, and complex options, both for hedging and for proprietary trading. This allows for more sophisticated risk management and income generation.
Liquidity Management	Domestic-Focused: Due to regulatory and tax restrictions, most liquidity management techniques in India are focused on domestic, single-entity operations. Techniques like notional pooling and multilateral netting are not permitted.	Global-Focused: International banks in developed countries operate sophisticated, cross-border cash and liquidity management systems. They utilize techniques like notional pooling to optimize cash across different legal entities and jurisdictions.
Technology and Analytics	Evolving Adoption: Indian banks are modernizing their treasury technology but may still rely on more traditional approaches. The adoption of new, agile technology platforms is still in progress for many.	Advanced Systems: Treasuries in developed countries leverage highly advanced, real-time analytics and technology platforms to manage complex trading strategies and risk exposures. The use of advanced risk metrics is standard practice.
Risk Management	Regulatory-Driven: Indian banks' risk management practices are heavily influenced by RBI mandates and prudential norms. Focus areas include credit risk and market risk, with frameworks constantly reviewed by regulators.	Integrated and Model-Driven: In addition to regulatory mandates, risk management is deeply integrated with business strategy. Banks use sophisticated Value-at-Risk (VaR) and stress-testing models, particularly for their complex trading book exposures.

Per Employee Business

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	23.73	25.74	29.78	34.10	37.37
Punjab National Bank	18.85	19.41	21.64	23.84	26.86
Bank of Baroda	19.57	22.05	26.66	30.46	34.33
Canara Bank	18.14	19.91	22.45	25.97	29.30
Union Bank of India	20.17	23.26	25.50	28.02	31.00
Bank of India	19.94	20.71	22.47	25.87	29.19
Indian Bank	22.17	25.20	26.61	29.85	32.42
Bank of Maharashtra	21.45	26.53	31.45	35.00	37.44
Central Bank of India	15.60	17.15	18.45	20.14	21.24
UCO Bank	14.70	16.33	18.90	20.93	24.35
Indian Overseas Bank	16.12	18.69	20.21	23.54	26.80
Punjab & Sind Bank	18.56	20.31	21.45	23.35	25.71

(Source: IBA Data)



K) Per Employee Business-Indian Banks Vs. International Banks:

While a direct comparison of “per employee business” can be complex due to differences in economies, technology, and market structures, research consistently shows that Indian banks have generally lower business per employee compared to their international counterparts. However, Indian banks have shown strong productivity growth, particularly within the public sector.

Key differences and underlying factors: Business Per Employee (BPE) Performance:

- ✳ **Foreign and Private Indian Banks outperform Public Sector Banks (PSBs)** on profitability-based measures like profit per employee. Foreign banks tend to excel due to their specialized activities, while private banks benefit from more nimble operations.
- ✳ **PSBs have improved Productivity Significantly.** Despite lagging in the past, PSBs like the State Bank of India have made substantial gains in business per employee through a combination of business growth and right-sizing their workforce.
- ✳ **International Banks Operate at a Higher Technological Level.** Historically, foreign and international banks have leveraged technology and business models that promote efficiency, leading to higher productivity per employee.
- ✳ **Growing Complexity in Measuring Productivity.** While Indian banks have seen an uptick in productivity, particularly in non-interest income from services like mutual fund and insurance sales, their overall operational costs have also risen. Experts note that many of these fee-based incomes are volume-driven rather than high-value, differentiated services.

Underlying factors influencing productivity: Technological adoption and automation:

- ✳ **Indian Banks have been slow to Invest in Technology,** especially compared to leading international banks. This over-reliance on

manual processes increases operational costs and reduces efficiency.

- ✳ **International Banks lead in Automation and AI Adoption.** Global Banks are more advanced in implementing Artificial Intelligence and other technologies to automate tasks and drive efficiency.

Workforce and Branch Networks:

- ✳ **PSBs in India have Large Branch Networks and Historically Larger Workforces,** which can lower the business per employee ratio. However, recent trends show a reduction in the percentage of PSB employees and efforts to optimize branch networks.
- ✳ **Private and Foreign Banks operate with Leaner Staff and Optimized Networks,** which naturally increases their per-employee metrics.

Business Models and Strategies:

- ✳ **International Banks are more likely to have a Focused,** Global Strategy targeting specific regions or segments where they have an advantage. This specialization can lead to higher efficiency in those targeted areas.
- ✳ **Indian Banks, especially PSBs, historically focused on Broader Financial Inclusion,** which involves serving a wider, often less lucrative, customer base. While important for the economy, this model can reduce average business per employee.

Market Size and Economic Factors:

- ✳ **Differences in National Economies, Regulations, and Market Maturity** play a significant role and make a direct comparison challenging.
- ✳ **International Banking Operations are often more diversified across Global Markets,** while Indian banks’ business is largely tied to the domestic market and its specific economic condition



Gross Profit of the Public Sector Banks

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	71,554	67,873	83,713	93,797	1,10,579
Punjab National Bank	22,159	20,762	22,529	24,931	26,831
Bank of Baroda	21,199	22,389	26,864	30,965	32,435
Canara Bank	19,689	23,089	27,716	29,413	31,390
Union Bank of India	19,667	21,873	25,467	28,211	31,090
Bank of India	10,273	9,988	13,393	14,069	16,412
Indian Bank	10,966	12,717	15,271	16,840	18,998
Bank of Maharashtra	3,960	4,848	6,099	8,005	9,319
Central Bank of India	4,579	5,197	6,884	7,363	8,124
UCO Bank	4,149	4,797	4,341	4,576	6,037
Indian Overseas Bank	5,896	5,763	5,942	6,764	8,688
Punjab & Sind Bank	772	1,330	1,450	1,131	2,075

(Source: IBA Data)

Provisions & Contingencies of the Public Sector Banks

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	51,144	36,198	33,481	32,720	39,678
Punjab National Bank	20,137	17,305	20,022	16,686	10,200
Bank of Baroda	20,370	15,117	12,754	13,176	12,853
Canara Bank	17,131	17,411	17,112	14,858	14,364
Union Bank of India	16,761	16,641	17,034	14,562	13,103
Bank of India	8,112	8,584	9,370	7,751	7,193
Indian Bank	7,961	8,772	9,989	8,777	8,080
Bank of Maharashtra	3,410	3,696	3,497	3,950	3,799
Central Bank of India	5,466	4,152	5,302	4,814	4,339
UCO Bank	3,982	3,868	2,478	2,923	3,592
Indian Overseas Bank	5,065	4,053	3,943	4,108	5,353
Punjab & Sind Bank	3,504	291	137	536	1,059

(Source: IBA Data)

Net Profit of the Public Sector Banks

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	20,410	31,676	50,232	61,077	70,901
Punjab National Bank	2,022	3,457	2,507	8,245	16,630
Bank of Baroda	829	7,272	14,110	17,789	19,581
Canara Bank	2,558	5,678	10,604	14,554	17,027
Union Bank of India	2,907	5,232	8,433	13,648	17,987
Bank of India	2,160	3,405	4,023	6,318	9,219
Indian Bank	3,005	3,945	5,282	8,063	10,918
Bank of Maharashtra	550	1,152	2,601	4,055	5,520
Central Bank of India	(887)	1,045	1,582	2,549	3,785
UCO Bank	167	930	1,862	1,654	2,445
Indian Overseas Bank	831	1,710	2,099	2,656	3,335
Punjab & Sind Bank	(2,732)	1,039	1,313	595	1,016

(Source: IBA Data)

Bank's Profit and Loss Account:

A typical Indian bank's Profit and Loss (P&L) account maps income from various product offerings and allocates

expenses to a system of primary and secondary cost centers. This accounting practice helps management analyse profitability, control costs, and make strategic decisions.

A Typical Bank P&L Account and Cost Centre Mapping:

P&L Account Head	Mapping to Income / Product Offering	Mapping to Cost Centers
Income Side		
Interest Earned	The primary source of income.	Directly attributed to Primary Profit Centers (e.g., Retail Loans, Corporate Banking).
	Income from lending money through: - Retail Products: Home loans, car loans, personal loans. - Corporate Products: Working capital loans, project finance. - Agricultural Products: Crop loans, farm equipment loans.	Loans and Advances departments, both retail and corporate.
<i>Interest on Investments</i>	Income from the bank's investment portfolio, including government securities and bonds.	Treasury Department.
<i>Interest on Balances with RBI and other Banks</i>	Income from deposits held with the Reserve Bank of India and other financial institutions.	Treasury Department.



Other Income (Non-Interest Income)	Income earned from non-core banking activities.	Primarily mapped to Primary Profit Centers but can have elements from Secondary Cost Centers .
<i>Commission, Exchange, and Brokerage</i>	- Service Fees: For letters of credit, guarantees, and fund transfers. - Foreign Exchange (Forex) Services: Profit from currency conversion. - Trade Finance Fees: For services like documentary bills.	Trade Finance, Forex Department, and branch network.
<i>Profit/Loss on Sale of Investments</i>	Realized gains or losses from the sale of securities.	Treasury Department.
<i>Profit/Loss on Forex Operations</i>	Net gain or loss from transactions in foreign currency.	Forex Department.
<i>Miscellaneous Income</i>	Other fee-based income, including charges for ATM services, debit card renewals, and penalty charges.	Digital Banking, Retail Banking, and branch network.
Expenditure Side		
Interest Expended	The main cost for banks, the interest paid to depositors.	Allocated to Primary Profit Centers based on deposits generated.
<i>Interest on Deposits</i>	Interest paid on savings, current, and term deposits.	Allocated to the business units (e.g., Retail Banking) responsible for raising deposits.
<i>Interest on RBI/Inter-bank Borrowings</i>	Interest paid on money borrowed from other banks and the Reserve Bank of India.	Treasury Department.
Operating Expenses	Costs associated with the day-to-day running of the bank.	Mapped to Primary and Secondary Cost Centers .
<i>Employee Costs</i>	Salaries, wages, bonuses, and staff welfare expenses.	Primary Cost Center Object: Employees. - Primary Cost Centers: Human Resources, Branch Operations, IT Department. - Secondary Cost Center: Human Resources (costs allocated to other departments).
<i>Other Operating Expenses</i>	Rent, taxes, insurance, lighting, legal charges, printing, and advertising.	Primary Cost Center Objects: Property, utilities, services. - Primary Cost Centers: Administration Department, IT Department, Marketing Department. - Secondary Cost Center: Administration (rent allocated across the bank).
<i>Depreciation and Amortization</i>	The expense of fixed assets like property, computers, and furniture.	Primary Cost Center Objects: Fixed assets. - Primary Cost Centers: Branch Operations, IT Department, Administration.
Provisions and Contingencies	Funds set aside for potential losses, especially from non-performing assets (NPAs).	Primary Cost Center Object: Credit Risk. - Primary Cost Center: Credit Risk Management.
Net Profit/Loss	The final profit or loss after deducting all expenses and provisions.	Reflects the overall profitability, which can be further analysed by business unit (profit center) using the mapping.



Definition of Cost Centers in Indian Banks:

Primary Cost Centers:

These are departments or business units that directly incur costs but do not directly generate revenue, or where costs are initially booked before being reallocated. In the context of a bank, these are support and operational departments.

Examples and their Objects:

Human Resources (HR) Department:

- ✓ *Objects:* Employee salaries, recruitment expenses, training and development costs, staff welfare expenses.

IT Department:

- ✓ *Objects:* Server maintenance, software licenses, IT support staff salaries, infrastructure costs.

Administration Department:

- ✓ *Objects:* Rent, building maintenance, utility bills, office supplies, security services.

Marketing Department:

- ✓ *Objects:* Advertising campaigns, promotional events, digital marketing costs.

Compliance and Legal Department:

- ✓ *Objects:* Legal fees, audit fees, compliance monitoring expenses.

Secondary Cost Centers:

These are cost centers that allocate the expenses of primary cost centers to the final revenue-generating units (profit centers). This process allows for a more accurate

calculation of the profitability of each product or service.

Examples and their objects:

Human Resources Allocation:

- ✓ *Object:* Employee costs are allocated to profit centers (e.g., Retail Loans, Corporate Banking) based on employee count or time spent.

IT Services Allocation:

- ✓ *Object:* IT costs are allocated to business units based on their usage of IT resources (e.g., number of terminals, volume of transactions).

Administration Overhead Allocation:

- ✓ *Object:* General administrative costs, such as rent and electricity, are allocated to profit centers based on square footage occupied or employee count.

The Complete Mapping Process:

- ✓ *Direct Cost Booking:* Expenses are initially booked to the respective primary cost centers where they are incurred (e.g., HR costs to the HR department).
- ✓ *Indirect Cost Allocation:* Costs from secondary cost centers (like IT and Admin) are allocated to the revenue-generating primary profit centers (e.g., Retail Banking, Corporate Banking). This is done using a logical allocation basis (e.g., employee count, system usage).
- ✓ *Profitability Analysis:* The bank's management can then generate a P&L statement that shows the profitability of each service product offering (e.g., home loans, credit cards) after accounting for both direct and allocated indirect costs.



Key Ratios–Cost Control and Productivity Ratios

To improve the functioning of bank branches from a cost control and productivity standpoint, bank management can utilize specific financial ratios. These ratios help assess operational efficiency, asset utilization, and overall financial health at the branch level (or aggregated from branch data for overall bank analysis).

Efficiency and Cost Control Ratios:

These ratios focus on how effectively a branch manages its expenses in relation to its income or assets.

Ratio	Formula	Relevance to Branch Functioning
Cost-to-Income Ratio (CIR) / Efficiency Ratio	$\frac{\text{Operating Expenses}}{\text{(Total Income - Interest Expense) or Non-Interest Expense / Revenue}}$	Primary Cost Control Metric: This is a crucial measure of operational efficiency. A lower ratio (ideally below 50%) indicates that the branch is spending less to generate each dollar of income, highlighting effective overhead control and operational management.
Operating Cost to Average Total Assets	$\frac{\text{Operating Expenses}}{\text{Average Total Assets}}$	Shows the level of operating expenses (staff, administration, etc.) relative to the size of the asset base the branch manages. A lower ratio suggests better cost management in relation to the scale of operations.
Cost of Funds (Cost of Borrowing)	$\frac{\text{Interest Expenses}}{\text{Average Total Borrowings/Deposits}}$	While interest expenses are tied to market rates, this ratio can reflect the branch's ability to attract low-cost deposits (like current and savings accounts) versus higher-cost borrowings, which is a key driver of overall profitability.
Staff Cost to Total Operating Expenses	$\frac{\text{Staff Expenses}}{\text{Total Operating Expenses}}$	Indicates the proportion of costs attributable to personnel. This helps in managing staffing levels and ensuring optimal utilization of human resources.

Productivity and Asset Utilization Ratios:

These ratios measure how effectively a branch utilizes its assets to generate income and manage its primary functions (lending and deposits).

Ratio	Formula	Relevance to Branch Functioning
Return on Assets (ROA)	$\frac{\text{Net After-Tax Income}}{\text{Total Assets}}$	Primary Productivity Metric: This is the ultimate indicator of overall profitability and how efficiently the branch uses its assets (mainly loans and investments) to generate profit. Branch-level ROA helps compare the performance of different branches.
Net Interest Margin (NIM) / Interest Spread	$\frac{\text{(Interest Income - Interest Expense)}}{\text{Average Total Assets}}$	Measures the core lending/deposit business profitability. A healthy NIM indicates a good spread between the interest earned on loans and the interest paid on deposits, which the branch depends on to cover operating costs and generate profit.

Ratio	Formula	Relevance to Branch Functioning
Loan-to-Deposit Ratio (LDR) or Credit to Deposit Ratio (CD Ratio)	Total Loans / Total Deposits	Assesses liquidity and earning potential. A balanced LDR (e.g., around 80-90%) shows the branch is effectively lending out deposits to earn interest without being over-leveraged or having too many idle, non-earning funds.
Assets Turnover Ratio	Net Sales (Bank Branch Total Business) / Net Operating Assets	In a banking context, this can be adapted to measure how effectively the branch's operating assets (e.g., fixed assets like premises and equipment) contribute to generating income.
Non-Performing Loans (NPL / NPA) to Total Loans Ratio	Gross NPL / Total Loans	Reflects asset quality and the effectiveness of the branch's credit appraisal and risk management. High NPLs indicate poor asset productivity and potential future credit costs.
Total Customers per Employee/ Branch Utilization	Number of Customers Served / Number of Employees	While not a traditional financial ratio, this operational metric is vital for measuring employee productivity and branch utilization, helping management optimize staffing and physical resources.

How these Ratios Improve Functioning:

- **Benchmarking and Comparison:** Ratios allow branch performance to be compared against industry averages, other branches, or past performance to identify underperformers and best practices.
- **Target Setting:** Management can set specific, quantifiable targets (e.g., reducing CIR to 50% or increasing LDR / CD Ratio) to guide branch managers' efforts.
- **Strategic Decision Making:** Analysing trends in these ratios helps in making informed decisions, such as optimizing the mix of loans and deposits, controlling non-interest expenses (e.g., administrative costs, marketing), and leveraging technology to improve efficiency.

L) Strategies to minimize the Gap between Gross Profit and Net Profit:

Gross Profit (operating profit) is the income a bank earns from its core business operations, such as lending and deposits, before accounting for provisions and taxes. Net Profit is what remains after all expenses, including provisions for Non-Performing Assets (NPAs), taxes, and other operating costs, have been deducted from the gross profit.

The gap between gross and net profit for Indian banks can be substantial, primarily due to loan provisioning and operational inefficiencies. To minimize this gap, Indian banks should implement strategies to improve asset quality, enhance operational efficiency, and diversify non-interest income streams.

Strategies to Improve Asset Quality and reduce NPAs: One of the largest factors reducing Net profit is the provisioning for bad loans (NPAs).

Strengthen Credit Risk Management:

- ✳ **Rigorous credit evaluation:** Implement comprehensive credit risk assessment models, potentially using AI and alternative data, to better evaluate a borrower's creditworthiness.
- ✳ **Early warning systems (EWS):** Use automated EWS and real-time monitoring to detect early signs of financial distress in borrowers, allowing for timely intervention.
- ✳ **Diversify loan portfolios:** Reduce concentration risk by avoiding heavy lending to specific industries that are vulnerable to economic downturns.

Expedite Debt Recovery:

- ✳ **Leverage legal frameworks:** Utilize the Insolvency and Bankruptcy Code (IBC) and the Securitization and Reconstruction of Financial Assets and



Enforcement of Security Interest (SARFAESI) Act for faster and more effective recovery of bad loans.

- ✱ **Support the “Bad Bank” initiative:** The National Asset Reconstruction Company Ltd (NARCL) can help banks resolve stressed assets above ₹ 500 crore, clearing their balance sheets.
- ✱ **Conduct Asset Quality Reviews (AQR):** As suggested by the Economic Survey, conducting fresh AQRs after regulatory forbearance ends helps assess the true state of asset quality.
- ✱ **Enhance post-disbursement monitoring:** Implement strict and automated post-sanction follow-up processes, using data and technology to prevent loan accounts from slipping into NPA status.

Strategies to Enhance Operational Efficiency: High operating costs directly reduce net profit. Improving efficiency lowers the Cost-to-Income Ratio (CIR), which is a key measure of a bank’s success.

- ✱ **Digitalize core processes:** Automate manual, repetitive tasks, such as KYC verification, loan processing, and invoice management, using technology like AI and Robotic Process Automation (RPA).
- ✱ **Optimize Branch and Channel Networks:** Reconfigure physical branches into “Advice Centers” for high-touch interactions, while promoting cost-effective digital channels for routine transactions.
- ✱ **Modernize Legacy IT systems:** Upgrade outdated core banking systems that incur high maintenance costs and hinder modern operations.
- ✱ **Improve Staff Productivity:** Provide specialized training in NPA management and utilize performance management techniques to boost staff efficiency.
- ✱ **Refine Business Analytics:** Implement better data tracking and analytics to pinpoint operational bottlenecks, predict customer needs, and optimize resource allocation.

Strategies to Increase Non-interest Income: By diversifying income streams beyond traditional lending, banks can stabilize revenue and make net profit less dependent on interest rate fluctuations.

✱ **Expand fee-based Services:**

- ✓ Offer premium banking: Create tiered banking packages with enhanced services for which customers pay a premium.
- ✓ Develop digital payment services: Charge fees for instant payments, mobile wallet integrations, and other modern payment solutions.
- ✓ Cross-sell products: Leverage existing customer relationships to cross-sell wealth management, insurance, and brokerage services.

✱ **Enhance treasury and cash management services:** Offer sophisticated cash flow forecasting, liquidity management, and international payment services to commercial clients for a fee.

✱ **Form strategic partnerships:** Collaborate with fintech companies to quickly offer innovative services like invoice management and embedded finance, generating new revenue streams.

✱ **Monetize assets:** Sell-off underperforming assets or monetize investments in other financial entities.

A Holistic and Forward-looking Approach:

- ✱ **Corporate Governance:** Banks, especially Public Sector Banks (PSBs), must improve corporate governance by streamlining senior-level appointments and establishing clearer accountability.
- ✱ **Performance Management Framework:** An Enterprise Performance Management (EPM) framework can help translate strategic goals into measurable functional objectives, driving predictable improvements in profitability.
- ✱ **Invest in a Data-driven Culture:** A long-term shift towards a data-driven culture, from credit appraisal to recovery, is necessary for sustainable profitability and a lower gap between gross and net profits.

Profit Per Employee of Public Sector Banks

(₹ in Lacs.)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	8.28	12.93	21.23	26.20	29.91
Punjab National Bank	2.10	3.54	2.57	8.61	17.29
Bank of Baroda	1.00	9.11	18.06	23.56	26.11
Canara Bank	2.90	6.53	12.48	18.00	21.00
Union Bank of India	3.72	6.96	11.16	17.99	24.33
Bank of India	4.15	6.50	7.60	12.35	18.15
Indian Bank	7.22	9.91	12.95	20.03	27.25
Bank of Maharashtra	4.19	9.05	20.05	30.04	37.83
Central Bank of India	(2.74)	3.38	5.07	8.06	10.13
UCO Bank	0.36	4.00	8.00	7.69	11.59
Indian Overseas Bank	3.53	8.00	9.00	12.00	16.00
Punjab & Sind Bank	(30.94)	12.25	14.81	6.80	11.45

(Source: IBA Data)

M) Profit Per Employee-Indian Vs. International Banks:

There is a difference between the profit per employee of Indian and international banks, with international banks generally having a higher profit per employee due to their larger scale and higher profitability metrics. Strategies to increase this profit per employee include improving operational efficiency, focusing on high-value customer relationships, leveraging technology for digital services, and implementing targeted incentive programs based on profitability.

Difference in Profit Per Employee:

- International Banks often have Higher Profit Per Employee:** Leading international banks, particularly those in developed economies like the US and China, consistently report higher profit per employee compared to Indian banks. This is often due to larger balance sheets, more diversified revenue streams, and greater economies of scale. For Example, ICBC and JPMorgan Chase are among the Top global banks by Net Profit.
- Indian Banks can have Lower Figures:** Indian Banks, especially public sector banks, can have lower profit per employee figures. This is influenced by factors like a large workforce, lower profit

margins on certain products, and a greater focus on Financial Inclusion which can impact Profitability on a Per-employee Basis.

Strategies to Increase Profit Per Employee:

- Improve operational efficiency:** Focus on reducing operational costs by automating processes, streamlining workflows, and improving productivity. This includes a focus on operational efficiency metrics like operating cost to total assets.
- Enhance customer relationships:** Implement a customer-centric approach by defining relationships and identifying top and bottom performers. This allows for more tailored products and services, as well as more effective pricing strategies based on the value of the relationship.
- Embrace technology and digitalization:** Invest in digital banking solutions and technology to improve service delivery, reduce reliance on manual processes, and expand reach to more customers with a smaller physical footprint. This includes leveraging technology for online services and data analytics.
- Optimize product and service offerings:** Analyse product profitability and make strategic decisions



on which products to focus on. Offer products that provide higher margins and meet customer needs effectively.

- ✱ **Implement performance-based incentives:** Link employee compensation to profitability and key performance indicators. This can help align employee efforts with the bank's profitability goals

and motivate them to focus on revenue-generating and cost-saving activities.

- ✱ **Focus on risk management:** Manage credit and operational risks effectively to minimize losses and protect the bank's profits. Robust risk management practices are crucial for maintaining overall profitability.

Return on Assets of the Public Sector Banks (%)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	0.48%	0.67%	0.96%	1.04%	1.10%
Punjab National Bank	0.15%	0.26%	0.18%	0.54%	0.97%
Bank of Baroda	0.07%	0.60%	1.03%	1.17%	1.16%
Canara Bank	0.23%	0.48%	0.81%	1.01%	1.09%
Union Bank of India	0.27%	0.47%	0.69%	1.03%	1.26%
Bank of India	0.28%	0.43%	0.49%	0.70%	0.90%
Indian Bank	0.50%	0.63%	0.77%	1.07%	1.32%
Bank of Maharashtra	0.30%	0.55%	1.10%	1.50%	1.75%
Central Bank of India	(0.26%)	0.30%	0.44%	0.63%	0.86%
UCO Bank	0.06%	0.34%	0.62%	0.56%	0.76%
Indian Overseas Bank	0.31%	0.59%	0.76%	0.81%	0.92%
Punjab & Sind Bank	(2.55%)	0.85%	0.98%	0.41%	0.67%

(Source: IBA Data)

N) Importance of Return on Assets (RoA) :

As one of the main profitability metrics, Return on Assets (RoA) is a key indicator of financial health for Indian banks. While the fundamental calculation is the same, an Indian Bank's RoA differs from its international counterparts due to unique market factors and regulatory environments.

RoA vs. RoI:

Distinction between Return on Assets (RoA) and Return on Investment (RoI) in the context of banking.

- ✱ **Return on Assets (RoA):** A bank's RoA measures how effectively it uses its total assets (Loans, Investments etc.) to Generate Profit. The formula is:

$$\text{RoA} = (\text{Net Income} / \text{Total Assets})$$

- ✱ **Return on Investment (RoI):** While RoI is a general performance metric for any Investment, it is less common for evaluating a Bank's Overall Performance. RoI measures the return on a specific investment, whereas RoA evaluates the bank's operational efficiency in using its entire asset base.

- ✱ **Indian Banks' RoA Differs from International Banks' RoA:** The comparative performance and factors affecting RoA differ between Indian and international banks due to several structural and market-specific reasons:

- ✱ **Profitability:** For a long time, the average RoA of Indian public sector banks has typically been lower than that of both Indian private banks and international banks operating in India. However, Indian private sector banks have shown robust growth in RoA, sometimes outperforming their peers.



- ★ **Interest Rates and Margins:** Fluctuating interest rates in the Indian market have historically influenced banks' profitability. When interest rates rise, a bank's net interest margin (the difference between interest earned and interest paid) can come under pressure, negatively affecting RoA.
- ★ **Asset Quality and Non-Performing Assets (NPAs):** The higher prevalence of NPAs (bad loans) in the Indian public sector banking space, though declining in recent years, historically acted as a significant drag on RoA. Provisions for contingencies related to NPAs directly reduce a bank's net profit.
- ★ **Regulatory Landscape:** Reserve Bank of India (RBI) norms, including capital adequacy requirements and regulations on NPA Classification, directly influence the financial structure and profitability metrics of Indian Banks. Foreign Banks operating in India, though subject to RBI Regulations, may have different internal practices that enable them to achieve higher RoA within the Country.
- ★ **Strategies for Indian Banks to increase RoA:** To boost their RoA, Indian banks can adopt a mix of strategies focusing on revenue growth, Cost Management, and Operational Efficiency:

Revenue Enhancement:

- ★ **Diversify income streams:** Increase non-interest income from sources like wealth management, bancassurance (selling insurance products), and fees from digital transactions to reduce reliance on traditional lending.
- ★ **Optimize product mix:** Focus on high-margin lending segments, such as retail and MSME loans, to improve the overall profitability of the loan portfolio.
- ★ **Leverage customer data:** Use advanced data analytics to create personalized, context-based financial products and services. This enhances customer delight and can generate additional revenue through targeted cross-selling.

Cost Management:

- ★ **Improve asset utilization:** Conduct regular audits to identify and address underperforming assets, such as non-core real estate, which can be monetized. Optimizing asset usage directly increases RoA.
- ★ **Streamline Operations:** Automate manual processes, centralize systems, and empower customers with self-service options to reduce operating expenses. Modernization is key to a bank's sustained profitability.
- ★ **Control Operational Costs:** Implement cost-cutting measures and improve overall efficiency without compromising the quality of services.

Asset Quality Improvement:

- ★ **Strengthen Risk Management:** Employ more effective risk management tools to better manage credit risk and reduce the accumulation of NPAs. This involves stricter lending criteria and improved monitoring.
- ★ **Expedite Resolution of NPAs:** Implement proactive strategies for the swift resolution of non-performing assets to minimize provisions and improve profitability.

Strategic Realignment:

- ★ **Channel Optimization:** While digital banking is crucial, banks should realign their physical branch networks. Branches can be repurposed as hubs for building customer relationships, fostering community visibility, and fostering sales, rather than just as transaction centers.
- ★ **Prioritize Human Capital:** Invest in attracting and retaining next-generation bankers by providing the technology and data needed for critical decision-making, moving away from manual tasks.



Gross Non-Performing Assets of Public Sector Banks

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	1,26,389	1,12,023	90,928	84,276	76,880
Punjab National Bank	1,04,423	92,448	77,328	56,343	44,082
Bank of Baroda	66,671	54,059	36,764	31,834	27,835
Canara Bank	60,288	55,652	46,160	40,605	31,530
Union Bank of India	89,788	79,587	60,987	43,098	35,350
Bank of India	56,535	45,605	37,686	29,183	21,749
Indian Bank	38,455	35,214	28,180	21,106	18,179
Bank of Maharashtra	7,780	5,327	4,334	3,833	4,185
Central Bank of India	29,277	28,156	18,386	11,340	9,225
UCO Bank	11,352	10,237	7,726	6,463	5,919
Indian Overseas Bank	16,323	15,299	14,072	6,794	5,348
Punjab & Sind Bank	9,334	8,565	5,648	4,665	3,371

(Source: IBA Data)

O) Recovery of NPAs - 'Best Practices' in other Countries:

While India has made significant strides in NPA recovery with mechanisms like the Insolvency and Bankruptcy Code (IBC) and Asset Reconstruction Companies (ARCs), developed countries employ more proactive, Tech-driven, and Market-oriented strategies. These global best practices focus on early intervention and risk mitigation rather than waiting for accounts to become non-performing.

Best Practices in Developed Countries:

- ✳ **Proactive Risk Assessment and Monitoring:** Instead of waiting for a loan to become an NPA (90 days overdue in India), International Banks use advanced analytics to predict potential defaults and intervene early.
- ✳ **Predictive Analytics and Machine Learning:** Sophisticated algorithms analyse customer data, spending habits, and market trends to identify early warning signals of financial distress.
- ✳ **Continuous Credit Monitoring:** The creditworthiness of borrowers is regularly tracked, and automated alerts are triggered by changes in a borrower's financial profile or external economic factors.
- ✳ **Stress Testing:** Banks run scenario analyses to understand the impact of various economic

conditions, such as rising interest rates or a recession, on their loan portfolios.

Efficient and Specialized Resolution Mechanisms: Developed Countries often use specialized bodies and Public-Private Partnerships to streamline the recovery process.

- ✳ **Specialized Asset Management Companies (AMCs):** Countries like South Korea (KAMCO) and Malaysia (Danaharta) have established centralized AMCs that buy bad loans from banks and specialize in their restructuring and recovery. This approach allows banks to offload stressed assets and focus on their core lending business. India's National Asset Reconstruction Company Ltd (NARCL) follows a similar model.
- ✳ **Market-based Solutions:** International Banks frequently sell their stressed assets in the secondary market to specialized distressed debt investors. This allows for quick resolution and frees up capital.
- ✳ **Public Private Partnerships (PPPs):** Collaborative Models combine the regulatory oversight of the public sector with the expertise and capital of the private sector to effectively manage large-scale stressed assets.

Robust and Business-friendly Insolvency Laws: While India's IBC is a major step forward, the legal framework in

many developed countries prioritizes speedy, time-bound resolutions and maximizing asset value.

✳ **Restructuring over Liquidation:** Insolvency frameworks in countries like the United States (Chapter 11) prioritize business reorganization to preserve the value of the company and save jobs, rather than immediate liquidation.

✳ **Strict Timelines and Enforcement:** Legal and regulatory frameworks are designed to ensure timely resolution of distressed assets, thereby improving creditor recovery rates. This encourages greater confidence in the credit market.

✳ **Creditor-in-Control Model:** The framework ensures that creditors, not defaulting promoters, control the resolution process.

Technology and Data-driven Collection Strategies: International Banks use Technology to optimize their debt collection efforts, making them more Efficient and Less Adversarial.

✳ **Digital Collection Platforms:** Automated communication, online payment portals, and automated follow-ups help banks manage collections

more efficiently, especially for retail and SME loans.

✳ **Effective Skip-tracing:** Advanced Technology and data analytics are used to locate and communicate with borrowers who have moved or changed contact information.

Ethical and Transparent Practices: Best practices prioritize transparency and ethical conduct, protecting both the bank and the borrower.

✳ **Clear Credit Policies:** Standardized, well-defined, and transparent credit policies and procedures ensure fair and consistent treatment of borrowers.

✳ **Ethical Conduct:** Independent audits and clear governance structures help prevent conflicts of interest and reduce risks from non-arm's-length lending practices.

✳ **Customer-centric Approach:** Many international banks use loan restructuring as a proactive tool to help borrowers experiencing temporary financial difficulties. They offer flexible payment plans, interest rate reductions, or loan tenure extensions to prevent a default and maintain the customer relationship.

Operating Expenses of Public Sector Banks

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	82,652	93,398	97,743	1,17,761	1,18,069
Punjab National Bank	20,309	20,253	24,105	28,536	32,261
Bank of Baroda	20,544	21,716	24,518	28,252	29,871
Canara Bank	19,338	19,792	22,481	26,120	28,135
Union Bank of India	16,766	18,438	21,931	24,440	25,937
Bank of India	10,839	11,952	13,982	15,079	16,975
Indian Bank	10,350	10,927	12,098	14,300	15,402
Bank of Maharashtra	3,565	3,849	3,922	4,814	5,801
Central Bank of India	6,782	7,258	8,887	10,245	11,627
UCO Bank	4,755	4,776	5,511	6,790	7,999
Indian Overseas Bank	5,562	5,451	6,421	8,722	7,747
Punjab & Sind Bank	2,393	2,281	2,463	2,932	3,276

(Source: IBA Data)



Operating Expenses as (%) of Total Expenses of Public Sector Banks

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	34.86%	37.64%	34.30%	29.68%	28.48%
Punjab National Bank	28.77%	30.48%	32.24%	29.93%	29.00%
Bank of Baroda	33.01%	36.82%	33.70%	29.39%	28.27%
Canara Bank	29.97%	31.51%	29.79%	26.59%	25.39%
Union Bank of India	27.56%	31.47%	31.37%	27.88%	26.89%
Bank of India	29.16%	33.23%	33.81%	28.59%	26.77%
Indian Bank	30.63%	33.06%	32.86%	30.66%	29.49%
Bank of Maharashtra	33.84%	35.56%	32.47%	31.09%	30.40%
Central Bank of India	31.89%	35.28%	39.08%	36.50%	37.03%
UCO Bank	34.65%	35.95%	34.84%	33.05%	34.13%
Indian Overseas Bank	33.45%	34.35%	36.55%	38.02%	31.00%
Punjab & Sind Bank	33.68%	33.91%	32.92%	29.96%	29.86%

(Source: IBA Data)

P) Operating Expenses to Total Expenses:

While there is no Single, Universally agreed-upon Benchmark for the percentage of Operating Expenses to Total Expenses for International Banks, the Cost-to-Income (C/I) ratio is the key international metric used to measure bank efficiency. This Ratio compares operating expenses to total operating income.

International Benchmark: Cost-to-Income (C/I) Ratio:

The C/I ratio varies by a Bank's Business Model, Size, and the Economic Environment, but General Benchmarks Exist.

- ✳ **Traditional Retail Banks:** A C/I ratio of approximately 50–60% is often considered acceptable.
- ✳ **Technologically Advanced / Digital Banks:** These Banks can achieve significantly lower ratios, often in the 30–40% Range, due to efficiencies gained from automation and streamlined processes.

Strategies and Best Practices for Indian Banks: Indian Banks can adopt several strategies to minimize their operating expense ratio and improve overall efficiency.

Technology and Digital Transformation:

- ✳ **Embrace Cloud Computing:** Shifting non-core

functions like IT, HR, and Marketing to cloud-based solutions can significantly lower upfront costs and ongoing IT support expenses.

- ✳ **Automate Routine Tasks:** Use Robotic Process Automation (RPA) and AI to automate repetitive, manual tasks such as data entry, transaction processing, and report generation, which reduces human manpower costs and errors.
- ✳ **Optimize Data Analytics:** Harness data analytics to identify inefficiencies and pinpoint opportunities for cost-saving.
- ✳ **Go Digital-first:** Invest in Digital Channels like Mobile Banking, online portals, and digital payments to reduce reliance on physical branches and their associated costs.

Operational Restructuring:

- ✳ **Optimize the Branch Network:** Evaluate the performance of the branch network and consider rationalizing it by closing underperforming locations. Reinvest these resources into more efficient digital channels.
- ✳ **Optimize Operations Models:** Move towards more modular operating models supported by flexible IT architecture. This helps standardize processes and

reduce the Cost-to-Serve.

- ★ **Implement Lean Methodologies:** Adopt lean principles to identify and eliminate wasteful processes. This drives continuous improvement and reduces operational costs.
- ★ **Simplify Product Portfolios:** Many Banks accumulate a large number of overlapping products. By rationalizing the portfolio and focusing on the most relevant offerings, banks can reduce costs and improve the customer experience.

Sourcing and Procurement:

- ★ **Outsource Non-core Functions:** Outsource functions that are not central to banking operations, such as IT support, customer service, or back-office tasks, to specialized providers. This reduces operational costs and allows the bank to focus on core competencies.
- ★ **Centralize Vendor Management:** Centralize the management of third-party vendors and renegotiate contracts regularly. The complexity of large banks can lead to multiple business units using duplicative vendors. Centralization and negotiation can yield significant savings.

Workforce and Productivity:

- ★ **Foster a Cost-Conscious Culture:** Promote a culture of cost management and transparency among

employees. Reward innovative ideas that lead to cost savings.

- ★ **Enhance Employee Training:** Investing in employee training and development can improve operational efficiency. Cross-train employees to handle multiple tasks, reducing reliance on specialized staff.
- ★ **Adopt Remote / Hybrid Work Models:** Normalize remote or hybrid work arrangements to reduce overhead expenses related to physical office space and utilities.

Financial Management:

- ★ **Strategic Cost Management:** Move beyond short-term cost-cutting measures towards a strategic approach. Conduct detailed cost-benefit analyses of processes, products, people, and infrastructure to plan for efficient long-term cost management.
- ★ **Improve Payment Processes:** Implement e-procurement software to automate and streamline purchasing, improve spending visibility, and consolidate vendors for better pricing.
- ★ **Maximize Synergies from Mergers and Acquisitions:** If M&A activity has occurred, revisit the integration process to ensure full operational synergies have been realized. This can address missed opportunities for cost reduction.

Spread as (%) Assets of Public Sector Banks

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	2.44	2.42	2.63	2.59	2.50
Punjab National Bank	2.42	2.18	2.36	2.57	2.35
Bank of Baroda	2.49	2.55	2.84	2.82	2.56
Canara Bank	2.09	2.15	2.34	2.45	2.20
Union Bank of India	2.30	2.34	2.56	2.63	2.48
Bank of India	1.97	1.91	2.49	2.53	2.34
Indian Bank	2.51	2.49	2.85	2.94	2.88

Name of the PSB	2021	2022	2023	2024	2025
Bank of Maharashtra	2.49	2.62	2.89	3.20	3.16
Central Bank of India	2.23	2.46	2.88	2.89	2.90
UCO Bank	2.16	2.42	2.44	2.50	2.66
Indian Overseas Bank	2.15	2.11	2.63	2.79	2.76
Punjab & Sind Bank	2.05	2.19	2.18	1.92	2.34

(Source: IBA Data)

Q) To Increase Spread as (%) Assets-Best Practices of International Banks:

International and foreign banks boost their asset spreads through advanced risk management, sophisticated financial products, and efficient asset-liability management (ALM). This approach often contrasts with that of Indian banks, which traditionally focus on higher-volume, government-mandated lending and face more stringent regulatory constraints.

Best Practices for Increasing Asset Spread by International Banks:

- ✱ **Advanced Asset-Liability Management (ALM):** International banks use sophisticated ALM to minimize interest rate risk and maximize net interest margins.
- ✱ **Dynamic Hedging:** They use financial derivatives like interest rate swaps and options to actively hedge against changes in interest rates, protecting their net interest income.
- ✱ **Strategic Funding Mix:** They strategically manage their funding sources, balancing low-cost customer deposits with a diversified mix of wholesale funding, such as secured and unsecured debt, to optimize their overall cost of funds.
- ✓ **Specialized Financial Products:** These banks gain higher margins by offering a wide array of specialized, high-yield products and services.
- ✱ **Wealth and Investment Banking:** They focus on high-net-worth individuals and large corporations, providing profitable services like wealth

management, investment banking, and private banking.

- ✱ **Trade Finance and Forex:** For multinational corporations, they offer lucrative trade finance and foreign exchange services, which have higher margins than standard lending.

- ✓ **Superior Risk Management:** Advanced risk assessment allows international banks to price risk more accurately and efficiently.

- ✱ **Granular Credit Analysis:** They leverage big data, AI-driven models, and international credit ratings to assess borrower creditworthiness more precisely, allowing them to charge a higher, more justified risk premium.

- ✱ **Global Diversification:** By operating across many countries and markets, they diversify their risk exposure, which adds resilience and stability. A global footprint can help them withstand regional economic downturns.

- ✓ **Treasury and Market Operations:** Profitable treasury operations contribute significantly to their asset spreads.

- ✱ **Optimized Portfolio Management:** They actively engage in money market and securities trading, managing their investment portfolios to maximize returns.

- ✱ **Foreign Currency Funding:** For foreign currency lending, they optimize their funding costs by trading off the riskiness of a net foreign currency exposure with the potential for higher returns.

How Indian Banks Differ:

- ✓ **Regulatory Obligations:** Indian banks, especially public sector banks, are subject to government mandates that often prioritize social goals over profit.
- ✱ **Priority Sector Lending (PSL):** Banks are required to allocate a significant portion of their lending to priority sectors like agriculture and small enterprises. This type of lending often carries lower interest rates and higher risk, which compresses overall spreads.
- ✱ **Limited Product Focus:** In contrast to international banks, Indian banks have historically been required to focus on broad-based, lower-margin services, giving them less room to specialize in high-margin, niche products.
- ✓ **Funding Strategy:** Indian banks have a different liability structure, which affects their cost of funds and, consequently, their spread.
- ✱ **Higher Reliance on Low-Cost Deposits:** Indian banks have a higher dependence on low-cost Current Account and Savings Account (CASA) deposits, which are the cheapest source of funds. While this lowers their cost of funds, the low interest rates are balanced by lower-risk lending opportunities and regulatory requirements.
- ✱ **Lower Efficiency in Wholesale Funding:** Compared to their international counterparts, Indian banks have lower access to and efficiency in leveraging wholesale funding markets for strategic balance sheet management.
- ✓ **Risk Pricing and Assessment:** The approach to risk varies between Indian and international banks.
- ✱ **Less Advanced Credit Models:** Indian banks may not possess the same level of advanced analytical tools for granular credit assessment as larger international institutions. This can result in less precise risk pricing.
- ✱ **Socio-political Factors:** In India, factors like government-driven policies can impact lending decisions, adding a layer of risk that is different from pure market and credit risk calculations seen in international institutions.
- ✓ **Operational Model and Scale:** The operational models reflect different strategic priorities and market structures.
- ✱ **Higher-end Focus vs. Branch Network:** Foreign banks in India often concentrate on lucrative, high-end segments. Indian banks, particularly public sector ones, operate vast branch networks to ensure financial inclusion, which entails higher operational costs that can affect spreads.
- ✱ **Technology Adoption:** While Indian banks are increasingly adopting digital technology, foreign banks are known for bringing in cutting-edge technological advancements and specialized international practices that improve efficiency and enable a wider range of profitable services.

Need for 'Cost Control and Revenue Growth' in Indian Banks

Addressing the need for cost control and revenue growth in the Indian banking system requires a multi-pronged strategy focused on leveraging technology, optimizing operations, and diversifying income streams. While interest income remains the core driver of profitability, banks are increasingly focusing on fee-based and non-interest income to compensate for market fluctuations and intense competition.

Strategies for Controlling Costs and Over-heads:

Digital Transformation and Automation:

- ✱ **Embrace cloud computing:** Shifting from

on-premise infrastructure to cloud-based solutions can dramatically reduce IT infrastructure and operational costs.

- ✱ **Streamline processes:** Banks can use AI and machine learning to automate manual tasks across the front, middle, and back offices. This includes automating customer onboarding, loan processing, fraud management, and regulatory compliance checks.
- ✱ **Channel optimization:** Banks should re-evaluate their branch networks, using smaller physical branches as "advice centers"

while driving transactional activities to more cost-effective digital channels like mobile apps and online portals.

- ✱ **Invest in self-service:** Deploying self-service kiosks for tasks like instant debit card and passbook printing, as well as cash and cheque deposits, can lower branch footfall and staff requirements.
- ✓ **Operational Efficiency and Workforce Optimization:** Simplify operations: Eliminate redundant products and services to reduce the complexity and cost of managing a vast portfolio.
- ✱ **Improve productivity:** Use data analytics to identify inefficiencies and restructure processes. A significant portion of employee time in some banks is spent on internal discussions rather than output-linked activities, which can be improved with new operating models.
- ✱ **Optimize workforce management:** Implement tools and analytics to match staffing levels with peak hours and demand, preventing overstaffing and cutting labor costs.
- ✱ **Reimagine physical spaces:** Embrace hybrid work models to reduce real estate and infrastructure overheads.

Leaner Resource Management:

- ✓ **Centralize and Consolidate:** Move away from fragmented local practices by centralizing functions like procurement, IT, and data analysis to improve efficiency and reduce costs.
- ✱ **Outsource Non-core Functions:** Non-critical processes, such as business process management (BPM), can be outsourced to specialized third-party vendors for cost savings, though with strong oversight.
- ✱ **Strengthen Vendor Management:** Implement robust strategies to negotiate better contract terms and optimize procurement, especially for enterprises with large global supply chains.

Strategies for Improving Revenue Sources:

✓ **Expand and Diversify Non-interest Income:**

Enhance Wealth Management: Grow wealth advisory services for both high-net-worth individuals and the mass affluent segment. Use AI to personalize financial planning and offer sophisticated services, including retirement, tax, and estate planning.

- ✱ **Monetize APIs:** Implement a Banking-as-a-Service (BaaS) model by opening up bank APIs to third parties. Charge partners fees for using these APIs to embed financial services into other businesses, creating a new, scalable revenue stream.
- ✱ **Create Premium Offerings:** Develop and promote premium banking services with tiered features and subscription models that offer convenience and exclusivity, attracting new customer segments.
- ✱ **Monetize Data:** Leverage customer data and AI to generate insights that can be sold to third-party vendors for new revenue – Cross Selling / Selling of Third-Party Products (By following the regulatory Guidelines).
- ✱ **Explore New Investment Opportunities:** Actively participate in the Qualified Institutional Buyer (QIB) category of IPOs to generate higher non-interest income from listing gains.

Innovate and Optimize Interest Income:

- ✓ **Leverage customer data:** Use analytics to offer personalized, relationship-based interest rates and loyalty programs to attract and retain loan customers.
- ✱ **Accelerate growth in advances:** Aggressively grow the loan book, as credit growth has shown strong potential for increasing interest-based revenues.
- ✱ **Refine credit underwriting:** Use technology and AI to continuously refine credit underwriting standards, improve risk



pricing, and manage asset quality effectively to sustain interest income.

Enhance Customer-centric Offerings:

✓ **Integrate into ecosystems:** Become the orchestrator of a customer-centric financial ecosystem by integrating with third-party partners. This provides a comprehensive, value-driven experience and increases the bank's share of the customer's wallet

✱ **Simplify pricing and Communication:**

Improve communication with customers by simplifying fee structures and making them transparent. Customer dissatisfaction with high fees is a major reason for switching banks.

✱ **Develop Financial Literacy Tools:** Provide digital financial tools and advisory services to help customers with budgeting, investments, and financial planning. This builds trust and positions the bank as a partner, not just a service provider.

R) Challenges of Indian Commercial Banks:

Indian banks can address challenges like rising NPAs, decreasing spreads, and increasing fraud by controlling operational costs, digitizing processes, and focusing on asset quality. These strategic measures will decrease the cost-to-income (C/I) ratio, improve profitability, and ultimately enhance public and shareholder confidence.

✓ **Improve operational efficiency through technology:** A primary way to lower the cost-to-income ratio is by optimizing internal operations and customer-facing channels through technology.

✱ **Digitalize core processes:** Banks can reduce operational costs by implementing automated, digital workflows for tasks such as loan applications, KYC (Know Your Customer) checks, and anti-money laundering (AML).

✱ **Embrace intelligent automation and AI:** Robotic Process Automation (RPA) and Artificial Intelligence (AI) can streamline repetitive tasks, freeing up employees to focus on higher-value work. This boosts productivity and reduces personnel costs, which constitute a large portion of a bank's non-interest expenses.

✱ **Modernize legacy IT systems:** Many banks still rely on outdated and costly legacy systems. Moving functions to the cloud and adopting modern technology stacks can reduce maintenance costs and improve agility.

✱ **Optimize the branch network:** Downsizing physical infrastructure by consolidating underperforming branches and encouraging hybrid work models can

significantly lower overheads like rent and utilities.

✓ **Enhance Income Generation:** To decrease the cost-to-income ratio, banks must also grow their revenue, particularly non-interest income.

✱ **Diversify into fee-based services:** Banks can generate higher non-interest income by expanding their offerings in wealth management, insurance, asset management, and brokerage services.

✱ **Strategic cross-selling and up-selling:** Banks should use customer data to identify opportunities for cross-selling and up-selling products to their existing customer base, such as offering a mortgage or credit card to a checking account holder.

✱ **Form strategic partnerships:** Collaborating with Fintech's or other businesses can create new revenue streams and help banks penetrate underserved segments, like micro-enterprises and rural markets.

Strategies to Address specific Banking Challenges:

✱ **Addressing NPAs and provision costs:** The resolution of Non-Performing Assets (NPAs) is crucial for improving profitability, as high NPAs require large provisions that erode earnings.

✱ **Enhance credit underwriting:** Improving borrower selection through better risk assessment can help prevent the accumulation of future bad loans.

✱ **Accelerate debt recovery:** Banks can utilize mechanisms like the Insolvency and Bankruptcy Code (IBC) and e-auctions under the SARFAESI Act to expedite the recovery of dues.



- ✱ **Monitor unsecured credit:** The Reserve Bank of India (RBI) has noted rising risks in unsecured retail credit, which warrants heightened vigilance from banks in this segment.
- ✓ **Managing Decreasing Spreads:** Net Interest Margin (NIM) is the difference between interest earned on loans (Yield on Advances) and interest paid on deposits (Cost of Deposits). Competition and shifting savings patterns have put pressure on this spread.
- ✱ **Increase CASA deposits:** The shift of household savings towards capital markets is increasing banks' reliance on costlier funding sources. Banks must innovate to retain and grow low-cost Current Account and Savings Account (CASA) deposits.
- ✱ **Leverage new growth engines:** Pursuing opportunities in areas like green finance, digital commerce, and the corporate capex cycle can create new lending markets with healthy margins.
- ✓ **Combating Fraud:** Digital frauds are a growing threat that affects banks financially and exposes them to significant reputational risk.
- ✱ **Strengthen cybersecurity and IT systems:** Continuous investment in technology and robust cybersecurity measures is essential to protect IT infrastructure and customer data.
- ✱ **Use advanced analytics:** Banks should leverage data and analytics to improve transaction monitoring and detect suspicious or unusual activity more effectively.
- ✱ **Enhance customer awareness:** Educating customers on the risks of digital fraud and social engineering is crucial for prevention.
- ✓ **Improve Transparency and Governance:** Beyond financial performance, a bank's reputation is built on trust.
- ✱ **Adhere to robust governance structures:** Banks must implement strong internal controls and governance policies that prioritize transparency and ethical conduct.
- ✱ **Enhance disclosures:** Providing clear and comprehensive disclosures to the public builds confidence and trust.
- ✱ **Integrate ESG frameworks:** Emphasizing Environmental, Social, and Governance (ESG) principles aligns with growing stakeholder expectations and demonstrates a commitment to sustainable value creation.
- ✓ **Enhance Customer Experience:** A superior and seamless customer experience is a key differentiator in a competitive market.
- ✱ **Hyper-personalization:** Using data and analytics to offer personalized products and services builds stronger customer relationships and drives loyalty.
- ✱ **Improve collections processes:** Shifting from a punitive "collections-oriented" mindset to a customer-centric "customer-service" approach can improve customer retention.
- ✓ **Foster Operational Resilience:** Investors and customers are reassured by a bank's ability to withstand shocks.
- ✱ **Strengthen capital base:** Maintaining a robust Capital-to-Risk-Weighted Assets Ratio (CRAR) demonstrates financial stability.
- ✱ **Manage liquidity risks:** Prudent liquidity management is crucial, especially in an environment of shifting deposit patterns and higher interest rates.
- ✱ **Address talent challenges:** Revamping employee value propositions to attract and retain specialized talent in areas like technology and analytics is vital for building a resilient organization.

Schedule 16: Total-Operating Expenses

(₹ in '000)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	82652,22,35	93397,51,52	97743,13,61	124860,81,35	118069,02,22
Punjab National Bank	20308,74,75	20252,59,51	24105,40,85	28535,79,80	32260,87,15
Bank of Baroda	20543,65,60	21716,43,88	24518,31,24	28251,67,56	29871,38,07
Canara Bank	19338,18,42	19791,90,55	22481,47,99	26119,79,61	28134,49,54
Union Bank of India	16765,99,28	18438,07,35	21931,33,19	24439,95,98	25936,54,86
Bank of India	10839,10,63	11952,37,43	13982,17,24	15079,16,33	16975,46,09
Indian Bank	10349,55,28	10926,50,28	12097,90,28	14300,45,59	15401,64,46
Bank of Maharashtra	3565,05,72	3849,01,28	3921,83,56	4815,20,10	5801,49,65
Central Bank of India	6782,23,30	7258,09,87	8886,73,55	10244,91,54	11627,16,58
UCO Bank	4754,80,89	4776,32,26	5510,91,50	6790,06,39	7999,40,83
Indian Overseas Bank	5561,72,12	5451,24,36	6421,46,32	8721,90,75	7747,26,38
Punjab & Sind Bank	2393,49,65	2280,60,29	2463,40,19	2931,57,40	3276,38,79

(Source: Annual Reports)

Schedule 16: Operating Expenses in the Banking Sector:

In the banking sector, operating expenses are the costs a bank incurs to run its daily operations and conduct its core business activities. These are critical to a bank's financial health, as they directly impact its profitability and operational efficiency.

In India, banks are required to prepare their financial statements according to the format prescribed by the Reserve Bank of India (RBI), which includes specific schedules detailing different income and expense categories. Schedule 16 lists the bank's operating expenses.

Schedule 16, detailing the operating expenses of banks, comprises the costs incurred in their day-to-day operations and has a direct impact on the scope, quality, and cost of their service and product offerings. A bank's operating expenses cover a wide array of activities necessary to produce and deliver its financial services.

The key Components typically found under Schedule 16:

Payments to and Provisions for Employees:

- ★ **Explanation:** This is often the most significant operating expense for a bank. It includes all costs associated with compensating and providing benefits to employees.

- ★ **Purpose:** To attract and retain the talent necessary to run the bank's operations, serve customers, and manage its various departments, from tellers and loan officers to senior executives.

Rent, Taxes, and Lighting:

- ★ **Explanation:** This covers expenses related to the bank's physical infrastructure, including rent and municipal taxes for branch offices, ATMs, and administrative offices. It also includes utility costs such as electricity for lighting, air conditioning, and powering office equipment.

- ★ **Purpose:** To provide the physical locations necessary for serving customers, housing staff, and running the business effectively.

Printing and Stationery:

- ★ **Explanation:** These are the costs for all printed materials and office supplies used in the bank's day-to-day business. This includes customer forms, passbooks, cheque books, letterheads, and general office supplies.

- ★ **Purpose:** To facilitate the documentation and record-keeping required for banking transactions and daily administrative tasks.



Advertisement and Publicity:

- ★ **Explanation:** This covers all expenditures on promoting the bank's products and services. It includes costs for marketing campaigns across various media, including print, television, digital, and social media.
- ★ **Purpose:** To build the bank's brand, attract new customers, promote new products (e.g., loans, credit cards), and maintain market share.

Depreciation on the Bank's Property:

- ★ **Explanation:** This is a non-cash expense that represents the allocation of the cost of a tangible asset over its useful life. It includes depreciation on bank buildings, office equipment, computers, furniture, and vehicles.
- ★ **Purpose:** To systematically account for the decrease in value of a bank's long-term assets, providing a more accurate reflection of their value over time.

Directors' fees, Allowances, and Expenses:

- ★ **Explanation:** This includes compensation paid to the members of the bank's Board of Directors for their services, such as sitting fees for attending board meetings and reimbursement for related expenses.
- ★ **Purpose:** To compensate the directors for their strategic guidance, oversight, and governance of the bank's operations.

Auditors' Fees and Expenses:

- ★ **Explanation:** These are the professional fees paid to external auditors for auditing the bank's financial statements and ensuring compliance with accounting standards and regulations.
- ★ **Purpose:** To provide independent and objective assurance that the bank's financial reports are accurate and fair, which is crucial for maintaining public trust and regulatory compliance.

Law Charges:

- ★ **Explanation:** This includes legal fees and other related charges incurred by the bank for various legal matters. This can involve expenses for

litigation, mergers and acquisitions, and maintaining compliance with banking laws.

- ★ **Purpose:** To handle legal issues, protect the bank's interests, and ensure its operations adhere to the law.

Postage, Telegrams, and Telephone Expenses:

- ★ **Explanation:** This category covers communication costs, including postage for mailing bank statements, cheques, and official letters. It also includes telecommunication expenses for phones, faxes, and internet services.
- ★ **Purpose:** To maintain essential communication with customers, other financial institutions, and internal branches.

Repairs and Maintenance:

- ★ **Explanation:** These are the recurring costs associated with maintaining the bank's properties, including its branches, offices, and ATM network.
- ★ **Purpose:** To ensure that all bank facilities and equipment are in good working condition, avoiding disruptions to customer service and business operations.

Insurance:

- ★ **Explanation:** This covers insurance premiums paid for various types of coverage, including property insurance, employee insurance, and other liability insurance.
- ★ **Purpose:** To protect the bank's assets and business against potential risks and financial liabilities.

Other Expenditure:

- ★ **Explanation:** This is a miscellaneous category that includes any operating expenses not covered by the other schedules. Examples include fees for banking services, IT consultancy charges, and other administrative costs.
- ★ **Purpose:** To capture the wide variety of smaller, necessary expenses required for the bank's daily functioning.



How the above expenses directly impact service offerings:

- ★ **Service availability and convenience:** Expenses for a physical branch network, ATMs, and digital infrastructure determine where and how customers can access banking services. A larger network and robust IT lead to greater convenience for the customer but also result in higher operating costs.
- ★ **Cost of services for the customer:** Operating expenses are a key factor in a bank's profitability and pricing strategy. Higher operational costs, such as those for manpower and IT, may be passed on to customers in the form of fees for various banking products, including loans, accounts, and other fee-based services.
- ★ **Service quality:** The quality of a bank's staff (recruitment and training costs) and its technological capabilities (IT spending) directly influence the efficiency, accuracy, and overall quality of customer service. Investing in these areas improves service but increases operating expenses.
- ★ **Product innovation:** Research and development expenses (included under "other expenditure" or specifically listed) are crucial for developing new and competitive banking products, from specialized loans to new fintech services. The ability to innovate is a function of a bank's willingness to spend on these operating costs.
- ★ **Compliance and security:** Legal, audit, and IT security costs are non-negotiable operating expenses for banks. These expenditures are essential to ensure the safety and security of customer assets and data, which is a core part of any bank's service offering.

To Sum Up:

While reducing operational costs is a strategy to improve profitability, banks also have other key alternatives like improving asset quality, adopting new technologies, increasing efficiency through the EASE framework for Public Sector Banks (PSBs), and benefiting from economic growth which can lead to higher interest rates on advances.

Challenges Facing Banks:

- ★ **Low interest on advances:** An economic environment with low-interest rates reduces the

income generated from loans.

- ★ **High cost of deposits:** Banks face increased expenses for the funds they take from depositors, such as savings or fixed deposit accounts.
- ★ **Increase in Non-Performing Assets (NPAs):** A high volume of unpaid loans (NPAs) erodes profitability and requires banks to set aside more capital for provisions.
- ★ **Increase in Frauds:** Fraudulent activities lead to direct financial losses and can impact a bank's reputation and profitability.

Other Alternatives for Banks:

- ★ **Improve Asset Quality:** Strengthening their loan portfolios by reducing the rate of NPAs can significantly improve profitability.
- ★ **Leverage Technology:** Implementing technologies like Artificial Intelligence (AI) can automate basic customer service, improve operational efficiency, and free up human agents for more complex tasks.
- ★ **Enhance Operational Efficiency:** Banks can simplify products and services, improve staff productivity, and reconfigure their physical workplaces to lower costs.
- ★ **Benefit from Economic Growth:** A strong economy can lead to increased demand for loans, higher interest rates on advances, and a better overall profitability for banks.
- ★ **Implement Government Frameworks:** Initiatives like the Enhanced Access & Service Excellence (EASE) framework for Public Sector Banks focus on technology-driven banking and outcome-centric human resources to improve efficiency and profitability.

Improved bank financial health is critical for the Indian economy and its citizens, as evidenced by recent improvements in key indicators like Capital to Risk (Weighted) Assets Ratio (CRAR) and a significant decline in non-performing assets (NPAs). A stable banking sector supports economic growth, better financial services, and financial inclusion for the public, though challenges like rising digital fraud and potential risks from high write-offs need continued attention.



References:

a) IBA Published Data of PSBs.

b) Schedule 16 – Operating Expenses of PSBs-Annual Reports of PSBs.

c) The Management Accountant – January 2021.

d) F. No. 7/124/2012-BOA-Ministry of Finance.

Annexure I

Need of Costing Department in Banks

An analysis of the Indian banking sector reveals a compelling case for creating dedicated Costing Departments and appointing Chief Cost Officers (CCOs). The year-on-year increase in non-interest expenses, driven by factors such as regulatory compliance, competition, and operational inefficiencies, has put pressure on profitability. Hiring qualified cost and management accountants (CMAs) and implementing robust costing tools would be a strategic move to address these challenges.

Reasons for establishing a Costing Department:

- ★ **Controlling non-interest expenditure:** Operational costs, or non-interest expenses, are a controllable factor for banks. A dedicated department with skilled CMAs can track, analyse, and manage these costs, which range from salaries, rent, and administrative overheads to technology investments.
- ★ **Enhancing operational efficiency:** Costing tools like Activity-Based Costing (ABC) can help allocate costs accurately to specific products, services, or activities. This provides insights to optimize processes, eliminate waste, and enhance operational efficiency.
- ★ **Improving profitability:** By managing costs effectively, banks can directly improve their bottom line. A lower cost-to-income ratio (CIR), a key measure of operational efficiency, indicates higher profitability. Costing can inform pricing strategies for various products and services, ensuring profitability across the board.
- ★ **Supporting strategic decision-making:** Costing provides detailed, data-driven analysis to support informed management decisions. This includes evaluating the profitability of new products, branches, or delivery channels. Costing exercises can help banks forecast future costs and achieve their budgeted goals.
- ★ **Enabling proactive risk management:** Non-interest expenses often arise from risks such as fraud, IT infringement, and compliance failures. A costing department can conduct vendor and process audits to improve controls and mitigate these risks.
- ★ **Aligning with digital transformation:** As

banks invest heavily in digital banking and new technologies, understanding the cost-effectiveness of these initiatives is crucial. Cost accountants can model costs at a granular, transactional level to assess the impact of digital channels like mobile and internet banking.

Need for Cost Accountants and Chief Cost Officers:

- ★ **Specialized skills for the banking sector:** The role of a Cost and Management Accountant (CMA), qualified by The Institute of Cost Accountants of India (ICMAI), is distinct from that of a Chartered Accountant (CA). While CAs focus on financial reporting and statutory compliance, CMAs specialize in cost control, efficiency, and decision support.
- ★ **Strategic leadership at the Head Office:** A Chief Cost Officer (CCO) at the Head Office would provide centralized strategic direction and oversight for cost management across the bank. This ensures a consistent approach to cost control initiatives across regional and zonal offices.
- ★ **Execution and control at the regional level:** Costing departments at the regional or zonal level can provide localized support. Their responsibilities would include budgetary control, variance analysis, and performance evaluation for their specific area.
- ★ **Empowering other departments:** By working closely with departments like IT, treasury, risk, and operations, cost accountants can provide data to help managers optimize their specific areas. They act as “strategic partners” rather than just number-crunchers.
- ★ **Boosting employee morale and productivity:** Focusing on cost control can lead to more efficient use of resources and better management of operational processes. This can reduce employee workload and stress, which are known challenges in the banking industry.

Expected Outcomes:

The introduction of a comprehensive costing structure



with CMAs in regional and zonal offices, led by a CCO, can provide Indian banks with a competitive edge by:

- ✱ *Increasing overall profitability.*
- ✱ *Enhancing operational efficiency.*
- ✱ *Optimizing resource allocation.*
- ✱ *Strengthening risk management frameworks.*
- ✱ *Ensuring sustainable growth in a competitive and evolving market.*

Annexure II

Model Cost Sheets-International Banks

International Banks use comprehensive expense control frameworks rather than single “Model Cost Sheets” to manage complex operational expenses. These frameworks are integrated into the bank’s overall risk management structure and are heavily influenced by regulatory bodies and frameworks like the Basel Accords and COSO. The strategies focus on continuous optimization, technology adoption, and robust governance to ensure sustainability and regulatory compliance.

Key Components of Expense Control Frameworks:

Cost-center-based Cost Sheets:

Banks categorize expenses by department or business unit (e.g., retail banking, investment banking, IT) to track spending and assign accountability. This approach provides detailed visibility into the operational costs of each division.

Model Cost Sheet: IT Department:

Expense Category	Account Code	Budget Period	Budgeted Amount	Actual Amount	Variance	Analysis
Personnel Costs						
Salaries and Wages	51101	Q4 2025	\$ 5,000,000	\$ 4,950,000	\$ 50,000	Under Budget due to recent attrition.
Training and Development	51102	Q4 2025	\$ 100,000	\$ 120,000	(\$ 20,000)	Increased spending on cybersecurity training.
Technology Infrastructure						
Cloud Services (SaaS)	52210	Q4 2025	\$800,000	\$850,000	(\$50,000)	Higher usage costs for cloud computing.
Software Licensing	52211	Q4 2025	\$600,000	\$580,000	\$20,000	Volume discount negotiated mid-quarter.
General & Administrative						
Consulting Fees	53305	Q4 2025	\$200,000	\$195,000	\$5,000	On track with project spending.
Vendor Management	53306	Q4 2025	\$150,000	\$150,000	\$0	As budgeted.

Zero-based Budgeting (ZBB):

Instead of starting with the previous year’s budget, ZBB requires every department to justify each expense item from a “zero base”. This forces a critical review of all spending and helps eliminate non-essential costs.

Activity-based Costing (ABC):

International banks use ABC to allocate costs more accurately by identifying the specific activities that drive operational expenses. For instance, rather than a single

overhead cost for a bank branch, ABC would allocate costs based on activities like processing deposits, opening new accounts, or providing loan services.

Zero-based Demand Management:

This technique uses data and analytics to challenge the underlying demand for a service, not just its cost. A bank might analyse cash-in-transit trips to ATMs to determine the optimal cash stock balance for each machine, which reduces both the number of trips and cash-in-stock costs.



Financial Shared Services:

Many large banks centralize back-office functions like IT support, procurement, and accounts payable into shared service centers. This eliminates redundant processes, creates economies of scale, and ensures a single, high-level view of costs.

Best Practices in Expense Control:

Automation and AI:

Banks are using advanced technologies like AI and Robotic Process Automation (RPA) to automate back-office and compliance processes. This leads to greater efficiency and significant cost reduction in non-personnel costs, which can account for up to 40% of overall expenses.

Vendor and Portfolio Optimization:

- **Vendor Consolidation:** Reducing the number of vendors and using fewer, more strategic partners allows banks to leverage volume for better discounts and terms.
- **Product Rationalization:** International banks continuously evaluate their product and service offerings to eliminate unprofitable or redundant ones. This trims the costs of managing an overly complex portfolio.

Real Estate and Workspace Optimization:

Many international banks are adopting hybrid working models to reduce their physical footprint and associated costs for rent, infrastructure, and maintenance.

Enhanced Financial Planning and Analysis (FP&A):

Leading banks utilize advanced analytics and rolling forecasts to create more accurate financial projections. Regular analysis of expense data helps identify cost drivers, spending patterns, and areas for improvement.

Sample Operational Expense Management Process Flow:

- **Budgeting:** Use zero-based budgeting (ZBB) for major initiatives and a rolling forecast for ongoing expenses.
- **Tracking and Reporting:** Capture expenses using an automated system, preferably with direct links to corporate cards. Generate monthly cost sheets for each department showing budget vs. actuals.
- **Analysis:** Use spend analytics to identify trends, areas of overspending, and compliance issues.
- **Policy Enforcement:** Automate expense policy enforcement by embedding rules into the expense management platform. For example, automatically reject expenses that exceed policy limits.
- **Strategic Reviews:** Conduct quarterly reviews to re-evaluate vendor contracts, assess product profitability, and identify opportunities for further automation or efficiency gains.
- **Continuous Improvement:** Incorporate a feedback loop where managers and finance teams review findings and refine policies and budgets for the next cycle.

Annexure III

Cost Control & Productivity Ratios to improve functioning of Bank Branches

To improve the functioning of bank branches from a cost control and productivity point of view, banks should monitor specific financial ratios. These ratios, while calculated at the bank level, can be disaggregated or adapted to measure the performance of individual branches.

Efficiency Ratios (Cost Control Point of View)

These ratios focus on managing operating expenses effectively.

✓ **Efficiency Ratio (Cost-to-Income Ratio - CIR):** This is the primary measure of bank efficiency.

- **Formula:** $(\text{Non-Interest Expenses} / \text{Revenue}) \times 100$
- **Significance for Branches:** A lower ratio (below 50% is generally considered optimal) indicates that a branch is more efficient in managing its overhead costs (e.g., employee salaries, administrative costs, marketing, utilities) relative to the income it generates. Monitoring this at the branch level helps identify cost-saving opportunities and best practices.

Operating Cost to Average Total Assets Ratio:

- **Formula:** $\text{Operating Expenses} / \text{Average Total Assets}$
- **Significance for Branches:** This ratio shows the level of operating expenses in relation to the total assets managed by the branch. A lower ratio indicates better cost management in relation to the volume of business handled.

Cost of Funds Ratio:

- **Formula:** $\text{Interest Expenses} / \text{Average Interest-Bearing Liabilities (Deposits \& Borrowings)}$
- **Significance for Branches:** While interest expenses are central to banking, branches that can attract a higher proportion of low-cost deposits (like Current Account Savings Account - CASA deposits) can significantly lower this ratio, thereby contributing

to higher overall profitability and cost control.

Productivity Ratios (Productivity Point of View):

These ratios measure how effectively a branch utilizes its assets and resources to generate income and growth.

✓ **Return on Assets (ROA):** This is a key measure of profitability and managerial efficiency.

- **Formula:** $\text{Net Income (after tax)} / \text{Total Assets}$
- **Significance for Branches:** ROA shows how effectively a branch is using its assets (mainly loans and investments) to generate profit. A higher ROA is desirable and indicates strong performance.

Loan-to-Assets Ratio (or Credit-to-Deposit Ratio):

- **Formula:** $\text{Total Loans (Advances)} / \text{Total Assets (or Total Deposits)}$
- **Significance for Branches:** This indicates the proportion of assets tied up in lending activities, which are typically the primary source of interest income. A higher ratio might indicate a more aggressive lending strategy, but must be balanced with asset quality considerations. When analyzed with the Credit-Deposit ratio, it helps understand how well a branch utilizes its deposit base for lending within its operational area.

Asset Turnover Ratio:

- **Formula:** $\text{Net Sales (or Total Income)} / \text{Average Total Assets}$
- **Significance for Branches:** While more general, this ratio can be adapted to show how efficiently the branch uses its assets to generate overall income. An increasing trend is desirable.

Other Important Ratios:

✓ **Net Interest Margin (NIM) / Interest Spread:**

- **Formula:** $(\text{Interest Income} - \text{Interest Expense}) / \text{Total Assets}$



- **Significance for Branches:** NIM measures the core lending profitability of the branch's operations. A higher NIM means the branch is effectively managing the spread between the interest earned on loans and the interest paid on deposits.

CASA Ratio:

- **Formula:** $(\text{Current Deposits} + \text{Savings Deposits}) / \text{Total Deposits}$
- **Significance for Branches:** As mentioned earlier, a higher CASA ratio implies the bank has access to a larger pool of low-cost funds, which directly contributes to a better NIM and profitability.

Non-Performing Assets (NPA) Ratios (Gross NPA / Net NPA):

- **Formula:** $\text{Gross/Net NPAs} / \text{Total Advances}$
- **Significance for Branches:** These measure asset quality and risk management. While not a direct efficiency ratio, high NPAs significantly impact profitability and require more resources (cost), so managing these at the branch level is crucial for overall functioning.

By tracking these ratios, bank management can compare branch performance, identify operational inefficiencies, implement cost-saving measures, and optimize asset utilization to improve overall functioning.



Chapter 2

Analysis of Business Parameters of Private Sector Banks



Contents:

1. <i>Investments.</i>	13. <i>Provisions & Contingencies.</i>
2. <i>Advances.</i>	14. <i>Net Profit.</i>
3. <i>Total Assets.</i>	15. <i>Credit Deposit Ratio.</i>
4. <i>Gross NPAs.</i>	16. <i>Investment Deposit Ratio.</i>
5. <i>Net NPAs.</i>	17. <i>Spread as % of Assets.</i>
6. <i>Interest Income.</i>	18. <i>Operating Expenses as % to Total Expenses.</i>
7. <i>Other Income.</i>	19. <i>Return on Assets (%).</i>
8. <i>Total Income.</i>	20. <i>Capital Adequacy Ratio – Basel III.</i>
9. <i>Interest Expended.</i>	21. <i>Net NPA as % to Net Advances.</i>
10. <i>Operating Expenses.</i>	22. <i>Business Per Employee.</i>
11. <i>Total Expenditure.</i>	23. <i>Profit per Employee.</i>
12. <i>Operating Profit.</i>	24. <i>References.</i>

New-generation Private Sector Banks consistently perform better than older ones across major financial metrics. Based on IBA data, this chapter compares banks using:

- ✱ Capital Adequacy Ratio (CAR).***
- ✱ Asset quality indicators like NPAs.***
- ✱ Profitability ratios (ROA, ROE).***
- ✱ Employee productivity indicators like business per employee.***

Financial Data for FY 2023–2025 has been used, sourced from IBA and Bank Annual Reports.

Analysis of Business Parameters of Private Sector Banks

As per Reserve Bank of India (RBI) statistics and related financial reports for the financial year ended March 2025 (FY25), New Private Sector Banks generally exhibited a better overall financial health and operational efficiency compared to Old Private Sector Banks.

Key Trends for FY25 included:

- ✳ **Profitability and Efficiency:** New Private Sector Banks (e.g., HDFC, ICICI, Kotak Mahindra) generally maintained higher valuations, better Return on Assets (ROA), and superior Return on Equity (ROE) compared to older private banks. This indicates better earning quality and overall efficiency.
- ✳ **Asset Quality:** The Banking System as a whole saw improved Asset Quality, with System-wide Gross Non-Performing Assets (GNPA) easing to 2.2% in March 2025. Private Banks as a Group maintained healthier Asset Quality Ratios (GNPA of around 1.8% in Q1 FY26) Compared to Public Sector Banks.

✳ **Credit Growth:** A significant trend in FY25 was that for the first time in 15 years, public sector banks actually outpaced private sector banks in credit growth, though private banks still saw growth (around 9.5%).

✳ **Capital Adequacy:** The capital to risk-weighted assets ratio (CRAR) for all Scheduled Commercial Banks reached a record high of 17.3% by March 2025, indicating strong capital buffers across the sector.

✳ **Deposit Composition:** Both groups faced the challenge of rising costs of funds as the share of low-cost Current Account and Savings Account (CASA) deposits declined, and customers shifted to high-interest term deposits. The Credit-Deposit ratio rose for the system to around 80.2%.

New Private Sector Banks continued to lead in profitability and overall financial strength, a long-standing trend, while Old Private Sector banks made efforts to improve their performance, particularly in credit growth and asset quality.

Detailed Analysis:

Table No:01

(₹ in Crores)

Sl. No.	Banks	Deposits		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	52,398	55,657	63,526
2	Tamil Nadu Mercantile Bank Ltd.	47,766	49,515	53,689
3	CSB Bank Ltd.	24,506	29,719	36,861
4	Dhanlaxmi Bank Ltd	13,352	14,290	16,013
5	The Federal Bank Ltd.	2,13,386	2,52,534	2,83,647
6	The Jammu & Kashmir Bank Ltd.	1,22,038	1,34,776	1,48,569
7	The Karnataka Bank Ltd.	87,368	97,988	1,04,807
8	The Karur Vysya Bank Ltd.	76,638	89,113	1,02,078
9	Nainital Bank Ltd.	7,682	8,268	8,256
10	RBL Bank	84,887	1,03,494	1,10,944
11	The South Indian Bank Ltd.	91,651	1,01,920	1,07,526
	Total of Old Private Banks [I]	8,21,671	9,37,274	10,35,917
II	New Private Sector Banks			
12	Axis Bank Ltd.	9,46,945	10,68,641	11,72,952



Sl. No.	Banks	Deposits		
		2023	2024	2025
13	DCB Bank Ltd.	41,239	49,353	60,031
14	HDFC Bank Ltd.	18,83,395	23,79,786	27,14,715
15	ICICI Bank Ltd.	11,80,841	14,12,825	16,10,348
16	IndusInd Bank Ltd.	3,36,438	3,84,793	4,11,078
17	Kotak Mahindra Bank Ltd.	3,63,096	4,48,954	4,99,055
18	YES Bank	2,17,502	2,66,372	2,84,525
19	Bandhan Bank	1,08,065	1,35,202	1,51,212
20	IDFC First Bank Ltd.	1,44,637	2,00,576	2,52,065
21	IDBI Ltd.	2,55,490	2,77,657	3,10,294
	Total of New Private Banks [II]	54,77,648	66,24,160	74,66,276
	Total of Private Banks [I+II]	62,99,318	75,61,434	85,02,193

(Source: IBA)

IBA=Indian Banks Association

OPS=Old Public Sector Banks

NPS=New Public Sector Banks

Recommendations:

- ✳ **Strengthen Deposit Mobilization:** Continue focusing on stable deposit growth, especially for banks showing slower growth (e.g., Nainital Bank, Dhanlaxmi Bank). Introduce targeted savings products for youth, senior citizens, and SMEs.
- ✳ **Improve Customer Retention:** Invest in customer service quality and faster issue resolution. Offer loyalty benefits for long-term depositors.
- ✳ **Enhance Digital Banking:** Expand digital onboarding and mobile banking features. Use analytics to offer personalized deposit schemes.
- ✳ **Reduce Dependence on Bulk Deposits:** Encourage retail deposit growth, which is more stable and cost-effective. Promote recurring and fixed deposits through branch campaigns.
- ✳ **Strengthen Branch & Regional Strategies:** For banks with strong local presence, deepen penetration in core states. Identify high-potential new markets for geographic expansion.
- ✳ **Improve Marketing & Communication:** Highlight safety, convenience, and competitive rates. Conduct financial literacy programs to build trust and brand value.
- ✳ **Monitor Deposit-Cost Ratios:** Keep deposit interest rates competitive but sustainable. Strengthen ALM (Asset-Liability Management) to avoid margin pressure.
- ✳ **Digital-First Approach for New Private Banks:** Banks like HDFC, ICICI, Axis, and Kotak should continue leading through-AI-driven financial recommendations-End-to-end digital deposit journeys-Cross-selling using customer data.
- ✳ **Nurture Traditional Strengths for Old Private Banks:** Leverage community trust, long-standing branches, and local relationships. Upgrade digital capabilities to retain younger customers.
- ✳ **Focus on Financial Inclusion:** Open low-cost accounts in semi-urban and rural areas. Use business correspondents to expand reach at lower cost

Table No:02

Sl. No.	Banks	Investments		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	14,333	15,664	17,336
2	Tamil Nadu Mercantile Bank Ltd.	14,156	15,263	15,101
3	CSB Bank Ltd.	5,849	7,551	11,389
4	Dhanlaxmi Bank Ltd	3,889	3,942	3,955
5	The Federal Bank Ltd.	48,983	60,860	66,246
6	The Jammu & Kashmir Bank Ltd.	34,829	34,987	41,213
7	The Karnataka Bank Ltd.	23,326	24,302	24,537
8	The Karur Vysya Bank Ltd.	18,808	22,344	23,831
9	Nainital Bank Ltd.	21,302	1,989	1,857
10	RBL Bank	28,875	29,576	32,165
11	The South Indian Bank Ltd.	24,642	23,977	21,777
	Total of Old Private Banks [I]	2,38,993	2,40,454	2,59,406
II	New Private Sector Banks			
12	Axis Bank Ltd.	2,88,815	3,31,527	3,96,142
13	DCB Bank Ltd.	12,582	16,211	20,150
14	HDFC Bank Ltd.	5,17,001	7,02,415	8,36,360
15	ICICI Bank Ltd.	3,62,330	4,61,942	5,04,757
16	IndusInd Bank Ltd.	83,116	1,06,527	1,14,497
17	Kotak Mahindra Bank Ltd.	1,21,404	1,55,404	1,81,907
18	YES Bank	76,888	90,235	85,104
19	Bandhan Bank	32,366	29,288	40,712
20	IDFC First Bank Ltd.	61,124	74,710	80,716
21	IDBI Ltd.	99,690	1,14,934	1,17,468
	Total of New Private Banks [II]	16,55,316	20,83,193	23,77,813
	Total of Private Banks [I+II]	18,94,308	23,23,647	26,37,219

(Source: IBA)

Recommendations:

- ✳ **Improve Investment Portfolio Quality:** Shift more funds toward high-quality, low-risk assets to ensure stable returns. Regularly review portfolio performance to reduce exposure to underperforming securities.
- ✳ **Strengthen Risk Management:** Use stricter duration and interest-rate risk controls, especially as investments grow. Stress-test investment portfolios more frequently.
- ✳ **Diversify Investments:** Avoid over-concentration

in any one sector or instrument. Explore a balanced mix of government securities, high-grade corporate bonds, and money-market instruments.

- ✳ **Optimize Yield Without Excess Risk:** Look for moderate-risk, better-yielding products rather than only low-yield safe options. Actively monitor market conditions to capture short-term opportunities.
- ✳ **Digital Tools for Investment Decisions:** Use data analytics and AI for portfolio optimization and early-warning signals. Implement automated monitoring dashboards for treasury operations.



- ★ **Strengthen Treasury Operations:** Improve efficiency and governance in treasury departments. Ensure compliance with RBI norms in valuation, provisioning, and classification.
 - ★ **Align Investments with Deposit Growth:** As deposits rise, ensure investment growth is well-matched to maintain liquidity. Maintain a healthy balance between SLR and non-SLR investments.
 - ★ **Improve Liquidity Management:** Keep sufficient high-quality liquid assets to meet unexpected cash needs. Regularly update liquidity contingency plans.

- ★ **Focus on Low-Performing Banks:** Banks with stagnating or falling investments (e.g., Nainital Bank, Dhanlaxmi Bank, South Indian Bank) should:
 - (a) Reassess investment strategy for better asset deployment.
 - (b) Strengthen capital and risk buffers before expanding investment books.
 - ★ **Enhance Governance & Compliance:** Strengthen oversight committees for treasury and risk. Ensure transparent reporting and adherence to RBI guidelines in investment classification.

Table No:03

Sl. No.	Banks	Advances		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	43,053	45,526	52,081
2	Tamil Nadu Mercantile Bank Ltd.	37,290	39,734	43,984
3	CSB Bank Ltd.	20,651	24,336	31,507
4	Dhanlaxmi Bank Ltd	9,452	10,102	11,959
5	The Federal Bank Ltd.	1,74,447	2,09,403	2,34,836
6	The Jammu & Kashmir Bank Ltd.	82,285	93,763	1,04,199
7	The Karnataka Bank Ltd.	59,952	71,509	76,541
8	The Karur Vysya Bank Ltd.	63,134	73,667	84,005
9	Nainital Bank Ltd.	4,317	4,518	4,664
10	RBL Bank	70,209	83,987	92,618
11	The South Indian Bank Ltd.	69,804	78,061	85,682
	Total of Old Private Banks [I]	6,34,594	7,34,605	8,22,077
II	New Private Sector Banks			
12	Axis Bank Ltd.	8,45,303	9,65,068	10,40,811
13	DCB Bank Ltd.	34,378	40,925	51,047
14	HDFC Bank Ltd.	16,00,586	24,84,862	26,19,609
15	ICICI Bank Ltd.	10,19,638	11,84,406	13,41,766
16	IndusInd Bank Ltd.	2,89,924	3,43,298	3,45,019
17	Kotak Mahindra Bank Ltd.	3,19,861	3,76,075	4,26,909
18	YES Bank	2,03,269	2,27,799	2,46,188
19	Bandhan Bank	1,04,757	1,21,137	1,31,987
20	IDFC First Bank Ltd.	1,51,795	1,94,592	2,33,113
21	IDBI Ltd.	1,62,568	1,88,621	2,18,399
	Total of New Private Banks [II]	47,32,078	61,26,784	66,54,848
	Total of Private Banks [I+II]	53,66,673	68,61,388	74,76,925

(Source: IBA)

Recommendations:

- ✱ **Improve Credit Quality:** Strengthen credit appraisal to avoid future NPAs. Focus lending on high-quality borrowers and sectors with stable cash flows.
- ✱ **Diversify Loan Portfolio:** Avoid too much lending in any single sector. Increase exposure to retail, MSME, and agriculture-these provide steady, low-risk growth.
- ✱ **Strengthen Risk Management:** Use early-warning systems to detect stressed accounts. Review large borrowers more frequently.
- ✱ **Promote Quality Retail Lending:** Expand home loans, auto loans, and personal loans with strict verification. Retail loans usually produce lower default rates and better margins.
- ✱ **Improve Credit Monitoring:** Monitor overdue accounts daily. Increase field visits for MSME and agriculture borrowers.
- ✱ **Use Technology to Reduce Credit Risk:** Apply data analytics and AI to improve loan approvals. Automate credit scoring for small-ticket loans.
- ✱ **Manage Advance Growth Wisely:** Align loan growth with deposit growth to maintain liquidity. Avoid aggressive lending without strong credit controls.
- ✱ **Recover Stressed Assets Faster:** Speed up recovery through settlement schemes and legal channels. Strengthen collection teams for early-stage delinquent loans.
- ✱ **Special Focus on Slow-Growth Banks:** Banks with slower loan growth (e.g., Nainital Bank, Dhanlaxmi Bank) should:
 - (a) Strengthen their branch network.
 - (b) Improve customer outreach and introduce more competitive loan products.
- ✱ **Strengthen Compliance & Governance:** Ensure all loans follow RBI norms. Improve documentation, verification, and post-disbursement checks.

Table No:04

Sl. No.	Banks	Total Assets		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	66,595	70,826	77,623
2	Tamil Nadu Mercantile Bank Ltd.	57,895	61,552	66,450
3	CSB Bank Ltd.	29,162	36,056	47,836
4	Dhanlaxmi Bank Ltd	15,132	15,962	17,937
5	The Federal Bank Ltd.	2,60,342	3,08,312	3,49,005
6	The Jammu & Kashmir Bank Ltd.	1,45,962	1,54,527	1,69,468
7	The Karnataka Bank Ltd.	99,058	1,16,085	1,20,862
8	The Karur Vysya Bank Ltd.	90,179	1,05,453	1,19,367
9	Nainital Bank Ltd.	8,657	9,307	9,360
10	RBL Bank	1,15,876	1,38,432	1,46,725
11	The South Indian Bank Ltd.	1,07,698	1,17,413	1,24,655
	Total of Old Private Banks [I]	9,96,557	11,33,924	12,49,290
II	New Private Sector Banks			
12	Axis Bank Ltd.	13,17,326	14,77,209	16,09,930
13	DCB Bank Ltd.	52,366	63,037	76,810
14	HDFC Bank Ltd.	24,66,081	36,17,623	39,10,199
15	ICICI Bank Ltd.	15,84,207	18,71,515	21,18,240



16	IndusInd Bank Ltd.	4,57,804	5,14,935	5,54,018
17	Kotak Mahindra Bank Ltd.	4,89,862	6,00,357	6,93,624
18	YES Bank	3,54,786	4,05,493	4,23,422
19	Bandhan Bank	1,56,037	1,77,842	1,91,476
20	IDFC First Bank Ltd.	2,39,942	2,96,115	3,43,819
21	IDBI Ltd.	3,30,502	3,63,578	4,11,661
Total of New Private Banks [II]		74,48,913	93,87,703	1,03,33,199
Total of Private Banks [I+II]		84,45,470	1,05,21,627	1,15,82,489

(Source: IBA)

Recommendations:

- ★ **Strengthen Asset Quality:** Prioritize reducing NPAs to protect growing asset bases. Regularly review large accounts and stressed sectors.
 - ★ **Improve Asset Utilization:** Ensure assets are generating adequate returns. Rebalance low-yielding assets toward better-performing segments.
 - ★ **Maintain Healthy Capital Adequacy:** As assets grow, ensure capital keeps pace. Consider raising capital through rights issues or Tier-II bonds if needed.
 - ★ **Prioritize Risk-Adjusted Growth:** Avoid rapid asset expansion without proper risk controls. Conduct frequent risk stress tests.
 - ★ **Strengthen Liquidity Management:** Maintain sufficient high-quality liquid assets (HQLA). Align asset growth with deposit growth to avoid liquidity pressure.
- ★ **Use Technology to Manage Assets Efficiently:** Adopt automation and analytics to monitor asset performance. Use AI-based tools to detect early signs of asset deterioration.
 - ★ **Focus on Balanced Growth:** Ensure growth in loans, investments, and other assets remains balanced. Avoid over-dependence on any single asset category.
 - ★ **Improve Governance and Monitoring:** Strengthen internal audits and compliance frameworks. Enhance oversight at the board and committee levels.
 - ★ **Support Smaller and Slower-Growing Banks:** Banks with modest or stagnant asset growth (e.g., Nainital Bank, Dhanlaxmi Bank) should:
 - (a) Expand product offerings.
 - (b) Improve branch productivity and digital reach.
 - ★ **Expand Customer Base Smartly:** Use digital channels to capture more retail and SME customers. Cross-sell products to improve asset creation.

Table No:05

Sl. No.	Banks	Gross NPA		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	1,920	1,854	1,638
2	Tamil Nadu Mercantile Bank Ltd.	521	575	556
3	CSB Bank Ltd.	263	361	498
4	Dhanlaxmi Bank Ltd	511	421	364
5	The Federal Bank Ltd.	4,184	4,529	4,376
6	The Jammu & Kashmir Bank Ltd.	5,204	3,956	3,605
7	The Karnataka Bank Ltd.	2,293	2,578	2,402
8	The Karur Vysya Bank Ltd.	1,458	1,042	642

9	Nainital Bank Ltd.	443	399	386
10	RBL Bank	2,420	2,271	2,465
11	The South Indian Bank Ltd.	3,708	3,620	2,800
	Total of Old Private Banks [I]	22,926	21,607	19,733
II	New Private Sector Banks			
12	Axis Bank Ltd.	18,604	15,127	14,490
13	DCB Bank Ltd.	1,123	1,353	1,554
14	HDFC Bank Ltd.	18,019	31,173	35,223
15	ICICI Bank Ltd.	31,184	27,962	24,166
16	IndusInd Bank Ltd.	5,826	6,693	11,046
17	Kotak Mahindra Bank Ltd.	5,768	5,275	6,134
18	YES Bank	4,395	3,983	3,936
19	Bandhan Bank	5,299	4,785	6,436
20	IDFC First Bank Ltd.	3,884	3,718	4,434
21	IDBI Ltd.	10,969	8,917	6,695
	Total of New Private Banks [II]	1,05,071	1,08,987	1,14,113
	Total of Private Banks [I+II]	1,27,997	1,30,593	1,33,846

(Source: IBA)

Recommendations:

- ✳ **Strengthen Credit Appraisal:** Approve loans only after strict income verification and collateral checks. Use improved scoring models for retail and MSME loans.
- ✳ **Improve Early Warning Systems:** Monitor borrower accounts daily for signs of stress. Flag delays early and act before they turn into NPAs.
- ✳ **Speed Up Recovery and Resolution:** Strengthen recovery teams. Use one-time settlement (OTS) schemes for small overdue accounts. Actively use legal channels like SARFAESI for large defaults.
- ✳ **Regular Portfolio Review:** Review top borrowers' financials every quarter. Conduct sector-wise NPA analysis to identify problem areas.
- ✳ **Restructure Only Genuine Cases:** Offer restructuring only to borrowers with real revival potential. Avoid evergreening of loans.
- ✳ **Improve Post-Disbursement Monitoring:** Visit borrower locations regularly for MSME/agriculture loans. Ensure loan funds are used for actual business purposes.
- ✳ **Reduce Concentration Risk:** Avoid excessive exposure to a single sector (e.g., real estate, textiles). Diversify loan portfolios for better NPA control.
- ✳ **Invest in Technology for Risk Control:** Use analytics to predict which accounts may turn NPA. Digitize documentation to avoid disputes and delays during recovery.
- ✳ **Strengthen Staff Training:** Train staff on credit assessment, NPA identification, and recovery strategies. Encourage accountability for high-risk lending.
- ✳ **Focus on High-NPA Banks:** Banks with rising NPAs (e.g., IndusInd Bank, Bandhan Bank, HDFC Bank) should: (a) Tighten underwriting standards. (b) Review exposure to vulnerable sectors. Increase monitoring frequency.



Table No:06

Sl. No.	Banks	Net NPA		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	1,018	899	653
2	Tamil Nadu Mercantile Bank Ltd.	230	336	160
3	CSB Bank Ltd.	72	125	164
4	Dhanlaxmi Bank Ltd	109	126	118
5	The Federal Bank Ltd.	1,205	1,255	1,040
6	The Jammu & Kashmir Bank Ltd.	1,334	737	818
7	The Karnataka Bank Ltd.	1,021	1,129	1,005
8	The Karur Vysya Bank Ltd.	468	298	166
9	Nainital Bank Ltd.	78	42	26
10	RBL Bank	773	619	271
11	The South Indian Bank Ltd.	1,294	1,135	791
	Total of Old Private Banks [I]	7,602	6,701	5,211
II	New Private Sector Banks			
12	Axis Bank Ltd.	3,559	3,247	3,685
13	DCB Bank Ltd.	357	454	572
14	HDFC Bank Ltd.	4,368	8,092	11,320
15	ICICI Bank Ltd.	5,155	5,378	5,589
16	IndusInd Bank Ltd.	1,715	1,969	3,287
17	Kotak Mahindra Bank Ltd.	1,193	1,271	1,343
18	YES Bank	1,658	1,330	800
19	Bandhan Bank	1,228	1,348	1,693
20	IDFC First Bank Ltd.	1,304	1,160	1,230
21	IDBI Ltd.	1,495	644	337
	Total of New Private Banks [II]	22,033	24,893	29,857
	Total of Private Banks [I+II]	29,635	31,594	35,069

(Source: IBA)

Recommendations:

✳ **Banks with Steadily Declining Net NPAs:** City Union Bank, Karur Vysya Bank, RBL Bank, South Indian Bank, Nainital Bank. These banks show consistent improvement in 2023–2025. Continue strengthening credit appraisal systems to maintain the downward trend. Reinvest savings from reduced NPAs into technology and customer acquisition. Enhance risk monitoring dashboards to sustain early identification of stress.

✳ **Banks with Rising Net NPAs:** Examples: HDFC

Bank, IndusInd Bank, DCB Bank, Bandhan Bank. These banks show noticeable increases in 2024–2025. Tighten underwriting standards, especially for retail and unsecured credit. Increase collection efforts and loan restructuring where viable to prevent further slippages. Conduct portfolio stress tests more frequently to identify high-risk sectors. Review growth strategy to ensure expansion is not compromising asset quality.

✳ **Banks with Fluctuating / Inconsistent Net NPAs:** Federal Bank, Karnataka Bank, J&K Bank, YES Bank, IDFC First Bank. These banks show variations

over the years. Stabilize asset quality through sector diversification to avoid concentration risk. Improve follow-up on large borrower accounts, which may be causing volatility. Strengthen internal audit and risk governance to reduce unexpected slippages.

★ **High Net NPA Banks (in absolute terms):** HDFC Bank, ICICI Bank, Axis Bank. Even though these are large banks, high absolute NPAs require attention. Leverage analytics-driven NPA prediction models to manage large portfolios efficiently. Increase provisioning buffers to enhance resilience. Collaborate with ARC/DRTs for faster recovery of old NPAs.

★ **Old Private Sector Banks (Overall Improving Trend):** Total Net NPA reduced from 7,602 (2023) to 5,211 (2025). Continue digital adoption to strengthen underwriting and collections for SMEs and retail. Focus on low-risk products (gold loans, secured

lending). Use improved NPA metrics to raise capital at more favourable terms.

★ **New Private Sector Banks (Overall Rising Trend):** Total Net NPA increased from 22,033 (2023) to 29,857 (2025). Reassess aggressive growth strategies that may be affecting asset quality. Increase focus on secured lending, especially among banks with high retail exposure. Improve borrower monitoring using digital tools and alternative data.

★ **General Recommendations for All Banks:** Adopt AI-based credit scoring and fraud detection to reduce future NPAs. Strengthen recovery channels-legal recovery, settlement schemes, and incentivized collection teams. Improve customer risk profiling and re-evaluate exposures to high-risk sectors like MSMEs, unsecured credit, and real estate. Enhance employee training on risk assessment and compliance.

Table No:07

Sl. No.	Banks	Interest Income		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	4,714	5,271	5,834
2	Tamil Nadu Mercantile Bank Ltd.	4,081	4,848	5,291
3	CSB Bank Ltd.	2,320	2,928	3,597
4	Dhanlaxmi Bank Ltd	1,071	1,207	1,320
5	The Federal Bank Ltd.	16,804	22,188	26,365
6	The Jammu & Kashmir Bank Ltd.	9,355	11,212	12,536
7	The Karnataka Bank Ltd.	7,220	8,299	9,014
8	The Karur Vysya Bank Ltd.	6,517	8,213	9,678
9	Nainital Bank Ltd.	588	692	710
10	RBL Bank	9,677	12,394	14,039
11	The South Indian Bank Ltd.	7,233	8,613	9,413
	Total of Old Private Banks [I]	69,579	85,865	97,798
II	New Private Sector Banks			
12	Axis Bank Ltd.	85,164	1,09,369	1,22,677
13	DCB Bank Ltd.	4,200	5,362	6,471
14	HDFC Bank Ltd.	1,61,586	2,58,341	3,00,517
15	ICICI Bank Ltd.	1,09,231	1,42,891	1,63,264
16	IndusInd Bank Ltd.	36,368	45,748	48,668
17	Kotak Mahindra Bank Ltd.	34,251	45,799	52,920
18	YES Bank	22,697	27,586	30,895
19	Bandhan Bank	15,905	18,870	21,948
20	IDFC First Bank Ltd.	22,728	30,323	36,501



21	IDBI Ltd.	20,570	26,426	28,902
	Total of New Private Banks [II]	5,12,699	7,10,713	8,12,762
	Total of Private Banks [I+II]	5,82,278	7,96,578	9,10,560

(Source: IBA)

Recommendations:

- ★ **Banks with Strong and Consistent Growth in Interest Income:** Federal Bank, RBL Bank, Karur Vysya Bank, CSB Bank, Axis Bank, HDFC Bank, ICICI Bank. Maintain the growth momentum by continuing to expand high-quality lending. Invest more in digital loan platforms to capture retail and MSME borrowers efficiently. Strengthen selling of secured loans to ensure income stability. Leverage analytics to identify new customer segments showing strong borrowing capacity.
- ★ **Banks with Moderate but Steady Growth:** Karnataka Bank, South Indian Bank, Tamil Nadu Mercantile Bank, IDFC First Bank, YES Bank. Widen the loan portfolio by adding new products (e.g., gold loans, vehicle loans). Improve branch-level credit marketing to accelerate loan growth. Optimize pricing strategies to increase yield on advances. Strengthen customer retention programs to grow recurring interest income.
- ★ **Banks with Slower or Inconsistent Growth:** Nainital Bank, Dhanlaxmi Bank, IDBI Bank. Reassess lending strategy to identify why growth is lagging (risk controls, outdated processes, limited reach). Enhance digital loan origination to improve scale and reduce dependency on physical branches. Increase focus on fee-based services to supplement interest income in the short term. Review interest rate competitiveness to attract better-quality borrowers.
- ★ **Large Banks with Very High Interest Income Growth:** HDFC Bank, ICICI Bank, Axis Bank. Ensure asset quality monitoring keeps pace with portfolio expansion to avoid future NPAs. Use advanced

risk models to evaluate high-growth segments. Prioritize secured lending and high-credit-score retail customers to maintain healthy yields. Invest in digital infrastructure to support rapid scaling without operational strain.

- ★ **New Private Sector Banks (High Growth Group Overall):** Total interest income increased from 5,12,699 (2023) to 8,12,762 (2025). Continue expansion in retail and MSME lending, which appears to be driving growth. Focus on geographical diversification to avoid regional concentration risk. Build stronger credit monitoring systems to ensure growth does not compromise asset quality. Improve deposit mobilization to support further credit expansion sustainably.

- ★ **Old Private Sector Banks (Steady and Healthy Growth):** Interest income rose from 69,579 (2023) to 97,798 (2025). Modernize credit processes to further speed up lending decisions. Expand digital lending channels to stay competitive with new private sector banks. Strengthen customer analytics to increase cross-sell and upsell opportunities. Enhance branch productivity through training and loan-focused performance incentives.

- ★ **General Recommendations for All Banks:** Strengthen digital onboarding and automated underwriting to grow interest income efficiently. Enhance risk pricing to balance growth with profitability. Promote secured loan products (housing, gold, vehicle loans) for stable income. Improve customer engagement to increase loan renewals and reduce attrition. Use data analytics to identify high-yield segments and tailor loan products accordingly.

Table No:08

Sl. No.	Banks	Other Income		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	810	742	898
2	Tamil Nadu Mercantile Bank Ltd.	629	645	850
3	CSB Bank Ltd.	316	584	972

4	Dhanlaxmi Bank Ltd	75	153	169
5	The Federal Bank Ltd.	2,330	3,079	3,801
6	The Jammu & Kashmir Bank Ltd.	757	825	1,137
7	The Karnataka Bank Ltd.	993	1,319	1,270
8	The Karur Vysya Bank Ltd.	1,159	1,649	1,830
9	Nainital Bank Ltd.	15	63	41
10	RBL Bank	2,489	3,043	3,806
11	The South Indian Bank Ltd.	813	1,516	1,813
	Total of Old Private Banks [I]	10,385	13,618	16,588
II	New Private Sector Banks			
12	Axis Bank Ltd.	16,143	22,442	25,257
13	DCB Bank Ltd.	409	474	751
14	HDFC Bank Ltd.	31,215	49,241	45,632
15	ICICI Bank Ltd.	19,831	22,958	28,507
16	IndusInd Bank Ltd.	8,166	9,388	7,684
17	Kotak Mahindra Bank Ltd.	7,083	10,273	11,418
18	YES Bank	3,685	5,114	5,857
19	Bandhan Bank	2,469	2,171	2,967
20	IDFC First Bank Ltd.	4,467	6,002	7,022
21	IDBI Ltd.	4,372	3,611	4,924
	Total of New Private Banks [II]	97,841	1,31,675	1,40,018
	Total of Private Banks [I+II]	1,08,226	1,45,292	1,56,606

(Source: IBA)

Recommendations:

- ★ **Banks Showing Strong Growth in Other Income:** CSB Bank, Federal Bank, Karur Vysya Bank, RBL Bank, South Indian Bank, Axis Bank, ICICI Bank, Kotak Bank. Expand fee-based services such as insurance distribution, mutual fund sales, and wealth management. Strengthen digital platforms to increase income from payments, UPI, and online transactions. Promote value-added services (locker fees, debit/credit card services, net banking upgrades). Leverage corporate relationships to grow treasury and trade finance income.
- ★ **Banks with Moderate or Stable Growth:** City Union Bank, Tamil Nadu Mercantile Bank, J&K Bank, Karnataka Bank, YES Bank, IDFC First Bank. Improve cross-selling at branch level through staff incentives. Diversify non-interest sources such as FX income, remittances, and bancassurance. Introduce premium account variants to generate higher service charges. Increase focus on digital fee income (card usage, bill payments, online service charges).
- ★ **Banks With Inconsistent or Volatile Other Income:** Nainital Bank, IndusInd Bank, Bandhan Bank, IDBI Bank, HDFC Bank. Conduct a product-wise income analysis to identify unstable sources. Reduce dependency on one-time income (treasury gains, recoveries) and build steady recurring income streams. Strengthen marketing of fee-generating products to stabilize growth. Improve customer engagement to promote more transaction-linked revenues.
- ★ **Banks With Declines or Weak Income in Some Years:** Nainital Bank in 2025, DCB Bank in 2024, IndusInd Bank in 2025. Review and upgrade product offerings to match competitor offerings. Enhance digital adoption programs to increase customer transaction activity. Revisit pricing for services to ensure fees reflect market standards. Increase treasury management efforts to improve trading and investment income.



★ **Old Private Sector Banks (Strong Overall Increase):** Other income rose from 10,385 (2023) to 16,588 (2025). Continue improving non-interest product suites, especially digital services. Train frontline staff to identify cross-selling opportunities. Modernize customer interfaces to increase usage of fee-based services.

★ **New Private Sector Banks (High Levels but Mixed Trends):** Other income increased from 97,841 (2023) to 1,40,018 (2025) but with some banks showing volatility. Focus on stable, annuity-type fee income such as wealth management and card fees. Enhance treasury and forex operations for wholesale business.

Strengthen partnerships with FinTech's to boost digital marketplace income. Develop premium digital banking bundles for higher-paying customers.

★ **General Recommendations for All Banks:** Increase reliance on fee-based income to reduce pressure on interest margins. Improve customer analytics to personalize offers and increase product uptake. Promote digital transactions to grow low-cost, scalable income streams. Strengthen compliance and internal control to avoid penalties that reduce net other income. Encourage innovation in financial products such as investment advisory and cash management solutions.

Table No:09

Sl. No.	Banks	Total Income		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	5,525	6,012	6,732
2	Tamil Nadu Mercantile Bank Ltd.	4,710	5,493	6,142
3	CSB Bank Ltd.	2,635	3,512	4,569
4	Dhanlaxmi Bank Ltd	1,146	1,360	1,489
5	The Federal Bank Ltd.	19,134	25,268	30,167
6	The Jammu & Kashmir Bank Ltd.	10,112	12,038	13,673
7	The Karnataka Bank Ltd.	8,213	9,617	10,283
8	The Karur Vysya Bank Ltd.	7,675	9,863	11,508
9	Nainital Bank Ltd.	603	755	752
10	RBL Bank	12,166	15,437	17,845
11	The South Indian Bank Ltd.	8,046	10,128	11,227
	Total of Old Private Banks [I]	79,964	99,482	1,14,386
II	New Private Sector Banks			
12	Axis Bank Ltd.	1,01,307	1,31,811	1,47,934
13	DCB Bank Ltd.	4,610	5,836	7,221
14	HDFC Bank Ltd.	1,92,800	3,07,582	3,46,149
15	ICICI Bank Ltd.	1,29,063	1,65,849	1,91,770
16	IndusInd Bank Ltd.	44,534	55,136	56,352
17	Kotak Mahindra Bank Ltd.	41,334	56,072	64,338
18	YES Bank	26,382	32,700	36,752
19	Bandhan Bank	18,373	21,041	24,915
20	IDFC First Bank Ltd.	27,195	36,325	43,523
21	IDBI Ltd.	24,942	30,037	33,826
	Total of New Private Banks [II]	6,10,540	8,42,388	9,52,781
	Total of Private Banks [I+II]	6,90,504	9,41,870	10,67,167

(Source: IBA)

Recommendations:

- ★ **Banks Showing Strong and Steady Growth in Total Income:** CSB Bank, Federal Bank, Karur Vysya Bank, RBL Bank, South Indian Bank, Axis Bank, HDFC Bank, ICICI Bank, Kotak Bank. Use the growth momentum to expand high-quality lending while maintaining asset quality. Increase investments in digital banking to sustain long-term income growth. Scale up cross-selling of fee-based and wealth products to further boost revenue. Strengthen data analytics to identify profitable customer segments.
 - ★ **Banks With Moderate Growth:** City Union Bank, Tamil Nadu Mercantile Bank, Karnataka Bank, J&K Bank, YES Bank, IDFC First Bank. Enhance branch-level credit productivity through better marketing and staff incentives. Diversify loan portfolios to include more secured retail, MSME, and agriculture segments. Improved customer engagement programs to increase loan renewals and new customer acquisition. Optimize product pricing to increase yield on assets.
 - ★ **Banks With Slow or Limited Growth:** Dhanlaxmi Bank, Nainital Bank, IndusInd Bank in 2025, Bandhan Bank. Re-evaluate business strategy to identify income-generating gaps. Strengthen risk management to ensure quality lending without compromising growth. Improve fee-based services to supplement income beyond interest earnings. Upgrade digital channels to attract new-age customers and increase transaction volumes.
 - ★ **Banks Showing High but Volatile Growth:** HDFC Bank, IndusInd Bank, IDBI Bank. Focus on stabilizing revenue streams, especially treasury and fee income.
- Strengthen internal controls to ensure consistent performance across years. Increase customer diversification to reduce reliance on specific sectors. Ensure operational capacity matches growth needs to avoid service disruptions.
- ★ **Old Private Sector Banks (Overall Strong Growth):** Total income increased from 79,964 (2023) to 1,14,386 (2025). Leverage traditional customer base while expanding digital services. Improve loan underwriting processes to scale lending safely. Enhance cross-selling and bundled products for steady income growth.
 - ★ **New Private Sector Banks (High Growth Group Overall):** Total income increased from 6,10,540 (2023) to 9,52,781 (2025). Strengthen digital loan origination and analytics to further accelerate revenue. Continue diversification across retail, MSME, and corporate segments. Enhance customer experience to gain market share in competitive segments. Monitor asset quality closely to ensure fast growth does not lead to future NPAs.
 - ★ **General Recommendations for All Banks:** Adopt digital technologies to improve efficiency, reduce costs, and enhance customer experience. Build strong fee-based income streams to reduce dependence on interest income. Strengthen risk management frameworks to maintain high-quality portfolios. Improve operational efficiency through automation and process optimization. Encourage innovation in loan products and services to attract diverse customer groups.

Table No:10

Sl. No.	Banks	Interest Expended		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	2,552	3,147	3,518
2	Tamil Nadu Mercantile Bank Ltd.	1,987	2,697	2,990
3	CSB Bank Ltd.	986	1,451	2,121
4	Dhanlaxmi Bank Ltd	595	749	837
5	The Federal Bank Ltd.	9,571	13,895	16,897
6	The Jammu & Kashmir Bank Ltd.	4,610	6,009	6,742
7	The Karnataka Bank Ltd.	4,035	5,000	5,703
8	The Karur Vysya Bank Ltd.	3,168	4,395	5,418
9	Nainital Bank Ltd.	309	372	400



Sl. No.	Banks	Interest Expended		
		2023	2024	2025
10	RBL Bank	4,678	6,351	7,576
11	The South Indian Bank Ltd.	4,221	5,281	5,928
	Total of Old Private Banks [I]	36,712	49,346	58,130
II	New Private Sector Banks			
12	Axis Bank Ltd.	42,218	59,474	68,329
13	DCB Bank Ltd.	2,483	3,434	4,364
14	HDFC Bank Ltd.	74,743	1,49,808	1,77,847
15	ICICI Bank Ltd.	47,103	68,585	82,099
16	IndusInd Bank Ltd.	18,776	25,132	29,636
17	Kotak Mahindra Bank Ltd.	12,699	19,806	24,578
18	YES Bank	14,780	19,491	21,951
19	Bandhan Bank	6,645	8,551	10,458
20	IDFC First Bank Ltd.	10,092	13,872	17,210
21	IDBI Ltd.	9,139	12,240	14,276
	Total of New Private Banks [II]	2,38,678	3,80,393	4,50,748
	Total of Private Banks [I+II]	2,75,391	4,29,739	5,08,878

(Source: IBA)

Recommendations:

- ✳ **Banks With Fast-Rising Interest Expenses:** CSB Bank, Federal Bank, Karur Vysya Bank, RBL Bank, HDFC Bank, ICICI Bank, IndusInd Bank, Kotak Bank. Improve low-cost deposit mobilization (CASA) to reduce reliance on high-cost term deposits. Introduce competitive savings products to attract stable, low-interest funds. Optimize branch-level deposit marketing to grow CASA ratios. Strengthen digital banking adoption to reduce service costs and improve customer stickiness.
- ✳ **Banks With Moderate / Stable Increase in Interest Expenses:** City Union Bank, Tamil Nadu Mercantile Bank, Karnataka Bank, J&K Bank, YES Bank, IDFC First Bank. Balance deposit growth with lending expansion to avoid unnecessary cost buildup. Use customer analytics to target segments that prefer low-cost deposits. Improve pricing strategy on deposits to maintain competitiveness without excessive cost. Promote long-term deposits with smoother repricing cycles.
- ✳ **Banks With Relatively Lower Growth in Interest Expenses:** Dhanlaxmi Bank, Nainital Bank, Bandhan Bank, IDBI Bank. Boost lending volumes, as controlled interest expense growth suggests potential

underutilization of deposit capacity. Review loan pricing strategy to ensure healthy spreads. Strengthen credit deployment in secured retail and MSME segments. Expand customer outreach to improve loan growth while maintaining asset quality.

- ✳ **Banks With Very High Absolute Interest Expenses:** HDFC Bank, ICICI Bank, Axis Bank. Adopt advanced treasury and liquidity management tools to control interest costs. Focus on acquiring granular retail deposits rather than bulk deposits. Use digital platforms to scale low-cost deposits at lower operational cost. Ensure loan yield improvements to maintain net interest margin (NIM) despite rising costs.

Old Private Sector Banks (Overall Increase from 36,712 to 58,130). Enhance CASA share by improving digital savings products. Use targeted campaigns for senior citizens, youth, and salaried groups for stable deposits. Optimize deposit mix to reduce dependency on higher-cost term deposits. New Private Sector Banks (Sharp Increase from 2,38,678 to 4,50,748). Implement strict cost-of-funds monitoring to protect profitability. Promote digital deposit channels to reduce acquisition cost. Increase cross-selling to deposit customers to deepen relationships. Prioritize retail deposit acquisition for long-term stability.

- ★ **General Recommendations for All Banks:** Grow CASA deposits through digital banking, attractive features, and better customer experience. Monitor net interest margin (NIM) more frequently to ensure profitability remains stable. Use data-driven deposit

pricing to avoid overpaying for funds. Expand digital savings ecosystems (UPI, wallets, micro-savings, recurring deposits). Enhance financial literacy programs to attract and retain depositors.

Table No:11

Sl. No.	Banks	Operating Expenses		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	1,155	1,348	1,535
2	Tamil Nadu Mercantile Bank Ltd.	1,150	1,314	1,406
3	CSB Bank Ltd.	942	1,281	1,538
4	Dhanlaxmi Bank Ltd	427	542	557
5	The Federal Bank Ltd.	4,768	6,198	7,168
6	The Jammu & Kashmir Bank Ltd.	3,644	3,752	4,001
7	The Karnataka Bank Ltd.	1,969	2,454	2,753
8	The Karur Vysya Bank Ltd.	2,032	2,639	2,877
9	Nainital Bank Ltd.	217	276	263
10	RBL Bank	5,285	6,055	6,642
11	The South Indian Bank Ltd.	2,317	2,980	3,029
	Total of Old Private Banks [I]	23,907	28,839	31,770
II	New Private Sector Banks			
12	Axis Bank Ltd.	27,041	35,213	37,500
13	DCB Bank Ltd.	1,340	1,538	1,820
14	HDFC Bank Ltd.	47,652	63,386	68,175
15	ICICI Bank Ltd.	32,873	39,133	42,372
16	IndusInd Bank Ltd.	11,412	14,263	16,071
17	Kotak Mahindra Bank Ltd.	13,787	16,679	18,754
18	YES Bank	8,420	9,823	10,547
19	Bandhan Bank	4,637	5,851	7,068
20	IDFC First Bank Ltd.	12,170	16,216	18,899
21	IDBI Ltd.	7,067	8,205	8,472
	Total of New Private Banks [II]	1,66,399	2,10,307	2,29,678
	Total of Private Banks [I+II]	1,90,306	2,39,146	2,61,448

(Source: IBA)

Recommendations:

- ★ **For Banks with Rising Operating Expenses:** Most banks in both old & new private sector groups show increasing operating expenses. Strengthen cost control measures, especially in branches with low productivity. Increase digital transactions to reduce manual operating costs. Review vendor contracts

and administrative overheads to cut wastage. Improve employee productivity through training and performance-linked incentives.

- ★ **For Banks with High or Increasing Total Expenditure:** Federal Bank, RBL Bank, Axis, HDFC, ICICI. Improve cost-to-income discipline



by aligning expenditure growth with revenue growth. Adopt automation and process simplification to reduce recurring expenses. Reduce dependency on high-cost deposits to limit interest expenditure. Improve loan pricing and fee income to offset cost increases.

- ✱ **For Banks with Slowing Operating Profit Growth:** Karnataka Bank, IndusInd Bank, Bandhan Bank in some years. Reassess product profitability and focus on high-yielding loan segments. Tighten asset quality monitoring to reduce slippages and improve profitability. Improve cross-selling of insurance, wealth, and digital products to enhance non-interest income. Strengthen collections and recovery mechanisms.
- ✱ **For Banks with High Provisions:** RBL Bank, Federal Bank, HDFC Bank, ICICI Bank. Strengthen early-warning systems to detect stressed accounts. Improve credit underwriting standards to prevent future NPAs. Conduct sectoral stress tests to identify vulnerable borrower groups. Increase use of risk-based pricing in high-risk segments.
- ✱ **For Banks with Declining or Volatile Net Profit:** RBL Bank (drop in 2025), IndusInd Bank, IDFC First Bank. Reassess cost structure to improve margins. Enhance loan mix to boost yield while managing risk. Strengthen customer retention and fee income to stabilize revenue. Improve risk management practices to reduce provisioning spikes.
- ✱ **For Banks with Declining or Low Return on Assets (ROA):** IndusInd Bank, IDFC First Bank, RBL Bank. Improve quality of credit portfolios to enhance profitability. Review asset allocation and focus on high-margin assets. Reduce inefficiencies in operations to lower cost ratios. Strengthen recovery performance to improve bottom line.
- ✱ **For Banks with Low or Declining Capital Adequacy:** Dhanlaxmi Bank, IndusInd Bank, YES Bank. Consider raising fresh capital through rights issues or Tier 2 instruments. Improve risk-weighted asset management to optimize capital usage. Enhance loan quality to reduce risk-weighted burden. Focus on retaining earnings to boost capital levels.
- ✱ **For Banks with High Net NPA %:** Examples: DCB Bank, Bandhan Bank, RBL Bank earlier years. Strengthen collections and recovery units. Increase

focus on secured lending. Reassess underwriting in high-risk sectors. Increase monitoring of MSME and unsecured loans.

- ✱ **For Banks with Low Business Per Employee:** CSB Bank, Nainital Bank, Bandhan Bank. Improve staff productivity through training and digital tools. Deploy employees more effectively in high-growth branches. Adopt digital-first acquisition to reduce burden on staff. Link incentives to business generation metrics.
- ✱ **For Banks with Low Profit Per Employee:** RBL Bank in 2025, Bandhan Bank, Dhanlaxmi Bank. Strengthen profitability per branch through better product mix. Encourage cross-selling and fee income initiatives. Review manpower allocation in low-performing regions. Enhance workforce efficiency using automation.
- ✱ **For Banks with Low Credit-Deposit Ratio:** Nainital Bank, Dhanlaxmi Bank, J&K Bank. Increase lending activities, particularly in secured retail segments. Enhance loan marketing and customer outreach. Improve turnaround times for loan approvals. Launch priority lending campaigns in growth regions.
- ✱ **For Banks with High Investment-Deposit Ratio:** Kotak Mahindra Bank, IDBI Bank, IDFC First Bank. Diversify income by increasing quality lending instead of excess investments. Rebalance portfolios to improve asset yields. Strengthen liability management to match ideal deposit mix.
- ✱ **General Recommendations for All Banks:**
 - Financial Stability:** Maintain strong capital buffers. Strengthen ALM (Asset-Liability Management) to handle interest rate changes.
 - Operational Efficiency:** Focus on cost optimization and digital transformation. Improve employee productivity through training and digitization.
 - Growth & Profitability:** Boost fee-based income. Improve asset quality to reduce provisions. Expand lending in retail, MSME, and agriculture, which provide stable growth.
 - Digital Transformation:** Increase adoption of AI-based risk models. Strengthen online banking to reduce operational expenses.

Table No:12

Sl. No.	Banks	Total Expenditure		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	3,707	4,495	5,053
2	Tamil Nadu Mercantile Bank Ltd.	3,137	4,011	4,396
3	CSB Bank Ltd.	1,928	2,732	3,659
4	Dhanlaxmi Bank Ltd	1,023	1,290	1,394
5	The Federal Bank Ltd.	14,339	20,093	24,065
6	The Jammu & Kashmir Bank Ltd.	8,253	9,761	10,743
7	The Karnataka Bank Ltd.	6,005	7,454	8,456
8	The Karur Vysya Bank Ltd.	5,200	7,033	8,295
9	Nainital Bank Ltd.	526	648	663
10	RBL Bank	9,964	12,406	14,218
11	The South Indian Bank Ltd.	6,538	8,261	8,957
	Total of Old Private Banks [I]	60,619	78,185	89,900
II	New Private Sector Banks			
12	Axis Bank Ltd.	69,259	94,687	1,05,829
13	DCB Bank Ltd.	3,823	4,972	6,184
14	HDFC Bank Ltd.	1,22,395	2,13,194	2,46,022
15	ICICI Bank Ltd.	79,976	1,07,718	1,24,472
16	IndusInd Bank Ltd.	30,188	39,396	45,707
17	Kotak Mahindra Bank Ltd.	26,486	36,485	43,332
18	YES Bank	23,200	29,314	32,498
19	Bandhan Bank	11,282	14,402	17,526
20	IDFC First Bank Ltd.	22,263	30,088	36,108
21	IDBI Ltd.	16,206	20,445	22,748
	Total of New Private Banks [II]	4,05,077	5,90,700	6,80,426
	Total of Private Banks [I+II]	4,65,696	6,68,885	7,70,326

(Source: IBA)

Recommendations:

- ★ **Banks With Rising Total Expenditure:** Most banks, both old and new private sector-show continuous increase in expenditure. Control administrative and operational costs through automation and digitization. Review branch-level profitability and consider consolidation of low-performing branches. Implement strict cost budgeting to avoid overspending by departments. Use data analytics to identify cost-heavy processes and eliminate inefficiencies.
- ★ **Banks With Very High Expenditure in Absolute Terms:** HDFC Bank, ICICI Bank, Axis Bank. Optimize staff costs through digital onboarding

and self-service channels. Reduce reliance on bulk deposits, which increases interest cost. Improve loan pricing and cross-selling to offset high expenditure. Strengthen treasury management to control interest expense.

- ★ **Banks With Sharp Year-on-Year Increases:** Federal Bank, RBL Bank, Kotak Bank, IDFC First Bank. Investigate drivers of rising costs (staffing, technology, branch expansion). Improve cost-to-income ratio through revenue-side strategies like fee income and high-yield lending. Re-evaluate vendor contracts to negotiate better rates. Promote digital channels to reduce physical operating costs.



- ★ **Banks With Moderate and Balanced Expenditure Growth:** City Union Bank, Tamil Nadu Mercantile Bank, Karnataka Bank. Continue current cost-management practices. Invest more in digital infrastructure to maintain cost efficiency in future. Strengthen employee productivity programs to prevent unnecessary cost escalation.
- ★ **Banks With Lower Expenditure Levels:** Dhanlaxmi Bank, Nainital Bank, CSB Bank. Increase lending and income-generating activities, as low expenditure may indicate limited operations. Focus on branch productivity and business expansion, especially in retail and MSME lending. Enhance marketing and customer acquisition efforts to grow business volumes.
- ★ **Old Private Sector Banks (Expenditure rising from 60,619 → 89,900):** Improve operational efficiency through automation in legacy systems. Reevaluate staff deployment to boost business per employee. Modernize branch operations to reduce overheads.

Promote digital savings and loans to contain service costs.

- ★ **New Private Sector Banks (Expenditure rising significantly from 4,05,077 → 6,80,426):** Strengthen cost discipline to maintain profitability despite expansion. Improve CASA mobilization to reduce interest expenditure. Increase fee-based income (cards, insurance, treasury) to support expenditure growth. Review rapid branch & employee expansion to avoid unnecessary cost inflation.

- ★ **General Recommendations for All Banks:** Strengthen cost-to-income monitoring on a quarterly basis. Promote digital customer service channels to reduce operational costs. Improve process automation in compliance, customer onboarding, and credit appraisal. Encourage productivity-linked incentives for employees. Focus on high-margin business segments to improve profitability despite rising expenditure.

Table No:13

Sl. No.	Banks	Operating Profit		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	1,818	1,517	1,679
2	Tamil Nadu Mercantile Bank Ltd.	1,573	1,482	1,746
3	CSB Bank Ltd.	707	780	910
4	Dhanlaxmi Bank Ltd	123	69	95
5	The Federal Bank Ltd.	4,794	5,174	6,101
6	The Jammu & Kashmir Bank Ltd.	1,858	2,277	2,930
7	The Karnataka Bank Ltd.	2,208	2,163	1,827
8	The Karur Vysya Bank Ltd.	2,476	2,829	3,212
9	Nainital Bank Ltd.	77	107	89
10	RBL Bank	2,202	3,031	3,627
11	The South Indian Bank Ltd.	1,507	1,868	2,270
	Total of Old Private Banks [I]	19,345	21,297	24,486
II	New Private Sector Banks			
12	Axis Bank Ltd.	32,048	37,123	42,105
13	DCB Bank Ltd.	787	864	1,037
14	HDFC Bank Ltd.	70,405	94,387	1,00,127
15	ICICI Bank Ltd.	49,087	58,131	67,299
16	IndusInd Bank Ltd.	14,346	15,740	10,645

Sl. No.	Banks	Operating Profit		
		2023	2024	2025
17	Kotak Mahindra Bank Ltd.	14,848	19,587	21,007
18	YES Bank	3,183	3,386	4,254
19	Bandhan Bank	7,091	6,639	7,389
20	IDFC First Bank Ltd.	4,932	6,237	7,415
21	IDBI Ltd.	8,736	9,592	11,078
	Total of New Private Banks [II]	2,05,463	2,51,688	2,72,355
	Total of Private Banks [I+II]	2,24,808	2,72,985	2,96,841

(Source: IBA)

Recommendations:

- ☀ **Banks With Strong and Consistent Growth in Operating Profit:** Federal Bank, Karur Vysya Bank, RBL Bank, South Indian Bank, Axis Bank, HDFC Bank, ICICI Bank, Kotak Bank, IDBI Bank. Continue expanding high-quality lending, especially in retail and MSME. Increase fee-based income sources to sustain profit momentum. Invest further in digital transformation to maintain operating efficiency. Strengthen talent and analytics teams to support scalable growth.
- ☀ **Banks Showing Moderate and Steady Growth:** City Union Bank, Tamil Nadu Mercantile Bank, CSB Bank, J&K Bank, YES Bank, IDFC First Bank. Improve cross-selling efforts to enhance non-interest income. Improve cost control to convert moderate growth into stronger profitability. Expand customer acquisition channels, especially digital and branch-driven. Boost secured loan products to support stable profit growth.
- ☀ **Banks With Declining or Volatile Operating Profit:** Dhanlaxmi Bank, Nainital Bank, Karnataka Bank, IndusInd Bank, Bandhan Bank in 2024. Review credit underwriting policies to prevent profit erosion due to higher provisions. Strengthen recovery and collections to stabilize earnings. Enhance cost management, especially in low-productivity branches. Re-evaluate high-risk lending segments that may be dragging profitability.
- ☀ **Banks With High Operating Profit Levels but Rising Costs:** HDFC Bank, ICICI Bank, Axis Bank. Monitor cost-to-income ratio closely to protect profitability.
- ☀ **Old Private Sector Banks (Growth from 19,345 → 24,486):** Improve operating efficiency through digital adoption. Expand fee-based income to support overall profitability. Maintain credit discipline to avoid future NPA-related profit losses. Focus on branch productivity to drive profit per employee.
- ☀ **New Private Sector Banks (Growth from 2,05,463 → 2,72,355):** Sustain high growth with strong internal controls. Enhance cross-selling of cards, insurance, and wealth products. Consolidate branch expansion to ensure profitable operations. Improve digital lending and automated underwriting for lower cost and higher accuracy.
- ☀ **General Recommendations for All Banks:** Enhance Revenue. Grow high-yield loan segments (retail, MSME, agriculture). Increase transaction-based and digital income. Strengthen treasury operations for stable gains. Improve Cost Efficiency. Automate manual processes. Optimize staff allocation. Control non-essential spending. Enhance Asset Quality. Strengthen early-warning systems. Reduce delinquencies through proactive measures. Improve collection infrastructure. Strengthen Digital Transformation. Adopt AI-based credit scoring. Expand digital banking usage. Improve customer experience to retain business.



Table No:14

Sl. No.	Banks	Provisions & Contingencies		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	881	501	555
2	Tamil Nadu Mercantile Bank Ltd.	544	410	563
3	CSB Bank Ltd.	160	213	316
4	Dhanlaxmi Bank Ltd	74	11	28
5	The Federal Bank Ltd.	1,784	1,454	2,049
6	The Jammu & Kashmir Bank Ltd.	661	510	847
7	The Karnataka Bank Ltd.	1,028	857	555
8	The Karur Vysya Bank Ltd.	1,370	1,224	1,271
9	Nainital Bank Ltd.	31	60	38
10	RBL Bank	1,320	1,863	2,931
11	The South Indian Bank Ltd.	732	798	967
	Total of Old Private Banks [I]	8,583	7,901	10,122
II	New Private Sector Banks			
12	Axis Bank Ltd.	22,469	12,262	15,731
13	DCB Bank Ltd.	321	328	422
14	HDFC Bank Ltd.	26,296	33,575	32,780
15	ICICI Bank Ltd.	17,190	17,242	20,072
16	IndusInd Bank Ltd.	6,957	6,790	8,002
17	Kotak Mahindra Bank Ltd.	3,909	5,806	4,556
18	YES Bank	2,465	2,135	1,848
19	Bandhan Bank	4,897	4,410	4,643
20	IDFC First Bank Ltd.	2,495	3,280	5,890
21	IDBI Ltd.	5,091	3,958	3,563
	Total of New Private Banks [II]	92,089	89,788	97,508
	Total of Private Banks [I+II]	1,00,673	97,688	1,07,630

(Source: IBA)

Recommendations:

✳ **Banks With Rising Provisions:** Federal Bank, J&K Bank, RBL Bank, CSB Bank, ICICI Bank, IndusInd Bank, IDFC First Bank. Strengthen early-warning systems to detect potential loan stress earlier. Tighten credit appraisal especially in MSME, unsecured, and high-risk retail segments. Enhance monitoring of large borrower accounts to prevent slippages. Increase recovery and collection efforts to reduce future provisioning requirements.

✳ **Banks With Declining or Stable Provisions:** Tamil Nadu Mercantile Bank, Karnataka Bank, YES Bank,

Kotak Bank, IDBI Bank. Maintain strong underwriting standards that helped reduce provisions. Continue strict follow-up on overdue accounts to prevent NPA formation. Increase secured lending to maintain asset quality stability. Regularly review portfolio health to avoid sudden spikes in provisioning.

✳ **Banks With Very Low Provisions:** Dhanlaxmi Bank, Nainital Bank. Ensure that low provisions are due to genuinely strong asset quality, not under-provisioning. Re-evaluate risk assessment processes to confirm adequacy of provision buffers. Maintain conservative provisioning policy to avoid future shocks.

- ★ **Banks With High Absolute Provisions:** HDFC Bank, Axis Bank, ICICI Bank. Diversify credit portfolio to avoid concentration risk. Introduce risk-based pricing to ensure high-risk borrowers pay appropriate margins. Use predictive analytics to anticipate stress and act early. Strengthen sector-wise monitoring, especially for corporate and SME loans.
- ★ **Banks With Sharp Year-to-Year Variability:** Axis Bank, HDFC Bank, RBL Bank, Kotak Bank. Stabilize provisioning trends by improving credit underwriting stability. Strengthen credit risk governance, including audit and review mechanisms. Ensure consistent revaluation of collateral to reduce provisioning fluctuations. Reduce reliance on volatile loan segments.
- ★ **Old Private Sector Banks (Provisions rising from 8,583 → 10,122):** Improve risk assessment for SME and agriculture sectors, where stress is common. Increase digital monitoring of retail and MSME borrowers. Avoid aggressive lending in high-risk categories. Enhance recovery mechanisms to lower future provisions.
- ★ **New Private Sector Banks (Provisions fluctuating between 92,089 → 97,508):** Focus on reducing volatility in the provisioning cycle. Adopt AI-based credit scoring and risk models for large borrower groups. Strengthen collection frameworks for unsecured retail loans. Prioritize asset quality over rapid growth to maintain profitability.
- ★ **General Recommendations for All Banks:** To Improve Asset Quality. Strengthen early detection systems for stressed assets. Conduct frequent stress testing for vulnerable sectors. Increase emphasis on secured lending, especially gold, housing, and vehicle loans. To Reduce Future Provisions. Improve pre-sanction checks and due diligence. Avoid excessive exposure to cyclical industries. Encourage loan restructuring where viable to prevent NPA formation. To Improve Recoveries. Enhance legal recovery systems (SARFAESI, DRT). Deploy tech-based collection tools. Engage recovery agents in a structured and compliant manner.

Table No:15

Sl. No.	Banks	Net Profit		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	937	1,016	1,124
2	Tamil Nadu Mercantile Bank Ltd.	1,029	1,072	1,183
3	CSB Bank Ltd.	547	567	594
4	Dhanlaxmi Bank Ltd	49	58	67
5	The Federal Bank Ltd.	3,011	3,721	4,052
6	The Jammu & Kashmir Bank Ltd.	1,197	1,767	2,082
7	The Karnataka Bank Ltd.	1,180	1,306	1,272
8	The Karur Vysya Bank Ltd.	1,106	1,605	1,942
9	Nainital Bank Ltd.	46	47	51
10	RBL Bank	883	1,168	695
11	The South Indian Bank Ltd.	775	1,070	1,303
	Total of Old Private Banks [I]	10,762	13,396	14,364
II	New Private Sector Banks			
12	Axis Bank Ltd.	9,580	24,861	26,373
13	DCB Bank Ltd.	466	536	615
14	HDFC Bank Ltd.	44,109	60,812	67,347
15	ICICI Bank Ltd.	31,897	40,888	47,227
16	IndusInd Bank Ltd.	7,390	8,950	2,643
17	Kotak Mahindra Bank Ltd.	10,939	13,782	16,450



Sl. No.	Banks	Net Profit		
		2023	2024	2025
18	YES Bank	717	1,251	2,406
19	Bandhan Bank	2,195	2,230	2,745
20	IDFC First Bank Ltd.	2,437	2,957	1,525
21	IDBI Ltd.	3,645	5,634	7,515
	Total of New Private Banks [II]	1,13,374	1,61,901	1,74,847
	Total of Private Banks [I+II]	1,24,136	1,75,297	1,89,211

(Source: IBA)

Recommendations:

- ★ **Banks Showing Strong and Steady Net Profit Growth:** Federal Bank, Karur Vysya Bank, South Indian Bank, J&K Bank, Axis Bank, HDFC Bank, ICICI Bank, Kotak Bank, IDBI Bank. Continue expanding high-quality lending, especially secured retail and MSME. Increase fee-based income (cards, insurance, wealth management) to strengthen profitability. Boost digital transformation efforts to maintain cost-efficiency. Maintain strong risk controls to ensure sustained profit growth.
- ★ **Banks Showing Moderate and Consistent Profit Growth:** City Union Bank, Tamil Nadu Mercantile Bank, CSB Bank, Bandhan Bank, YES Bank. Improve operating efficiency to convert revenue growth into higher profits. Enhance customer cross-selling to generate additional non-interest income. Focus on CASA mobilization to reduce interest expenses. Strengthen credit monitoring to avoid future provision spikes.
- ★ **Banks With Declining or Volatile Net Profit:** RBL Bank in 2025, IndusInd Bank, IDFC First Bank, Nainital Bank. Conduct a detailed profitability review to identify loss-making segments. Reassess underwriting practices in high-risk sectors that lead to unstable profits. Strengthen recovery and collections to reduce provisions impacting net profit. Tighten cost controls to protect margins.
- ★ **Banks With Low Absolute Net Profit:** Dhanlaxmi Bank, Nainital Bank. Expand lending and income-generating activities, especially secured segments. Increase branch productivity through staff training and digitization. Improve marketing and customer acquisition to grow business volumes. Focus on high-margin products (gold loans, microfinance, vehicle loans).
- ★ **Banks With High Profit Growth but Higher Risk:** YES Bank, Axis Bank, J&K Bank-strong jumps. Ensure profit growth aligns with sustainable asset quality. Avoid aggressive lending that may cause future NPAs. Maintain sufficient capital buffers to support rapid growth. Strengthen credit risk modelling to avoid slippages.
- ★ **Old Private Sector Banks (Profit rising from 10,762 → 14,364):** Improve operational efficiency to convert income into higher profits. Use digital channels aggressively for cost-effective growth. Reduce legacy NPAs to lower provisions and boost profit. Strengthen branch-level performance tracking.
- ★ **New Private Sector Banks (Profit rising from 1,13,374 → 1,74,847):** Balance rapid growth with strict risk control, especially in retail and SME. Improve deposit mix (CASA) to reduce interest cost. Invest in analytics-based lending to enhance portfolio quality. Expand fee-based income streams to diversify profit sources.
- ★ **General Recommendations for All Banks:** Enhance Revenue. Grow high-yield, low-risk lending. Strengthen non-interest income sources. Improve treasury operations. Improve Efficiency. Control operating and administrative expenses. Increase automation in all processing functions. Enhance employee productivity through performance-linked programs. Strengthen Asset Quality. Monitor early-warning signals for stressed assets. Improve credit underwriting and review processes. Strengthen collections and legal recovery. Invest in Digital & Customer Experience. Expand digital loan products. Improve customer retention and cross-selling. Use analytics to target profitable customer segments.

Table No:16

Sl. No.	Banks	Credit Deposit Ratio		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	82.17	81.80	81.98
2	Tamil Nadu Mercantile Bank Ltd.	78.07	80.25	81.92
3	CSB Bank Ltd.	84.27	81.89	85.47
4	Dhanlaxmi Bank Ltd	70.79	70.69	74.68
5	The Federal Bank Ltd.	81.75	82.92	82.79
6	The Jammu & Kashmir Bank Ltd.	67.43	69.57	70.13
7	The Karnataka Bank Ltd.	68.62	72.98	73.03
8	The Karur Vysya Bank Ltd.	82.38	82.67	82.29
9	Nainital Bank Ltd.	56.20	54.64	56.49
10	RBL Bank	82.71	81.15	83.48
11	The South Indian Bank Ltd.	76.16	76.59	79.69
	Total of Old Private Banks [I]	77.23	78.38	79.36
II	New Private Sector Banks			
12	Axis Bank Ltd.	89.27	90.31	88.73
13	DCB Bank Ltd.	83.36	82.92	85.03
14	HDFC Bank Ltd.	84.98	104.42	96.50
15	ICICI Bank Ltd.	86.35	83.83	83.32
16	IndusInd Bank Ltd.	86.17	89.22	83.93
17	Kotak Mahindra Bank Ltd.	88.09	83.77	85.54
18	YES Bank	93.46	85.52	86.53
19	Bandhan Bank	96.94	89.60	87.29
20	IDFC First Bank Ltd.	104.95	97.02	92.48
21	IDBI Ltd.	63.63	67.93	70.38
	Total of New Private Banks [II]	86.39	92.49	89.13
	Total of Private Banks [I+II]	85.19	90.74	87.94

(Source: IBA)

Recommendations:

- ✳ **Banks With Low or Improving Credit–Deposit Ratio (CDR):** Dhanlaxmi Bank, J&K Bank, Karnataka Bank, Nainital Bank. Increase lending efforts, especially in retail, MSME, agriculture. Improve loan processing speed to attract borrowers. Strengthen marketing and customer outreach for credit products. Introduce pre-approved loans for existing deposit customers.
- ✳ **Banks With Very High CDR (Above 90%):** HDFC Bank in 2024, YES Bank earlier, Bandhan Bank, IDFC First Bank. Strengthen deposit mobilization, especially low-cost CASA. Avoid over-aggressive lending that can create future stress. Improve liquidity

buffers to maintain stability. Balance loan growth with sustainable funding sources.

- ✳ **Banks With High Investment-Deposit Ratio:** Kotak Bank, IDBI, DCB Bank, IDFC First Bank. Reduce excessive investment concentration and increase quality lending. Rebalance portfolios to improve yields and profitability. Focus on retail asset products (home, gold, vehicle loans) to deploy funds effectively.
- ✳ **Banks With Declining or Low Spread (Low profitability per asset):** Dhanlaxmi Bank, Karnataka Bank, YES Bank. Improve loan pricing to increase margins. Reduce cost of funds by improving CASA



share. Focus on high-yield retail products. Strengthen treasury management to increase asset returns.

- ✳ **Banks With High Operating Expenses %:** CSB Bank, RBL Bank, Kotak Bank, Bandhan Bank, IDFC First Bank. Improve cost discipline through digital processes. Review branch-level expenses and reduce low-performing branches. Increase self-service and automated channels to reduce manpower costs. Improve employee productivity through training and performance incentives.
- ✳ **Banks With Low Return on Assets (ROA):** Dhanlaxmi Bank, Nainital Bank, YES Bank, IDFC First Bank, IndusInd Bank in 2025. Improve asset quality to reduce provisions. Enhance profitability of lending operations. Reduce operational inefficiencies. Strengthen credit underwriting and recovery systems.
- ✳ **Banks With Strong ROA (Above ~2%):** ICICI Bank, Kotak Mahindra Bank, HDFC Bank. Continue high-quality lending strategy. Expand fee-based income to sustain high returns. Maintain strong risk controls to protect asset quality.
- ✳ **Banks With Low Capital Adequacy (Below 16%):** Dhanlaxmi Bank, J&K Bank slightly, RBL Bank, IndusInd Bank, YES Bank, IDFC First Bank. Consider raising fresh capital through rights issue or AT1/Tier-2 instruments. Improve risk-weighted asset efficiency. Strengthen loan quality to reduce capital erosion. Retain profits to build capital buffers.
- ✳ **Banks With High Net NPA %:** DCB Bank, Bandhan Bank, Karnataka Bank earlier, South Indian Bank earlier. Strengthen collections and recovery efforts. Reassess underwriting in risk-heavy segments. Increase secured loan share. Use digital monitoring tools to track emerging delinquencies.
- ✳ **Banks With Low Business per Employee:** CSB Bank, Nainital Bank, Bandhan Bank, DCB Bank. Improve employee productivity through training and

targets. Use digital tools to reduce manual workload. Reassign staff to high-potential branches/regions. Promote cross-selling to improve business generated per employee.

- ✳ **Banks With Low Profit per Employee:** Dhanlaxmi Bank, Nainital Bank, Bandhan Bank, IDFC First, IndusInd Bank in 2025. Improve profitability of branches through better product mix. Introduce performance-linked incentives. Reduce operational inefficiencies that reduce profits. Invest in staff training focused on sales, credit, and service.
- ✳ **Old Private Sector Banks-Group Recommendations:** Performance improving gradually across most indicators. Modernize legacy systems and move to digital-heavy operations. Strengthen cost control to improve spreads and ROA. Focus on retail lending to increase profitability. Enhance branch productivity and reduce overheads.
- ✳ **New Private Sector Banks-Group Recommendations:** Faster growth but more volatility in some metrics. Balance rapid expansion with strong asset quality controls. Improve CASA mobilization to reduce funding cost. Maintain capital strength to support future growth. Strengthen credit monitoring and early-warning systems.
- ✳ **General Recommendations for All Banks:** Strengthen Asset Quality. Tighten credit underwriting. Improve collections and reduce slippages. Use analytics for early NPA detection. Improve Profitability. Increase fee-based income. Improve loan pricing and product mix. Strengthen cost-to-income efficiency. Enhance Operational Efficiency. Automate back-office operations. Improve employee productivity. Consolidate low-performing branches. Enhance Customer & Digital Focus. Increase digital loan origination. Improve customer experience and retention. Use data analytics to target profitable segments.

Table No:17

Sl. No.	Banks	Investment Deposit Ratio		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	27.35	28.14	27.29
2	Tamil Nadu Mercantile Bank Ltd.	29.64	30.82	28.13
3	CSB Bank Ltd.	23.87	25.41	30.90
4	Dhanlaxmi Bank Ltd	29.12	27.59	24.70
5	The Federal Bank Ltd.	22.96	24.10	23.35
6	The Jammu & Kashmir Bank Ltd.	28.54	25.96	27.74
7	The Karnataka Bank Ltd.	26.70	24.80	23.41
8	The Karur Vysya Bank Ltd.	24.54	25.07	23.35
9	Nainital Bank Ltd.	277.31	24.06	22.49
10	RBL Bank	34.02	28.58	28.99
11	The South Indian Bank Ltd.	26.89	23.53	20.25
	Total of Old Private Banks [I]	29.09	25.65	25.04
II	New Private Sector Banks			
12	Axis Bank Ltd.	30.50	31.02	33.77
13	DCB Bank Ltd.	30.51	32.85	33.57
14	HDFC Bank Ltd.	27.45	29.52	30.81
15	ICICI Bank Ltd.	30.68	32.70	31.34
16	IndusInd Bank Ltd.	24.70	27.68	27.85
17	Kotak Mahindra Bank Ltd.	33.44	34.61	36.45
18	YES Bank	35.35	33.88	29.91
19	Bandhan Bank	29.95	21.66	26.92
20	IDFC First Bank Ltd.	42.26	37.25	32.02
21	IDBI Ltd.	39.02	41.39	37.86
	Total of New Private Banks [II]	30.22	31.45	31.85
	Total of Private Banks [I+II]	30.07	30.73	31.02

(Source: IBA)

Recommendations:

- ✱ **Banks With Low and Declining Investment-Deposit Ratio:** South Indian Bank, Karnataka Bank, Karur Vysya Bank, Dhanlaxmi Bank, Nainital Bank, J&K Bank. Increase deployment of funds into lending, as too-low investment ratios may indicate underutilization of deposits. Focus on retail and MSME lending to improve yield. Ensure adequate liquidity buffers, but avoid excess idle funds. Improve credit appraisal and turnaround time to attract quality borrowers.
- ✱ **Banks With Rising Investment-Deposit Ratio:** CSB Bank, Axis Bank, DCB Bank, HDFC Bank, Kotak Mahindra Bank. Ensure investments are well-diversified and not overly concentrated in low-yield securities. Balance between loans vs. investment

allocation to maintain strong spreads. Regularly review treasury strategy to ensure optimal returns. Avoid excessive investments at the cost of slowed lending growth.

- ✱ **Banks With Very High Investment-Deposit Ratios:** IDFC First Bank, IDBI Bank, YES Bank, Kotak Bank. Consider shifting a portion of funds from investments to loans to improve overall profitability. Focus on secured retail lending (home, gold, vehicle loans) to increase deployment. Reassess investments to ensure they do not restrict lending capacity. Strengthen deposit-liquidity planning to maintain balance.
- ✱ **Banks With Balanced and Stable Investment-Deposit Ratios (Around 25–32%):** City Union Bank, Federal Bank, ICICI Bank, IndusInd Bank, Bandhan Bank.



Maintain current asset–liability management (ALM) discipline. Continue balanced growth between loans and treasury investments. Gradually shift toward higher-yield assets, if risk allows. Improve risk-based pricing to enhance spreads.

✱ **Old Private Sector Banks (Group:** Ratio falling from 29.09 → 25.04): Deploy more funds into profitable lending channels. Modernize loan origination to boost credit growth. Improve cross-selling to deepen customer relationships. Maintain investment strategy focused on safety and moderate returns.

✱ **New Private Sector Banks (Group:** Ratio rising from 30.22 → 31.85): Monitor the quality and duration of investments to avoid market risks. Ensure investment growth does not limit lending expansion. Optimize

treasury yield through active portfolio management. Improve loan portfolio diversification to balance investment growth.

✱ **General Recommendations for All Banks:** Improve Asset Allocation. Ensure balanced distribution between loan book and investment book. Avoid excessive reliance on low-yield investments. Use ALM frameworks to maintain optimal liquidity. Enhance Lending Growth. Speed up loan processing and disbursement. Use digital tools for faster credit decisions. Target secured, high-quality retail and MSME borrowers. Strengthen Treasury Management. Improve interest rate risk management. Review duration of investment portfolios. Diversify investments to reduce concentration risk.

Table No:18

Sl. No.	Banks	Spread as % of Assets		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	3.25	3.00	2.98
2	Tamil Nadu Mercantile Bank Ltd.	3.62	3.49	3.46
3	CSB Bank Ltd.	4.57	4.09	3.09
4	Dhanlaxmi Bank Ltd	3.14	2.87	2.69
5	The Federal Bank Ltd.	2.78	2.69	2.71
6	The Jammu & Kashmir Bank Ltd.	3.25	3.37	3.42
7	The Karnataka Bank Ltd.	3.22	2.84	2.74
8	The Karur Vysya Bank Ltd.	3.71	3.62	3.57
9	Nainital Bank Ltd.	3.22	3.44	3.32
10	RBL Bank	4.31	4.37	4.40
11	The South Indian Bank Ltd.	2.80	2.84	2.80
	Total of Old Private Banks [I]	3.30	3.22	3.18
II	New Private Sector Banks			
12	Axis Bank Ltd.	3.26	3.38	3.38
13	DCB Bank Ltd.	3.28	3.06	2.74
14	HDFC Bank Ltd.	3.52	3.00	3.14
15	ICICI Bank Ltd.	3.92	3.97	3.83
16	IndusInd Bank Ltd.	3.84	4.00	3.44
17	Kotak Mahindra Bank Ltd.	4.40	4.33	4.09
18	YES Bank	2.23	2.00	2.11
19	Bandhan Bank	5.93	5.80	6.00
20	IDFC First Bank Ltd.	5.27	5.56	5.61
21	IDBI Ltd.	3.46	3.90	3.55
	Total of New Private Banks [II]	3.68	3.52	3.50
	Total of Private Banks [I+II]	3.63	3.49	3.47

(Source: IBA)

Recommendations:

- ★ **Banks With Declining Spread:** City Union Bank, Tamil Nadu Mercantile Bank, CSB Bank, Dhanlaxmi Bank, Karnataka Bank, Karur Vysya Bank, DCB Bank, IndusInd Bank. Revisit loan pricing strategy to ensure adequate margins. Increase focus on high-yield retail loans such as MSME, gold, and personal loans (within risk limits). Improve CASA mobilization to reduce cost of funds. Strengthen credit quality to minimize future provisioning, which indirectly affects spreads.
 - ★ **Banks With Improving Spread:** J&K Bank, Nainital Bank, RBL Bank, South Indian Bank slightly, Axis Bank remaining stable. Continue focusing on profitable asset segments. Accelerate digital loan delivery to scale up high-return portfolios. Maintain strict risk controls to ensure spread gains are sustainable. Invest in analytics tools to identify profitable customer segments.
 - ★ **Banks With High Spread (Above ~4%):** RBL Bank, Bandhan Bank, IDFC First Bank, Kotak Bank, ICICI Bank. Use the strong spread advantage to grow market share in secured and prime retail segments. Strengthen capital buffers to support growth. Focus on improving credit quality, especially in banks prone to high-risk lending. Expand cross-selling products to enhance non-interest income along with strong spread.
 - ★ **Banks With Very Low Spread (Below 3%):** Dhanlaxmi Bank, Karnataka Bank, City Union Bank, YES Bank.
- Improve loan portfolio yield by redesigning product mix. Reduce reliance on low-yield corporate loans and increase retail lending. Enhance liability profile by increasing CASA deposits. Improve efficiency to lower operating costs, which indirectly supports spread improvement.
- ★ **Old Private Sector Banks (Spread slightly decreasing from 3.30 → 3.18):** Strengthen lending margin discipline. Avoid excessive investment in low-yield securities. Improve branch productivity to support margin growth. Focus on retail expansion and fee income, which help maintain healthy spreads.
 - ★ **New Private Sector Banks (Spread slightly decreasing from 3.68 → 3.50):** Maintain balance between rapid growth and credit quality. Increase low-cost deposit base to protect margins. Expand digital retail lending to improve return on assets. Better manage interest rate risk in treasury.
 - ★ **General Recommendations for All Banks:** Improve Lending Margin. Revise pricing strategies for both retail and corporate borrowers. Focus on high-yield, low-risk loans. Reduce Cost of Funds. Strengthen CASA mobilization. Develop digital savings products to attract low-cost deposits. Enhance Operational Efficiency. Reduce manual operations through automation. Improve branch productivity and employee efficiency. Strengthen Risk Management. Avoid excessive exposure to risky sectors. Use analytics for early detection of stress.

Table No:19

Sl. No.	Banks	Operating Expenses as % to Total Expenses		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	31.16	29.99	30.38
2	Tamil Nadu Mercantile Bank Ltd.	36.67	32.76	31.98
3	CSB Bank Ltd.	48.87	46.88	42.03
4	Dhanlaxmi Bank Ltd	41.77	41.99	39.99
5	The Federal Bank Ltd.	33.25	30.85	29.79
6	The Jammu & Kashmir Bank Ltd.	44.15	38.44	37.24
7	The Karnataka Bank Ltd.	32.80	32.93	32.55
8	The Karur Vysya Bank Ltd.	39.08	37.52	34.68
9	Nainital Bank Ltd.	41.27	42.55	39.71
10	RBL Bank	53.04	48.81	46.72
11	The South Indian Bank Ltd.	35.44	36.07	33.82



Sl. No.	Banks	Operating Expenses as % to Total Expenses		
		2023	2024	2025
	Total of Old Private Banks [I]	39.44	36.89	35.34
II	New Private Sector Banks			
12	Axis Bank Ltd.	39.04	37.19	35.43
13	DCB Bank Ltd.	35.04	30.93	29.43
14	HDFC Bank Ltd.	38.93	29.73	27.71
15	ICICI Bank Ltd.	41.10	36.33	34.04
16	IndusInd Bank Ltd.	37.80	36.21	35.16
17	Kotak Mahindra Bank Ltd.	52.05	45.71	43.28
18	YES Bank	36.29	33.51	32.46
19	Bandhan Bank	41.10	40.63	40.33
20	IDFC First Bank Ltd.	54.67	53.90	52.34
21	IDBI Ltd.	43.61	40.13	37.24
	Total of New Private Banks [II]	41.08	35.60	33.76
	Total of Private Banks [I+II]	40.86	35.75	33.94

(Source: IBA)

Recommendations:

- ✳ **Banks With High Operating Expense Ratios (Above ~40%):** CSB Bank, Dhanlaxmi Bank, J&K Bank, Nainital Bank, RBL Bank, Kotak Bank, Bandhan Bank, IDFC First Bank. Control administrative and branch-level expenses through strict budgeting. Shift more customer services to digital platforms to reduce service costs. Optimize manpower allocation and provide productivity-based incentives. Review and renegotiate vendor and outsourcing contracts to reduce overheads. Identify low-performing branches for restructuring or consolidation.
- ✳ **Banks With Moderately High Ratios (35–40%):** City Union Bank, Karnataka Bank, South Indian Bank, Axis Bank, ICICI Bank, IndusInd Bank, YES Bank, IDBI Bank. Improve employee productivity through training and automation. Expand self-service banking options to reduce manual operations. Implement process automation (KYC, onboarding, loan processing). Increase cross-selling to improve income without proportionate cost increase.
- ✳ **Banks With Improving Expense Ratios:** Federal Bank, CSB Bank, Karur Vysya Bank, Tamil Nadu Mercantile Bank, HDFC Bank. Continue current cost optimization strategies. Reinvest savings into digital transformation and customer acquisition. Adopt lean

operations and simplify processes to further control costs. Strengthen performance-based management to maintain efficiency gains.

- ✳ **Banks With Very High Ratios Requiring Priority Action:** RBL Bank (46–53%), Kotak Mahindra Bank (43–52%), IDFC First Bank (52–55%). Conduct a deep cost audit to identify major leakage points. Improve risk-based employee deployment across branches. Enhance automation in credit approval, collections, and compliance. Avoid rapid staff expansion unless backed by business growth. Strengthen digital ecosystems to shift customers away from physical branches.
- ✳ **Old Private Sector Banks Group (Ratio improving from 39.44 → 35.34):** Leverage digital banking to reduce physical operating costs. Improve employee effectiveness at legacy branches. Continue optimizing branch footprint and operational structure. Use analytics to improve cost-to-income alignment.
- ✳ **New Private Sector Banks Group (Ratio improving from 41.08 → 33.76):** Consolidate gains by expanding high-margin products. Strengthen digital onboarding and automated processing. Reduce dependency on manual operations in service areas. Benchmark cost structures with top-performing peers.

- ★ **General Recommendations for All Banks:** Improve Cost Efficiency. Increase digital adoption to reduce in-branch expenses. Implement centralized back-office operations. Promote paperless and automated workflows. Improve Revenue Side. Boost fee-based income (cards, insurance, wealth management). Improve customer cross-selling. Focus on high-yield retail lending. Enhance Operational Control. Conduct regular cost reviews. Improve procurement transparency. Adopt activity-based costing to identify high-cost areas.

Table No:20

Sl. No.	Banks	Return on Assets (%)		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	1.46	1.52	1.55
2	Tamil Nadu Mercantile Bank Ltd.	1.97	1.84	1.88
3	CSB Bank Ltd.	2.06	1.79	1.49
4	Dhanlaxmi Bank Ltd	0.34	0.38	0.41
5	The Federal Bank Ltd.	1.28	1.32	1.23
6	The Jammu & Kashmir Bank Ltd.	0.89	1.22	1.32
7	The Karnataka Bank Ltd.	1.21	1.19	1.05
8	The Karur Vysya Bank Ltd.	1.27	1.63	1.72
9	Nainital Bank Ltd.	0.54	0.52	0.61
10	RBL Bank	0.83	0.96	0.51
11	The South Indian Bank Ltd.	0.73	0.93	1.06
II	New Private Sector Banks			
12	Axis Bank Ltd.	0.80	1.83	1.74
13	DCB Bank Ltd.	0.97	0.93	0.89
14	HDFC Bank Ltd.	2.07	1.98	1.91
15	ICICI Bank Ltd.	2.16	2.37	2.41
16	IndusInd Bank Ltd.	1.81	1.90	0.50
17	Kotak Mahindra Bank Ltd.	2.47	2.61	2.65
18	YES Bank	0.20	0.30	0.60
19	Bandhan Bank	1.56	1.44	1.53
20	IDFC First Bank Ltd.	1.13	1.10	0.48
21	IDBI Ltd.	1.20	1.44	2.11

(Source: IBA)

Recommendations:

- ★ **Banks With High and Consistently Strong ROA (Above ~2%):** ICICI Bank, Kotak Mahindra Bank, HDFC Bank, CSB Bank in 2023, Tamil Nadu Mercantile Bank. Continue focusing on high-quality lending that delivers strong returns. Expand fee-based services (cards, insurance, wealth products) to sustain profitability. Maintain tight credit underwriting to protect asset quality. Reinforce capital buffers to support growth without pressuring ROA.
- ★ **Banks With Improving ROA Over the Years:** Karur Vysya Bank, South Indian Bank, J&K Bank, YES Bank, Nainital Bank. Increase lending in secured retail and MSME sectors where profitability is rising. Strengthen cost control to further boost ROA. Improve loan recovery and collections to reduce NPA-related drag. Reinforce credit monitoring systems to sustain gains.
- ★ **Banks With Declining ROA:** CSB Bank, Federal Bank, Karnataka Bank, Bandhan Bank, Axis Bank slightly. Review asset quality issues that may be impacting profitability. Improve loan pricing to recover yield. Reduce high-cost deposits to improve net interest margin. Reevaluate underperforming



business segments and reallocate resources.

- ★ **Banks With Very Low ROA (Below ~0.75%):** Dhanlaxmi Bank, Nainital Bank, YES Bank, RBL Bank in 2025, IndusInd Bank in 2025, IDFC First Bank. Strengthen credit underwriting standards to prevent future losses. Reduce operating inefficiencies through automation and digital banking. Improve risk-adjusted lending, focusing on low-risk secured loans. Increase profit per employee through training and performance incentives.
- ★ **Banks With Highly Volatile ROA:** RBL Bank, IndusInd Bank, IDFC First Bank. Conduct a detailed profitability stability review. Avoid aggressive lending in high-risk areas. Build larger provision buffers to absorb shocks. Improve sector diversification to avoid concentration risk.
- ★ **Old Private Sector Banks-Group Trend (ROA mostly stable around 1–1.5%):** Strengthen digital lending to improve returns. Improve asset quality

through stronger monitoring. Reduce operating cost to support ROA. Enhance cross-selling to lift non-interest income.

- ★ **New Private Sector Banks-Group Trend (Higher ROA but more volatility):** Improve risk management frameworks to reduce swings in ROA. Maintain capital adequacy to support sustainable growth. Expand low-cost deposit base to boost net interest margins. Focus on stable lending segments like retail housing, gold loans, auto loans.
- ★ **General Recommendations for All Banks:** Improve Asset Profitability. Increase focus on high-yield, low-risk loans. Review loan portfolio for low-return segments. Strengthen Asset Quality. Enhance collections & early-warning systems. Tighten credit appraisal to prevent NPAs. Improve Cost-to-Income Ratio. Adopt automation to reduce operating expenses. Consolidate or optimize low-performing branches. Grow Non-Interest Income. Expand cross-selling and digital products. Strengthen fee-based revenue streams.

Table No:21

Sl. No.	Banks	Capital Adequacy Ratio-Basel III (%)		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	22.34	23.73	23.75
2	Tamil Nadu Mercantile Bank Ltd.	26.26	29.37	32.71
3	CSB Bank Ltd.	27.10	24.47	22.46
4	Dhanlaxmi Bank Ltd	12.32	12.71	16.12
5	The Federal Bank Ltd.	14.81	16.13	16.40
6	The Jammu & Kashmir Bank Ltd.	15.39	15.33	16.29
7	The Karnataka Bank Ltd.	17.45	18.00	19.85
8	The Karur Vysya Bank Ltd.	18.56	16.67	18.17
9	Nainital Bank Ltd.	16.24	15.22	16.76
10	RBL Bank	16.92	16.18	15.54
11	The South Indian Bank Ltd.	17.25	19.91	19.31
II	New Private Sector Banks			
12	Axis Bank Ltd.	17.64	16.63	17.07
13	DCB Bank Ltd.	17.55	16.59	16.77
14	HDFC Bank Ltd.	19.26	18.80	19.55
15	ICICI Bank Ltd.	18.34	16.33	16.55
16	IndusInd Bank Ltd.	17.86	17.23	16.24
17	Kotak Mahindra Bank Ltd.	21.80	20.55	22.25
18	YES Bank	17.90	15.40	15.60
19	Bandhan Bank	19.76	14.69	18.71
20	IDFC First Bank Ltd.	16.82	16.11	15.48
21	IDBI Ltd.	20.44	22.26	25.05

(Source: IBA)

Recommendations:

Credit–Deposit Ratio (CDR): Shows how effectively deposits are converted into loans.

- ✱ **Banks With Low CDR (Below ~70%):** Nainital Bank, J&K Bank, Karnataka Bank, Dhanlaxmi Bank, IDBI Bank. Increase lending, especially in secured retail, MSME, gold and agriculture loans. Strengthen loan marketing and customer outreach. Improve loan approval speed to attract better borrowers. Introduce pre-approved loan products for existing customers.
- ✱ **Banks With Very High CDR (Above 90%):** HDFC Bank in 2024, IDFC First Bank, YES Bank earlier, Bandhan Bank. Strengthen deposit mobilization, especially low-cost CASA. Avoid over-aggressive lending, which may cause future NPAs. Improve liquidity buffers to reduce funding risk. Balance growth by promoting stable, secured loan segments.
- ✱ **Banks With Stable & Healthy CDR (75–90%):** City Union Bank, Federal Bank, Karur Vysya Bank, Axis Bank. Maintain balanced lending and deposit strategy. Focus on high-quality loans with good margins. Strengthen risk controls to avoid loan quality deterioration.

Investment–Deposit Ratio (IDR): Shows how much of deposits are invested in securities.

- ✱ **Banks With Low IDR (Below ~25%):** South Indian Bank, Karnataka Bank, J&K Bank, Dhanlaxmi Bank, Karur Vysya Bank. Deploy more funds into profitable loan segments. Avoid keeping deposits idle or over-focused on liquidity. Strengthen credit appraisal to support safe lending growth.
- ✱ **Banks With Very High IDR (Above ~35%):** Kotak Mahindra Bank, IDFC First Bank, IDBI Bank, YES Bank. Shift part of investments into higher-yield retail loans. Rebalance the portfolio to improve overall return on assets. Monitor interest rate risk in long-term securities.

- ✱ **Banks With Balanced IDR (25–32%):** ICICI Bank, HDFC Bank, Axis Bank, Bandhan Bank. Maintain a good mix of liquid investments and lending. Monitor market risk and ensure diversification. Gradually increase lending in high-growth retail/SME sectors.

Capital Adequacy Ratio (CAR): Shows financial strength and ability to absorb losses.

- ✱ **Banks With Low Capital Adequacy (Below ~16%):** Dhanlaxmi Bank, RBL Bank, YES Bank, IDFC First Bank, IndusInd Bank slightly. Consider raising capital (rights issue, AT1/Tier 2 instruments). Improve underwriting and recovery to reduce NPA impact. Slow down high-risk lending until capital strengthens. Improve profit retention to boost capital base.
- ✱ **Banks With Very Strong CAR (Above ~20%):** Tamil Nadu Mercantile Bank, Kotak Bank, IDBI Bank, CSB Bank, City Union Bank. Expand lending in high-quality segments like retail housing, auto, MSME. Invest in technology and digital expansion. Use strong capital base to grow market share safely. Explore new products with strong profitability and low risk.
- ✱ **Banks with Stable and Healthy CAR (16–20%):** ICICI Bank, HDFC Bank, Federal Bank, Axis Bank, Karnataka Bank. Maintain balanced growth. Continue strong risk management practices. Use capital efficiently by optimizing risk-weighted assets. Focus on ROA and profit growth to support capital sustainability.
- ✱ **General Recommendations for All Banks:** Strengthen Lending Quality. Improve credit appraisal and borrower assessment. Increase secured lending to reduce risk. Improve Deposit Mix. Grow CASA deposits to reduce cost of funds. Offer digital savings products to attract customers. Enhance Risk Management. Use early-warning systems for stressed accounts. Perform sectoral stress tests regularly. Boost Profitability. Increase fee-based income. Control operational expenses through automation. Strengthen Liquidity & Capital. Maintain robust liquidity buffers. Ensure steady capital buildup to support growth.



Table No:22

Sl. No.	Banks	Net NPA as % to Net Advances		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	2.36	1.97	1.25
2	Tamil Nadu Mercantile Bank Ltd.	0.62	0.85	0.36
3	CSB Bank Ltd.	0.35	0.51	0.52
4	Dhanlaxmi Bank Ltd	1.16	1.25	0.99
5	The Federal Bank Ltd.	0.69	0.60	0.44
6	The Jammu & Kashmir Bank Ltd.	1.62	0.79	0.79
7	The Karnataka Bank Ltd.	1.70	1.58	1.31
8	The Karur Vysya Bank Ltd.	0.74	0.40	0.20
9	Nainital Bank Ltd.	1.84	0.94	0.56
10	RBL Bank	1.10	0.74	0.29
11	The South Indian Bank Ltd.	1.85	1.45	0.92
	Total of Old Private Banks [I]	1.20	0.91	0.63
II	New Private Sector Banks			
12	Axis Bank Ltd.	0.39	0.31	0.33
13	DCB Bank Ltd.	1.04	1.11	1.12
14	HDFC Bank Ltd.	0.27	0.33	0.43
15	ICICI Bank Ltd.	0.48	0.42	0.39
16	IndusInd Bank Ltd.	0.59	0.57	0.95
17	Kotak Mahindra Bank Ltd.	0.37	0.34	0.31
18	YES Bank	0.82	0.58	0.33
19	Bandhan Bank	1.17	1.11	1.28
20	IDFC First Bank Ltd.	0.86	0.60	0.53
21	IDBI Ltd.	0.92	0.34	0.15
	Total of New Private Banks [II]	0.47	0.41	0.45
	Total of Private Banks [I+II]	0.55	0.46	0.47

(Source: IBA)

Recommendations:

- ✳ **Banks With High or Increasing Net NPA Levels:** DCB Bank, Bandhan Bank, IndusInd Bank (2025), Karnataka Bank earlier. Strengthen credit underwriting and borrower due diligence. Reduce exposure to high-risk sectors and unsecured lending. Improve collections and recovery mechanisms, including legal follow-up. Introduce early-warning systems for accounts showing stress. Re-evaluate loan restructuring practices to avoid repeat slippages.
- ✳ **Banks With Improving but Still Moderate NPAs:** J&K Bank, Nainital Bank, Dhanlaxmi Bank, South Indian Bank, City Union Bank. Continue strong recovery and monitoring initiatives. Strengthen customer profiling to avoid lending to weak segments. Increase secured

retail lending such as gold, auto, mortgage loans. Maintain tight loan review until NPAs reach industry-leading levels.

- ✳ **Banks With Very Low and Stable NPAs:** ICICI Bank, HDFC Bank, Axis Bank, Kotak Bank, Karur Vysya Bank, Federal Bank. Sustain current credit discipline and risk framework. Use strong asset quality to grow loan book safely. Expand higher-yield retail and MSME lending with cautious risk filters. Maintain adequate provisioning buffers to protect low NPA levels.
- ✳ **Banks With Sharply Falling NPAs:** RBL Bank, Nainital Bank, Karur Vysya Bank, City Union Bank. Continue aggressive NPA recovery and settlement strategies. Strengthen preventive credit monitoring

to keep slippages low. Use improved asset quality to improve profitability and spreads. Reinvest savings from lower provisions into growth areas.

- ★ **Banks With Volatile NPA Trends:** Examples: IndusInd Bank, Bandhan Bank, DCB Bank. Review portfolio concentration and diversify risk. Tighten post-disbursement monitoring of vulnerable segments. Conduct stress testing of high-risk portfolios regularly. Increase provisioning to reduce profit volatility.
- ★ **Old Private Sector Banks – Group Trend (Improving from 1.20 → 0.63):** Continue strong collection measures. Improve customer selection for SME and corporate loans. Expand secured and risk-controlled retail lending. Keep building provision buffers to support stability.
- ★ **New Private Sector Banks – Group Trend (Stable around 0.41–0.47):** Maintain current risk

management standards. Focus on credit scoring and digital underwriting to reduce slippages. Strengthen early-warning triggers for retail and MSME borrowers. Reduce volatility in banks showing rising NPAs (Bandhan, IndusInd).

- ★ **General Recommendations for All Banks:** Reduce NPAs at the Source. Strengthen borrower assessment and credit scoring. Limit lending to high-risk/unsecured segments. Improve Early Detection. Use analytics to identify early signs of repayment stress. Monitor new-to-credit and small borrowers closely. Enhance Recovery Efficiency. Speed up legal recovery and settlement processes. Use digital tools for follow-up and customer reminders. Maintain Strong Provisioning. Keep buffers above regulatory minimum. Provision conservatively for stressed sectors.

Table No:23

Sl. No.	Banks	Business per Employee		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	15.98	14.21	15.32
2	Tamil Nadu Mercantile Bank Ltd.	19.10	19.44	20.67
3	CSB Bank Ltd.	6.47	6.56	8.38
4	Dhanlaxmi Bank Ltd	13.13	14.64	16.07
5	The Federal Bank Ltd.	29.55	32.23	32.41
6	The Jammu & Kashmir Bank Ltd.	15.57	17.81	20.18
7	The Karnataka Bank Ltd.	17.03	19.21	20.89
8	The Karur Vysya Bank Ltd.	18.11	18.00	18.91
9	Nainital Bank Ltd.	10.99	10.79	10.81
10	RBL Bank	13.11	14.03	13.38
11	The South Indian Bank Ltd.	16.28	17.65	20.36
II	New Private Sector Banks			
12	Axis Bank Ltd.	20.00	20.19	20.88
13	DCB Bank Ltd.	7.80	8.37	8.97
14	HDFC Bank Ltd.	19.74	21.49	23.62
15	ICICI Bank Ltd.	17.07	16.84	20.06
16	IndusInd Bank Ltd.	16.95	16.98	16.61
17	Kotak Mahindra Bank Ltd.	8.73	9.63	10.89
18	YES Bank	15.67	17.42	18.40
19	Bandhan Bank	3.02	3.19	3.35
20	IDFC First Bank Ltd.	8.11	8.67	10.31
21	IDBI Ltd.	22.31	23.50	25.65

(Source: IBA)



Recommendations:★ Banks With Low Business per Employee: Bandhan Bank, CSB Bank, DCB Bank, Nainital Bank, Kotak Bank (still low), IDFC First Bank. Improve employee productivity through better training in sales, customer handling, and product knowledge. Increase use of digital channels to reduce manual workload and free staff for business growth. Set clear performance targets for business generation. Reassign staff from low-performing branches to areas with higher business potential.

★ **Banks With Improving Business per Employee:** Tamil Nadu Mercantile Bank, Dhanlaxmi Bank, South Indian Bank, J&K Bank, Karnataka Bank, IDBI Bank, HDFC Bank. Encourage staff with performance-linked incentives to sustain improvement. Invest further in digital onboarding and cross-selling tools. Expand products in high-performing branches. Strengthen branch-level monitoring to maintain the upward trend.

★ **Banks With High Business per Employee:** Federal Bank, IDBI Bank, Axis Bank (stable), HDFC Bank (rising strongly). Use strong productivity levels to accelerate retail and SME growth. Introduce advanced analytics to help staff target profitable customers. Continue investing in digital and self-service platforms to maintain efficiency. Strengthen employee retention programs to keep skilled staff.

★ **Banks With Declining or Volatile Productivity:** City Union Bank, RBL Bank, IndusInd Bank slightly declining. Conduct a productivity review at branch and

employee levels. Identify low-performing regions and provide focused training. Simplify internal processes to reduce administrative burden. Improve cross-selling efforts to raise customer value per employee.

★ **Old Private Sector Banks (Group Trend: Gradual Improvement):** Strengthen digitization to speed up service delivery. Improve staff capability through continuous learning programs. Use data-based monitoring to track employee performance. Encourage selling of loans, deposits, insurance, etc.

★ **New Private Sector Banks (Group Trend: Moderate but uneven growth):** Increase automation to reduce operational load on staff. Use workforce optimization tools to deploy staff efficiently. Improve training in digital banking and relationship management. Promote a sales-focused culture with incentives and recognition.

★ **General Recommendations for All Banks:** Enhance Employee Productivity. Use digital tools to reduce paperwork and routine tasks. Conduct regular performance reviews and targeted training. Align incentives with business growth and customer satisfaction. Expand Business through Better Customer Engagement. Promote cross-selling of loans, cards, insurance, and investment products. Improve customer service quality to retain and grow business. Improve Branch Efficiency. Reallocate staff based on business potential. Consolidate or restructure weak-performing branches.

Table No:24

Sl. No.	Banks	Profit per Employee		
		2023	2024	2025
I	Old Private Sector Banks			
1	City Union Bank Ltd.	15.58	14.13	14.77
2	Tamil Nadu Mercantile Bank Ltd.	23.04	23.29	24.93
3	CSB Bank Ltd.	8.01	7.21	7.80
4	Dhanlaxmi Bank Ltd	2.79	3.43	3.80
5	The Federal Bank Ltd.	22.94	25.96	26.12
6	The Jammu & Kashmir Bank Ltd.	9.06	13.75	16.65
7	The Karnataka Bank Ltd.	13.64	14.67	14.54
8	The Karur Vysya Bank Ltd.	14.25	17.66	19.68
9	Nainital Bank Ltd.	4.26	4.00	4.00
10	RBL Bank	8.00	9.00	5.00
11	The South Indian Bank Ltd.	8.18	11.09	14.15

Sl. No.	Banks	Profit per Employee		
		2023	2024	2025
II	New Private Sector Banks			
12	Axis Bank Ltd.	10.94	25.29	25.45
13	DCB Bank Ltd.	5.08	5.25	5.31
14	HDFC Bank Ltd.	27.73	31.20	32.00
15	ICICI Bank Ltd.	27.52	29.42	35.00
16	IndusInd Bank Ltd.	20.60	21.36	6.00
17	Kotak Mahindra Bank Ltd.	15.00	18.00	21.00
18	YES Bank	2.80	4.51	8.49
19	Bandhan Bank	3.36	3.00	3.53
20	IDFC First Bank Ltd.	7.75	7.56	3.66
21	IDBI Ltd.	20.42	29.63	38.09

(Source: IBA)

Recommendations:

- ✱ **Banks With Very Low Profit per Employee:** Dhanlaxmi Bank, Nainital Bank, YES Bank (improving), Bandhan Bank, DCB Bank. Improve employee productivity through targeted sales and service training. Increase use of digital processes to reduce time spent on manual tasks. Reallocate staff from low-business branches to high-potential regions. Strengthen cross-selling of loans, insurance, cards, and deposits.
- ✱ **Banks With Declining Profit per Employee:** City Union Bank, RBL Bank, IDFC First Bank, IndusInd Bank (sharp drop in 2025). Conduct a profitability diagnostic to identify weak branches and costly operations. Tighten credit quality to reduce provisioning that affects profit. Improve fee-based income to support profitability. Review staffing levels and ensure efficient manpower deployment.
- ✱ **Banks With Improving Profit per Employee:** J&K Bank, South Indian Bank, Karur Vysya Bank, YES Bank, Tamil Nadu Mercantile Bank. Maintain momentum with incentive-driven performance systems. Continue investing in digital tools for faster service and higher productivity. Encourage cross-selling and bundled financial products. Strengthen risk management to keep provisions low and profits stable.
- ✱ **Banks With High Profit per Employee:** ICICI Bank, HDFC Bank, IDBI Bank, Axis Bank (after 2024), Kotak Mahindra Bank. Use high productivity to drive growth in profitable retail and SME lending. Continue automation and AI-based efficiency improvements. Enhance employee retention with career progression and rewards. Expand operations strategically without hurting productivity levels.
- ✱ **Banks With Volatile Profit per Employee Trends:** RBL Bank, IndusInd Bank, IDFC First Bank. Review portfolio risk to reduce profit volatility from provisions. Stabilize income by expanding fee-based businesses. Strengthen collections and recovery to prevent profit erosion. Implement stricter cost-control measures in fluctuating branches.
- ✱ **Old Private Sector Banks-Group Trend (Moderate but steady improvement):** Continue focusing on staff skill enhancement. Boost digital adoption to support higher profitability. Strengthen branch-level performance monitoring. Promote revenue diversification through cross-selling.
- ✱ **New Private Sector Banks-Group Trend (Higher but more uneven):** Improve consistency through better asset quality controls. Focus on automation to reduce per-employee operational costs. Expand high-profit product portfolios. Improve risk-adjusted lending to maintain stable profits.
- ✱ **General Recommendations for All Banks:** Improve Employee Productivity. Provide training in sales, credit, and customer management. Use digital tools to simplify operations and reduce manual workload. Boost Profitability. Increase fee income from cards,



insurance, investments, etc. Strengthen credit underwriting to reduce NPA-related losses. Improve pricing strategy for loans and deposits. Enhance Operational Efficiency. Optimize branch structures and staffing. Centralize back-office operations to reduce cost.

References:

- a) Key Business Statistics-IBA.
- b) Department of Research and Statistics-IBA.



Chapter 3

Importance of Costing Policy in Banks



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A structured Costing Policy helps Banks manage expenses, improve Profitability, and promote efficient use of resources. Many Banks are adopting Digital Tools, Automation, and Re-engineered processes to reduce Controllable Costs.

This chapter covers:

- ✱ *Why every Bank needs a formal Costing Policy.*
- ✱ *Importance of the Cost-to-Income Ratio (CIR).*

The content is based on discussions with Bank Officials and Practicing Cost & Management Accountants (CMAs)

Importance of Costing Policy in Banks

Banks have multiple key policies, including Credit Policy, Investment Policy, KYC/AML Policy, Outsourcing Policy and Locker Policies etc. etc., each with distinct objectives. The Credit Policy focuses on managing 'Loan Risk' and ensuring profitability, while the 'Investment Policy' aims to generate returns and preserve capital. The 'KYC / AML Policy' prevents financial crime by identifying customers and monitoring transactions. Like the 'Locker Policy' is designed to ensure security and prevent unauthorized access or misuse of safe deposit lockers etc. etc.

a) Common 'Bank Policies' and their Objectives:

Credit Policy Objectives:

- ✱ **Minimize Credit Losses:** By evaluating and approving loans carefully.
- ✱ **Optimize Profitability:** Balancing risk with potential returns from lending.
- ✱ **Maintain a Healthy Loan Portfolio:** Ensuring the overall 'loan book' is diversified and stable.
- ✱ **Ensure Regulatory Compliance:** Adhering to rules set by the central bank (RBI).

Investment Policy Objectives:

- ✱ **Generate Returns:** Aiming for profit from investments in various assets.
- ✱ **Preserve Capital:** Protecting the principal amount of money invested.
- ✱ **Hedge Against Inflation:** Making investments that outpace rising prices.
- ✱ **Align with Financial Goals:** Selecting investments that suit an individual or institution's specific financial needs.

KYC/AML Policy Objectives:

- ✱ **Prevent Money Laundering:** Stopping criminals from legitimizing illegally obtained funds.

- ✱ **Combat Terrorist Financing:** Preventing funds from being used to support terrorist activities.
- ✱ **Identify and verify customers:** Ensuring the true identity of every customer is known.
- ✱ **Monitor transactions:** Keeping an eye on account activity for suspicious patterns.
- ✱ **Manage financial crime risk:** Protecting the institution from being used for illicit activities.

HR Policy Objectives:

- ✱ To govern Human Resource Management practices, ensuring fair and ethical treatment of employees, compliance with various employee related laws, and fostering a productive work environment.

Outsourcing Policy Objectives:

- ✱ To manage risks associated with outsourcing certain functions, including due diligence on vendors, ensuring service quality, and maintaining control over outsourced activities.

Locker Policy Objectives:

- ✱ **Ensure security:** Protecting the contents of safe deposit lockers.
- ✱ **Prevent unauthorized access:** Implementing procedures to ensure only the rightful owner can access the locker.
- ✱ **Maintain proper records:** Documenting all locker rentals and operations.
- ✱ **Comply with regulations:** Adhering to banking rules for locker management etc.

Overall Objectives of Bank Policies:

In general, the core objectives of these diverse policies are:

- ✱ **Risk Mitigation:** Identifying and reducing potential risks, including financial, operational, regulatory, and reputational risks.



- ✱ **Regulatory Compliance:** Adhering to the legal and regulatory frameworks set by central banks and other authorities.
- ✱ **Financial Stability:** Ensuring the stability and integrity of the financial system through responsible management of financial products and services.
- ✱ **Customer Protection:** Safeguarding customer assets and interests, and building trust through transparent and secure services.
- ✱ **Operational Efficiency:** Streamlining internal processes and promoting effective resource management.

Importance of Designing 'Costing Policy' in Banks

Designing Principles for a Commercial Bank's 'Costing Policy' include:

- ✱ Profitability.
- ✱ Efficiency.
- ✱ Fairness.
- ✱ Risk Management, and
- ✱ Regulatory Compliance.

A successful 'Costing Policy' aims to balance Profit Maximization with responsible Lending, ensure pricing reflects the true Cost of Services, manage Asset and Liquidity Risks, and adhere to Banking Regulations for overall Financial Health and Stability. The key principles to consider:

Profitability and Value Creation:

- ✱ **Profit Maximization:** The fundamental goal is to generate profit through Interest Income on Loans and Investments and fees for services. The Costing Policy should ensure that revenue covers costs and contributes to the Bank's Profitability.
- ✱ **Value-Based Pricing:** Pricing should reflect the value delivered to customers and the bank's operational costs, considering factors like risk, customer relationship, and service complexity.

Operational Efficiency:

- ✱ **Cost Control:** Continuously monitor and control operational costs, including personnel, technology, and administrative expenses, to maintain competitive pricing and improve profit margins.

Process Optimization: Implement efficient processes for product development, service delivery, and

customer management to reduce overhead and improve efficiency.

Risk Management:

- ✱ **Asset and Liability Management:** The costing policy must account for interest rate risks, credit risks, and liquidity risks. The pricing of loans and the investment of deposits are critical to managing these financial exposures.
- ✱ **Fraud Prevention:** Incorporate costs related to fraud prevention measures into the overall cost structure to mitigate potential losses.

Fairness and Transparency:

- ✱ **Customer Affordability:** While aiming for profit, the bank must ensure its products and services are affordable and accessible to the target market, promoting fair access to financial services.
- ✱ **Clear Communication:** The Costing Policy and 'associated fees' should be communicated clearly and transparently to customers to build trust and avoid dissatisfaction.

Regulatory Compliance:

- ✱ **Adherence to Regulations:** The Costing Policy must comply with all relevant banking regulations, including those related to interest rates, fees, and capital adequacy, ensuring the bank's activities are legal and ethical.
- ✱ **Capital Adequacy:** A strong costing policy helps maintain sufficient capital reserves, which is a key component of a bank's financial health as assessed by rating systems like CAMELS.



b) Cost Control is ‘Need of Hour’ in Banking Sector:

Cost Control is crucial for Indian Banks due to increasing operating expenses and competitive pressures from domestic and foreign banks, as well as Agile FinTech’s. Banks can implement strategies like:

- ✱ Downsizing physical branches.
- ✱ Adopting cloud-based platforms for efficiency.
- ✱ Automating processes.
- ✱ Improving productivity through Role restructuring and goal setting, and
- ✱ Leveraging Fintech Solutions.

Reasons for Increasing Costs:

- ✱ **Technological Advancements:** Digital transformation and the adoption of new technologies to meet evolving customer expectations require significant investments.
- ✱ **Increased Competition:** The entry of private and foreign banks, coupled with innovative fintech companies, has intensified competition, forcing banks to invest more in customer acquisition and retention.
- ✱ **Regulatory Compliance:** Banks must comply with various and changing regulations, which can be a time-consuming and costly process.
- ✱ **Customer Expectations:** Customers now expect seamless, personalized, and digital-first banking experiences, which necessitates investment in digital infrastructure and customer service.

‘Cost Control’ Measures for Indian Banks:

- ✱ **Digital Transformation & Cloud Adoption:** Migrating to cloud platforms can significantly reduce infrastructure costs and increase operational efficiency.
- ✱ **Branch Downsizing & Digital Channels:** Reducing the physical footprint of brick-and-mortar branches and shifting to digital channels can lower significant overhead expenses like rent and maintenance.
- ✱ **Automation & Process Improvement:** Automating routine tasks and re-evaluating workflows can eliminate redundancies and improve overall workplace productivity.

- ✱ **Fintech Partnerships & BaaS:** Collaborating with fintech firms or enabling Banking as a Service (BaaS) can help banks offer innovative products and services more efficiently.
- ✱ **Workplace Productivity & Reimagined Roles:** Consulting with productivity experts to restructure departments, set clear goals, and reimagine roles can lead to a more efficient workforce.
- ✱ **Cross-selling & Targeted Marketing:** Implementing effective marketing strategies and cross-selling opportunities can help increase revenue streams and customer loyalty.

Need for ‘Costing Policy’ in Banking Sector:

Banks need a formal Costing Policy like other policies because it provides a structured approach to control:

- ✱ **Spending.**
- ✱ **Optimize Resource Allocation, and**
- ✱ **Enhance Profitability, ensuring long-term financial sustainability.**

Key objectives include improving profitability by identifying cost-saving opportunities, gaining a competitive advantage through better resource use, ensuring financial stability through efficient management, and aligning costs with strategic goals.

Essentials of ‘Costing Policy’ in Banking Sector:

- ✱ **Structured Approach:** A policy provides a clear framework for identifying, controlling, and reducing costs in a consistent and planned manner.
- ✱ **Financial Stability:** Effective cost management ensures a bank’s financial health, allowing it to withstand economic fluctuations and maintain long-term viability.
- ✱ **Improved Profitability:** By managing costs efficiently, banks can increase their profit margins, which is crucial for growth and investor confidence.
- ✱ **Competitive Advantage:** Controlling costs and optimizing resource allocation allows a bank to offer better products or services, or invest in innovation, giving it a competitive edge.
- ✱ **Strategic Alignment:** The policy helps align



spending with the bank's overall strategic objectives, ensuring that resources are directed towards initiatives that support its long-term goals.

- ✳ **Accountability and Control:** A formal policy establishes clear roles, responsibilities, and processes for cost management, fostering accountability across the organization.

Objectives of Implementing a 'Costing Policy':

- ✳ **Profit Optimization:** To systematically identify and implement measures that reduce operational costs, thereby increasing the bank's profitability.
- ✳ **Resource Optimization:** To ensure that financial and other resources are allocated efficiently and effectively, maximizing their value and impact.
- ✳ **Enhanced Competitiveness:** To control costs in a way that allows the bank to offer competitive pricing

or invest in value-adding activities that differentiate it from rivals.

- ✳ **Long-Term Financial Sustainability:** To build a sustainable financial structure that can endure market volatility and support continuous growth and development.
- ✳ **Improved Decision-Making:** To provide a more accurate and realistic assessment of costs and revenues, enabling better-informed strategic and operational decisions.
- ✳ **Value Creation for Customers:** To shift cost savings into investments that deliver enhanced value to customers, such as improved digital services or better customer support.
- ✳ **Risk Mitigation:** To manage operational and financial risks by preventing wasteful spending and ensuring that expenditures support essential functions and strategic initiatives.

Cost-to-Income Ratio (CIR)

The strategic implementation of 'Costing Policies' across the operations of Indian Banks can significantly help Control and Decrease the **Cost-to-Income Ratio (CIR)** by optimizing expenses, improving operational efficiency, and driving productivity, as lower CIR indicates improved efficiency and profitability.

Costing Policies Help Reduce CIR:

- ✳ **Cost Control and Allocation:** A well-defined costing policy helps banks accurately track and allocate expenses across different business units and activities, leading to a better understanding of where costs are incurred and opportunities for reduction.
- ✳ **Process Optimization:** By analysing the costs associated with various banking operations (like customer onboarding, loan processing, or digital transactions), banks can identify inefficiencies and streamline workflows, thereby reducing operational costs.
- ✳ **Digital Transformation:** Investing in and implementing digital technologies for automation can significantly reduce manual

manpower, increase speed, and lower the overall cost of delivering services, directly impacting CIR.

- ✳ **Enhanced Decision-Making:** Costing policies provide critical financial data that enables management to make informed decisions regarding resource allocation, product pricing, and investment in new technologies, ultimately leading to cost savings.
- ✳ **Focus on Value Drivers:** A good costing framework helps identify high-value activities, allowing banks to focus their resources on areas that generate the most income, while potentially reducing investment in less profitable ventures.
- ✳ **Regulatory Compliance:** Costing policies ensure that banks operate in a cost-effective manner, which aligns with regulatory goals for maintaining a stable and efficient financial sector.

In essence, the effective implementation of costing policies allows Indian banks to become more efficient, competitive, and profitable by achieving a

substantial decrease in their cost-to-income ratio.

c) Cost to Income Ratio of Public Sector Banks

(For the FY 2021 to 2025)

Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
01	Bank of Baroda	49.21%	49.24%	47.72%	47.71%	47.94%
02	Bank of India	51.34%	54.48%	51.08%	51.73%	50.84%
03	Bank of Maharashtra	47.37%	44.26%	39.14%	37.55%	38.37%
04	Canara Bank	49.55%	46.16%	44.79%	47.04%	47.27%
05	Central Bank of India	59.70%	58.27%	56.35%	58.18%	58.87%
06	Indian Bank	48.55%	46.21%	44.20%	45.92%	44.77%
07	Indian Overseas Bank	48.54%	48.61%	51.94%	56.32%	47.14%
08	Punjab & Sind Bank	75.61%	63.16%	62.95%	72.16%	61.23%
09	Punjab National Bank	47.82%	49.38%	51.69%	53.37%	54.59%
10	UCO Bank	53.40%	49.89%	55.94%	59.74%	56.99%
11	Union Bank of India	46.02%	45.74%	46.27%	46.42%	45.48%
	Average of 11 PSBs	49.57%	48.83%	48.41%	49.70%	49.15%
12	State Bank of India	53.60%	57.91%	53.87%	55.66%	51.64%
	Average of 12 PSBs	51.13%	52.31%	50.45%	51.98%	50.09%

(Source: IBA Data)

d) Designing a 'Costing Policy' Banks:

Indian banks' costing policies focus on analysing and controlling costs across operations by implementing techniques like activity-based costing, standard costing, and budgetary control. Key elements include cost classification, determining unit costs for products/services, identifying inefficiencies, and leveraging technology to automate processes and support strategic decisions like pricing and market segmentation.

Key Elements of a 'Costing Policy': A comprehensive costing policy in Indian banks encompasses several broad elements to manage expenses and optimize profitability:

Cost Analysis and Classification:

- ✳ **Cost Accounting:** Banks analyse and classify all

expenditures to understand the cost of their products, services, and various operations.

- ✳ **Cost Allocation:** Costs are allocated to specific products, processes, departments, or services to determine their true cost of production or delivery.

Efficiency and Waste Identification:

- ✳ **Incentivizing Efficiency:** The policy aims to highlight inefficiencies, waste of resources (materials, time, expenses), and inefficient use of machinery or equipment.
- ✳ **Performance Monitoring:** By comparing actual results against standards, banks can identify areas of underperformance and implement corrective actions.



Implementation of Costing Techniques:

- ✳ **Standard Costing:** Banks set standard costs for various activities and products, then compare them to actual costs to control variances and ensure efficiency.
- ✳ **Budgetary Control:** Establishing budgets for different departments and activities helps in planning and controlling expenses, with regular reviews to monitor performance against the budget.
- ✳ **Activity-Based Costing (ABC):** While not always a core technique, ABC is used to accurately assign costs to activities and then to products or services, providing a more precise cost view.

Leveraging Technology:

- ✳ **Digitalization:** Investment in digital technologies helps in automating processes, optimizing workflows, and improving data analysis for cost management.
- ✳ **Data-Driven Decision Making:** Technology enables banks to gather and analyse data to identify revenue leakage, improve customer segmentation, and inform strategic decisions.

Strategic Decision Support:

- ✳ **Profitability Analysis:** Costing provides insights into the profitability of different products, services, and customer segments, guiding decisions on pricing, product development, and resource allocation.
- ✳ **Strategic Initiatives:** Costing information supports broader strategic initiatives such as investing in new technologies, developing embedded finance solutions, and optimizing cross-selling and upselling opportunities.

e) 'Costing Policy' Guidelines:

Indian Banks' Costing Policy focus on strategic planning and control to reduce operating expenses, manage personnel costs, negotiate supplier contracts, and prevent operational risks. Key contents include cost budgeting, resource planning, performance measurement, risk management, and a culture of cost-consciousness driven by strong leadership. The goal is to enhance profitability, maintain quality and customer satisfaction, and gain

a competitive advantage through optimized resource allocation and value-adding activities.

Key Components of a Costing Policy:

- ✳ **Cost Control & Reduction Programs:** Implement systematic processes to identify, analyse, and reduce costs across all bank operations, including operational expenses and staffing.
- ✳ **Strategic Cost Planning:** Develop strategies that align with the bank's broad objectives, focusing spending on high-value activities and eliminating unnecessary expenditures.
- ✳ **Budgeting & Financial Management:** Utilize cost budgeting, resource planning, and accurate cash forecasting to predict and manage expenditures effectively.
- ✳ **Personnel Cost Management:** Address employee-related expenses through fair pay structures, productivity improvements, and efficient management of staff costs.
- ✳ **Supplier & Vendor Management:** Consolidate purchasing, engage in intelligent bargaining, and establish clear procurement procedures to reduce external costs.
- ✳ **Operational Efficiency:** Optimize processes, manage overheads (like utilities and rent), and adopt continuous improvement practices to enhance efficiency and reduce operational waste.
- ✳ **Performance Measurement & Reporting:** Establish metrics and reporting systems to track cost performance, identify inefficiencies, and measure the effectiveness of cost-saving initiatives.
- ✳ **Risk Management:** Integrate risk management into cost control efforts, particularly by minimizing default risk and managing the cost of capital to protect profitability.
- ✳ **Technology & Tools:** Leverage tools like Activity-Based Costing (ABC), budgetary control, and Lean Accounting to gain deeper insights into cost drivers and optimize resource allocation.
- ✳ **Culture & Leadership:** Foster a cost-conscious culture across the organization, supported by strong

leadership and a clear accountability framework, to ensure successful implementation and sustainability.

f) 'Cost Sheets' to implement Costing Policy:

Indian banks are required to develop cost sheets to track and control operating costs at various units, including branches, alternate delivery channels, and processing centers, as part of their costing policy. These cost sheets help monitor expenditures, provide detailed financial overviews of each unit, and aid in cost control and resource allocation. This practice aligns with general cost accounting principles, where detailed cost breakdown allows for improved efficiency and informed decision-making regarding expenses and profitability.

Purpose of Cost Sheets in Indian Banks

- ✱ **Cost Monitoring and Control:** Cost sheets provide a detailed breakdown of expenses for each operational unit, allowing for continuous tracking and management of various costs.
- ✱ **Performance Analysis:** By providing a clear overview of expenses for different operational units like branches and processing centers, banks can analyse the financial performance of each unit and identify areas for improvement.
- ✱ **Resource Allocation:** A thorough understanding of costs helps banks allocate resources more efficiently and make informed decisions about spending.
- ✱ **Efficiency Improvement:** By identifying cost drivers and expenditures, banks can establish cost control measures to enhance overall operational efficiency.

How Cost Sheets Work:

- ✱ **Categorization of Expenses:** Costs are typically categorized into direct and indirect expenses to get a complete picture of total expenditure.
- ✱ **Unit-Specific Breakdown:** The cost sheets provide a granular view of costs, broken down by specific operational units such as branches, alternative delivery channels, and central processing centers.
- ✱ **Analysis and Decision-Making:** The data compiled in these cost sheets serves as a basis for managerial decisions related to pricing, profitability analysis, and strategic planning for cost reduction.

g) Details of 'Costing Policy' in Banks:

1. Cost Control & Reduction Programs:

Indian Banks' 'Cost Control' and reduction programs involve technology integration, process improvements, and digitalization, including a shift to internet banking and ATMs over brick-and-mortar branches. They focus on optimizing supply chain management, implementing centralized procurement, and analysing third-party spending to achieve cross-organizational savings. Other strategies include strategic workforce management, rethinking mainframe infrastructure, and leveraging SaaS/PaaS solutions for non-differentiating functions to reduce operational costs and enhance efficiency.

Key Strategies:

- ✱ **Digital Transformation:** Channel Optimization: Reducing the number of physical branches and focusing on online platforms, ATMs, and internet banking to deliver services.
- ✱ **Automation:** Implementing technology to automate processes and reduce manual efforts, leading to greater operational efficiency.
- ✱ **Technology and Infrastructure:** Cloud Adoption: Migrating non-core functions to Software-as-a-Service (SaaS) and Platform-as-a-Service (PaaS) models to reduce infrastructure costs.
- ✱ **Mainframe Modernization:** Strategically upgrading or rethinking mainframe systems for better cost-effectiveness and flexibility.
- ✱ **Supply Chain and Vendor Management:** Centralized Procurement: Consolidating procurement to leverage economies of scale and drive down costs across the organization.
- ✱ **Third-Party Spend Management:** Gaining visibility and control over third-party vendors to identify and eliminate duplicative services and unnecessary spending.
- ✱ **Process and Workforce Optimization:** Process Improvement-Streamlining workflows and operational processes to enhance efficiency and reduce bottlenecks.
- ✱ **Strategic Workforce Management:** Re-evaluating staffing levels through staff redeployment and



focusing on upskilling to meet changing service delivery needs.

- ✳ **Financial and Spending Analysis:** Spending Analysis: Conducting comprehensive spending analyses to identify major cost centers and specific costs that can be reduced.
- ✳ **Category Management:** Focusing on key spending categories to drive strategic cost savings and align with business value creation.

2. Strategic Cost Planning:

Strategic Cost Planning for Indian banks involves optimizing expenses by aligning them with long-term goals, often through digital transformation, process outsourcing, AI adoption, and cloud migration to reduce operational costs, improve efficiency, and maintain profitability. Key components include strategic positioning analysis to understand industry comparison, cost driver analysis to identify factors influencing costs, and the use of data analytics infrastructure to monitor and analyse costs and trends. Banks also focus on controlling cost of funds and cost of risk through mechanisms like the Insolvency and Bankruptcy Code (IBC) and improved credit discipline to foster a better debt-to-creditor relationship.

Key Components and Approaches:

- ✳ **Strategic Positioning Analysis:** Banks analyse their position relative to competitors and the industry to make informed strategic decisions about cost management.
- ✳ **Cost Driver Analysis:** This involves identifying and examining both structural (e.g., technology choices) and executional (e.g., operational processes) cost drivers to understand their financial impact.
- ✳ **Data Analytics Infrastructure:** Investing in robust data analytics helps banks gather insights into customer behaviour, market trends, and operational efficiency, which are crucial for effective cost management.
- ✳ **Strategic Levers for Cost Transformation:** Indian banks are employing various strategies to manage and reduce costs:
- ✳ **Digitalization and AI:** Implementing AI and machine learning for functions like fraud detection, credit risk assessment, and customer service helps improve efficiency and reduce costs.

- ✳ **Cloud Computing:** Migrating to cloud-based infrastructure enhances scalability, reduces IT costs, and increases agility in deploying new services.

- ✳ **Business Process Outsourcing (BPO):** Outsourcing non-core functions like IT support to specialized providers can lead to significant savings and allow banks to focus on core strategic activities.

- ✳ **APIs and Open Banking:** Utilizing Application Programming Interfaces (APIs) facilitates integration with third-party FinTech's, expanding service offerings and potentially creating new cost efficiencies.

Focus on Key Cost Areas:

- ✳ **Cost of Funds:** Banks strive to keep their cost of borrowing low to offer more affordable rates to customers and maintain competitiveness.

- ✳ **Cost of Risk:** This includes loan loss provisions and capital charges. Banks use mechanisms like the Insolvency and Bankruptcy Code (IBC) to improve credit discipline, resolve non-performing assets (NPAs), and reduce the overall cost of risk.

Objectives of Strategic Cost Planning:

- ✳ **Cost Reduction:** Reducing expenses while maintaining or improving service quality and customer satisfaction.

- ✳ **Competitive Advantage:** Achieving a competitive edge by offering competitive pricing or superior products and services.

- ✳ **Profitability:** Improving overall profitability through a combination of cost reduction and revenue growth strategies.

- ✳ **Resource Optimization:** Allocating resources to activities that provide the most value and align with the bank's strategic direction.

3. Budgeting & Financial Management:

Indian Banks control costs through a formal budget and financial management process involving budget preparation, resource allocation, performance monitoring (comparing actuals to budget), and corrective actions. This is supported by key activities like cash flow management,



capital expenditure control, and the use of various budgets (operational, cash, capital) to oversee day-to-day and long-term expenses. Banks also implement cost-cutting measures by categorizing expenses, tracking spending, and optimizing processes to improve efficiency and achieve financial goals.

Key Components of Budgetary Control:

- ✱ **Preparation of Budget:** This involves forecasting income and expenses for a future period.
- ✱ **Execution & Allocation:** Once the budget is prepared, resources are allocated to different departments and functions.
- ✱ **Performance Monitoring:** Actual results are continuously compared against the budgeted figures to identify variances.
- ✱ **Corrective Actions:** When significant deviations occur, managers take necessary steps to bring spending back in line with the budget.

Types of Budgets:

- ✱ **Operational Budget:** Manages the day-to-day income and expenses of the bank.
- ✱ **Cash Budget:** Focuses on monitoring the flow of cash in and out of the bank to ensure adequate liquidity.
- ✱ **Capital Budget:** Controls spending on large, long-term investments such as buying new assets or expanding operations.

Methods and Tools for Cost Control:

- ✱ **Expense Categorization:** Banks categorize their expenses to understand where money is being spent and identify areas for potential reduction.
- ✱ **Real-time Spending Tracking:** Modern budgeting systems allow for continuous monitoring of spending, enabling quick analysis and adjustments.
- ✱ **Automated Systems:** Automating parts of the budget creation process can make it faster and more efficient for banks.
- ✱ **Zero-Based Budgeting (ZBB):** While not explicitly detailed for Indian banks, ZBB, which requires

justification for every expenditure, is a method used to control costs by starting each new budget from a “zero” base.

Benefits for Banks:

- ✱ **Improved Financial Discipline:** Budgetary control instils financial discipline and helps achieve financial goals.
- ✱ **Enhanced Efficiency:** By eliminating waste and controlling costs, banks can improve overall operational efficiency.
- ✱ **Better Resource Management:** Effective budgeting ensures resources are allocated efficiently to support growth and other strategic initiatives.
- ✱ **Informed Decision-Making:** Budgets provide managers with the data needed to make sound decisions regarding resource allocation and spending.

4. Personnel Cost Management:

Indian banks control personnel costs through strategic workforce planning, leveraging technology for process automation and digital service delivery, outsourcing non-core functions, redeploying staff to high-demand areas, improving employee productivity through performance management systems, optimizing staffing levels, and implementing robust budget control systems. These strategies focus on maximizing efficiency, enhancing employee productivity, and ensuring cost-effective service delivery to meet business objectives and improve overall profitability.

Strategies for Personnel Cost Management:

- ✱ **Strategic Workforce Planning:** Banks analyse their future needs for skills and roles, ensuring optimal staffing levels and avoiding unnecessary hires.
- ✱ **Digital Transformation and Technology:**
 - **Automation:** Investing in technology to automate routine tasks reduces the need for manual manpower.
 - **Digital Channels:** Promoting and improving Internet banking and ATM facilities helps reduce reliance on physical branches, thereby reducing staffing costs.



- ★ **Outsourcing:** Non-core functions, such as IT services, data center management, and network maintenance, are often outsourced to specialized third-party providers, reducing in-house personnel costs.

Employee Performance and Productivity:

- ★ **Performance Management Systems:** Implementing systems like Management by Objectives (MBO) and 360-degree feedback helps evaluate employee performance, reward high performers, and identify areas for improvement to boost productivity.
- ★ **Staff Redeployment:** Shifting staff from areas of low demand to areas of high demand is a common practice to optimize resource utilization.

Budgetary Control:

- ★ **Cost Centers & Drivers:** Banks identify major cost centers and the cost drivers within them to focus on reducing costs where it has the most impact.
- ★ **Budgeting & Variance Analysis:** Establishing standard and budgeted costs, comparing them with actual costs, and periodically reviewing the process helps control expenditure.
- ★ **Process Improvement:** Focusing on improving operational processes and adopting cost-effective service delivery methods increases efficiency and reduces the need for excessive staff.
- ★ **Cross-selling and Upselling:** While not directly a personnel cost control, successfully cross-selling and upselling financial products can generate more revenue, which can be used to absorb personnel costs more easily.

Underlying Principles:

- ★ **Cost-Conscious Culture:** Fostering a culture where all employees are aware of and responsible for cost management contributes to overall success.
- ★ **Strategic vs. Tactical:** Banks adopt strategic planning for long-term cost control and tactical approaches for short-term cost reduction, aligning efforts with business objectives.

5. Supplier & Vendor Management:

Indian banks control costs through robust Supplier &

Vendor Management (SVM) by strategically selecting, onboarding, and managing vendors throughout the entire lifecycle to achieve favourable terms, monitor performance, mitigate risks, and ensure regulatory compliance. Key elements include thorough vendor selection, detailed contract negotiation, continuous performance monitoring against Key Performance Indicators (KPIs) and Service Level Agreements (SLAs), proactive risk assessment, and leveraging technology like Vendor Management Systems (VMS) for efficiency and comprehensive data management to optimize costs and drive value.

Vendor Lifecycle Management: The process typically includes these crucial stages:

- ★ **Vendor Selection and Sourcing:** Vetting potential vendors to assess their service capabilities, financial stability, and alignment with the bank's strategic goals before committing.
- ★ **Onboarding and Documentation:** A standardized process for bringing selected vendors into the bank's systems, including contract management, tax form collection, and setting up clear payment terms.
- ★ **Contract Negotiation:** Negotiating for cost-effective terms, such as volume discounts, favourable payment schedules, and exclusive service packages, which requires thorough market research and data analysis.
- ★ **Performance Monitoring:** Continuously tracking vendor performance using KPIs and SLAs, monitoring costs, delivery timelines, and quality standards.
- ★ **Risk Management:** Proactively identifying and mitigating risks associated with third-party dependencies, ensuring the continuity and security of operations.
- ★ **Invoice Processing & Payment:** Streamlining invoice processing and payment systems to reduce administrative costs, ensure timely payments, and avoid late payment penalties.
- ★ **Relationship Management:** Maintaining open communication, establishing clear communication channels, and fostering value-added collaborations with key suppliers.
- ★ **Vendor Offboarding:** A systematic process for



discontinuing vendor relationships when necessary, ensuring proper data handling and asset return.

Strategies for Cost Control:

- ★ **Consolidate Data and Perform Analysis:** Banks use consolidated vendor data and performance insights to identify cost-saving opportunities and evaluate the most cost-effective partners.
- ★ **Leverage Technology:** Implement Vendor Management Systems (VMS) to automate processes, track spend, manage contracts, and provide real-time performance data.
- ★ **Monitor Vendor Spend and Performance:** Track vendor expenses against cost targets and measure overall performance to identify areas for improvement and optimization.
- ★ **Ensure Regulatory Compliance:** Adhere to regulations, such as those regarding payments to Micro, Small, and Medium Enterprises (MSMEs), to avoid penalties and maintain good vendor relations.
- ★ **Negotiate Better Terms:** Use insights from data analysis to negotiate for better pricing and terms, such as early payment discounts, to improve cash flow and reduce costs.
- ★ **Conduct Regular Reviews:** Implement regular review cycles and performance dashboards to ensure vendors remain accountable and to address any potential issues promptly.

6. Operational Efficiency:

Indian Banks control operational costs by investing in digital transformation for automation and efficiency, focusing on a low cost-to-income ratio (CIR), managing non-performing assets (NPAs), and implementing strategies to optimize resource utilization through technology and process streamlining. Different bank types, public, private, and foreign, show varying levels of efficiency, with studies indicating opportunities for improvement across all segments to reduce costs and enhance service delivery.

Key Indicators of Operational Efficiency:

- ★ **Cost-to-Income Ratio (CIR):** This is a key metric that compares a bank's operating expenses to its

operating income. A lower CIR indicates better cost control and higher profitability.

- ★ **Staff Expenses to Total Expenses Ratio:** Measures the proportion of total expenses that go towards staff costs.

Strategies for Cost Control:

- ★ **Digitalization and Technology:** Investing in digital technologies helps automate workflows, optimize processes, and reduce manual efforts, leading to lower costs.
- ★ **Process Optimization:** Banks aim to streamline their internal processes and reduce redundancies to improve efficiency and cost-effectiveness.
- ★ **Resource Management:** Efficient banks effectively manage their resources such as technology, personnel, and capital to produce the highest output at the lowest cost.
- ★ **Customer Self-Service:** Implementing self-service platforms allows customers to complete transactions and access information independently, reducing the need for employee assistance.

Factors Influencing Operational Efficiency:

- ★ **Bank Ownership:** Studies have shown variations in efficiency levels between public, private, and foreign banks, with foreign banks sometimes demonstrating higher operational efficiency.
- ★ **Non-Performing Assets (NPAs):** A significant reduction in NPAs is crucial for improving the overall cost efficiency of the banking industry.
- ★ **Mergers and Acquisitions:** The impact of mergers can vary, but some studies suggest they have a positive effect on the cost efficiency of merged banks.
- ★ **Macroeconomic Factors:** Factors like Gross Domestic Product (GDP) growth can influence the operational efficiency of the banking sector.

Outcomes of Efficient Operations:

- ★ **Enhanced Profitability:** Lower operational costs directly contribute to higher profits and better



financial health for banks.

- ★ **Improved Service Delivery:** By reducing costs, banks can improve the quality and accessibility of their services, contributing to financial inclusion.
- ★ **Sustainability:** Operational efficiency is vital for the long-term sustainability and success of a bank and the banking sector as a whole.

7. Performance Measurement & Reporting:

Indian banks control costs by using performance metrics such as non-interest expense ratios, cost-to-income ratios, and profit per employee to monitor operational efficiency and identify areas of waste. Regular reporting, including data on operational risks and non-interest costs from business units and internal audit, allows senior management to track performance against benchmarks, ensure resource utilization, and implement corrective actions to improve cost-effectiveness and overall financial performance.

- ★ **Key Performance Metrics:** Banks use various metrics to measure performance and control costs:
- ★ **Non-Interest Expense Ratios:** Measures the ratio of non-interest expenses (like staff salaries, rent, and other operational costs) to total income or total expenses, indicating operational cost control.
- ★ **Cost-to-Income Ratio:** This ratio shows the cost of generating a unit of income and is a crucial indicator of operational efficiency.
- ★ **Net Profit per Employee:** Tracks the profitability per employee, highlighting productivity and potential cost inefficiencies related to staffing.
- ★ **Return on Assets (ROA):** Measures how profitably a bank is using its assets to generate earnings, with lower asset utilization often leading to higher costs.
- ★ **Reporting Mechanisms:** To control costs, banks rely on various reporting systems:
 - ★ **Internal Reports:** Senior management receives reports from business units, group functions, operational risk management, and internal audit.
 - ★ **Operational Risk Reports:** These reports

contain both internal and external data, providing a comprehensive view of financial, operational, and compliance data relevant to decision-making.

- ★ **Audit Reports:** Internal and external audit reports help management assess the accuracy and reliability of financial data and internal controls.

Reporting Process for Cost Control:

- ★ **Data Collection:** Information is gathered from different sources, including operational data, financial results, and external market conditions.
- ★ **Analysis:** These reports are analysed to identify problem areas, underutilized resources, and inefficiencies.
- ★ **Benchmarking:** Performance is compared against industry standards or internal targets to gauge efficiency.
- ★ **Corrective Actions:** Based on the analysis, timely corrective actions are implemented to address inefficiencies and improve cost management.
- ★ **Management Review:** Regular reviews by senior management ensure that reporting systems are timely, accurate, and relevant, leading to better decision-making and improved performance.

8. Risk Management:

Indian banks control costs through risk management by implementing frameworks that identify, measure, monitor, and control various risks, including credit, market, operational, and liquidity risks. Key cost-control strategies involve risk-based pricing of loans, allocating capital to absorb expected losses, employing stress testing and advanced credit models, using derivatives and hedging for market risk, and enhancing cybersecurity and internal controls to prevent operational losses. The Reserve Bank of India (RBI) also enforces prudential norms like Basel III, requiring robust risk management and capital adequacy to maintain financial stability and control losses.

Risk Identification and Assessment:

- ★ **Risk Frameworks:** Banks establish comprehensive

risk management frameworks, including guidelines and tools, to identify and assess various risks.

- ★ **Types of Risk:** These frameworks cover key risk areas like credit, market (interest rate, exchange rate, liquidity), operational (including cyber threats), and strategic risks.

Risk Monitoring and Control:

- ★ **Key Risk Indicators (KRIs):** Banks monitor Key Risk Indicators to track and manage risks effectively.
- ★ **Stress Testing:** Advanced models and stress testing are used to assess the impact of adverse market conditions on portfolios and capital.
- ★ **Risk-Based Pricing:** Loans are priced based on the perceived risk of the borrower, with higher-risk borrowers paying higher interest rates.
- ★ **Capital Allocation:** Banks allocate capital to absorb potential losses, a practice supported by the Risk Adjusted Return on Capital (RAROC) framework.

Mitigating Operational Risks:

- ★ **Cybersecurity:** Banks invest in cybersecurity solutions to protect against breaches and operational disruption.
- ★ **Internal Controls:** Stricter internal controls, regular audits, and enhanced systems are implemented to prevent operational failures and losses.
- ★ **Incident Reporting:** Timely reporting and ongoing review of incidents help in improving systems and controls.

Strategic and Regulatory Measures:

- ★ **Strategic Risk-Taking:** Banks aim to take informed, calculated risks aligned with their business objectives.
- ★ **Regulatory Compliance:** Adherence to regulations, such as the Basel III norms for capital and liquidity, is crucial for maintaining financial stability and preventing sanctions.
- ★ **Asset-Liability Management (ALM):** ALM frameworks and hedging strategies, including the

use of derivatives, help manage market and liquidity risks.

9. Technology & Tools:

Indian banks reduce operational costs by adopting Robotic Process Automation (RPA) for repetitive tasks, leveraging Artificial Intelligence (AI) and Machine Learning (ML) for credit scoring and fraud detection, expanding digital-first services like mobile banking and UPI to lower overhead from physical branches, and utilizing cloud computing for scalable and cost-effective infrastructure. These technologies improve efficiency, reduce manual effort, enhance customer experience, and streamline workflows, ultimately leading to long-term cost savings and increased productivity.

Key Technologies & Tools:

- ★ **Robotic Process Automation (RPA):** Banks use RPA to automate repetitive, data-intensive, and rule-based tasks such as data entry and application processing. This reduces manual effort, improves accuracy, and saves significant time and costs associated with human resources.
- ★ **Artificial Intelligence (AI) & Machine Learning (ML):**
 - ★ **Credit Scoring:** AI-driven models analyse alternative data to assess creditworthiness, expanding access to credit and reducing default risks.
 - ★ **Fraud Detection:** AI/ML helps detect fraudulent transactions and activities, safeguarding against losses.
- ★ **Virtual Assistants & Chatbots:** AI-powered chatbots and virtual assistants provide customer support and handle inquiries, reducing the load on human agents and improving efficiency.
- ★ **Digital Banking Platforms & Mobile Banking:** Shifting to digital-first models and mobile banking reduces the need for extensive physical branches, significantly cutting down on infrastructure and operational overhead.
- ★ **Unified Payments Interface (UPI):** This real-time payment system has revolutionized digital payments, enabled faster transactions and expanding



reach while lowering costs compared to traditional methods.

- ✱ **Cloud Computing:** Leveraging cloud infrastructure offers scalability, flexibility, and cost-effectiveness for managing banking operations and data.
- ✱ **Biometric Authentication:** Tools like biometric-based identification enhance security and streamline customer verification processes, reducing fraud and associated costs.
- ✱ **Big Data Analytics:** Analysing large datasets helps identify inefficiencies, optimize workflows, and enable personalized customer services, contributing to cost savings and revenue generation.
- ✱ **Application Programming Interfaces (APIs):** APIs facilitate seamless integration between different systems and third-party services, enabling innovation and cost-effective collaboration.

How These Technologies Control Costs:

- ✱ **Reduced Operational Overhead:** Digital channels and automation decrease the reliance on physical branches and manual manpower, significantly lowering costs.
- ✱ **Improved Efficiency:** Automation and AI streamline processes, leading to faster turnaround times and increased productivity across various banking functions.
- ✱ **Enhanced Risk Management:** AI-driven fraud detection and credit scoring reduce potential financial losses from defaults and fraudulent activities.
- ✱ **Optimized Workforce:** Automating repetitive tasks allows human resources to focus on more complex and strategic activities, maximizing their value and improving overall workplace productivity.
- ✱ **Scalability:** Cloud computing and digital platforms allow banks to scale their operations efficiently without incurring massive upfront costs, adapting to changing demands.

10. Culture & Leadership:

To control costs, Indian banks need leadership that fosters

a cost-conscious culture, prioritizes operational efficiency, leverages technology, and embraces strategic financial management. Effective leadership must promote an environment where employees are engaged and supported, but also accountable for cost-saving initiatives, addressing challenges like high operational expenses and the need to reduce reliance on cash.

Key Aspects for Cost Control in Indian Banks:

Leadership & Culture:

- ✱ **Cost-Conscious Culture:** Leadership must establish a culture where cost awareness is embedded in daily operations, encouraging employees to identify and implement cost-saving measures.
- ✱ **Ethical Sales & Resource Allocation:** Leaders should shift away from a focus on mere sales targets and towards ethical selling practices, ensuring adequate resources and support are provided to staff, rather than pushing for forced sales.
- ✱ **Employee Engagement:** Fostering a positive work culture, where employee dignity and mental well-being are prioritized, can improve productivity and efficiency, indirectly contributing to cost reduction.

Operational Efficiency:

- ✱ **Technology Adoption:** Banks must embrace and integrate technology to automate processes, improve efficiency, and reduce manual efforts, thereby lowering operational costs.
- ✱ **Reducing Cash Intensity:** India's high cash intensity leads to significant currency operation costs. Banks can control these by promoting digital payment systems and reducing the physical handling of cash.
- ✱ **Streamlining Operations:** A strong culture can support organizational change aimed at streamlining processes, which is crucial for managing budgets and facilities effectively.

Strategic Financial Management:

- ✱ **Cost Accounting and Management:** Implementing robust cost accounting and management practices helps banks analyse their expenses and identify areas for optimization, as highlighted in studies from the Indian Banking System.



- ✱ **Focus on Cost Efficiency:** The goal of cost efficiency is to achieve the best performance from inputs and outputs, requiring banks to minimize operating and interest costs.
- ✱ **Strategic Planning:** Integrating cost control into broader strategic goals, such as achieving sustainable development and competitive advantage, is essential for long-term success.

11) Need for Cost and Management Accountants (CMAs) in Banking Sector:

Indian commercial banks need Cost and Management Accountants to control costs, monitor expenses, and improve profitability across their operations by preparing budgets, allocating overheads, and implementing cost-saving measures. Cost accountants help banks analyse financial data to identify trends and potential problems, manage Non-Performing Assets (NPAs), ensure compliance with regulatory guidelines like Basel norms and RBI prudential norms, and provide crucial financial insights for strategic decision-making in departments like Treasury and Foreign Exchange.

Here are the specific reasons for appointing “Cost and Management Accountants” in various departments of an Indian bank:

- ✱ **Cost Control and Profitability:** Banks, as commercial entities, must be profitable. Cost accountants analyse the cost structure to identify areas for cost reduction and implement measures to control expenses, thereby improving overall profitability.
- ✱ **Budgetary Control and Planning:** They prepare budget forecasts and develop cost control systems, enabling effective financial management and strategic planning within different departments.
- ✱ **Expense Monitoring:** Cost accountants monitor expenditures across various departments, ensuring that expenses remain within budget and identifying any deviations or inefficiencies.
- ✱ **Overhead Allocation:** They are responsible for allocating overhead costs (such as rent, electricity, salaries, and depreciation) to different banking products and services, providing a true understanding of their profitability.

- ✱ **Asset Quality Management:** With challenges like Non-Performing Assets (NPAs) in the banking sector, cost accountants contribute to analysing asset quality and provisioning, helping banks maintain financial stability.
- ✱ **Compliance and Regulatory Adherence:** They ensure that financial processes align with regulatory requirements and prudential norms set by the Reserve Bank of India (RBI), such as those for asset classification and provisioning.
- ✱ **Strategic Input:** By interpreting financial data and identifying trends, cost accountants provide valuable insights to management, supporting strategic decision-making in crucial areas like Treasury and Foreign Exchange.

a) Cost Accountants are essential in the Indian Banking Sector for:

- ✱ **Strategic Cost Control.**
- ✱ **Operational Efficiency.**
- ✱ **Effective Decision-making, and**
- ✱ **Profitability Analysis, especially as Margins Shrink and Competition Intensifies.**

They provide vital cost data for pricing, resource optimization, and eliminating unprofitable ventures. By moving beyond financial accounting, they offer real-time insights to help banks manage costs, improve services, and align with national and global regulatory requirements, ultimately contributing to overall financial health and competitiveness.

b) Importance of ‘Cost and Management Accountants’ in Banking Sector:

- ✱ **Shrinking Margins:** The banking sector in India, driven by social banking and government initiatives, has faced challenges like competition and shrinking profit margins. Cost accountants provide innovative solutions and cost-effective strategies to enhance efficiency and profitability.
- ✱ **Strategic Planning:** They are not just for audits but are involved in planning across various banking activities, acting as business consultants to help achieve greater value and efficiency.
- ✱ **Regulatory Compliance:** Indian Banks, as members of the G-20, must adhere to International



Frameworks like the Basel Committee's Capital Adequacy framework, making cost management crucial.

c) Other benefits are:

- ✱ **Cost-Benefit Analysis:** Cost accountants undertake cost-benefit analyses of all banking functions like people, products, processes, and infrastructure to identify areas of profit and loss.
- ✱ **Profitability Analysis:** They help in pinpointing less profitable products or services and concentrating efforts on profitable ones, ensuring maximized profits and resource optimization.
- ✱ **Decision-Making Support:** By analysing costs and identifying inefficiencies, they provide accurate data that supports informed pricing decisions, resource allocation, and overall strategic choices.
- ✱ **Operational Efficiency:** Cost accountants help in identifying and eliminating wasteful costs, discontinuing unprofitable business propositions, and improving the overall operational efficiency of the banking system.
- ✱ **Value Creation:** Their role has evolved from merely providing information to creating value for customers and stakeholders, making them strategic planners and market analysts for sustainable growth.
- ✱ **Modernizing Systems:** In the face of digital transformation and the rise of neo-banking, cost accountants' expertise is crucial for banks to adapt to new technologies, manage digital costs, and maintain a competitive edge.

To Sum Up:

The Scope to Control Costs in Banking Operations includes focusing on operational cost management through digital transformation, automation, and process standardization; managing default risk and cost of capital, which are influenced by external factors; and optimizing resource allocation by streamlining vendor relationships, consolidating real estate, and sharing compliance costs through industry collaborations. Effective cost control is vital for enhancing profitability, gaining a competitive advantage, and ensuring stakeholder confidence.

Operational Cost Control:

- ✱ **Digital Transformation & Automation:** Invest in technology to automate repetitive back-office processes, streamline workflows, and enable self-service options for customers.
- ✱ **Process Standardization & Optimization:** Standardize common processes, like account transfers and loan applications, to reduce redundancy and increase efficiency across the bank.
- ✱ **Channel Management:** Offer diverse customer service channels, including low-touch digital options like chatbots, to meet different customer needs and reduce support costs.

Financial & Risk Cost Management:

- ✱ **Default Risk Management:** Monitor and manage the risk of loan defaults, which impacts a bank's financial health.
- ✱ **Cost of Capital Optimization:** Strategically manage the cost of capital, which involves the holding cost of capital for loans as prescribed by regulatory frameworks.
- ✱ **Risk Management Functions:** Quantitatively measure and compare the total cost of risk management functions against sales and assets to identify areas for improvement.

Strategic & Resource Management:

- ✱ **Vendor Relationship Management:** Consolidate vendor relationships and negotiate favourable terms to reduce overall expenses.
- ✱ **Real Estate Optimization:** Review and optimize the bank's real estate portfolio to reduce overhead costs.
- ✱ **Industry Collaborations:** Engage in industry-wide collaborations to share resources and co-develop solutions for common compliance challenges, thereby reducing costs.
- ✱ **Shared Services & Centralized Management:** Implement financial shared services and centralized management of third-party spending to improve efficiency and alignment across business units.



Overall Benefits:

- ✱ **Increased Profitability:** Lowering costs directly contributes to a stronger bottom line.
- ✱ **Enhanced Competitiveness:** Cost-efficient banks can offer better rates and services, giving them an edge in the market.
- ✱ **Stakeholder Confidence:** Demonstrating fiscal responsibility builds trust with investors and customers.

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Annexure I

Objectives of Costing Policy in Banks

Commercial Banks operate for profit, balancing income from products like loans against expenses from operations, a process that requires strategic revenue generation and cost optimization through effective Costing Policy. Successful Indian banks generate revenue from interest income on loans and non-interest income from fees, while simultaneously managing operational costs to ensure profitability and satisfy stakeholders.

Sources of Revenue for Banks:

- ✱ **Interest Income:** The primary income for banks comes from the difference between the interest rates they charge on loans and the interest rates they pay on deposits.
- ✱ **Non-Interest Income:** This income is generated from non-traditional, fee-based activities such as service charges for accounts, ATM fees, loan processing fees, and wealth management services.

Controlling Non-Interest Expenses:

- ✱ **Operational Efficiency:** Banks must control non-

interest expenses, which include costs related to technology, salaries, and other administrative functions, to maintain profitability.

- ✱ **Strategic Costing:** Implementing good costing policies helps banks identify, analyse, and reduce or optimize these expenses to improve their bottom line.

Why Costing Policies Are Crucial?

- ✱ **Profitability:** The core purpose of commercial banks is to be profitable, and managing both revenue streams and costs is essential for achieving this goal.
- ✱ **Stakeholder Satisfaction:** Profitability ensures that banks can satisfy stakeholders, including shareholders, by providing returns on their investment.
- ✱ **Sustained Growth:** By optimizing costs and diversifying revenue, banks can achieve sustainable growth and adapt to changing financial landscapes.

Annexure II

Contents of ‘Model Costing Policy’ of Banks

In India, Banks do not follow a single, standardized “Costing Policy” format. Instead, each bank develops its own internal policy based on guidelines and circulars issued by the Reserve Bank of India (RBI), competitive market factors, and its specific business strategy.

A ‘Model Costing Policy’ would therefore be a comprehensive framework, incorporating best practices and RBI expectations for ‘Controlling and Optimizing Costs.’

“Model Costing Policy” Format for Indian Banks: Objective and Scope:

- ★ **Objective:** To establish a systematic framework for the identification, measurement, allocation, and control of all costs incurred by the bank. The policy aims to enhance operational efficiency, increase profitability, and provide reliable cost information for pricing decisions and strategic planning.
- ★ **Scope:** The policy covers all costs and expenses across all business units, departments, products, and services of the bank, including central functions and shared services.

Governance and Responsibilities:

- ★ **Board of Directors:** Has the ultimate responsibility for approving and overseeing the bank’s cost management framework and culture.
- ★ **Audit Committee of the Board (ACB):** Reviews the efficacy of the internal audit function regarding cost control, the follow-up on internal inspection reports, and adherence to audit recommendations.
- ★ **Senior Management:** Is responsible for implementing the costing policy and establishing effective internal controls throughout the bank.
- ★ **Costing Department/Finance Function:** Is responsible for the practical application of the policy, including data collection, analysis, and reporting.

Methodology for Cost Identification and Allocation:

- ★ **Activity-Based Costing (ABC):** A modern approach

to accurately allocate costs based on the activities that drive them, rather than relying on traditional, less precise methods. This involves:

- ★ **Identifying Activities:** All tasks and functions carried out within the bank, such as loan processing, customer service, and transaction processing.
- ★ **Assigning Costs to Activities:** Tracing overhead costs (e.g., salaries, technology infrastructure) to the activities that consume them.
- ★ **Determining Cost Drivers:** Identifying the factors that influence the cost of an activity (e.g., number of transactions, customer inquiries).
- ★ **Product and Service Costing:** Using the data from the ABC model to calculate the true cost of each banking product and service (e.g., specific loan types, credit cards) to inform pricing strategies.
- ★ **Cost Centers:** The policy defines clear cost centers (e.g., branches, departments, subsidiaries) to track and monitor expenditures and assign accountability.

Key Policy measures for Cost Optimization:

- ★ **Digital Transformation and Automation:** Invest in technology to automate repetitive, manual tasks in areas like data entry, accounting, and customer service. This reduces human error and frees up employees for higher-value activities.
- ★ **Specific Actions:** Implement Robotic Process Automation (RPA), enhance chatbots for customer service, and migrate to cloud-based systems.

Operating model Efficiency:

- ★ **Branch Rationalization:** Optimize the branch network by reviewing customer footfall and transaction volume. Downsize physical workspaces or adopt hybrid working models for administrative functions.
- ★ **Hybrid Work Arrangements:** Formalize flexible work options for non-branch staff to reduce real estate and utility costs.



- ✱ **Outsourcing:** Evaluate outsourcing non-core functions like IT support, back-office operations, and collections to specialized providers to reduce operational costs.

Strategic Procurement:

- ✱ **Vendor Consolidation:** Reduce the number of suppliers to gain leverage for better bulk deals.
- ✱ **Procurement Automation:** Digitize the procurement process for purchase orders, invoicing, and compliance checks to increase efficiency and reduce administrative costs.

Expense Management and Control:

- ✱ **Spend Analysis:** Implement data-driven analytics to evaluate spending patterns across the organization and identify areas of waste.
- ✱ **Budgeting and Forecasting:** Establish robust budgeting procedures with regular monitoring against actual expenditure.
- ✱ **Control over Discretionary Spending:** Implement clear approval hierarchies and controls for all non-essential and discretionary expenses.
- ✱ **Asset-Liability Management (ALM):** Optimize the bank's balance sheet to limit risk and increase profitability, especially by managing interest costs effectively.

- ✱ **Interest Cost Optimization:** Strategically manage debt financing by evaluating borrowing options and managing interest rate risk.

- ✱ **Revenue Leakage Plugging:** Implement measures to identify and recover lost income, particularly from non-performing assets (NPAs) and other irregularities.

- ✱ **Specific Actions:** Conduct a periodic review of accounts, particularly "unsatisfactory" ones, to ensure all recoverable income is realized.

Monitoring, Reporting, and Review:

- ✱ **Regular Reporting:** Generate regular reports on key cost metrics, including actual costs versus budget, efficiency ratios, and progress on cost optimization initiatives.

- ✱ **Performance Metrics:** Track key performance indicators (KPIs) such as cost-to-income ratio, personnel expense to average assets ratio, and specific savings from strategic initiatives.

- ✱ **Periodic Review:** Conduct a thorough review of the costing policy and related metrics at least annually to ensure alignment with the bank's strategy and changing market conditions.

Annexure III

Simple Organization Structure and Function of the Bank:

In an Indian Bank, the organizational structure is built around a complex web of departments that either directly generate revenue through customer-facing product offerings or provide essential support services. High-level governance and strategic direction, often guided by regulatory requirements from the Reserve Bank of India (RBI), oversee the entire structure.

Business and Product Offerings (Revenue-Generating):

These units are at the forefront of the bank's operations, directly interacting with customers and driving the bank's core business.

Retail Banking: This division focuses on individual customers and small businesses, managing common banking products and services.

- ★ **Customer-facing Roles:** Branch managers and relationship executives interact directly with account holders, small-business owners, and loan applicants.

Key Products and Processes:

- ★ **Savings and Deposits:** Offering and managing savings, current, and fixed deposit accounts.
- ★ **Loans and Advances:** Approving and managing retail loan products, such as home loans, personal loans, and vehicle loans.
- ★ **Credit and Debit Cards:** Issuing and managing card products.
- ★ **Wealth Management:** Providing investment and insurance products to individual customers.
- ★ **Corporate and Wholesale Banking:** This unit serves large corporations, mid-sized enterprises, and government bodies, offering tailored financial solutions.
- ★ **Customer-facing Roles:** Corporate Relationship Managers build and maintain relationships with large institutional clients.

Key Products and Processes:

- ★ **Project and Corporate Finance:** Providing large-

scale loans and financial advisory for projects and corporate activities.

- ★ **Trade Finance:** Facilitating global trade with services such as letters of credit, guarantees, and export-import financing.
- ★ **Treasury Management:** Handling cash management, foreign exchange (Forex), and other treasury needs for corporate clients.
- ★ **Treasury and Investment Banking:** This highly specialized division manages the bank's own funds and offers complex financial products.

Key Products and Processes:

- ★ **Trading and Portfolio Management:** Managing the bank's investments in government securities, bonds, and money market instruments.
- ★ **Derivatives and Risk Hedging:** Creating and offering derivative products to help corporate clients manage risk.
- ★ **Support Services and Business Processes:** These divisions provide the infrastructure, technology, and administration necessary for the revenue-generating units to operate effectively.
- ★ **Business Process Service Providers:** This group is involved in core operational functions that execute and enable product offerings, often involving standardized, high-volume transactions.
- ★ **Branch operations:** The network of branches across India handles day-to-day transactions like cash deposits, withdrawals, and account opening.
- ★ **Central Processing Centers (CPCs):** Many banks have centralized back-office operations to increase efficiency and reduce costs. These centers process applications for loans, accounts, and other services.
- ★ **Customer Relationship Management (CRM):** This function uses technology to collect and manage customer data, helping improve service quality and sales processes.



- ✱ **IT Operations:** This department ensures the continuous availability of all banking technology, from core banking software to online platforms and ATMs.
- ✱ **Support Services to Business Processes:** These functions ensure the efficiency, quality, and security of the core business processes.
- ✱ **Human Resources (HR):** Manages talent acquisition, training, and employee development.
- ✱ **Marketing and communications:** Handles advertising, branding, and customer communications.
- ✱ **Digital channels (E-banking):** Manages the development and operation of online banking, mobile banking, and other digital services, which are critical delivery channels for modern banking.
- ✱ **Governance and Business Strategy:** These functions operate at the highest level, providing strategic direction, oversight, and control for the entire bank, ensuring compliance with regulatory bodies like the RBI.

Governance Functions:

- ✱ **Board of Directors:** Appointed by the government and shareholders, the Board is responsible for the overall strategic direction and oversight of the bank.

It operates through various committees, such as the Audit Committee and HR Committee.

- ✱ **Risk management:** This function identifies, assesses, and mitigates all types of risks, including credit, market, and operational risks, in compliance with regulations like the Basel norms.
- ✱ **Compliance:** The Chief Compliance Officer (CCO) and team monitor internal processes to ensure adherence to regulatory guidelines from the RBI, SEBI, and other authorities.
- ✱ **Internal Audit:** An independent function that reviews the effectiveness of internal controls and governance processes.

Business Strategy Components:

- ✱ **Corporate planning and strategy:** Develops the bank's long-term and short-term strategic objectives.
- ✱ **Economic research:** This unit analyses macroeconomic trends to inform business and investment decisions.
- ✱ **Financial control and accounts:** The CFO's department manages financial reporting, budgeting, and accounting.

Annexure IV

Cost Drivers:

A bank's cost structure is complex, driven by various factors, with some costs being more significant than others. The allocation of these costs to specific products and services is critical for measuring profitability and making strategic decisions.

Hierarchy of Bank Cost Drivers (High to Low):

Cost of Funds: The cost of funds represents the interest a bank pays on its sources of funding, such as customer deposits (savings, checking, and fixed deposits) and borrowed money.

- ✱ **Cost Driver:** Interest rates in the broader market. The cost can change daily or even hourly depending on market volatility.

- ✱ **Significance:** It is often the largest and most variable cost for a bank, heavily influencing its profitability. Banks with a high Current Account and Savings Account (CASA) ratio, which represents lower-cost deposits, can decrease their cost of funds.

- ✱ **Operational Costs:** These are the day-to-day expenses of running the business and are a major cost driver.

- ✓ **Cost Driver:** A bank's distribution channels and infrastructure, including its physical branch network, digital platforms, and staffing levels.

- ✓ **Significance:** While operational costs include many line items, they are most heavily influenced by:

- ✓ **Personnel Expenses:** Salaries, benefits, and training for bank staff.

- ✱ **IT Operations and Maintenance:** The substantial costs of maintaining legacy systems and investing in new technology for digital transformation.

- ✱ **Branch Infrastructure:** Costs associated with physical branches like rent, utilities, and maintenance.

Governance and Compliance Costs: These are the expenses incurred to adhere to regulatory requirements

and are significant and often increasing.

Cost Driver: The volume and complexity of regulations, which are rising in the banking industry.

- ✓ **Significance:** The costs can be enormous, driven by personnel, technology, and audits. Failure to comply can result in severe penalties and reputational damage.

- ✓ **Personnel:** Hiring specialized compliance officers and allocating staff time for reporting.

- ✓ **Technology:** Implementing and maintaining systems for compliance processes.

- ✓ **External Fees:** Engaging third-party consultants and auditors.

Expected Losses: For lending products, expected losses represent the anticipated costs from loans that are not repaid.

- ✱ **Cost Driver:** Portfolio risk, including the probability of default by borrowers.

- ✱ **Significance:** This cost is typically managed by the risk department and evaluated regularly based on risk models.

Other Indirect Costs: These are a variety of overheads not directly tied to a single product.

- ✱ **Cost Driver:** Activities that support multiple areas of the business.

- ✱ **Examples:** Marketing and advertising expenses, corporate office administrative expenses, and legal fees not related to compliance fines.

Allocation of Costs in Banking:

Allocable Costs: are expenses that can be directly or indirectly assigned to a specific product, service, or department.

- ✱ **Direct Allocation:** This method traces costs that are clearly identifiable with a single cost object.



For example, a loan officer's salary can be directly allocated to the retail lending department.

✱ **Indirect Allocation:** Also known as overhead or joint costing, this involves assigning common costs to multiple cost objects based on a fair basis of allocation. The following methods are commonly used:

✓ **Time-driven Activity-based Costing (TDABC):** For banks, this is a refined way to allocate operational costs. It assigns costs based on the time required to perform specific activities for each service, such as the time it takes to process a transaction or open a new account.

✓ **Headcount:** Allocating costs like human resources or training to departments based on the number of employees.

✓ **IT Usage:** Allocating technology infrastructure costs based on the usage of systems by different departments.

✓ **Reciprocal Allocation:** A method that accounts for services provided between supporting departments, such as IT providing services to HR and HR providing services back to IT.

Unallocable Costs are expenses that cannot be reasonably or economically assigned to a specific cost object, product, or service.

✱ **Characteristics:** These are typically organization-wide costs that would not disappear even if a specific product line were discontinued.

Examples:

✓ **Fixed Corporate Costs:** Expenses for the CEO's office or broad, enterprise-level risk management that benefit the bank as a whole.

✓ **Legacy Systems Maintenance:** The cost of maintaining an old, core banking system that supports all products might be too complex to allocate accurately.

✓ **Market-level Expenses:** The cost of acquiring capital is based on market conditions, not on individual products, making it difficult to allocate precisely.

✓ **Treatment:** Unallocable costs are typically treated as a deduction from the bank's total profit at the corporate level, rather than being assigned to specific products for pricing or profitability analysis.



Annexure V

Cost Drivers of Banks – Strategic Business / Operations Units

To provide a comprehensive overview, the cost drivers for a bank can be broken down by primary groups and then by specific departments and functions. The primary drivers for any banking product are operational costs, the cost of funding, and expected losses. The sections below further categorize these factors.

Primary Grouping Cost Drivers:

Retail Banking:

- ★ **Customer Acquisition and Service:** Includes the marketing costs to attract new customers, as well as the ongoing expenses of branch networks, call centers, and digital channels.
- ★ **Operational Costs:** Expenses for transaction processing, account servicing, and other day-to-day activities.
- ★ **Risk Assessment and Credit Analysis:** A major driver in lending, covering the labor and technology costs for evaluating the creditworthiness of a large number of individual borrowers.

MSME (Micro, Small, and Medium Enterprises) Banking:

- ★ **Higher Risk Perception:** MSME lending is often viewed as higher risk due to smaller scale, limited financials, and higher default rates. This drives up the cost of credit and required loan loss provisions.
- ★ **Collateral and Guarantee Costs:** MSMEs often lack sufficient collateral, increasing the bank's risk and sometimes requiring expensive third-party guarantees.
- ★ **Information Asymmetry:** The cost associated with a lack of comprehensive financial data from MSMEs, which requires more manpower-intensive due diligence and credit analysis.
- ★ **Lending Procedures:** The processing of MSME loans often involves complex, non-standardized procedures, driving up operational costs.

Agriculture Banking:

- ★ **Credit Risk:** High vulnerability to external factors

like weather, market fluctuations, and natural disasters, which increases the risk of default and drives up provisioning costs.

- ★ **Operational Costs of Delivery:** High costs are involved in providing credit to farmers in remote rural areas, including maintaining a rural branch network.
- ★ **Government-Sponsored Schemes:** Implementing various government-subsidized schemes and priority sector lending targets can affect profitability, as banks must sometimes lend at lower-than-market interest rates.
- ★ **Monitoring and Recovery:** It is resource-intensive to monitor agricultural credit and recover dues from farmers in a timely manner.

International Banking:

- ★ **Funding Costs:** Reliance on potentially more expensive wholesale market funding and exposure to exchange rate fluctuations can increase the cost of funds.
- ★ **Complex Compliance:** Operating across multiple jurisdictions requires adherence to numerous, often conflicting, regulatory regimes, dramatically increasing legal, compliance, and IT costs.
- ★ **Higher Operational Expenses:** Handling complex international transactions, managing foreign currency accounts, and complying with international payment standards (e.g., SWIFT charges) are costly.
- ★ **Country and Exchange Rate Risk:** The risk of political instability, economic downturns, and currency fluctuations in foreign markets directly impacts the cost and profitability of international operations.

Departmental and Functional Cost Drivers:

Central Processing Centre (CPC):

- ★ **High Fixed Costs:** Includes overhead costs like rent, utilities, and maintenance for large processing facilities.



- ★ **Technology Infrastructure:** The cost of hardware, software, and networking for handling high volumes of transactions.
- ★ **Labor Costs:** The salaries and benefits for the large number of employees required to perform manual processing tasks.
- ★ **Automation Inefficiency:** Costs can be driven by a lack of automation, leading to higher manual processing and error rates.

Administrative Officer (Admin):

- ★ **Overhead Expenses:** General administrative costs for the entire bank, such as office supplies, maintenance, utilities, and taxes.
- ★ **Procurement and Vendor Management:** Costs associated with procuring goods and services and managing relationships with external vendors.
- ★ **Compliance with Manpower Laws:** Costs related to salary administration, benefits, and statutory compliance, as dictated by regulations.

Treasury Department:

- ★ **Cost of Funding:** The single most significant driver, including interest paid on deposits and borrowing costs from the money markets.
- ★ **Liquidity Management:** Costs associated with maintaining required levels of liquid assets and managing the bank's cash flow.
- ★ **Risk Management:** Cost of managing interest rate risk and foreign exchange risk, which may involve hedging instruments.
- ★ **Market Volatility:** Treasury costs are highly sensitive to financial market conditions and can change hourly or daily.

Technology:

- ★ **Infrastructure Investment:** Significant and recurring capital expenditure for hardware, software, and network components.
- ★ **Cybersecurity:** Ever-increasing costs for advanced security systems, threat detection, and personnel to

protect against cyber threats and fraud.

- ★ **Digital Transformation:** The costs of upgrading legacy systems, migrating to the cloud, and implementing new technologies like GenAI and APIs.
- ★ **Maintenance and Support:** Ongoing costs for IT operations, including maintenance, upgrades, and support staff.

Operations Departments (e.g., Pension Processing, Clearing):

- ★ **Processing Volumes:** Higher transaction volumes lead to higher processing costs, whether automated or manual.
- ★ **Automation Investment:** The cost of implementing and maintaining automation to handle repetitive tasks and improve efficiency.
- ★ **Regulatory Reporting:** Costs associated with fulfilling regulatory requirements for reporting, record-keeping, and auditing.
- ★ **Error Management:** The costs of identifying, correcting, and rectifying errors that occur during processing, which can involve reputational and financial penalties.

Risk and Compliance Department:

- ★ **Regulatory Mandates:** The cost of implementing and maintaining systems and processes to comply with regulations, such as KYC (Know Your Customer), AML (Anti-Money Laundering), and data privacy rules.
- ★ **Penalties for Non-compliance:** The potentially massive cost of fines, legal fees, and operational disruptions resulting from compliance failures.
- ★ **Personnel Costs:** The salaries for highly specialized compliance and risk professionals who monitor and manage regulatory adherence.
- ★ **External Audits and Consultants:** The expense of engaging third-party firms to evaluate the bank's compliance framework.



NPA/Stressed Assets Resolution Department:

- ✱ **Legal Costs:** Expenses incurred in pursuing legal recourse to recover bad loans, including court fees and lawyer charges.
- ✱ **Provisioning:** The cost of setting aside funds to cover potential loan losses, which directly impacts a bank's profitability and capital adequacy.
- ✱ **Operational Costs:** Costs associated with the manpower-intensive process of monitoring and managing stressed assets, including frequent communication with borrowers.
- ✱ **Recovery Lags:** The time and effort involved in the recovery process, which can reduce the value of the recovered assets over time.



Annexure VI

Revenue Streams Vs. Costs

Banks earn revenue from two primary sources: net interest income (NII) and non-interest income. The banking business model hinges on borrowing money at a low interest rate (from depositors) and lending it out at a higher rate. The difference between these rates is the net interest margin. Non-interest income is generated through a wide range of service fees and commissions.

Each revenue stream has associated costs and specific objectives for managing those costs.

Net Interest Income (NII): NII is the primary revenue driver for most commercial banks and represents the profit earned from lending activities.

Costs:

- ★ **Cost of Capital (or Cost of Funds):** The interest paid on liabilities, primarily customer deposits, as well as on borrowings from other financial markets.
- ★ **Credit Risk Costs:** The potential for losses when borrowers default on loans. This is managed through risk assessments and setting aside provisions for non-performing assets (NPAs).
- ★ **Operational Costs:** Expenses related to managing the lending process, from loan origination and underwriting to servicing and collections.

Key Cost Objectives:

- ★ **Optimize the Cost of Funds:** Attract and retain low-cost deposits, such as checking and savings accounts, while effectively managing the interest rates offered.
- ★ **Minimize Default Risk:** Improve credit scoring and underwriting processes to reduce non-performing loans, thereby lowering provisions for credit losses.
- ★ **Increase Operational Efficiency:** Streamline and automate the entire loan lifecycle to reduce manual errors and costs. This includes adopting digital channels for applications and using automated loan management software.

Workflow for Lending Products:

- ★ **Lead Sourcing and Pre-qualification:** The bank

attracts potential borrowers through marketing and uses initial screening to assess suitability.

- ★ **Application Submission and Documentation:** The borrower formally submits an application along with required documents, such as income statements, tax returns, and identification.
- ★ **Application Processing and Credit check:** Bank staff or automated systems verify documents and conduct a credit check using scoring engines and credit bureau data.
- ★ **Underwriting and Decisioning:** A human underwriter or AI-driven model assesses the borrower's risk profile based on financial health, employment, and debt. A decision to approve, deny, or approve with modified terms (e.g., a higher interest rate) is made.
- ★ **Approval and Disbursement:** The borrower accepts the loan offer. After final checks, the loan funds are disbursed through a bank transfer or other payment methods.
- ★ **Loan Servicing and Repayment:** The bank manages the loan account, tracking repayments, accruing interest, and communicating with the borrower.
- ★ **Collections and Closure:** If payments are missed, the collections process is initiated. The loan account is closed once fully repaid.

Non-Interest Income:

This revenue stream is generated through a variety of fees, commissions, and trading activities. It is becoming increasingly important for banks to diversify their revenue streams and increase stability.

Costs:

- ★ **Technology Costs:** Significant investment is required for digital platforms, mobile apps, and robust back-office systems that support payments, wealth management, and trading.
- ★ **Channel Costs:** Expenses associated with maintaining distribution channels like bank branches

and ATM networks.

- ✱ **Marketing and Sales Costs:** Advertising and promotional expenses to attract customers and cross-sell services.
- ✱ **Risk and Compliance Costs:** Ensuring adherence to complex regulations and protecting against fraud and cybersecurity threats.
- ✱ **Third-party Costs:** Commissions paid to external partners for distributing third-party products, like insurance or mutual funds.

Key Cost Objectives:

- ✱ **Enhance Digital Efficiency:** Prioritize technology investments that improve the customer experience and reduce the need for expensive manual processes and physical infrastructure.
- ✱ **Optimize Channel Costs:** Encourage customers to use lower-cost digital channels over physical branches by offering seamless and convenient services.
- ✱ **Strategic Workforce Management:** Use automation to reduce staffing costs for routine, manual tasks, and instead focus on upskilling staff for higher-value advisory roles.
- ✱ **Bundle Services Effectively:** Offer bundles of services to increase customer loyalty and justify fee structures, thereby reducing the risk of customer churn due to fees.

Workflow for Other Service Offerings:

Investment Banking and Advisory Services:

- ✱ **Deal Sourcing and Origination:** Senior bankers identify potential deals, such as mergers and acquisitions (M&A) or Initial Public Offerings (IPOs).
- ✱ **Screening and Due Diligence:** Teams conduct a deep dive into a client's financials and business model to determine suitability for the transaction.

- ✱ **Transaction Preparation:** Marketing materials, such as teasers and Confidential Information Memoranda (CIMs), are prepared to showcase the opportunity to potential buyers or investors.
- ✱ **Go-to-Market and Showcasing:** The opportunity is marketed to a targeted list of buyers or investors, and the bank manages the entire process from Non-Disclosure Agreement (NDA) execution to closing.
- ✱ **Valuation and Negotiation:** The bank provides valuation analysis and assists in negotiating terms to maximize value for its client.
- ✱ **Execution and Closing:** Once terms are agreed upon, legal documents are drafted and signed, and funds and ownership are exchanged to close the deal.

Retail banking and customer support:

- ✱ **Customer Onboarding:** New customers are acquired, and an account is opened after performing Know Your Customer (KYC) and Anti-Money Laundering (AML) checks.
- ✱ **Needs Assessment:** Bank staff or automated systems assess the customer's financial goals and risk tolerance to offer suitable products.
- ✱ **Product Presentation and Offering:** The bank offers a range of products, such as savings accounts, loans, credit cards, or investment products, aligned with the customer's needs.
- ✱ **Transaction Processing:** The bank processes various transactions, including deposits, withdrawals, fund transfers, and bill payments, through multiple channels (branch, ATM, online, mobile).
- ✱ **Customer Support:** Customers' queries are addressed, and issues are resolved through in-person assistance, helpline support, or online chatbots.
- ✱ **Account Maintenance:** Regular account maintenance activities are performed, such as updating customer information or handling complaints.



Annexure VII

Revenue Streams, Costs

Banks generate revenue from interest income (from loans and investments), fee-based income (from services like overdrafts, ATMs, and account maintenance), and commission from third-party products (like mutual funds and insurance). Key costs include interest paid on deposits, operational expenses (salaries, technology, rent),

loan defaults, and regulatory compliance. Workflows for different product groups vary; for example, a loan's workflow involves an application, credit assessment, and disbursement, while a checking account involves deposit processing and statement generation.

Revenue Streams, Costs, and Objectives:

Revenue Stream	Examples	Key Costs	Key Cost Objectives
Interest Income	Loans (personal, mortgage, business), credit cards, investments.	Interest paid on deposits, loan defaults, cost of funds.	To generate a higher return on lending than the cost of borrowing (deposits); managing risk from defaults.
Fee-Based Income	Account maintenance, ATM, overdraft, late payment, wire transfers, insufficient funds, loan origination	Technology infrastructure, customer service, fraud prevention	To cover the costs of providing services, generate profit from transactional activities, and discourage undesirable behaviours like overdrafts
Commission Income	Distributing third-party products like mutual funds and insurance	Sales and marketing, compliance, training	To earn a fee for acting as an agent, expanding product offerings without holding inventory

Workflows for Service Product Offerings:

Personal Checking Account:

Customer Action: Opens account, deposits funds, writes checks, uses debit card.

Bank Action:

- ✳ **Onboarding:** Verifies ID, creates account, provides debit card and checks.
- ✳ **Transaction Processing:** Debits/credits transactions, processes checks, maintains ledgers.
- ✳ **Fee Management:** Monitors minimum balance, triggers overdrafts, if necessary, charges monthly fees.
- ✳ **Reporting:** Generates monthly statements.

Personal Loan:

Customer Action: Applies for a loan, provides documentation.

Bank Action:

- ✳ **Application & Underwriting:** Receives application,

verifies credit history and income, assesses risk.

- ✳ **Disbursement:** Approves the loan and disburses funds to the customer's account.
- ✳ **Repayment:** Schedules and collects monthly payments.
- ✳ **Collections:** Manages delinquencies and defaults.

Wealth Management:

Customer Action: Establishes a relationship, invests assets.

Bank Action:

- ✳ **Onboarding:** Assigns a financial advisor, assesses goals and risk tolerance.
- ✳ **Advisory:** Provides investment advice and management services, creates a portfolio.
- ✳ **Execution:** Executes trades and manages the portfolio.
- ✳ **Reporting:** Provides regular performance reports to the client.

Annexure VIII

Cost Management Strategies

Indian banks can adopt cost management strategies for P&L debit side items like interest paid (by improving asset-liability management), staff costs (through technology and process optimization), operating expenses (by reducing physical branches, outsourcing, and digitalizing operations), and provision for bad debts (by strengthening risk management). Other strategies include leveraging cloud technology, automating processes, and enhancing productivity to improve overall cost efficiency.

Cost Management Strategies

Interest Paid:

- ✱ **Asset-liability Management (ALM):** Improve ALM to optimize interest rates on deposits and loans, reducing the cost of funds.
- ✱ **Deposit Mix Optimization:** Encourage lower-cost current and savings accounts to reduce the overall interest expense.

Employee Expenses:

- ✱ **Technology Adoption:** Invest in digital technology and automation to reduce the need for manual personnel and improve productivity.
- ✱ **Skill Development:** Upskill existing employees for higher-value roles, reducing the need for new hires in repetitive tasks.
- ✱ **Leaner Workforce:** Streamline the organizational structure and reduce workforce where redundancies exist.

Operating and Administrative Expenses:

- ✱ **Branch Downsizing:** Reduce the number of physical branches by consolidating or closing less profitable

ones, as per Infosys BPM.

- ✱ **Digital Channels:** Encourage customers to use digital platforms (mobile apps, internet banking) to reduce the transaction costs associated with physical branches.
- ✱ **Outsourcing:** Outsource non-core business processes to specialized firms to lower costs, as per Infosys BPM.
- ✱ **Cloud Adoption:** Migrate to cloud-based infrastructure to reduce capital expenditure on hardware and IT maintenance, as per Infosys BPM.

Provisions and Contingencies:

- ✱ **Credit Risk Management:** Strengthen the credit appraisal process and improve post-disbursement monitoring to reduce the incidence of non-performing assets (NPAs), thereby lowering the provision for bad debts.
- ✱ **Early Warning Systems:** Implement advanced systems to identify potential risks early and take corrective action.

Other Expenses:

- ✱ **Process Optimization:** Use cost accounting principles to identify and eliminate waste in processes and improve efficiency.
- ✱ **Discretionary Spending Control:** Carefully manage discretionary spending and direct it only to programs that provide tangible value.
- ✱ **Accurate Forecasting:** Implement a more accurate and frequent forecasting process to better manage expenditures.



Annexure IX

Summary Banks' Profit and Loss Account

To manage the costs listed on the debit side of the Profit and Loss (P&L) account, Indian banks must adopt targeted and strategic initiatives. The primary cost components for banks include interest expenses on deposits and borrowings, operating expenses related to daily functioning, and provisions for loan losses and other contingencies.

Managing Interest Expenses: Interest expenses, or the cost of funds, are a bank's largest expenditure. They represent the interest paid to depositors and lenders.

- ✱ **Optimize the Deposit Mix:** Encourage low-cost Current Account and Savings Account (CASA) deposits over high-cost term deposits. Banks can achieve this by offering competitive digital products and personalized services to retain and grow their low-cost customer base.
- ✱ **Improve Asset-liability Management (ALM):** Match the duration and rate of a bank's assets (loans) with its liabilities (deposits) to prevent a mismatch that can hurt profitability during rate changes.
- ✱ **Leverage Alternate Funding Sources:** Explore market opportunities for funds, such as the call money market, especially during periods of low interest rates, to reduce dependence on expensive, volatile sources.

Controlling Operating Expenses: Operating expenses cover all the costs of running the bank, including employee salaries, rent, maintenance, and marketing.

- ✱ **Automate Processes:** Implement automation and Artificial Intelligence (AI) to streamline back-office operations, payment processing, and other routine tasks. This reduces manual errors and improves efficiency, allowing staff to focus on strategic tasks.
- ✱ **Embrace Digital Delivery Channels:** Shift customers towards alternate, lower-cost channels like mobile banking, internet banking, and apps. This reduces the need for expensive physical infrastructure.
- ✱ **Rationalize Branch and Real Estate Portfolio:** Downsize or optimize the physical branch network

and administrative offices, especially in a hybrid work environment. Use strategies like sharing cash-handling systems with other banks to cut operational costs.

- ✱ **Optimize Procurement:** Streamline procurement processes for goods, technologies, and services. Banks can consolidate vendors, negotiate better contract terms, and use data analytics to identify cost-saving opportunities.
- ✱ **Improve Workforce Productivity:** Restructure roles and eliminate redundant processes by leveraging productivity tools and data analysis. This creates a leaner and more agile organization.

Reducing Provisions and Contingencies: Provisions for Non-Performing Assets (NPAs) and other contingencies significantly impact a bank's profitability.

- ✱ **Strengthen Risk Management:** Invest in robust risk management systems and data analytics to improve credit appraisal and early warning mechanisms. This helps identify and mitigate potential loan losses proactively.
- ✱ **Employ the "4R" Strategy:** Implement the government-endorsed strategy of:

✓ **Recognition:** Transparently identifying the true extent of bad loans.

✓ **Resolution:** Recovering money through debt restructuring and legal action.

✓ **Recapitalization:** Infusing capital into banks to absorb losses.

✓ **Reforms:** Introducing long-term systemic improvements to prevent future NPAs.

- ✱ **Enhance Loan Monitoring and Recovery:** Proactively monitor loan portfolios for early signs of irregularities. For existing NPAs, invest in legal resources and dedicated recovery teams to expedite the recovery process.

- ✱ **Diversify Loan Portfolio:** Avoid excessive



concentration in high-risk sectors. Diversifying the loan book across industries and borrowers can help manage and reduce overall credit risk.

- ★ **Adopting Strategic Cost Management Tools:** In addition to the above measures, banks can use advanced management techniques to embed a cost-conscious culture throughout the organization.
- ★ **Zero-Based Budgeting (ZBB):** Challenge and justify every expense from scratch during each budgeting cycle, rather than basing it on previous years' spending. This helps eliminate unnecessary or outdated expenditures.

- ★ **Strategic Cost Management:** Shift from ad-hoc cost-cutting to a long-term, value-driven approach. Analyse the cost-effectiveness of products and processes to prioritize investments that deliver strategic value.

- ★ **Outsource Non-core Activities:** Delegate non-core functions, such as IT support or back-office processing, to specialized third-party providers. This can lead to significant operational cost savings and allow the bank to focus on core competencies.



Chapter 4

Cost Audit



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Cost Audit strengthens transparency, ensures Fair Pricing of Banking Services, and supports better decision-making. It helps identify inefficiencies and reduce overheads. Topics covered include:

- ✳ Importance of Budgeting Systems for Bank Expenses.***
- ✳ Role of CMAs in preparing and conducting a Cost Audit Plan.***
- ✳ Need for a Dedicated Cost Accounting Department.***

Inputs were gathered from experienced practicing CMAs and bank officials



Cost Audit

Controlling Costs is vital for Indian Banks' Profitability, competitiveness, and efficient operations, primarily by managing the cost of funds and optimizing operating expenses such as personnel, technology, and physical infrastructure. Effective cost management involves strategic planning to identify cost centers, set standards and budgets, track actual costs, and implement reduction strategies like embracing digital technology and outsourcing to improve the Cost-to-Income Ratio (CIR), which directly impacts profitability and market position.

Types of Costs:

Cost of Funds: This is the expense incurred to raise capital through deposits, borrowings, and other sources. Managing this cost is critical for offering competitive lending rates.

Operating Expenses:

- ✱ **Personnel Costs:** Salaries, benefits, and other employee-related expenses.
- ✱ **Technology Costs:** Investments in digital banking, cloud services, and other technological infrastructure.

- ✱ **Administrative Costs:** Rent, utilities, and other overhead expenses related to physical branches.
- ✱ **Marketing and Sales Costs:** Expenses incurred to attract and retain customers.

Importance of Cost Control:

- ✱ **Profitability:** Lower costs lead to higher profits, as banks can offer more competitive interest rates on loans and investments while maintaining healthy margins.
- ✱ **Competitiveness:** In a competitive market, managing costs allows banks to offer better value and maintain their market share.
- ✱ **Efficiency:** Cost control is a strategic exercise that improves operational efficiency, which is reflected in a lower cost-to-income ratio.
- ✱ **Resource Allocation:** By understanding their costs, banks can allocate resources more effectively, investing in profitable ventures and divesting from less efficient ones.

Importance of Budgetary Control System of Various Costs of Banks

In Indian commercial banks, formulating cost and revenue budgets and implementing Zero-Based Budgeting (ZBB) for certain expenditures are essential for a robust costing policy. This strategy aligns spending with strategic goals, improves cost-efficiency, and enhances profitability.

Objectives of a bank's costing policy: The ultimate aim of a bank's costing policy is to optimize financial performance and strategic alignment. Key objectives include:

- ✱ **Profit maximization:** Increasing the bank's earnings through efficient management of costs and effective pricing of financial products.
- ✱ **Cost reduction:** Identifying and eliminating unnecessary expenses, particularly for discretionary and operational activities.
- ✱ **Resource efficiency:** Ensuring optimal allocation of resources toward the most profitable and strategic business units, products, and services.
- ✱ **Product pricing:** Basing the pricing of banking products and services on actual costs, market factors, and desired profitability.
- ✱ **Performance management:** Establishing metrics and benchmarks to monitor performance against budgetary goals.
- ✱ **Accountability:** Making managers at all levels responsible for their respective departmental budgets and expenditures.

Formulation of cost budgets: Cost budgets for Indian commercial banks must be functional and granular, detailing expenses across various departments and activities. A systematic approach to formulation involves:



- ✱ **Functional segmentation:** Creating separate budgets for each major function or department to control costs and set performance targets. Common functions include:
- ✱ **Lending operations:** Budgets for loan processing, credit assessment, and recovery costs, including manpower, legal expenses, and technology.
- ✱ **Branch operations:** Budgets for rent, salaries, utilities, and maintenance costs for the physical branch network.
- ✱ **Technology and digital banking:** Budgets for IT infrastructure, software maintenance, cybersecurity, and support for digital channels like mobile and internet banking.
- ✱ **Human resources:** Budgets for staff salaries, recruitment, training, and employee benefits.
- ✱ **Treasury and forex operations:** Budgets for transaction costs, market data, and risk management systems.
- ✱ **Marketing and business development:** Budgets for advertising, promotions, and brand-building activities.
- ✱ **Cost classification:** Dividing costs into controllable and non-controllable categories, and further segmenting them into fixed, variable, and discretionary types.
- ✱ **Data-driven forecasting:** Using historical data, market trends, and strategic plans to create realistic and accurate cost projections.

Introduction of Zero-Based Budgeting (ZBB): ZBB is a powerful tool for cost reduction that requires every expense to be justified from a "zero base" for each new budget period. It is particularly effective for discretionary activities and can be implemented through the following steps:

- ✱ **Identify decision units:** Determine the discrete functions, departments, or projects to which ZBB will be applied. For example, marketing, training, and technology spending are suitable candidates for ZBB.
- ✱ **Create decision packages:** For each decision unit, managers must prepare a "decision package." This proposal justifies the unit's existence, its funding requirements, and the consequences of not receiving funding. This forces managers to think critically about resource allocation.
- ✱ **Evaluate and rank packages:** Senior management reviews and ranks all decision packages based on their strategic importance and cost-benefit analysis. This process ensures that resources are allocated to the highest-priority activities.
- ✱ **Allocate resources:** Funding is approved based on the rankings, ensuring that spending is intentional and directly linked to strategic goals.

Development of revenue budgets: Revenue budgets in a bank are crucial for forecasting income and evaluating the profitability of different business segments. Effective revenue budget development involves:

- ✱ **Product-wise revenue forecasting:** Developing detailed revenue budgets for each product category, such as advances, deposits, and fee-based services.
- ✱ **Interest income from loans:** Forecasting revenue based on historical trends, projected credit growth, and interest rate movements.
- ✱ **Interest income from investments:** Budgeting for income from various investments like government securities, considering market yield fluctuations.
- ✱ **Non-interest income:** Estimating revenue from non-core activities, including fees, commissions, and foreign exchange earnings.
- ✱ **Market and segment analysis:** Analysing market conditions, competitor pricing, and demand to forecast future revenue streams. This can involve segmentation by geography, customer type, and business unit.
- ✱ **Digital channel revenue:** Projecting income from digital initiatives, which are increasingly vital for growth and cost-efficiency.
- ✱ **Integration with cost budgets:** The revenue budget must be developed in conjunction with cost budgets to project net income and profitability for each product and service.

By integrating robust cost budgets, targeted ZBB, and detailed revenue budgets, Indian commercial banks can achieve greater financial discipline, enhance efficiency, and align their financial plans with the broader strategic objectives of their costing policy.



Cost Control Strategies:

- ✱ **Digital Transformation:** Investing in digital technologies and embracing cloud services can reduce operational costs.
- ✱ **Process Optimization:** Streamlining workflows and improving productivity can lead to cost savings.
- ✱ **Outsourcing:** Outsourcing non-core business processes can help banks reduce costs and focus on their core competencies.
- ✱ **Leaner Portfolio Management:** Downsizing the physical footprint of branches and optimizing the asset portfolio can lower expenses.

Strategic Planning & Monitoring:

- ✱ **Cost Center Identification:** Banks must identify

their major cost centers to focus their reduction efforts.

- ✱ **Standard and Budgeted Costs:** Establishing standard costs for objectives and creating realistic budgets based on past data provides a benchmark for control.
- ✱ **Actual Cost Tracking:** Recording actual costs and comparing them with standard and budgeted costs helps identify variances.
- ✱ **Review and Analysis:** Periodically reviewing the cost structure and performance helps ensure continuous improvement.

By effectively controlling these various costs, Indian banks can enhance their financial health, ensure long-term sustainability, and better serve their customers.

Effects of Cost Reduction in Banking Operations

Reducing operating costs allows a bank to improve its financial performance and competitiveness, which can lead to lower loan interest rates for borrowers, higher interest rates for depositors, and increased dividends for shareholders.

Lower loan interest rates: A bank's primary source of profit is the "net interest spread," the difference between the interest it charges on loans and the interest it pays on deposits. A reduction in operational costs, such as payroll and IT expenses, expands this profit margin. This increased margin gives the bank flexibility to:

- Offer more competitive loan interest rates to attract new customers and grow its loan portfolio.
- Remain profitable even if the central bank lowers its policy rate, which typically leads to reduced interest income for lenders.

Higher deposit interest rates: A larger operating margin can also be used to attract and retain deposits. Banks can pass on some of their cost savings to customers by offering more attractive interest rates on savings accounts and fixed deposits. This strategy helps a bank strengthen its funding base, a critical component for its lending capacity.

Higher dividends for shareholders: Improved profitability directly benefits shareholders, as it increases the bank's earnings. Shareholders may receive these higher earnings as dividends; a portion of the profits distributed to them. A higher dividend payout can also be a positive signal to the market that the bank is financially healthy and well-managed.

Strategies for reducing costs: Banks can implement several strategies to achieve these cost reductions:

- **Adopting technology:** Investing in automation, artificial intelligence (AI), and mobile banking can significantly lower operational costs by automating repetitive tasks and streamlining workflows.
- **Digitalization:** Reducing a bank's physical footprint through branch closures or downsizing its real estate portfolio can lead to substantial cost savings.
- **Process improvement:** Streamlining inefficient internal processes reduces costs and improves the customer experience.
- **Portfolio optimization:** Eliminating redundant or unprofitable products and services can decrease administrative overhead and allow the bank to focus on its most successful offerings.

a) Cost Audit:

A Cost Audit is a systematic verification of a bank's cost records to ensure accuracy, compliance, and efficiency, which is crucial for controlling expenses in Indian banks by identifying wastage, optimizing resource utilization, and providing reliable data for informed decision-making. Its importance lies in improving cost control, detecting fraud, enhancing profitability, ensuring regulatory compliance, and providing accurate data for strategic planning, thus improving a bank's overall financial health and competitiveness.

Objectives of Cost Audit:

The primary objectives of a cost audit for Indian banks are to ensure accuracy and reliability of cost records, detect and prevent inefficiencies, errors, and fraud, evaluate and improve cost control measures across branches, administrative offices, and IT operations, and guarantee compliance with cost accounting standards and regulations. Planning involves familiarizing with bank operations, collecting data, assessing internal controls, and creating a detailed audit program to verify cost allocations and identify opportunities for cost reduction and better resource utilization.

- ★ **Accuracy of Cost Data:** To verify that all cost records and documents are accurate, authentic, and consistently prepared, preventing errors in reporting and financial decisions.
- ★ **Detection of Discrepancies and Fraud:** To identify inconsistencies, duplicate entries, unapproved expenses, and other errors in cost records, which helps prevent financial losses and ensures correct accounting.
- ★ **Cost Control and Reduction:** To evaluate existing cost control measures and identify areas for improvement, helping to reduce waste and optimize resource utilization in various bank operations.
- ★ **Compliance:** To ensure that the bank's cost accounting practices adhere to the requirements of applicable laws, regulations, and internal policies, avoiding penalties and legal issues.
- ★ **Efficiency and Performance Improvement:** To pinpoint areas of inefficiency and mismanagement in cost allocation and usage at branches, administrative offices, and IT departments, recommending corrective actions for improved productivity.

- ★ **Support for Management Decisions:** To provide reliable and audited cost data that helps management in budgeting, planning, and making informed decisions regarding cost-effectiveness.

Importance of Cost Audit:

- ★ **Improved Decision-Making:** Accurate cost data provided by the audit enables management to make informed decisions regarding pricing, investment planning, and cost reduction strategies.
- ★ **Regulatory Compliance:** The audit ensures the bank adheres to relevant regulations and guidelines from bodies like the Institute of Cost Accountants of India (ICMAI), which is essential for operating within the Indian banking sector.
- ★ **Enhanced Profitability:** By detecting and correcting inefficiencies and wasteful practices, cost audits contribute directly to a bank's improved profitability.
- ★ **Corporate Governance:** A cost audit contributes to better corporate governance by promoting transparency, accountability, and sound financial management practices within the bank.
- ★ **Continuous Improvement:** It serves as an instrument for continuous improvement by evaluating a bank's performance and economic efficiency, ensuring it remains competitive in the long run.

Cost Audit Controls Costs: A Cost Audit helps Banks Control their various Costs in Several Ways:

- ★ **Accuracy in Cost Data:** It verifies the accuracy of cost accounting records, ensuring that management and stakeholders have reliable data for sound financial decisions.
- ★ **Identification of Inefficiencies and Wastage:** The audit process pinpoints cost-intensive processes, inefficiencies, and wastage within the bank's operations, highlighting areas for improvement.
- ★ **Optimization of Resources:** By analysing cost data, the audit suggests ways to optimize the use of resources, leading to cost savings and improved operational efficiency.
- ★ **Enhanced Cost Control:** It helps in establishing and improving cost control processes, resulting in a reduction of operational costs and increased profitability.



- ★ **Fraud Detection:** A cost audit can detect discrepancies, irregularities, and fraudulent activities within the cost accounting system, thereby minimizing financial fraud and promoting transparency.

EOQ Model for Cash Management of Banks

Banks use an Economic Order Quantity (EOQ)-like model to minimize cash held in bank branches and ATMs, balancing the costs of holding excess cash (opportunity cost, insurance, security) against the costs of running out (lost customer service, lost revenue) to improve profitability. While the classic EOQ is for physical inventory, its principle applies to cash by determining the optimal cash replenishment quantity to meet demand without incurring excessive costs.

Why banks minimize cash balance:

- **Opportunity Cost:** Excess cash earns no interest, representing a lost opportunity to invest those funds and generate more profit.
- **Holding Costs:** While not traditional inventory costs, there are costs associated with security, insurance, and managing large cash holdings.
- **Risk of Loss:** Large cash reserves are vulnerable to risks like theft, fire, or natural disasters, increasing financial exposure.

How EOQ principles apply to cash management:

- **Optimal Quantity:** Just as EOQ finds the ideal quantity of goods to order, the bank's cash management model determines the optimal amount of cash to have on hand.
- **Balancing Costs:** The model seeks to find the "sweet spot" where the costs of replenishing cash (transportation, security) are balanced against the costs of holding too much cash.
- **Meeting Demand:** The goal is to have sufficient cash to meet customer demand (e.g., ATM withdrawals, branch transactions) while minimizing idle funds.

Modern approaches to cash optimization:

- **Demand Forecasting:** Advanced techniques like time-series analysis and machine learning are used to predict cash demand more accurately based on historical data and transaction patterns.
- **Integrated Models:** Banks are developing sophisticated models that combine demand forecasting with cash optimization to determine optimal replenishment schedules, routes, and quantities for branches and ATMs.
- **Customer Service Level:** While minimizing cash, banks must also ensure a high customer service level to avoid stock-outs and customer dissatisfaction.

b) Areas of Cost Audit:

For a cost audit in Indian banks, the auditor needs to examine areas such as Business Acquiring Costs, Employee, Utility, and Administrative Costs, as well as Overheads, Fixed Assets, and Depreciation to control overall expenditure and resource utilization. They will also look at Repair and Maintenance, Interest and Financing Charges, and specific costs like Research & Development of Bank Products, Technology and Quality of Customer Services etc. Additionally, the audit assesses the budgetary control system, cost allocation methods, and related party transactions, aiming to enhance efficiency, ensure compliance, and support informed management decisions to control various types of costs.

1. Scope:

Operational Costs:

- ★ **Business Acquiring Costs:** Verifying the costs of Business (Deposits / Borrowings / Lending or Credit etc.).
- ★ **Employee Costs:** Auditing salaries, wages, and other employee-related expenses.
- ★ **Utilities:** Checking costs for electricity, water, and other essential services.



- ★ **Repairs & Maintenance:** Evaluating expenses related to maintaining assets and facilities.

Fixed Assets & Depreciation:

- ★ **Fixed Assets:** Verifying the value and proper recording of fixed assets.
- ★ **Depreciation:** Reviewing the methods and accuracy of depreciation charges.

2. Overheads:

- ★ **Administrative Overheads:** Analysing costs associated with the bank's general administration.
- ★ **Service Department Expenses:** Assessing costs for supporting departments within the bank.

3. Financing and Other Costs:

- ★ **Interest and Financing Charges:** Evaluating costs related to borrowing and financing.
- ★ **Research and Development (R&D) Expenses:** Auditing costs incurred for R&D activities.
- ★ **Quality Control Expenses:** Reviewing expenses for maintaining quality standards.

4. Systemic & Strategic Aspects:

- ★ **Budgetary Control Systems:** Evaluating the effectiveness of budgetary systems for cost control.
- ★ **Cost Allocation Methods:** Verifying how costs are assigned to various cost centers or products.
- ★ **Related Party Transactions:** Examining transactions with related entities to prevent inflated costs.

5. Purpose and Benefits of Cost Audit:

- ★ **Cost Reduction:** Identifying areas for minimizing waste and optimizing resource utilization.

- ★ **Decision Making:** Providing accurate cost information for management to make strategic decisions.

- ★ **Compliance:** Ensuring cost records and reports adhere to legal and regulatory requirements.

- ★ **Efficiency Evaluation:** Assessing the operational efficiency of the bank and its processes.

- ★ **Internal Control:** Strengthening internal control mechanisms to manage costs effectively.

c) Cost Audit Plan:

- ★ **Familiarization:** Gain a deep understanding of the bank's structure, operations, and the specific cost accounting rules and regulations applicable to Indian banks.

- ★ **Data Collection:** Gather all necessary information, including cost sheets, ledgers, invoices, and financial statements from branches, administrative offices, and IT departments.

- ★ **Internal Control Assessment:** Evaluate the effectiveness of the internal control systems in place to manage costs, ensuring that they are robust enough to prevent errors and fraud.

- ★ **Audit Program Development:** Create a detailed cost audit program, outlining the specific procedures, checklists, and tests to be performed to achieve the audit objectives.

- ★ **Execution:** Conduct the audit by verifying cost records, checking calculations, and analysing cost allocations across different functions, including IT.

- ★ **Reporting:** Prepare a comprehensive cost audit report, including the audit findings, any identified discrepancies, and recommendations for cost control and efficiency improvements to management



Role of Cost Accountant

Cost Accountant services are crucial in Indian commercial banks for determining the cost of each banking transaction, a process vital for budgeting, pricing strategies, financial planning, and overall profitability. By analysing costs associated with various services, such as Deposit Accounts, Loan Accounts, ATM Transaction Costs, employee costs, and capital equipment, cost accountants provide management with detailed financial data to control expenses, allocate resources effectively, and improve decision-making in the competitive banking sector.

Why cost accounting is important in banking?

- *Determining Transaction Costs:* Banks have a wide range of services and products, and each carries different costs. Cost accountants use methods like activity-based costing to track the expenses associated with each transaction, from ATM withdrawals to online transfers.
- *Budgeting and Financial Planning:* By understanding the costs of various services, banks can create more accurate budgets and financial forecasts. This allows for better anticipation of future costs and revenues, aiding in strategic planning.
- *Pricing Decisions:* Cost data is essential for setting competitive and profitable prices for the services banks offer. Accurate cost information helps in determining the right fees and interest rates.
- *Resource Allocation:* Management can make informed decisions about where to allocate resources by understanding which activities and services are most or least profitable.
- *Profitability Analysis:* Cost accounting helps identify which products and services contribute most to the bank's overall profitability, enabling the management to focus on high-margin offerings and improve inefficient processes.
- *Performance Monitoring:* Cost accountants monitor actual expenses against budgeted figures, allowing for the tracking of any deviations and the implementation of corrective measures to control costs.
- *Compliance and Regulatory Requirements:* The banking sector is highly regulated. Cost accounting helps ensure compliance with financial regulations and provides transparency in financial reporting.

In essence, cost accountants are key in transforming raw financial data into actionable insights that drive efficiency and profitability in the complex operational environment of a commercial bank.

d) Role of Cost Auditor:

To develop a cost audit for Indian banks, appoint a qualified cost auditor, establish clear objectives like cost reduction in branches and IT, conduct detailed cost record verification and analysis, identify cost-saving opportunities through process reviews, document and implement recommended cost controls, and follow up with periodic reviews to ensure sustained cost efficiency at branches, administrative offices, and for IT expenses.

Cost Auditor in Banking Sector:

Appointment of a Qualified Cost Auditor:

- ✳ **Engage an Eligible Auditor:** Select a cost auditor with expertise in the banking sector and knowledge of relevant cost accounting standards.

Planning and Objectives:

- ✳ **Define Scope and Objectives:** Clearly define the audit's goals, which include controlling costs at branches, administrative offices, and specific IT costs.
- ✳ **Understand the Bank's Structure:** Obtain an in-depth understanding of the bank's operations, including its memorandum and articles of association, and management structure.
- ✳ **Review Past Reports:** Examine previous audit reports and the annual reports of the bank for context and insights.

Cost Record Verification and Analysis:

- ✳ **Verify Cost Data:** Meticulously check cost records,

ledgers, invoices, and other financial documents to ensure their accuracy and consistency.

- ★ **Detect Discrepancies:** Identify any errors, duplicate entries, unapproved expenses, or incorrect calculations to ensure accurate cost reporting.
- ★ **Analyse Costs:** Break down costs into categories to understand expenditure patterns at different operational levels.

Focusing on Specific Areas:

Branch Costs:

- ★ Review staffing, infrastructure, and operational efficiency at branches.
- ★ Assess costs related to customer service and branch operations.

Administrative Office Costs:

- ★ Examine the efficiency of departments and the costs associated with their functions.
- ★ Evaluate the effectiveness of internal control systems.

IT Costs:

- ★ Review expenditures on software, hardware, maintenance, and IT personnel.
- ★ Assess the efficiency and reliability of electronic banking services.

Identifying Opportunities for Cost Control:

- ★ **Efficiency Improvements:** Identify areas where processes can be streamlined to reduce costs without compromising quality or service.
- ★ **Technology Optimization:** Propose solutions for better utilization of technology and cost-effective IT infrastructure.
- ★ **Resource Management:** Recommend better management of resources, including human resources, materials, and energy consumption.

Reporting and Implementation:

- ★ **Prepare a Detailed Report:** Document findings, discrepancies, and recommendations in a clear audit report.
- ★ **Facilitate Implementation:** Work with management to implement the proposed cost-saving measures.

Follow-Up and Monitoring:

- ★ **Monitor Implementation:** Track the progress of implemented changes and their impact on costs.
- ★ **Periodic Reviews:** Conduct follow-up audits or reviews to ensure ongoing adherence to cost control measures.

Appointing Cost Auditors is the process involves the Board's appointment, typically on the recommendation of an audit committee. The primary objective of a cost audit is to ensure the accuracy of cost records and to provide insights for better resource utilization and decision-making, which directly helps in managing and improving bank margins.

e) Areas of Cost Audit:

Cost of Deposits: A core function of a cost audit for a bank is to accurately determine the cost of various financial products and services, including the "Cost of Deposits". This helps in understanding the true expense of funds acquired by the bank.

- ★ **Improving Net Interest Margins:** By providing detailed insights into operational costs and resource utilization, cost audits enable banks to identify areas of inefficiency. This allows them to optimize their cost structures and improve their overall profitability and Net Interest Margins (NIMs).
- ★ **Compliance and Accuracy:** The audit ensures that cost records are maintained accurately and in accordance with Generally Accepted Cost Accounting Principles, providing reliable data for management and stakeholders.
- ★ **Resource Optimization:** Cost audits help banks to exercise control over their operations and achieve economies of scale, leading to better utilization of resources and enhanced productivity.



f) Suitability of Cost Accountants as Cost Auditor:

Cost Auditors are crucial for the effective implementation of a budgetary control system in Indian commercial banks, as their role involves verifying cost accuracy, ensuring adherence to cost accounting principles, and analysing cost statements for inconsistencies. By scrutinizing capital expenditure, IT costs, per-transaction costs, overheads, outsourcing costs, and net interest margins, cost auditors help banks control expenses, improve financial performance, and meet budgetary targets.

- ✳ **Appointment:** The Board of Directors appoints the cost auditor, usually a qualified cost accountant or a firm of cost accountants, on the recommendation of the Audit Committee.
- ✳ **Scope of Audit:** The cost audit covers all cost records, statements, and cost accounting procedures to ensure accuracy and compliance with standards.
- ✳ **Reporting to Stakeholders:** The cost auditor prepares a report, which is crucial for interpreting cost information and facilitating strategic decision-making by the company's management.

Cost Auditors in Budgetary Control:

- ✳ **Data Verification:** Cost auditors examine cost ledgers to ensure the accuracy and reliability of cost data, which is essential for effective budget control.
- ✳ **Cost Accounting Principles:** They verify that banks follow established cost accounting principles and procedures when accounting for various expenses, promoting consistency and transparency.
- ✳ **Inconsistency Analysis:** Cost auditors analyse cost statements to identify any inconsistencies or deviations from budgeted figures, allowing for timely corrective action.
- ✳ **Capital Expenditure Scrutiny:** They ensure that capital expenditures are properly planned, authorized, and accounted for, preventing

unnecessary spending on fixed assets.

- ✳ **Information Technology Cost Analysis:** Cost auditors review IT costs, including software and infrastructure, to ensure they are within budget and align with strategic objectives.
- ✳ **Per-Transaction Cost Monitoring:** They track and analyse the costs associated with individual banking operations to identify inefficiencies and opportunities for cost reduction.
- ✳ **Overhead & Outsourcing Control:** Cost auditors provide insights into control overheads and outsourcing costs, helping banks optimize these expenditures.
- ✳ **Net Interest Margin (NIM) Improvement:** By analysing various cost drivers, cost auditors help banks understand how expenses impact their profitability and identify ways to improve the net interest margin.

Cost Auditor Importance:

- ✳ **Financial Prudence:** Cost audits contribute to a framework of financial prudence by providing management with accurate cost information and ensuring accountability.
- ✳ **Improved Financial Performance:** By identifying cost-saving opportunities and optimizing resource allocation, cost auditors directly contribute to a bank's financial health and profitability.
- ✳ **Compliance and Transparency:** Their work ensures that banks comply with financial regulations and maintain transparency in their cost management practices.
- ✳ **Strategic Decision-Making:** The detailed analysis provided by cost auditors supports informed strategic decisions regarding investments, operations, and overall business strategy.

Utilization of Cost Accountants

Utilizing Cost Accountants is a viable strategy for Indian commercial banks to not only reduce their cost of capital but also enhance their overall profitability by improving efficiency, managing costs, and making informed strategic decisions. Cost accountants analyse and manage operational costs and can provide insights into optimizing capital structure, which directly impacts a bank's profitability and bottom line.

Need of Cost Accountants in Banks:

Cost of Capital Reduction:

- **Capital Structure Analysis:** Cost accountants can analyse the bank's existing capital structure (debt vs. equity) and recommend optimal strategies for fundraising, potentially lowering the overall cost of capital.
- **Operational Efficiency:** By evaluating and improving the efficiency of various banking operations, cost accountants can indirectly reduce the need for capital and increase returns, thus lowering the effective cost of capital.

Bottom Line Enhancement:

- **Cost Management:** They play a crucial role in identifying and controlling operational costs, which is a strong imperative for the entire banking industry.
- **Profitability Analysis:** Through detailed cost analysis, they help in understanding which products and services are most profitable and where inefficiencies lie, allowing for strategic adjustments to boost earnings.
- **Strategic Decision Support:** Cost accountants provide vital information for strategic decision-making, from setting pricing for products and services to managing risk and improving return on investment.

Specific Banking Roles:

- **Cost Management in BFSI:** The Institute of Cost Accountants of India (ICMAI) recognizes the significant scope for cost accountants in the Banking, Financial Services, and Insurance (BFSI) sector, where cost management is a key focus.
- **Non-Performing Assets (NPAs) Management:** By improving internal processes and risk management, cost accountants can help banks reduce NPAs, which directly impacts profitability and the bottom line.

To Sum Up:

Indian banks can adopt cost control practices by focusing on strategic cost reduction, implementing robust budgeting and monitoring, leveraging technology, and fostering a cost-aware culture. Key areas for control include operational costs, such as downsizing physical spaces and optimizing staffing, as well as managing IT infrastructure by embracing cloud solutions. By establishing clear cost goals, analysing expenses regularly, and holding departments accountable, banks can improve efficiency and enhance profitability.

Cost Audit plays a vital role in reducing the high costs of operations in the banking sector by identifying inefficiencies, optimizing resource allocation, ensuring regulatory compliance, and providing accurate cost data for better decision-making, ultimately improving profitability and operational efficiency.

How Cost Audits Reduce Bank Operating Costs:

- ✳ **Cost Optimization:** By thoroughly examining cost data, a cost audit helps pinpoint areas of high expense, identifying opportunities for cost savings and the elimination of wasteful practices within a bank.
- ✳ **Improved Efficiency:** Cost audits highlight operational inefficiencies, bottlenecks, and deviations from cost standards, leading to streamlined processes, better resource utilization, and reduced time overruns.
- ✳ **Accurate Financial Data:** A cost audit verifies that the cost accounting records are accurate and free from errors, providing management with reliable data for sound financial planning, budgeting, and



strategic decision-making.

- ✱ **Risk Mitigation:** The audit process detects discrepancies, fraud, and malpractices, safeguarding the bank against financial losses and protecting its reputation.
- ✱ **Strategic Decision-Making:** Reliable and verified cost data enables management to make informed decisions regarding pricing, resource allocation, and the adoption of new technologies or operational models.
- ✱ **Regulatory Compliance:** Cost audits ensure that banks comply with relevant statutory and regulatory requirements related to cost accounting, helping them avoid penalties and maintain a strong market position.
- ✱ **Enhanced Profitability:** By reducing avoidable expenses, improving efficiency, and optimizing resource allocation, cost audits directly contribute to higher profitability for the banking institution.

In essence, a cost audit provides a systematic and objective review of a bank's cost structure and financial practices, making it an essential tool for controlling costs and enhancing overall performance.

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Annexure I

Dedicated Cost Accounting Department

An official mandate requiring all Indian commercial banks to establish a dedicated Cost Accounting Department, led by a Chief Cost and Management Officer. However, cost and management accounting is an integral function in the Indian banking sector, and commercial banks are actively recruiting qualified Cost and Management Accountants (CMAs) to manage these operations.

Key aspects of Cost Management in Indian commercial banks:

- *Growing demand for CMAs:* Public sector banks are increasingly hiring CMAs for positions related to cost management, including treasury and foreign exchange departments etc.
- *Focus on cost reduction:* Banks are focusing on controlling costs at various levels, such as branches, administrative offices, and ATM centers. They are also redesigning financial products and increasing the use of alternative delivery channels like mobile and internet banking to minimize costs.
- *Importance of internal cost management:* While there is no centralized directive for a mandatory cost accounting department, the Reserve Bank of India (RBI) expects banks to have internal cost controls. The RBI requires banks to justify the total cost of lending to borrowers by considering the bank's total costs and expected returns.
- *Regulatory influence:* The Ministry of Corporate Affairs, under which the Institute of Cost Accountants of India (ICMAI) operates, controls cost and management accountancy in India.
- *Specialized professionals:* Many banks already employ finance professionals with a Cost and Management Accountant (CMA) qualification. These individuals often serve in senior financial leadership roles, such as Chief Financial Officers (CFOs), to oversee the costing function.
- *Evolving standards:* The ICMAI issues Cost Accounting Standards (CAS) that provide principles and guidelines for the measurement, classification, and presentation of cost information. While not specific to banks, these standards influence the overall practice of cost management in India.

In summary, the creation of a formal Cost Accounting Department with a designated Chief Cost and Management Officer is an internal strategic decision for individual commercial banks based on the importance.



Annexure-II

Creation of Model Cost Sheets

Creating Model Cost Sheets for the Indian banking sector requires adopting a service-oriented costing approach rather than the traditional manufacturing model. Banks should develop a comprehensive cost management framework that classifies and tracks expenses across various functions and products to improve efficiency, aid strategic decision-making, and comply with regulatory guidelines.

Key Principles for effective Bank Cost Sheets in India:

- ✳ **Adapt costing for services:** Unlike manufacturing, banks do not have “direct materials.” Cost sheets should be based on Activity-Based Costing (ABC) principles to accurately trace indirect costs (overheads) to specific products, services, and customer segments.
- ✳ **Categorize costs by function:** Group costs based on the bank’s core functions, such as treasury operations, lending, retail banking, and support functions like administration and IT.
- ✳ **Classify costs by behaviour:** Differentiate between fixed costs (e.g., branch rent), variable costs (e.g., costs per transaction), and semi-variable costs (e.g., utility bills). This is crucial for budgeting and forecasting.
- ✳ **Leverage technology:** Use digital technology, automation, and advanced analytics to gather real-time data, reduce manual processing costs, and gain deeper insights into spending patterns.
- ✳ **Report regularly:** Prepare and review cost sheets at regular intervals (e.g., monthly, quarterly) to monitor performance against budgeted costs and quickly address any deviations.

Model Cost Sheet framework for Indian banks:

A model cost sheet for the Indian banking sector would look significantly different from a traditional manufacturing cost

sheet. It should be structured to analyse the profitability of different business segments, products, and customer categories.

- ✳ **Implementing a cost control framework in Indian banks:**
To effectively use the cost sheets, Indian banks can adopt the following measures:
- ✳ **Embrace digitalization:** Migrate core banking functions and customer interactions to digital channels to reduce reliance on physical branches, which significantly lowers operational overheads.
- ✳ **Optimize operations:** Streamline internal processes, eliminate redundant activities, and leverage intelligent automation (RPA) to cut costs and improve efficiency.
- ✳ **Manage technology spending:** Modernize legacy IT systems, move to the cloud, and ensure technology investments deliver a positive return on investment.
- ✳ **Restructure the workforce:** Re-design roles, upskill employees for digital operations, and carefully manage staff expenses, which represent a significant portion of a bank’s costs.
- ✳ **Monitor key performance indicators (KPIs):** Regularly track the Cost-to-Income Ratio (CIR), a critical measure of operational efficiency. Aim for a lower CIR, which indicates strong financial health.
- ✳ **Adopt a strategic mindset:** Use cost data to make better business decisions, such as which products to promote, which branches to close, and how to price services more competitively.
- ✳ **Implement a contingency plan:** Prepare for unexpected events, such as market downturns or geopolitical shifts, by having strategies in place to manage expenses during uncertain times.

Annexure III

Details of Various Costs in Banks

Cost Component	Details
a) Cost of Funds	- <i>Interest paid on deposits:</i> Savings accounts, current accounts, fixed deposits, etc. - <i>Interest paid on borrowings:</i> From the Reserve Bank of India (RBI) or other financial institutions. - <i>Other funding costs:</i> Issuance costs for bonds, debentures, etc.
b) Operating Costs	- <i>Staff costs:</i> Salaries, allowances, and benefits for all employees, from administrative to front-line staff. - <i>Premises costs:</i> Rent, electricity, maintenance, depreciation of buildings, etc.
c) Technology and Digital Costs	- <i>IT hardware and software:</i> Servers, systems, and software licensing fees. - <i>System maintenance:</i> Costs for maintaining core banking systems and digital platforms. - <i>Digital infrastructure:</i> Expenses for ATMs, mobile banking, internet banking, and payment systems like UPI. - <i>Cybersecurity costs:</i> Investments in firewalls, encryption, and other security measures to protect customer data.
d) Administrative Costs	- <i>General overheads:</i> Office supplies, legal fees, audit fees, marketing, and travel expenses. - <i>Communication expenses:</i> Telephone, internet, and postage costs.
e) Third-Party and Outsourcing Costs	- <i>Vendor payments:</i> Costs associated with outsourced services like IT support, business process management, or customer service. - <i>Consultant fees:</i> Costs for external advisory and project management services.
f) Risk and Compliance Costs	- <i>Provisioning for credit losses:</i> Provisions for Non-Performing Assets (NPAs) and other potential loan losses. Under RBI guidelines, this is moving towards an Expected Credit Loss (ECL) framework. - <i>Regulatory compliance:</i> Costs associated with adhering to RBI regulations, reporting, and audits. - <i>Operational risk costs:</i> Expenses to mitigate risks associated with daily banking operations.
g) Other Costs	- <i>Depreciation and Amortization:</i> Depreciation on assets like computers, furniture, and vehicles. - <i>Taxes and Duties:</i> Applicable taxes on operations and services.
Total Cost of Operations (Sum of (a) to (g))	This is the total cost incurred by the bank to conduct its business.
Allocation for specific products	Using activity-based costing (ABC), this total cost is allocated to various products (e.g., home loans, credit cards, mutual funds) and customer segments based on their resource consumption.



Chapter 5

Cost to Income Ratio



Contents:

1. <i>Introduction.</i> 2. <i>Cost to Income Ratio of Public Sector Banks.</i> 3. <i>Cost-to-Income Ratio (CIR).</i> 4. <i>General Benchmark for Traditional Retail Banks.</i> 5. <i>Calculation of Cost-to-Income Ratio.</i> 6. <i>Schedule 16: Total-Operating Expenses.</i> 7. <i>Cost-to-Income Ratios by S & P Global.</i> 8. <i>How to Improve CIR?</i> 9. <i>Cost Reduction Strategies.</i> 10. <i>A Selection of the Principal Strategies for Cost Reduction.</i>	11. <i>Treasury Services to be offered to Corporate Clients of the Banks.</i> 12. <i>Budgetary Control System for CIR.</i> 13. <i>To Sum Up.</i> <i>Role of Cost Accountant in managing CIR-Annexure I.</i> <i>Cost Sheet for CIR-Annexure II.</i> <i>Costs are to be split in Fixed and Variable-Annexure III.</i> <i>CVP Analysis for better Cost to Income Ratio-Annexure IV.</i> <i>References.</i>

CIR is a Vital measure of Operational Efficiency. A Lower CIR means the Bank is spending less to earn more. This Chapter explains:

- * CIR Trends of Public Sector Banks.***
- * Structure of Schedule-16 (Operating Expenses).***
- * Cost Reduction Strategies and CVP Analysis to Improve CIR.***

International Best Practices have been adapted for Indian Conditions, with specific attention to Controllable Banking Costs.



Cost-to-Income Ratio

Banks and financial institutions encounter an ongoing challenge in sustaining profitability amidst a perpetually evolving market landscape and escalating customer expectations. Contemporary trends in economic conditions and shifts within the industry are exerting significant influence on banks and lenders, thereby underscoring the necessity for advanced process intelligence.

To reduce operational costs, Indian banks should monitor their cost-to-income (C/I) ratio to assess efficiency and identify areas for improvement, implementing strategies like digital technology adoption for automation, channel optimization, and robust process improvements. Setting industry standards for the C/I ratio helps establish benchmarks for evaluating performance and driving continuous improvement in profitability.

Need to Monitor:

- ✳ **Operational Efficiency:** The C/I ratio is a key performance indicator (KPI) that reveals a bank's operational efficiency and helps identify where costs can be optimized.
- ✳ **Profitability:** A lower C/I ratio generally indicates higher profitability, as the bank is earning more income for every unit of cost incurred.
- ✳ **Competitiveness:** By improving efficiency, banks can become more competitive in the market.
- ✳ **Trend Analysis:** Tracking the C/I ratio over time provides valuable data for trend analysis and performance evaluation.

Strategies for Cost Reduction:

- ✳ **Invest in Digital Technology:** Automating workflows, optimizing processes, and using data analytics can significantly reduce operational costs and improve efficiency.
- ✳ **Optimize Customer Channels:** Analyse and improve how customers interact with the bank through various channels to create a cost-effective and customer-friendly combination.
- ✳ **Streamline Operations:** Focus on streamlining internal processes to eliminate inefficiencies and reduce unnecessary expenditures.
- ✳ **Implement Process Improvement Programs:** Enforce rigorous process improvement programs to continuously identify and address areas of cost leakage.

Standards of Cost to Income Ratio:

- ✳ **Industry Benchmarks:** Banks should compare their C/I ratios against industry averages and best practices to set realistic standards for their own performance.
- ✳ **Historical Data:** Analysing historical C/I ratios helps in establishing internal benchmarks and tracking progress over time.
- ✳ **Regulatory Influence:** The Reserve Bank of India (RBI)'s supervisory powers and prudential norms also influence the operational standards for banks.

By adopting these measures, Indian banks can effectively manage and reduce their operational costs, leading to improved financial health and greater market competitiveness.

Cost to Income Ratio of Public Sector Banks (For the FY 2021 to 2025)

Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
01	Bank of Baroda	49.21%	49.24%	47.72%	47.71%	47.94%
02	Bank of India	51.34%	54.48%	51.08%	51.73%	50.84%
03	Bank of Maharashtra	47.37%	44.26%	39.14%	37.55%	38.37%
04	Canara Bank	49.55%	46.16%	44.79%	47.04%	47.27%
05	Central Bank of India	59.70%	58.27%	56.35%	58.18%	58.87%

Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
06	Indian Bank	48.55%	46.21%	44.20%	45.92%	44.77%
07	Indian Overseas Bank	48.54%	48.61%	51.94%	56.32%	47.14%
08	Punjab & Sind Bank	75.61%	63.16%	62.95%	72.16%	61.23%
09	Punjab National Bank	47.82%	49.38%	51.69%	53.37%	54.59%
10	UCO Bank	53.40%	49.89%	55.94%	59.74%	56.99%
11	Union Bank of India	46.02%	45.74%	46.27%	46.42%	45.48%
Average of 11 PSBs		49.57%	48.83%	48.41%	49.70%	49.15%
12	State Bank of India	53.60%	57.91%	53.87%	55.66%	51.64
Average of 12 PSBs		51.13%	52.31%	50.45%	51.98%	50.09

(Source: IBA Data)

a) Cost-to-Income Ratio (CIR):

The Cost-to-Income Ratio (CIR) of a bank is a key indicator of operational efficiency and profitability, showing how much a bank spends to generate each rupee of income; a lower CIR signifies better efficiency and higher profitability. While a specific universal benchmark for Indian commercial banks isn't provided in the results, a benchmark of 45-55% for Urban Cooperative Banks was suggested in a 2021 study, and investors and analysts use the ratio to compare banks' performance against their peers and historical data to spot potential problems or assess strategies, with a rising ratio suggesting costs are increasing faster than income.

Example:

Cost-to-Income Ratio is Calculated by DIVIDING the 'Operating Expenses' by the 'Operating Income' generated i.e., Net Interest Income PLUS the Other Income.

Formulae $CIR = (\text{Operating Expenses} / \text{Operating Income}) \times 100$

Where 'Operating Expenses' = Employee Costs + Other Operating Expenses.

Operating Income = Net Interest Income + Other Income.

Importance to Cost-to-Income Ratio:

- ★ **Measures Operational Efficiency:** The CIR indicates how effectively a bank manages its expenses to generate income.
- ★ **Indicates Profitability:** A lower ratio means a bank

is more efficient and profitable because it spends less to earn each unit of income.

- ★ **Highlights Potential Problems:** A rising CIR from one period to the next suggests that costs are growing faster than income, signalling potential issues with cost control or revenue generation.
- ★ **Aids in Benchmarking:** It allows investors, analysts, and management to compare a bank's performance against competitors and its own historical performance, providing insights into operational effectiveness.
- ★ **Reflects Overall Performance:** As a composite index, the CIR reflects a bank's effectiveness and productivity across various operational areas.

Benchmark of Cost-to-Income Ratio:

- ★ There isn't a single, universally published benchmark for all Indian commercial banks provided in the search results, as performance can vary significantly across different types of banks.
- ★ However, a study by the National Institute of Bank Management (NIBM) in 2021 suggested a benchmark of 0.45 to 0.55 for Scheduled Urban Cooperative Banks, which translates to about 45% to 55%.
- ★ Investors and analysts typically benchmark CIRs against historical trends, specific bank targets, and the performance of similar banks within the industry to evaluate a bank's efficiency.



General Benchmark for Traditional Retail Banks

A General Benchmark for Traditional Retail Banks is around 50-60%, indicating that for Every Dollar of Income, the Bank Spends 50 to 60 Cents on Operations and Administration.

Lower Cost-to-Income Ratios are generally considered a Sign of Better Operational Efficiency.

✓ One of the most effective methodologies to assess the profitability of banks is through the Cost-to-Income Ratio (CIR). This metric serves as an indicator of a bank's operational efficiency by juxtaposing the expenditures it incurs against its generated income. It is crucial for preserving financial stability and enhancing profitability.

✓ The cost-to-income ratio constitutes a fundamental financial metric within the banking sector. It fundamentally compares a bank's operational expenditures with its operational income. A diminished 'CIR' denotes elevated operational efficiency, which represents an optimal condition for

banks. Conversely, if the ratio escalates, it signifies that costs are escalating at a rate surpassing income, which may indicate potential challenges for the institution.

b) Calculation of Cost-to-Income Ratio:

Operating Expenses: These encompass all expenditures incurred by the bank during its routine business operations. This may include administrative costs, employee salaries, rent, utility expenses, depreciation, amortization, and various other operational outlays. It explicitly excludes extraordinary or one-time expenses.

Schedule 16: Total-Operating Expenses

(₹ in '000)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	82652,22,35	93397,51,52	97743,13,61	124860,81,35	118069,02,22
Punjab National Bank	20308,74,75	20252,59,51	24105,40,85	28535,79,80	32260,87,15
Bank of Baroda	20543,65,60	21716,43,88	24518,31,24	28251,67,56	29871,38,07
Canara Bank	19338,18,42	19791,90,55	22481,47,99	26119,79,61	28134,49,54
Union Bank of India	16765,99,28	18438,07,35	21931,33,19	24439,95,98	25936,54,86
Bank of India	10839,10,63	11952,37,43	13982,17,24	15079,16,33	16975,46,09
Indian Bank	10349,55,28	10926,50,28	12097,90,28	14300,45,59	15401,64,46
Bank of Maharashtra	3565,05,72	3849,01,28	3921,83,56	4815,20,10	5801,49,65
Central Bank of India	6782,23,30	7258,09,87	8886,73,55	10244,91,54	11627,16,58
UCO Bank	4754,80,89	4776,32,26	5510,91,50	6790,06,39	7999,40,83
Indian Overseas Bank	5561,72,12	5451,24,36	6421,46,32	8721,90,75	7747,26,38
Punjab & Sind Bank	2393,49,65	2280,60,29	2463,40,19	2931,57,40	3276,38,79

(Source: Annual Reports)

Operating Income: This refers to the revenue generated by the bank from its core business activities. It typically encompasses net interest income (the differential between interest income derived from assets and interest paid on liabilities) and non-interest income (such as fees generated from services like wealth management and payment services). Banks report their financial results for specified periods on varying timelines, which can influence the

comparative analysis of cost-to-income ratios.

To ascertain the Cost-to-Income Ratio, divide the operating expenses by the operating income, and multiply the resultant figure by 100 to articulate it as a percentage. This calculation reveals the proportion of the bank's income allocated to cover its operating expenses.

For instance, if a Bank incurs operating expenses of ₹ 5,00,000 and generates an operating income of ₹10,00,000/-

Cost-to-Income Ratio would be calculated as $(5,00,000 / 10,00,000) * 100 = 50\%$.

This indicates that 50% of the bank's income is allocated towards covering operating expenses, thereby suggesting that the bank possesses a relatively high operational efficiency.

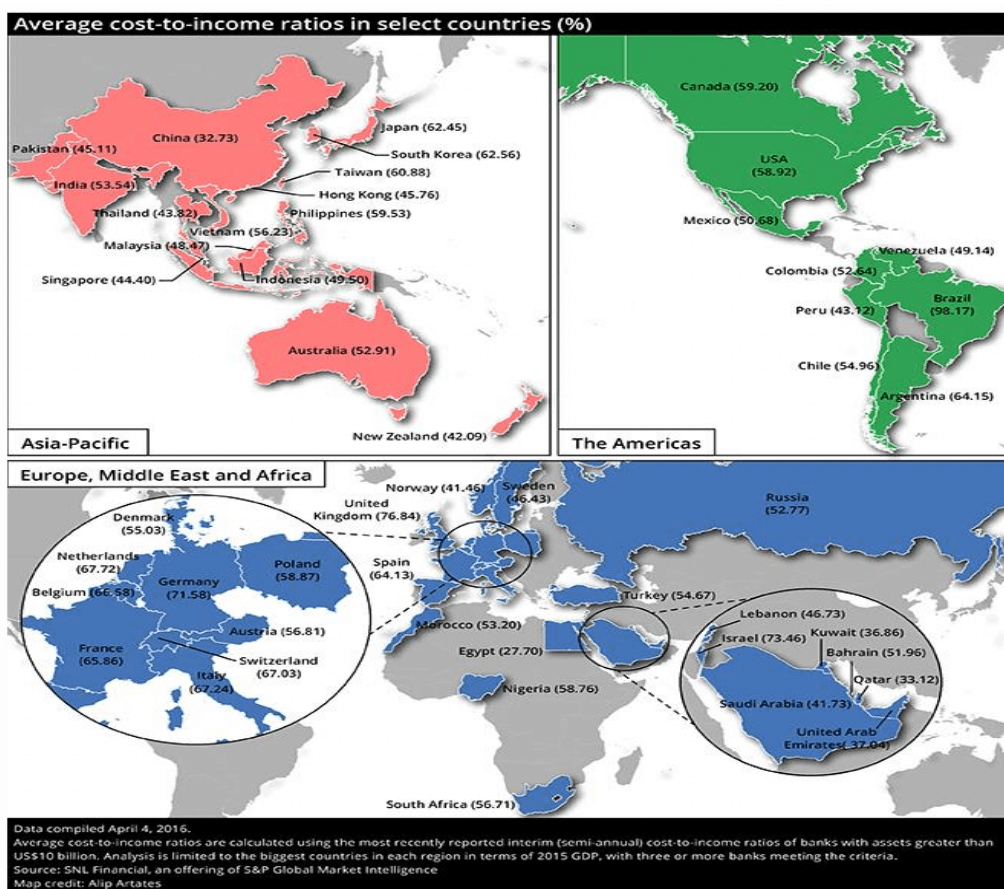
managed Cost-to-Income Ratio can significantly contribute to the long-term viability of a bank. It reflects the financial health of the institution and lays the groundwork for strategic financial planning.

The Ideal Cost-to-Income Ratio for banks may fluctuate based on the specific characteristics of the institution, including its business model, size, and geographical positioning. Nevertheless, it is generally acknowledged that a lower 'CIR' is regarded as preferable, as it signifies heightened operational efficiency.

Ideal Cost-to-Income Ratio for Banks: A prudently

C) Cost-to-Income Ratios by S&P Global:

Average Cost-to-Income Ratios of Bank in the World



(Source: S&P Global)

✱ For traditional retail banks, a Cost-to-Income Ratio of approximately 50-60% is typically perceived as acceptable. This signifies that for each rupee of income generated, the bank expends between 50 and 60 cents on operational and administrative costs.

✱ For banks that are more technologically advanced or digitally oriented, the Cost-to-Income Ratio (CIR) can be markedly lower, frequently situated within the range of 30-40%. This diminished ratio can be ascribed to the efficiencies achieved through digital



technologies, including automation and streamlined processes, which can substantially curtail operational expenses. The strategic utilization of data to uncover patterns and insights may yield novel operational efficiencies and considerable cost reductions.

- ★ Although a lower CIR is typically advantageous, it should not compromise essential domains such as customer service, risk management, and regulatory compliance. The equilibrium between efficiency and effectiveness is paramount for a robust banking operation.
- ★ While there is no universally optimal Cost-to-Income Ratio for banks, striving for a reduced ratio while upholding elevated standards of service and compliance serves as a prudent guideline.

d) How to Improve CIR?

To improve their Cost to Income (CIR) ratio, Indian banks must effectively manage their costs by optimizing fixed costs and controlling variable costs. This involves a strategic approach that includes increasing revenue, leveraging technology to streamline operations, and implementing robust cost-saving programs. Minimizing fixed costs, such as rent and administrative expenses, and reducing variable costs, like the cost of transactions and processes, are crucial steps in improving overall financial health and profitability.

Strategies for Managing Costs:

Optimize Fixed Costs:

- ★ Rationalize Branch Networks: Banks can reduce fixed overheads by optimizing the number and location of physical branches, shifting towards digital channels where customers prefer.
- ★ Streamline Back-Office Operations: Automating and digitalizing non-core functions can reduce the need for extensive infrastructure and personnel, thereby lowering fixed costs.

Control Variable Costs:

- ★ Leverage Technology: Digital transformation can significantly reduce costs associated with manual processes and transactions, making operations more efficient and lowering variable costs.

- ★ Manage CASA Deposits: By focusing on mobilizing low-cost current account and savings account (CASA) deposits, banks can reduce their interest expenses, a significant variable cost, and increase their spread.
- ★ Process Improvement: Implementing and reinforcing process improvement programs helps to identify inefficiencies and reduce waste, which directly lowers variable costs.

Integrated Approach:

- ★ Holistic Digital Transformation: A comprehensive digital strategy can touch all aspects of a bank's operations, from customer experience to core platforms, to create significant cost efficiencies.
- ★ Focus on Income Generation: While cost management is vital, simultaneously focusing on increasing income through new products, expanded digital services, and improved customer engagement also drives a lower CIR.

e) Strategies to Enhance the Cost-to-Income Ratio:

- ★ It necessitates that banks remain attuned to current trends to effectively execute initiatives designed to ameliorate their Cost-to-Income Ratio.
- ★ The principal methodology for augmenting the Cost-to-Income Ratio encompasses either increasing income or diminishing costs. Frequently, a judicious blend of these two strategies proves to be the most efficacious.

Enhancement of Non-interest Income:

- ★ To bolster profitability, banks generate revenue through the provision of and earning interest from loans. Marketing initiatives and customer acquisition represent direct modalities for income enhancement. In a competitive landscape, banks must judiciously balance the risks and rewards associated with the provision of additional loans.

Non-interest income stands as a significant revenue stream for banks, facilitating diversification of income sources and mitigating reliance on interest-based earnings. The following strategies may be employed by banks to enhance non-interest income:

- ✓ **Service fees:** Banks may impose charges for various

services, including wire transfers, overdrafts, ATM utilization, account maintenance, and late payments. Nonetheless, it is imperative to exercise caution in order to maintain equilibrium and avoid alienating customers through excessive fees.

- ✓ **Provision of ancillary services:** Banks can introduce supplementary services such as wealth management, asset management, insurance, or brokerage services. By offering these services, banks can accrue commissions and fees that contribute to their non-interest income.
- ✓ **Cross-selling and upselling:** Banks can capitalize on their existing customer relationships to cross-sell or upsell alternative financial products or services. For instance, a customer with a checking account may also exhibit interest in a mortgage, credit card, or investment product.
- ✓ **Strategic collaborations:** Banks may establish strategic partnerships with other enterprises. For example, a bank might collaborate with a travel agency to offer co-branded credit cards or with a retailer to provide store-branded debit cards. Such partnerships can generate fees and additional non-interest income.
- ✓ **Treasury operations:** Banks can derive non-interest income through their treasury operations, encompassing foreign exchange trading, securities

trading, and various other financial market activities.

- ✓ **Service bundling:** By consolidating services, banks can present ‘value-added’ packages to customers, often resulting in elevated overall fees.

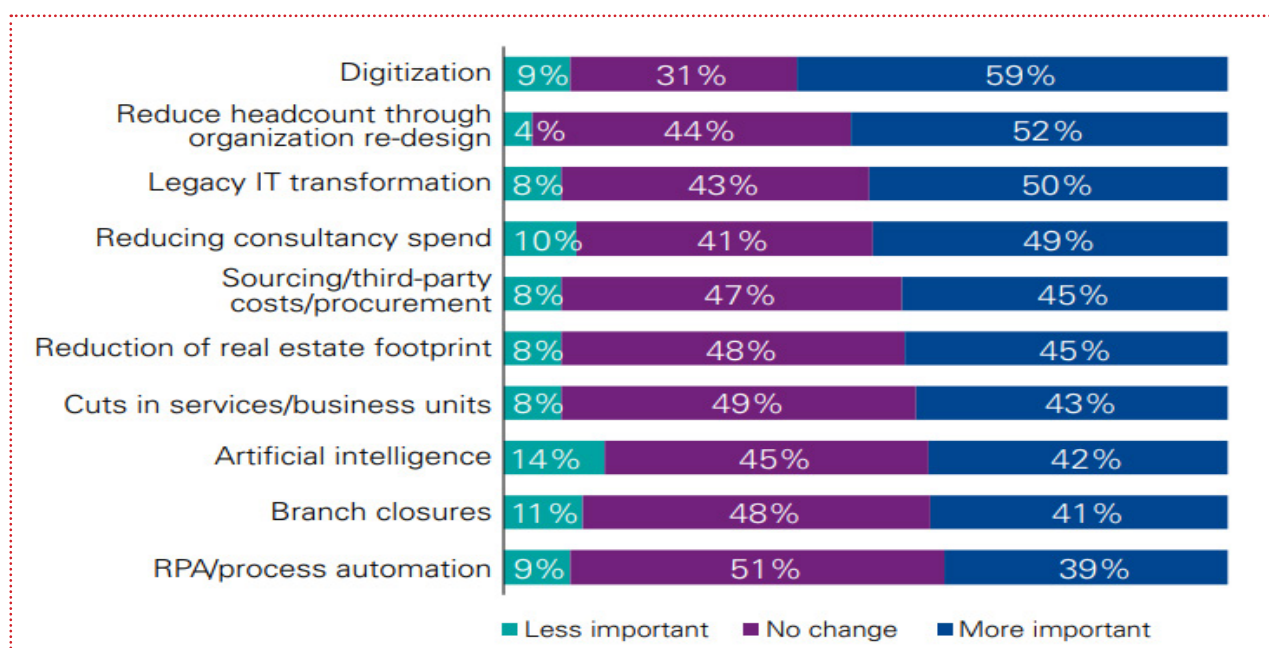
- ✓ While these strategies have the potential to augment non-interest income, they should be implemented with due consideration of regulatory constraints and the bank’s long-term customer relationship strategy. An overemphasis on fee income could potentially engender customer dissatisfaction and attrition; therefore, a balanced approach is essential.

f) Cost Reduction Strategies:

The identification of patterns and insights through data analytics can yield novel operational efficiencies and substantial cost reductions.

The task of reducing expenditures within the banking sector is considerably more complex than merely articulating the intention. Banks operate as intricate entities characterized by numerous regulatory obligations and customer-facing activities, necessitating highly skilled manpower, collaborative teams, intricate workflows, and multifaceted processes.

A Selection of the Principal Strategies for Cost Reduction



(Source: S&P Global)¹



Areas of Cost Reduction:

- ✱ **Digitalization of Core Processes:** The integration of advanced technologies has the potential to enable banks to markedly diminish their operational expenditures. A primary advantage of digitalization lies in the ability to supplant inefficient tasks (for instance, manual completion and review of loan applications) with digital workflows that are amenable to significant automation or optimization.

The implementation of banking software, automated processes, and digital platforms can enhance operational efficiency, mitigate human errors, and lead to reductions in personnel-related costs.

- ✱ **Reduction of Workforce through Organizational Restructuring:** Financial institutions often maintain substantial front and back-office personnel comprising various specialized roles and competencies. Common approaches to workforce reduction may encompass offshoring or near-shoring non-core activities, as well as centralizing or eliminating redundant tasks across disparate teams. Estimates suggest that more than 50% of banks' non-interest expenses are attributable to compensation and associated employee costs.
- ✱ **Modernization of Legacy IT Systems:** Numerous banks depend on outdated IT infrastructures that have accrued significant administrative and maintenance costs over extended periods (or even decades). The technical debt incurred from sustaining legacy systems contributes markedly to both direct IT expenditures and indirectly affects overall operational efficiency.
- ✱ Recent research conducted by ProcessMaker indicates that approximately 50% of office work consists of repetitive tasks, such as navigating multiple systems or manually entering data into spreadsheets or databases.
- ✱ **Management of Third-Party Costs:** The curtailment of expenditures related to consultants or third-party services represents a straightforward approach to maintaining fiscal discipline. Rigorous budgeting and cost-control measures can assist in regulating overall expenses.

This may encompass the oversight and management of marketing and advertising expenditures, the implementation of cost-effective training initiatives, and the renegotiation of contracts with suppliers and vendors.

- ✱ **Streamlining Operations:** The closure of branches, reduction of real estate holdings, and cuts to services and business units are prevalent methods for streamlining operational activities. By pinpointing and abolishing unprofitable resources, banks can bolster efficiency and curtail costs.

Additional strategies may involve the simplification of reporting systems, automation of routine tasks, or the reorganization of departments to enhance workflow.

- ✱ **Leveraging Intelligent Automation:** Ultimately, the adoption of Robotic Process Automation (RPA) or Artificial Intelligence presents new avenues for automating certain repetitive tasks or segments of workflows that hinder efficiency or escalate costs in banking operations. It is unsurprising that banks and financial services have emerged as some of the earliest and most enthusiastic proponents of intelligent automation.
- ✱ **Utilization of Process Intelligence to Enhance the Cost-to-Income Ratio:** A recurring theme among various cost reduction initiatives within banks is their association with operational excellence programs or specialized teams. Given that a significant proportion of banking tasks entails knowledge-intensive work, initiatives aimed at optimizing or automating processes can exert a profound influence on profitability.
- ✱ Acquiring traction on pivotal initiatives necessitates a well-defined strategic approach, an exceptionally concentrated focus, and effective communication channels. Additionally, the appropriate instruments for operational cost transformation are imperative.
- ✱ Process intelligence software, such as ProcessMaker PI, is becoming an increasingly favoured resource among leaders in operational excellence within banking and financial institutions. This software integrates the functionalities of process mining and task mining in a manner that is particularly conducive to banking operations.
- ✱ The principal advantage of process intelligence lies in its provision of comprehensive visibility into operational activities and processes. In other terms, it furnishes transparency regarding the execution and location of work. Such process transparency serves as an X-ray for assessing the vitality of business operations and provides data-driven insights into avenues for enhancement.

Enhancing the cost-to-income ratio presents a multifaceted challenge that demands a comprehensive strategy. By concentrating on revenue augmentation, embracing technological advancements, optimizing operational processes, controlling expenses, and implementing rigorous process improvement initiatives, banks

can endeavour to enhance their cost-to-income ratio and, consequently, their overall financial health and profitability. Remaining vigilant regarding contemporary trends is essential for banks to sustain profitability and refine their cost-to-income ratio.

Treasury Services to be offered to Corporate Clients of the Bank

Indian banks can optimize their treasury departments' high capital expenditures by offering treasury management services to corporate clients, generating new revenue streams through fees and commissions while also utilizing their own treasury infrastructure more efficiently. This dual approach improves the banks' bottom line by creating new fee-based income and fully leveraging their existing, expensive treasury operations.

Why Banks Incur High Capital Expenditure for Treasury Departments:

- *Infrastructure Investment:* Banks invest heavily in technology, systems, and physical infrastructure for their treasury operations to manage large sums of money, conduct complex transactions, and comply with regulations.
- *Skilled Personnel:* Attracting and retaining skilled treasury personnel, who are crucial for effective risk management and liquidity optimization, also represents a significant cost.

How Offering Treasury Services to Corporate Clients Helps:

- *New Fee/Commission Income:* By providing services like cash management, liquidity management, risk management, and payment services to corporate clients, banks earn fees and commissions, directly adding to their revenue.
- *Increased Asset Utilization:* Banks can put their expensive treasury infrastructure to better use by servicing multiple clients, thereby increasing the overall utilization levels of these assets and improving their return on investment.
- *Enhanced Client Relationships:* Offering comprehensive treasury management solutions strengthens relationships with corporate clients, potentially leading to other banking business opportunities and increased customer loyalty.
- *Diversification of Revenue:* This strategy diversifies the bank's revenue beyond traditional interest income, making them less reliant on lending and improving overall financial stability.

g) Budgetary Control System for CIR:

Monitoring Cost-to-Income Ratio (CIR) across different organizational levels is a key strategy for banks to manage expenses and improve overall profitability. The hierarchical approach-developing budgets and monitoring performance from the branch to the head office-provides granular control, allowing banks to identify and address inefficiencies effectively.

Hierarchical CIR budgeting process:

1. Branch-level budgeting: Each branch develops a detailed budget for its operational expenses and projected income. The budget is based on historical performance, growth targets, and local market conditions. This granular approach ensures accountability at the ground level.

Income: Includes projections from new and existing accounts, loan disbursements, and fee-based services.

Costs: Involves local expenses such as rent, utilities, employee salaries, and administrative overhead.

Key actions: Branch managers are responsible for achieving their monthly CIR target and reporting any variances.

2. Regional office-level consolidation: The Regional Office (RO) consolidates the budgets from all branches under its jurisdiction. The RO analyses performance trends across its branches, identifies regional opportunities for cost savings or revenue growth, and sets the regional CIR target.

Income analysis: Compares the income generation patterns of different branches to identify best practices.

Cost analysis: Seeks opportunities for bulk purchasing, technology sharing, or real estate optimization across the region.



Key actions: The RO provides support and resources to struggling branches and reports on the overall regional performance to the Zonal Office.

3. Zonal office-level integration: The Zonal Office (ZO) combines the data from multiple Regional Offices to get a broader view of performance. The ZO's budget refines the regional targets based on larger strategic initiatives and market dynamics within its zone. This level of aggregation allows for more strategic decision-making.

Strategic alignment: Aligns regional budgets with the bank's broader strategy for business lines and customer segments.

Resource allocation: Allocates resources, such as marketing budgets or technology investments, to regions where they will have the greatest impact on CIR.

Key actions: The ZO addresses significant cross-regional issues and reports on zonal performance to the Head Office.

4. Head office-level finalization: At the Head Office (HO), the budgets from all zones are consolidated to produce the bank's final CIR budget. The HO uses this data to set the bank-wide strategy, allocate capital, and report to regulators and investors. The HO is responsible for ensuring the overall CIR target is met.

Overall strategy: Defines major initiatives like digital transformation, network optimization, and product portfolio rationalization.

Performance benchmarking: Uses the hierarchical data to identify high-performing versus low-performing regions and branches.

Key actions: The HO initiates major cost-optimization projects and sets the final budget for the entire bank.

Monthly monitoring and action on negative deviations: A bank-wide, monthly monitoring process is essential for tracking performance against CIR budgets and ensuring a timely response to any negative deviations.

Monitoring process:

Data collection: At the end of each month, expense and income data are collected at the branch level.

Report generation: A monthly CIR report is generated, comparing actual performance against the budgeted target for each branch, region, and zone.

Performance analysis: The report highlights instances of negative deviation and triggers an alert for further investigation.

Action plan for negative CIR deviation:

Initial trigger (Branch Level): If a branch's CIR exceeds its monthly budget, the branch manager must immediately identify the cause. Is it a rise in a specific cost, or is income falling short of projections?

Potential strategies:

Increase income: Launch a targeted campaign to sell a high-margin product.

Control costs: Postpone non-essential spending, such as marketing materials or travel.

Report findings: The branch manager must report the issue and proposed corrective actions to the Regional Office.

Escalation and support (Regional Level): The Regional Manager reviews the branch's report. If the negative deviation is significant or affects multiple branches, the RO must take a more direct role.

Potential strategies:

Resource redistribution: Reassign resources or staff to support underperforming branches.

Training and guidance: Provide additional training to improve sales techniques or operational efficiency.

Collective action: Implement regional initiatives to drive revenue or cut costs, such as shared marketing campaigns.

Strategic intervention (Zonal Level): The Zonal Manager intervenes if an issue at a regional level threatens the overall zonal target.

Potential strategies:

Technology investment: Introduce a new process

automation tool to reduce operational expenses across multiple branches.

Portfolio optimization: Re-evaluate and rationalize the product portfolio in the zone to focus on more profitable offerings.

Structural review: Examine operational models to eliminate redundancies or consolidate functions.

Overall correction (Head Office Level): The HO is responsible for overall CIR performance. It receives reports from all zones and takes action on significant, bank-wide trends.

Potential strategies:

Major cost reduction: Initiate a bank-wide program to downsize physical infrastructure, such as closing or merging underperforming branches.

Digital transformation: Invest in core technology upgrades to modernize systems and reduce long-term operational costs.

Organizational redesign: Restructure departments and roles to improve overall productivity and efficiency.

This multi-level approach ensures that a bank's CIR goals are not just abstract targets, but are actively managed and supported by a clear, responsive chain of command.

To Sum Up:

Closely monitoring the Cost-to-Income Ratio (CIR) on a real-time basis is crucial for commercial banks to effectively control costs, increase income, and improve profitability. By keeping a close watch on this metric, banks can enhance operational transparency, improve cost management, better allocate resources, and foster a culture of continuous improvement by identifying areas where efficiency can be improved or revenue opportunities can be capitalized on.

Why real-time monitoring of CIR is important:

✓ **Direct Financial Health Indicator:** The CIR directly reflects a bank's operational efficiency, with a lower percentage indicating greater efficiency.

✓ **Proactive Cost Management:** Real-time monitoring

allows for the immediate identification of rising costs, enabling banks to take prompt action to control expenses and avoid future budget overruns.

✓ **Income Generation:** It highlights the importance of balancing cost reduction with strategies to boost income, such as attracting more customers, increasing non-interest income through fee-based services, and improving the profitability of loan portfolios.

✓ **Resource Allocation:** By understanding how operational costs relate to income, banks can make better decisions about where to allocate resources for maximum return.

✓ **Competitive Benchmarking:** Banks can use the CIR to compare their performance against industry benchmarks, identifying potential areas for improvement and maintaining a competitive edge.

Strategies to improve CIR:

Cost Reduction: Implement measures to improve workplace productivity and streamline processes to lower operational expenses.

Income Enhancement:

Increase Non-Interest Income: Focus on generating revenue from sources other than traditional interest, such as offering specialized financial products or expanding digital services.

Attract and Retain Customers: Marketing efforts to attract more customers and offering competitive products and services are crucial for increasing overall income.

Enhanced Digital Services: Expanding digital services can attract new customer segments and provide new revenue streams, contributing to a better CIR.

Cost Accountants, or Cost and Management Accountants (CMAs), are crucial for monitoring a bank's Cost to Income Ratio (CIR) because their expertise in cost accounting allows them to effectively evaluate and manage operating expenses against income, which is essential for assessing and improving operational efficiency and profitability.



The Role of a Cost Accountant in Monitoring CIR:

Cost-to-Income Ratio (CIR) Definition: The CIR is a key performance indicator that measures how much of a bank's income is consumed by its operating expenses. It is calculated by dividing operating expenses by operating income.

Expertise in Cost Analysis: Cost accountants specialize in measuring and recording costs, providing management with the financial data needed to make informed decisions about resource allocation and operational efficiency.

Evaluating Operational Efficiency: A lower CIR indicates greater operational efficiency, while a higher ratio suggests that the bank is spending too much to generate its income.

Strategic Management: CMAs use their specialized knowledge to evaluate operating efficiency, which is vital for strategic management and ensuring a bank's long-term competitiveness.

Identifying Areas for Improvement: By analysing cost structures, cost accountants can pinpoint areas where expenses can be reduced or managed more effectively, thereby improving the CIR.

Synergizing Global Practices: With global management accounting bodies and best practices for managing financial institutions, cost accountants

can help banks implement these strategies to remain competitive.

In essence, the specialized skills of a Cost Accountant / Cost and Management Accountants are indispensable for banks to not only calculate their CIR but also to use this information as a tool for strategic decision-making and enhancing overall financial performance of the Banks.

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Annexure I

Role of Cost Accountant in managing CIR

To fine-tune the Cost-to-Income (CIR) ratio for Indian commercial banks, a cost accountant plays a vital and strategic role beyond simple accounting. Their responsibilities involve detailed analysis, operational oversight, and strategic guidance to increase efficiency and control costs.

The cost-to-income ratio is a key measure of a bank's operational efficiency, calculated by dividing its operating expenses by its total operating income. A lower ratio signifies better efficiency and higher profitability.

Role of a cost accountant in managing CIR:

1. Granular cost analysis and reporting: Unlike a traditional financial accountant who focuses on historical reporting, a cost accountant provides management with forward-looking, granular data to guide operational decisions.

- ★ **Cost center analysis:** Dividing the bank into cost centers (e.g., retail banking, corporate banking, treasury, IT) helps to pinpoint which departments are most and least efficient.

- ★ **Activity-based costing (ABC):** Applying ABC principles, cost accountants can allocate overhead expenses to specific activities, such as processing loans or servicing customer accounts. This reveals the true cost of providing each service and helps eliminate unprofitable activities.

- ★ **Variance analysis:** By comparing actual costs to budgeted or standard costs, the accountant can identify discrepancies and investigate the root causes of cost overruns.

2. Strategic cost management: A cost accountant's insights are crucial for developing and executing strategies to reduce expenses in a sustainable way.

- ★ **Non-interest expense control:** A significant portion of a bank's costs comes from non-interest expenses, such as employee compensation, technology, and real estate. A cost accountant helps monitor and control these costs by identifying and suggesting reductions in administrative overhead and third-party spending.

- ★ **Process improvement:** Cost accountants can evaluate workflows in areas like loan applications and customer

service to identify inefficiencies and advocate for process streamlining or automation using technologies like AI and Robotic Process Automation (RPA).

- ★ **Portfolio optimization:** The accountant analyses the profitability of a bank's products and services to help decide which offerings are redundant or unprofitable. This allows management to build a leaner, more profitable portfolio.

3. Budgeting and forecasting: Accurate and data-driven budgets are essential for managing costs effectively.

- ★ **Realistic budgets:** Based on historical data and current analysis, the cost accountant prepares realistic and reliable budgets for all departments and functions.

- ★ **Forecasting for future costs:** The accountant uses analytical and financial modelling skills to predict future costs, allowing the bank to proactively plan for upcoming expenses.

4. Digital transformation and technology leverage: With the increasing digitalization of banking, a cost accountant provides valuable expertise in leveraging technology to lower operating costs.

- ★ **IT system evaluation:** The accountant assesses the cost-effectiveness of a bank's IT infrastructure. This includes evaluating the expenses of maintaining legacy systems versus the cost savings of migrating to the cloud.

- ★ **Cost-benefit analysis:** When evaluating new technologies, such as digital banking platforms, a cost accountant performs a cost-benefit analysis to determine the return on investment.

- ★ **Automation impact:** The accountant analyses the cost savings from automating routine tasks, which reduces manual work, minimizes errors, and increases employee productivity.

5. Performance measurement and incentives: To ensure cost awareness is embedded throughout the bank, a cost accountant helps in developing metrics and performance-based incentives.

- ★ **Key performance indicators (KPIs):** The accountant



helps establish and monitor KPIs such as cost-per-customer (CPC) or full-time employees (FTE) per customer. These metrics help the bank focus on productivity and efficiency.

✱ **Incentive alignment:** By tracking department-specific costs, the accountant ensures that incentives are aligned with cost-efficiency goals, encouraging a cost-conscious culture across the organization.



Annexure II

Cost Sheet for CIR

Indian banks do not use a single standardized “Cost Sheet” but rather analyse their expenses and revenues through detailed internal financial statements and management reporting, often focusing on specific cost categories such as employee costs, operating expenses (including rent, power, and stationery), and depreciation to identify areas for reduction and control. Banks employ strategies like digitalization and process automation to streamline operations, reduce the number of physical branches and staff, and control third-party costs, all with the goal of improving their Cost to Income Ratio (CIR).

Key Cost Components for Banks: Indian banks track various costs to monitor and manage their CIR, including:

- ✱ **Employee Costs: Salaries, benefits, and other personnel-related expenses.**
- ✱ **Operating Expenses:**
 - ✓ **Office Rent:** For branches and administrative offices.
 - ✓ **Utilities:** Electricity, water, and other consumables.
 - ✓ **Stationery and Consumables:** Office supplies and materials.
 - ✓ **Advertisement and Marketing Expenses:** Costs associated with promoting products and services.
 - ✓ **Legal Expenses:** Costs related to legal matters and compliance.
- ✱ **Depreciation:** For assets like furniture, fixtures, and IT equipment.
- ✱ **IT and Technology Costs:** Modernizing legacy systems and investing in digital platforms.
- ✱ **Third-Party Costs:** Expenses paid to external vendors and service providers.

Formats and Reporting: While no specific “Cost Sheet” template exists for banks, they use internal financial statements and reports to analyse costs:

- ✱ **Profit and Loss (Income) Statement:** Summarizes income and expenses over a period, revealing the cost categories that are impacting profitability.
- ✱ **Management Reports:** Internal reports that provide detailed breakdowns of costs by department, branch, or product line, allowing for in-depth analysis and comparison.
- ✱ **Benchmarking:** Banks use techniques like Data Envelopment Analysis (DEA) to compare their operational efficiency and cost structures against other branches or competitors to identify areas for improvement.

Strategies for Cost Reduction: Banks use various strategies to control their CIR:

- ✱ **Digitalization:** Moving to mobile banking, internet banking, and call centers to reduce reliance on physical branches.
- ✱ **Process Automation:** Automating core banking processes to improve efficiency and reduce manual effort.
- ✱ **Organizational Restructuring:** Re-evaluating and redesigning organizational structures to reduce headcount.
- ✱ **Streamlining Operations:** Identifying and eliminating inefficiencies in workflows and processes.
- ✱ **Strategic Partnerships:** Collaborating with other entities to share costs and resources.
- ✱ **Controlling Third-Party Expenses:** Negotiating better terms with vendors and consolidating services.



Annexure III

Costs are to be split in Fixed and Variable

Managing the Cost-to-Income Ratio (CIR) in banking requires a strategic approach that includes splitting costs into fixed and variable components and optimizing the utilization of fixed-cost assets. By doing so, banks can effectively fine-tune their CIR and improve profitability and operational efficiency.

Strategic cost management for CIR:

1. Splitting fixed and variable costs: By analysing and separating costs, banks gain clarity on which expenses are static and which change with business volume.

Fixed costs: These are expenses that do not change significantly with the volume of a bank's operations. Managing these involves strategic decisions to improve overall cost efficiency.

Examples: Rent for branches and head office premises, long-term contracts, and permanent employee salaries and benefits.

Variable costs: These expenses vary in proportion to the level of business activity. Banks manage these by controlling specific operational activities.

Examples: Processing costs for transactions, commission payments, and marketing expenses.

2. Using optimal capacity utilization for fixed costs: After identifying fixed costs, banks can increase the efficiency and profitability of these assets through optimal capacity utilization. This practice ensures that the bank is maximizing the output from its existing resources rather than letting them remain idle.

Tactics for optimizing fixed-cost assets:

- ✱ **ATMs and branches:** Many banks are shifting towards digital channels, which allows them to optimize their physical footprint.
- ✓ **Actions:** Banks can reduce their branch count, redesign existing branches for higher efficiency, or install next-generation ATMs that handle a wider variety of services to increase transaction volume per machine.

- ✱ **Head office premises:** By adopting hybrid or remote work models, banks can downsize their expensive, central office spaces.

- ✓ **Actions:** They can consolidate locations, sublease unused floor space, and reduce maintenance and utility expenses.

- ✱ **Manpower:** Strategic workforce management ensures that staffing levels are aligned with business volume and technological capabilities.

- ✓ **Actions:** Banks can automate repetitive tasks with AI and robotics, restructure departments to eliminate redundant roles, and invest in employee training to improve productivity.

- ✱ **Technology infrastructure:** Modernizing legacy IT systems and migrating to cloud-based solutions is a critical strategy.

- ✓ **Actions:** Banks can shift non-core functions to the cloud, use "pay-as-you-go" models to reduce upfront costs, and leverage automation to minimize IT support and maintenance expenses.

Expected outcomes of this approach: By implementing these cost management strategies, banks can achieve several benefits that lead to a lower CIR.

- ✱ **Cost reduction:** Automation and optimization directly lower operating expenses.
- ✱ **Enhanced productivity:** Optimal use of resources and technology enables employees to focus on higher-value tasks.
- ✱ **Increased efficiency:** A streamlined operating model allows banks to deliver products and services at a lower unit cost.
- ✱ **Improved financial health:** A lower CIR indicates that a bank is more efficient at generating income relative to its operational costs, which leads to higher profitability.

Annexure IV

CVP Analysis for better Cost to Income Ratio

Optimum utilization of manpower, technology, and other resources in Indian banks reduces the Cost to Income Ratio by decreasing operating expenses and also increases operating revenue, which further reduces the ratio; banks can use Cost Volume Profit (CVP) Analysis for better cost management, but it primarily helps in analysing the impact of changes in volume on costs and profits, which is applicable to banks through service volume analysis to maintain a better cost-to-income ratio.

Impact on Cost to Income Ratio:

- ✱ **Reduced Costs:** Optimized resource utilization, especially technology, leads to lower operating expenses.
- ✱ **Increased Revenue:** Better resource allocation can also drive operational efficiency, leading to increased service offerings and thus higher operating revenue.
- ✱ **Combined Effect:** A lower cost base and higher revenue work together to significantly improve the Cost-to-Income Ratio (operating expenses divided by operating income), which is a key performance indicator for banks.

Role of CVP Analysis in Banks:

- ✱ **Service Volume Analysis:** While traditionally used for physical products, CVP analysis can be adapted by banks to understand the relationship between the volume of services provided (e.g., number of accounts, transactions) and the associated costs and revenues.
- ✱ **Cost-Effectiveness:** By analysing the CVP relationship, banks can identify the most profitable service volumes and the optimal levels of resources to employ to achieve a favourable cost-to-income ratio.
- ✱ **Strategic Decisions:** CVP analysis provides insights for strategic decision-making, helping banks to:
 - ✓ **Identify Break-Even Points:** Determine the volume of services needed to cover costs.
 - ✓ **Analyse Profitability:** Understand how changes in service volume affect profits and the cost-to-income ratio.
 - ✓ **Optimize Resource Allocation:** Make informed decisions about investing in technology or manpower to maximize efficiency and profitability.



Annexure V

Prefer 'PSL Lending' instead of 'RIDF Deposit' of Shortfall with NABARD

To meet Priority Sector Lending (PSL) targets and avoid shortfalls with NABARD and NHB, banks should focus on direct lending to priority sectors, which is more profitable than contributing to shortfall funds like the Rural Infrastructure Development Fund (RIDF). Strategies include improving internal processes for PSL identification, expanding direct credit to priority sectors where possible, and developing a stronger risk-based assessment for these areas. For banks that still have a shortfall, making timely contributions to RIDF and other designated funds is mandatory to comply with RBI norms.

Strategies to meet targets and minimize shortfalls:

- ✳ **Expand direct lending:** Focus on increasing loans directly to priority sectors, such as MSMEs, agriculture, and housing, as this yields a higher lending rate compared to the interest from RIDF.

Improve internal processes:

- ✳ **Enhance PSL identification:** Implement robust internal systems and controls to ensure all eligible loans are correctly identified and categorized under priority sector lending.
- ✳ **Streamline credit assessment:** Develop efficient and effective risk-based assessment models specifically for priority sector lending to enable faster processing of eligible loan applications.
- ✳ **Leverage partnerships:** Explore strategic partnerships with Non-Banking Financial Companies (NBFCs) and other institutions to co-lend or provide last-mile connectivity for priority sector customers.
- ✳ **Prioritize the right sectors:** Analyse the profitability

and growth potential of different priority sector sub-categories to allocate resources strategically. Prioritize sectors where the bank has a competitive advantage and can generate better yields.

Fulfil the obligation:

- ✳ **Contribute to shortfall funds:** If direct lending is insufficient, make timely contributions to the RIDF with NABARD and other mandated funds.
- ✳ **Comply with regulations:** Understand that contributing to shortfall funds is a regulatory requirement, even if the lending yield is higher.

Strategies for minimizing the cost of shortfalls:

- ✳ **Proactive management:** Monitor PSL achievement closely throughout the financial year to avoid significant shortfalls at year-end, which might lead to a larger penalty or contribution to shortfall funds.
- ✳ **Understand the interest rates:** Be aware that interest rates on RIDF and other shortfall funds are determined by the RBI. These rates are often lower than market rates, making direct lending more attractive.
- ✳ **Explore alternative funding:** Consider other avenues for funding priority sector loans, such as government-sponsored schemes or co-lending arrangements, which may offer better returns than contributing to shortfall funds.
- ✳ **Review and update strategy:** Regularly review the bank's PSL strategy to adapt to evolving market conditions and regulatory changes. This will help identify new opportunities and potential risks.



Schedule 16-Operating Expenses

Sl. No.	Particulars of Operating Expenses	Year Ended				
		2021	2022	2023	2024	2025
I	Payments to and Provisions for Employees					
II	Rent, Taxes and Lighting					
III	Printing & Stationery					
IV	Advertisement and Publicity					
V	Depreciation on Fixed Assets (other than Leased Assets)					
	Depreciation on Leased Assets					
VI	Directors' fees, allowances and expenses					
VII	Auditors' fees and Expenses (including branch auditors' fees and expenses)					
VIII	Law Charges					
IX	Postages, Telegrams, Telephones, etc.					
X	Repairs and Maintenance					
XI	Insurance					
XII	Other Operating Expenses relating to Credit Card Operations					
XIII	Other Operating Expenses relating to Insurance Business					
XIV	Other Expenditure					



Chapter 6

Cost Benefit Analysis of Banking Operations



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4. *Cost-benefit Analysis of Alternate Delivery Channels vs. Bank Branches.*
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8. *Centralized Locker System.*
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11. *Cash Replenishment.*
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15. *References.*

CBA helps Banks evaluate whether the benefits of a Project outweigh its Costs. It is essential for selecting the most Cost-effective Option. This chapter includes Analysis of:

- ✱ *Branches vs. Alternate Delivery Channels.*
- ✱ *Third-party products.*
- ✱ *Outsourced activities.*
- ✱ *Centralized locker Branches.*

Inputs were developed through Standard Costing Literature and Consultations with Bank Officials.



Cost Benefit Analysis of Banking Operations

While the specific format for a cost-benefit analysis (CBA) can vary, the core components remain consistent across different banking operations. A CBA compares the total costs of an activity against the total benefits to determine its viability and value.

Here are model statements for a CBA of common banking operations, including mobilization of deposits, sanctioning advances, general banking operations, and treasury operations.

CBA model for mobilization of Deposits:

The objective of mobilizing deposits is to acquire low-cost funds that can be used for profitable lending and investment activities.

Costs:

- ✱ **Interest expenses:** The cost of interest paid to depositors (e.g., on savings, current, and fixed deposits).
- ✱ **Operational costs:** Expenses related to managing deposit accounts. This includes salaries for branch staff, teller costs, and digital platform expenses.
- ✱ **Marketing and promotion costs:** Expenses for advertising, special campaigns, and promotions to attract new depositors.
- ✱ **Infrastructure costs:** Overhead costs for maintaining the physical branch network and secure digital infrastructure.
- ✱ **Regulatory costs:** Expenses for compliance with central bank regulations, such as maintaining a cash reserve ratio (CRR).
- ✱ **Insurance costs:** Premiums paid for deposit insurance.

Benefits:

- ✱ **Stable and low-cost funding:** Deposits provide a stable source of funds for the bank at a lower cost compared to money market borrowings, which carry higher liquidity risk.

- ✱ **Basis for profitable advances:** A large deposit base allows the bank to increase its lending activities, which are typically more profitable than investments.
- ✱ **Cross-selling opportunities:** A strong depositor base provides opportunities to cross-sell other products like credit cards, insurance, and investment services.
- ✱ **Customer base expansion:** Attracting a large number of depositors expands the customer base, which enhances the bank's market share and brand value.
- ✱ **Increased fees and service charges:** Fees from various deposit-related services (e.g., debit cards, transaction fees, and non-maintenance of minimum balance) contribute to non-interest income.

Analysis and Decision-making:

To analyse the net benefit, a bank would compare the total costs of acquiring and servicing deposits with the total benefits generated. The average cost of deposits (interest cost as a percentage of total deposits) is a key metric. If the net present value (NPV) of the projected net cash flows is positive, the deposit mobilization strategy is considered viable.

CBA model for sanction of Advances:

The objective of sanctioning advances (loans) is to generate high-interest income while effectively managing credit risk.

Costs:

- ✱ **Cost of funds:** The interest cost associated with the funds used for lending, primarily sourced from deposits and other borrowings.
- ✱ **Operational costs:** Expenses for processing loan applications, conducting credit analysis, and managing the loan portfolio. This includes staff salaries, credit software, and legal fees.
- ✱ **Credit risk Costs:** Potential losses from loan defaults and the cost of maintaining provisions for non-performing assets (NPAs).



★ **Collection and recovery costs:** The expense of collecting loan payments and recovering funds from delinquent borrowers.

Marketing costs: Advertising and promotion expenses to attract potential borrowers.

Benefits:

★ **Interest income:** The primary benefit is the interest earned on loans and advances.

★ **Non-interest income:** Fees and charges from loan processing, prepayment penalties, and other related services.

★ **Diversification of revenue:** A healthy lending portfolio diversifies the bank's income streams and reduces dependence on other revenue sources.

★ **Economic growth and goodwill:** Providing credit for productive purposes contributes to economic growth and enhances the bank's public reputation.

Analysis and Decision-making:

The analysis involves comparing the return on advances (interest income as a percentage of total advances) against the cost of funds and credit risk. Banks also calculate the risk-adjusted return on capital (RAROC) for different loan categories to determine which types of lending are most profitable. A positive NPV would indicate a profitable lending activity.

CBA model for General Banking Operations:

This includes activities like providing payment services, handling remittances, and managing the bank's branch network.

Costs:

★ **Technology and systems costs:** Expenses for maintaining and upgrading core banking systems, payment gateways, and digital banking platforms.

★ **Personnel costs:** Salaries and benefits for branch staff, back-office employees, and IT personnel.

★ **Branch network costs:** Rent, utilities, and maintenance costs for the physical infrastructure.

★ **Processing costs:** The per-transaction cost of processing payments, clearing checks, and other operational tasks.

★ **Compliance costs:** Adherence to regulatory requirements for anti-money laundering (AML) and know-your-customer (KYC) procedures.

Benefits:

★ **Fee and commission income:** Revenue from transaction fees, debit/credit card fees, locker rentals, and other service charges.

★ **Customer loyalty:** Providing efficient and reliable services fosters customer loyalty, which helps retain high-value depositors and borrowers.

★ **Customer base expansion:** Efficient operations and a broad service portfolio can attract new customers and increase market share.

★ **Data insights:** Digital operations provide valuable data that can be analyzed to better understand customer needs and develop new products.

★ **Operational efficiency:** Investments in technology can lead to automated processes and lower long-term costs.

Analysis and Decision-making:

A CBA for general operations often involves evaluating technology upgrades or branch network expansion. It compares the capital expenditure and ongoing operational costs against the projected increase in fee income, improved customer retention, and potential for cross-selling. A positive net benefit would justify the investment.

CBA Model for Treasury Operations:

Treasury operations manage a bank's financial risks, liquidity, funding, and investments.

Costs:

★ **Personnel costs:** Salaries for treasury managers, traders, and risk analysts.

★ **Risk management costs:** Expenses for systems and software to manage market risk, interest rate risk, and liquidity risk.



- ✱ **Funding costs:** The expense of borrowing from money markets and other institutional sources to meet liquidity needs.
- ✱ **Technology costs:** Cost of specialized trading platforms and financial analysis tools.
- ✱ **Regulatory compliance costs:** Expenses for adhering to central bank guidelines on liquidity and market risk management.

Benefits:

- ✱ **Investment income:** Income from the treasury portfolio, including government securities and other market instruments.
- ✱ **Effective liquidity management:** Ensures the bank has sufficient cash to meet its short-term obligations, preventing financial distress.
- ✱ **Risk mitigation:** Protecting the bank from adverse movements in interest rates and foreign exchange rates.
- ✱ **Capital optimization:** Efficiently managing capital to support business growth and meet regulatory requirements.

- ✱ **Enhanced balance sheet management:** Strategic investment and funding decisions improve the overall health and profitability of the bank's balance sheet.

Analysis and decision-making:

The CBA for treasury operations assesses the profitability of investment decisions relative to market risk and cost of capital. It also evaluates the benefits of risk mitigation (e.g., protection from interest rate hikes) against the costs of hedging and using specialized risk management systems. An effective treasury function is critical for overall bank profitability and stability.

a) Alternate Delivery Channels:

A cost-benefit analysis of alternative delivery channels shows that while bank branches are more expensive per transaction, they offer benefits like human interaction and complex services. In contrast, alternate channels like ATMs, internet banking, and mobile banking are significantly cheaper per transaction and offer 24/7 convenience, but they require initial investment and have limited customer support for complex issues. For Indian banks, a multi-channel strategy balancing the cost-efficiency of digital channels with the relationship-building and complex service capabilities of branches is crucial for growth and financial inclusion.

Comparison of Alternative vs. Bank Branch Channels:

Feature	Bank Branch (Primary Channel)	Alternative Channels (ATMs, Internet, Mobile, etc.)
Transaction Cost	High, as it includes employee salaries, rent, and other overheads.	Low, especially for simple transactions like transfers, bill payments, and balance inquiries.
Transaction Volume	Limited capacity to handle a high volume of transactions, especially for routine tasks.	High transaction volumes can be handled efficiently, reducing the burden on branches.
Customer Convenience	Limited by banking hours and physical location.	Available 24/7 from anywhere, providing "anytime, anywhere" banking.
Service Scope	Handles complex services, personalized advice, and large-value transactions.	Primarily handles routine transactions, though mobile and internet banking are expanding their scope.
Initial Investment	High initial costs for building and maintaining branches.	Requires significant initial investment in technology and infrastructure, but the cost per transaction is much lower.
Benefits	- Personal relationship building. - Ability to handle complex and high-value transactions. - Enhanced customer trust.	- Reduced operational costs. - Increased customer convenience and reach. - Improved efficiency and speed. - Essential for financial inclusion in remote areas.
Drawbacks	- High operational costs. - Limited accessibility and hours.	- Initial technology investment. - Lack of human interaction for complex issues. - Potential for cybersecurity risks. - Some channels, like Business Correspondents (BCs), can face challenges like agent churn and low revenues.

Examples of Cost-benefit in action:

ATM vs. Branch: A customer visiting a branch to withdraw money costs the bank significantly more than a customer using an ATM. The ATM channel has the initial cost of installation and maintenance, but the cost per transaction is a fraction of the in-branch cost.

Internet Banking vs. Branch: Internet banking's cost per transaction is even lower than ATM transactions. It also allows customers to perform a wide range of activities like opening a fixed deposit, paying bills, or transferring funds, which would otherwise require a visit to the branch.

Business Correspondents (BCs): While setting up BCs is a cost-effective way to reach rural customers, banks need to analyse the long-term costs associated with agent training, infrastructure, and retention, as highlighted in one study. The benefits include expanding reach and promoting financial inclusion, but the costs of agent churn and low revenue must be managed to ensure sustainability.

While bank branches are essential for complex services, Indian commercial banks must strategically leverage alternative channels to reduce costs, enhance customer convenience, and expand their reach. An integrated approach where digital channels handle high-volume, routine transactions and branches focus on value-added services is the most cost-effective and customer-centric model.

b) ATMs, CDMs, BCs:

Indian commercial banks' alternative delivery channels like ATMs, internet banking, and mobile banking offer significant cost benefits over traditional bank branches, mainly due to lower operational costs per transaction and enhanced scalability. While a bank branch provides personalized service, it involves high overheads. Digital alternatives, such as chatbots, also offer substantial cost savings compared to traditional call centers by automating customer service and reducing manpower expenses.

Cost-benefit Analysis of Alternate Delivery Channels vs. Bank Branches:

Channel	Costs	Benefits	Drawbacks
Bank Branch	- High operational and maintenance costs. - High transaction costs. - High establishment costs for physical presence.	- Personalized, face-to-face interaction. - Handles complex financial needs. - Builds trust with customers. - Serves as a vital point for rural areas.	- Limited operating hours. - Longer wait times for customers. - Limited geographical accessibility
ATM/CDM	- Cost for machine and maintenance. - Ongoing cash management and security expenses. - Potential transaction fees for customers beyond free limits.	- 24/7 access for cash withdrawals and deposits. - Reduced cost per transaction compared to a teller. - Extended geographical reach, especially in semi-urban areas.	- Costly infrastructure compared to online options. - Security risks.
Internet & Mobile Banking	- Technology infrastructure investment. - Software development and maintenance costs. - Cybersecurity costs.	- Lowest transaction costs for banks. - High scalability and efficiency. - Convenience and accessibility 24/7. - Personalized financial insights via analytics.	- Requires customer digital literacy. - Potential cybersecurity risks. - Impersonal nature compared to in-person service.



Channel	Costs	Benefits	Drawbacks
Business Correspondents (BCs)	- Commission-based costs per transaction. - Technology and equipment costs.	- Extends banking services to remote and rural areas at a lower cost than branches. - Human interaction for customers needing assistance.	- Transaction volume limitations. - Dependence on third-party agents.
Call Centres	- High manpower costs for human agents. - Infrastructure and operational costs.	- Provides human support for complex issues. - Handles high volume of inquiries.	- High operational costs. - Potential for long wait times.
Chatbots	- Software development and integration costs. - AI model training and maintenance.	- Significantly lower operational and manpower costs than call centers. - Provides 24/7 customer support for basic inquiries. - Highly scalable for large volumes of interactions.	- Limited ability to handle complex or nuanced issues. - Can feel impersonal for some customers.

c) Third-Party Products:

In India, the sale of third-party products offers commercial banks a lucrative and risk-diversified revenue stream, but it introduces significant regulatory, reputational, and operational challenges. A comprehensive cost-benefit analysis reveals that while the benefits can be substantial, success depends on robust internal controls and ethical sales practices to mitigate the associated risks.

Benefits of Selling Third-party Products:

Increased and diversified revenue:

- ✳ **Boosts non-interest income:** Banks earn substantial fee-based income from commissions on the sale of insurance policies, mutual funds, and other financial products. This reduces dependence on traditional interest income from loans and deposits, providing stability, especially in a fluctuating interest rate environment.
- ✳ **Higher commissions on insurance:** Pushing traditional life insurance plans is particularly profitable for banks due to high commission rates, which can be up to 65% of the first-year premium and 2–17.5% on renewals.
- ✳ **Leverages existing customer base:** Banks can leverage their vast network and trusted customer relationships to cross-sell products to a large, captive audience with a low customer acquisition cost.

Enhanced market position and customer relationships:

- ✳ **One-stop financial shop:** By offering a wide array of financial products, banks can position themselves as comprehensive financial solution providers, which increases customer satisfaction and loyalty.
- ✳ **Deeper customer engagement:** Selling third-party products creates more touchpoints with customers, providing more opportunities to understand their needs and deepen relationships. This increases customer lifetime value and retention.

Efficiency and innovation:

- ✳ **Capital efficiency:** Selling third-party products does not require the bank to use its own capital, unlike its core lending business. This allows banks to generate income without taking on credit risk.
- ✳ **Adopting technology:** The distribution of these products encourages banks to adopt digital platforms and engage in fintech partnerships, improving their technological capabilities and appeal to digitally-savvy customers.

Costs and risks of selling Third-party Products:

Reputational and Legal Risks:

- ✳ **Mis-selling:** This is the most significant risk, often driven by aggressive sales targets and high commissions. Bank employees may push inappropriate

or complex products on customers, particularly the elderly, resulting in financial losses and erosion of customer trust.

- ★ **Reputational damage:** Customer dissatisfaction and complaints arising from mis-selling can cause significant reputational damage, leading to a loss of public trust that is difficult to rebuild.
- ★ **Regulatory penalties:** Regulators like the Reserve Bank of India (RBI), Securities and Exchange Board of India (SEBI), and Insurance Regulatory and Development Authority of India (IRDAI) enforce strict guidelines to prevent mis-selling. Violations can lead to severe financial penalties and regulatory action. Recent draft rules proposed by the RBI restrict the display of third-party products on digital channels to protect customers from aggressive marketing.

Operational and Employee Costs:

- ★ **Compliance and governance:** Banks must invest heavily in robust compliance and risk management frameworks to adhere to the complex, multi-layered regulations governing third-party products.
- ★ **Staff training and pressure:** Banks incur costs to train and certify employees on the nuances of a wide range of third-party products. High sales pressure can lead to unethical behavior and high employee turnover.

Integration costs: Seamlessly integrating third-party product platforms with the bank's core systems requires significant technological investment and can present operational challenges.

Conflict of Interest:

- ★ **Prioritizing commissions over suitability:** High commissions create a direct conflict of interest, where sales staff may prioritize products that are more profitable for the bank rather than those that are best for the customer.
- ★ **Internal product bias:** Banks with their own insurance or mutual fund subsidiaries may prioritize selling their proprietary products over others, regardless of customer need.

The cost-benefit analysis shows that for Indian commercial banks, selling third-party products is a high-reward, high-risk strategy. The financial gains from diversified revenue and improved profit margins are clear and significant. However, these benefits are contingent upon the bank's ability to effectively manage the associated costs and risks.

To ensure a positive Net Benefit, Banks are:

- ★ **Strengthen governance:** Implement robust policies and internal controls to prevent mis-selling and protect customer interests.
- ★ **Adopt ethical sales practices:** Shift the sales culture away from aggressive, target-based incentives and towards a customer-centric advisory model.
- ★ **Invest in technology:** Leverage technology to ensure compliance, improve customer-facing platforms, and use data analytics to recommend suitable products.
- ★ **Prioritize training:** Ensure that sales personnel receive comprehensive and ongoing training on all product details, risks, and ethical sales practices.

For banks that can navigate the regulatory landscape and mitigate reputational risks, the sale of third-party products remains a powerful and profitable component of their business strategy.

d) Outsourcing Activities:

Indian banks use cost-benefit analyses to weigh the financial and strategic advantages of outsourcing various operations against retaining them in-house. Outsourcing is common for non-core functions like ATM management, call centers, and data entry, while core functions such as internal audit and loan sanctioning must be kept in-house as per Reserve Bank of India (RBI) guidelines.

- ★ **Cost-benefit Analysis for In-house vs. Outsourcing:** Below is a framework for Indian banks to conduct a comparative analysis. A bank would populate the data and project future costs and benefits for specific functions to make a decision.



Aspect	In-house operations	Outsourcing operations
Costs:		
Capital expenditure (CapEx)	High initial investment: - Setting up physical infrastructure and workstations. - Acquiring technology, software, and hardware. - Purchasing licenses.	Low initial investment: • Minimal setup costs, as the vendor has existing infrastructure • No capital expenditure on technology
Operational expenditure (OpEx)	High ongoing costs: - Salaries and benefits: Recruiting, training, and retaining a large workforce. - Administrative overhead: Management of staff, payroll, and performance monitoring - Utilities: Rent, electricity, and maintenance for office space - IT maintenance: Regular technology upgrades and maintenance	Lower and predictable costs: - Service provider fees: Based on volume or fixed contract, making costs predictable. - Reduced HR burden: Vendor handles hiring, training, and administration. - Economies of scale: Vendors can offer lower per-unit costs due to large-scale operations
Risks		
Data security	High control: - Data is kept within the bank's own secure network. - Easier to monitor and enforce confidentiality protocols.	Higher risk: - Sharing sensitive data with a third-party vendor increases the risk of data breaches. - Loss of control over data handling practices. - Requires strict contractual security clauses and audits.
Compliance	Direct oversight: - Full internal control over compliance with regulations like RBI guidelines. - Compliance procedures can be tailored to the bank's policies.	Indirect oversight: - Risk of non-compliance if the vendor fails to adhere to banking regulations. - The bank remains responsible for any compliance failures by the service provider.
Vendor dependency	No risk: The bank has complete control over its own resources.	High risk: Over-reliance on a single vendor can create a high-risk situation if the vendor fails to perform or goes out of business. - Exit strategy risk: Difficult and expensive to switch vendors or bring the activity back in-house
Loss of control	Full control: The bank maintains complete oversight of day-to-day operations and service quality.	Limited control: Handing over operational control can affect service quality and customer experience.
Benefits		

Aspect	In-house operations	Outsourcing operations
Expertise	Institutional knowledge: - Internal teams build deep knowledge of the bank's specific processes and institutional culture	Access to specialization: - Vendors offer specialized skills and up-to-date technologies that are expensive to develop in-house. - Expertise in specific domains like fraud detection or data analytics.
Focus	Distributed focus: Resources are divided between core and non-core activities.	Strategic focus: Allows the bank to redirect internal resources to core competencies like product development and customer experience.
Scalability	Limited flexibility: Difficult and costly to scale operations up or down in response to market fluctuations.	High flexibility: Providers can easily scale resources based on demand, such as during peak seasons or for rapid growth.
Efficiency	Potential inefficiency: May lack the specialized processes and technology to achieve maximum efficiency in non-core tasks.	Improved efficiency: Vendors often have streamlined processes and technology, leading to faster and more accurate operations.
Customer satisfaction	Inconsistent quality: Customer service quality can vary depending on internal staffing and training.	Enhanced service: Many BPO providers offer 24/7, high-quality customer support, improving customer satisfaction and loyalty.

Hybrid model: The Common Approach:

Given the trade-offs, many Indian banks adopt a hybrid approach, where a mix of in-house and outsourced functions is maintained:

- ✱ Core functions are kept in-house for strategic control, security, and knowledge retention. This includes activities like:
 - Internal Audit.
 - Compliance and Risk Management.
 - Loan Sanctioning.
 - Treasury and Investment Portfolio Management.
- ✱ Non-core functions are outsourced to leverage cost efficiencies, specialization, and scalability. These typically include:
 - ATM installation and management.
 - Call center and customer support.
 - IT infrastructure and maintenance.
 - Data entry and processing.
 - Credit card processing.

Example: A large public sector bank like State Bank of India (SBI) may manage its core banking technology in-house while outsourcing the maintenance of its extensive ATM network to a specialized service provider.

The optimal choice between in-house and outsourcing for an Indian bank depends on its specific functions, size, and strategic goals. The hybrid model is generally considered the most balanced approach, combining the security and control of in-house operations with the cost-effectiveness and expertise of outsourcing.

e) Centralized Locker System:

For Indian commercial banks operating in crowded urban areas, a centralized locker branch serving a cluster of branches is the best model from a cost-benefit perspective, and some banks like ICICI Bank are already adopting automated, centralized "Smart Vault" facilities. While scattered lockers offer customer convenience, the centralized model provides superior security, efficiency, and revenue potential.

Here is a cost-benefit analysis comparing the two approaches.



Centralized Locker Branch for a Cluster of Branches:

Cost-benefit Analysis:

Feature	Cost perspective	Benefit perspective
Capital expenditure	High initial investment for a state-of-the-art, high-capacity, robotic vault. This includes the secure room, advanced security technology, and automated systems.	The high-capacity facility serves multiple branches, significantly reducing the overall capital cost per locker compared to building individual vaults everywhere. The single, modern vault has a longer lifespan and may be amortized more effectively.
Operational expenditure	Reduced ongoing operational costs due to economies of scale. Needs fewer staff to manage the entire locker inventory and customer visits. Expenses related to security personnel, maintenance, and utilities are confined to one location.	Allows for the efficient use of specialized staff and resources. Automating the locker retrieval process, as seen in ICICI's Smart Vault, further lowers labor costs.
Space optimization	Requires significant real estate for the central vault, but this can be a more efficient use of space than dedicating premium space in numerous city branches.	Frees up valuable floor space in individual branches located in high-rent urban areas. This space can then be used for more profitable services, like customer lounges or specialized wealth management desks.
Security	Requires a substantial investment in advanced security systems like biometric access, RFID, and 24/7 CCTV, along with fire and flood protection.	Offers maximum security for valuables , protecting against theft, fraud, and natural calamities more effectively than individual branch vaults. This minimizes bank liability and enhances customer trust.
Customer convenience	Potential inconvenience for customers who need to travel to the central facility. Requires strong marketing and customer communication to manage the transition and highlight the security benefits.	Access to lockers can be offered beyond normal banking hours, such as 24/7 access through automated kiosks. This model also provides a greater variety of locker sizes due to higher inventory.
Revenue generation	May require a temporary loss of locker revenue during the transition from decentralized to centralized operations.	Higher revenue potential per locker due to optimized capacity utilization and the ability to offer premium services like enhanced access hours. A study noted banks lose significant revenue with scattered, under-priced lockers.

Scattered Locker Operations at each Branch:

Cost-benefit Analysis:

Feature	Cost perspective	Benefit perspective
Capital expenditure	High cumulative capital costs for setting up individual, robust security rooms and vaults across multiple branches. Many of these smaller vaults may be underutilized.	No significant upfront investment required for a large central facility, allowing for a phased or "as-needed" expansion.
Operational expenditure	Inefficient and high operational costs due to scattered resources. Requires dedicated staff at every branch and higher cumulative security and maintenance expenses.	Provides the traditional service model that many customers are accustomed to, reducing the need for customer education and change management.

Feature	Cost perspective	Benefit perspective
Space optimization	Inefficient use of valuable, high-rent urban branch space for small, under-utilized vault rooms.	Customers have immediate access at their local branch, which is highly convenient for those who need to access their locker frequently or prefer a local touchpoint.
Security	Security infrastructure may be less robust and consistent across all branches compared to a single, purpose-built central vault. This increases the risk of theft and bank liability.	None over the centralized model. Security is typically weaker and more expensive to maintain at a high standard across all locations.
Customer convenience	High convenience for customers who value proximity and can visit their local branch.	Keeps the service highly accessible and integrated with other branch-based services.
Revenue generation	Low revenue potential and often operates at a loss due to low occupancy rates and high operational overhead per locker. The pricing is often not aligned with the true cost.	None compared to the centralized model. This model offers low profitability.

For Indian commercial banks with crowded urban branches, a centralized, automated locker branch is the clearly superior long-term strategy. The model allows banks to:

- ✳ Significantly reduce overall costs by consolidating overhead and exploiting economies of scale.
- ✳ Offer state-of-the-art security that reduces liability and enhances customer confidence.
- ✳ Generate higher revenue by optimizing locker occupancy and pricing.
- ✳ Free up prime real estate in city branches for more profitable business activities.

While the initial investment is higher and requires managing customer habits, the long-term benefits in efficiency, security, and profitability make it the more strategic and modern approach. This is why forward-thinking banks in India, like ICICI with its “Smart Vault,” are already moving towards this centralized and automated model.

f) Cash Replenishment:

A cost-benefit analysis for cash replenishment in Indian banks shows that while outsourcing can reduce direct employee costs, in-house staff offers greater control, security, and flexibility, though at a higher fixed cost.

Outsourcing provides potential cost savings through shared infrastructure and specialized services, but it comes with risks like loss of control over security, vendor dependency, and potential quality issues. An in-house model offers better data security and immediate response capabilities but requires significant investment in personnel, vehicles, and training.

In-house staff:

Costs:

- ✳ **Higher fixed costs:** Salary, benefits, training, and pension for employees.
- ✳ **High capital expenditure:** Investment in cash vans, security equipment, and technology.
- ✳ **Operational expenses:** Fuel, maintenance, and insurance for vehicles.
- ✳ **Risk of theft:** While managed internally, staff can be a security risk.

Benefits:

- ✳ **Greater control:** Complete control over cash movement, security, and staff accountability.
- ✳ **Flexibility:** The ability to adjust cash replenishment schedules and routes as needed.



- ✱ **Data security:** Better control over sensitive transaction data and a reduced risk of data leaks.
- ✱ **Employee morale:** A sense of loyalty and job security can lead to better performance.

Outsourcing agencies:

Costs:

- ✱ **Vendor fees:** A recurring operational cost for the services provided.
- ✱ **Potential for hidden costs:** Unforeseen expenses related to service level agreements (SLAs) or security breaches.
- ✱ **Loss of control:** Less direct control over security protocols and staff training.
- ✱ **Vendor dependency:** Reliance on the agency's infrastructure and personnel, leading to potential service disruptions.

Benefits:

- ✱ **Reduced fixed costs:** Lower overhead by avoiding the costs associated with hiring, training, and equipping employees.
- ✱ **Scalability:** Easier to scale up or down operations based on business needs.
- ✱ **Expertise:** Specialized knowledge and experience from the vendor in cash management and logistics.
- ✱ **Potential for lower overall cost:** Savings can be achieved if the vendor can achieve greater efficiency through economies of scale.

Recommendations:

- ✱ **Perform a detailed cost-benefit analysis:** Conduct a thorough analysis based on the bank's specific requirements, including the number of branches, cash volume, and geographic locations.
- ✱ **Consider a hybrid model:** A mix of in-house and outsourced services could be the most effective solution. For example, keep high-value cash movements in-house while outsourcing routine tasks like ATM replenishment to a specialist vendor.

- ✱ **Prioritize security:** Implement robust security protocols regardless of whether the service is in-house or outsourced.

- ✱ **Review and evaluate regularly:** Continuously monitor the performance of both in-house and outsourced services and make adjustments as needed.

- ✱ **Use outsourcing for lower-risk activities:** Outsource the replenishment of cash in ATMs to specialized agencies that have the necessary infrastructure and trained personnel.

g) Recovery of NPAs like Retail Loans, KCC and SHGs:

A cost-benefit analysis of in-house versus outsourced debt recovery shows that the best approach depends on the bank's specific needs, but a hybrid model may offer the most benefits. In-house staff provide a more controlled and potentially cheaper solution for smaller loan portfolios, while outsourcing is better for larger volumes, especially in specialized or distant locations. An in-house approach can reduce recovery costs and maintain a direct relationship with the borrower, while outsourcing can be more efficient and cost-effective for the bank, especially if it lacks specialized staff or resources.

In-house debt recovery:

Costs:

- ✱ Salaries, benefits, and training for recovery staff.
- ✱ Infrastructure, office space, and support for the recovery team.
- ✱ Potential for higher operational costs if staff are not fully utilized.

Benefits:

- ✱ Greater control over the recovery process and brand image.
- ✱ Enhanced customer relationship management, especially for retail loans.
- ✱ Familiarity with the bank's products, systems, and customer base.



- ★ Potential for lower per-loan recovery costs, especially for smaller portfolios.

Outsourcing debt recovery:

Costs:

- ★ Fees paid to the third-party recovery agency, which may be performance-based.
- ★ Costs associated with managing the third-party relationship.

Benefits:

- ★ Access to specialized expertise and advanced recovery tools.
- ★ Increased efficiency and faster recovery times, especially for large loan volumes.
- ★ Scalability, allowing banks to adjust their recovery resources as needed.
- ★ Reduced overhead for the bank, as it does not need to invest in infrastructure or training for a large in-house team.

Which option to choose:

- ★ In-house staff are ideal for banks with a smaller volume of NPAs, especially in retail loans where maintaining customer relationships is important.
- ★ Outsourcing is often more effective for large banks with high volumes of NPAs, or for recovering specialized loans like those for KCC or SHG where the bank lacks the necessary expertise or resources.

Hybrid model: A combination of both approaches, with in-house staff handling smaller or strategic accounts and outsourcing handling bulk recovery, may provide the most optimal solution. This model can leverage the strengths of both approaches and tailor recovery efforts to different loan types and risk profiles.

To Sum Up:

Outsourcing non-core banking operations can be beneficial for banks facing increasing business volumes and costs. This strategy allows banks to handle greater business volumes while controlling costs by eliminating the need

to hire full-time staff for these tasks, ultimately improving profitability. Outsourcing can also provide access to specialized expertise and allow the bank to focus more on its core competencies.

By outsourcing, banks can avoid the costs associated with hiring, training, and maintaining a full-time workforce for non-core activities. Outsourcing to specialized service providers can lead to faster processing and higher efficiency, as they often have the expertise and technology to handle high volumes. Banks can redirect their internal resources and management focus toward core banking activities, such as lending, customer relationship management, and strategic planning. Outsourcing provides access to specialized knowledge and skills, such as advanced data analytics and modelling, without the need for a long-term investment in training. It offers a flexible solution to scale operations up or down based on business needs, which is particularly useful in managing fluctuating workloads.

Banks must have a comprehensive outsourcing policy in place that includes criteria for selecting service providers and systems for managing risks, as required by regulators like the RBI. Regular risk assessments, audits, and reviews are crucial to ensure that outsourced functions are performed according to the bank's standards and policies. Banks should be mindful of the potential for over-reliance on third-party providers, especially for critical functions. It's essential to comply with all relevant regulatory and statutory guidelines when outsourcing services.

References:

- a) Cost-Benefit Analysis-Challenges in Implementation and Cost Benefit Analysis of AI and BI Proposals-ICMAI Research Bulletin-December, 2019.
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- c) Cost Accounting Standards-Cost Accounting Standards Board (CASB)-
- d) Data on 'Third-Party Products' commission earned by the Banks-Annual Reports of PSBs.
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- f) <https://www.icicibank.com/wealth-management/personal/smart-vault>.



Annexure I

Cost Sheets for Cost Benefit Analysis of Various Banking Operations

To perform a cost-benefit analysis for outsourcing Indian banking operations, banks should create detailed cost sheets for both in-house and outsourced scenarios, which includes direct (salaries, equipment, technology) and indirect costs (overhead, training) for in-house options, and vendor fees, contracts, and transition costs for outsourced options. The analysis should then compare total costs against benefits like potential cost savings (especially on labor and infrastructure), access to expertise, improved efficiency, and enhanced customer service, while also accounting for risks such as data security, loss of control, and potential hidden costs.

Cost sheets and cost-benefit analysis framework:

In-house cost sheet:

Direct Costs:

- ✳ **Salaries and benefits:** Include wages, health insurance, retirement contributions, and other benefits for staff in the specific operation.
- ✳ **Equipment and technology:** Costs for hardware, software, licenses, and maintenance related to the function.
- ✳ **Office space and utilities:** Allocate a portion of rent, electricity, and other facility costs for the team.
- ✳ **Supplies:** Costs for stationery, printing, and other consumables.

Indirect Costs:

- ✳ **Training and development:** Investment in employee skills and ongoing training.
- ✳ **Management and supervision:** Salaries of managers overseeing the in-house team.
- ✳ **Recruitment and HR:** Costs associated with hiring new employees.
- ✳ **Overhead allocation:** A share of general administrative and IT support costs.

Outsourced cost sheet:

Direct Costs:

- ✳ **Vendor fees:** The contractually agreed-upon price for the services, which may be per-transaction, hourly,

or a fixed fee.

- ✳ **Implementation and transition costs:** One-time costs for setting up the new service, including potential data migration and integration.
- ✳ **Legal and contract management:** Costs associated with drafting and managing the vendor contract.

Indirect Costs:

- ✳ **Internal management and oversight:** Time and resources spent by bank employees to manage the vendor relationship.
- ✳ **Contingency costs:** Budget for potential unexpected issues or scope changes.

Benefits analysis:

Tangible benefits:

- ✳ **Cost savings:** Reduced expenditure on salaries, benefits, and infrastructure, as described in the cost sheets.
- ✳ **Improved efficiency:** Potentially lower per-unit costs through vendor specialization and economies of scale.

Intangible benefits:

- ✳ **Focus on core competencies:** The bank can redirect internal resources to more strategic activities.
- ✳ **Access to expertise:** Leveraging the specialized knowledge and technology of the vendor.
- ✳ **Flexibility:** Ability to scale up or down more easily based on business needs.
- ✳ **Enhanced service quality:** 24/7 customer support through outsourcing to specialized call centers.

Risk assessment:

- ✳ **Data security and privacy:** Risks associated with third-party access to sensitive customer data.
- ✳ **Loss of control:** Reduced direct control over the operations and quality of service.
- ✳ **Vendor dependency:** Reliance on the vendor's stability and performance.
- ✳ **Hidden costs:** Potential for costs beyond the initial contract, such as "out-of-scope" work.
- ✳ **Impact on employee morale:** Potential negative effects on the morale of internal employees not being involved in the outsourced function.



Chapter 7

A Study on 'Third Cost' in Banks



Contents:

1. *1. Introduction.*
 2. *Top Five Banks Business Performance for the Financial Year Ending 2025.*
 3. *2. About Third Cost.*
 4. *Schedule 16 – Operating Expenses-Model of SBI.*
 5. *Rent, Taxes and Lighting of Top 5 Banks for FY 2021 to 2025.*
 6. *Rent, Taxes and Lighting of PSB for the FY 2024 and 2025.*
 7. *Percentage of in RTL in Total Business of the Bank.*
 8. *Average Number of Customers and Staff “Per Branch” as on 31.03.2025.*
 9. *Following Table Shows Number of ATMs and Branch Vs. ATMs Data as on 31.03.2025.*
 10. *3. Strategies to Control Rent, Taxes and Lighting (RTL) Costs.*
 11. *4. To Sum Up.*
- ‘Branch Less Banking’ through FinTech Model.*
- References*

Schedule-16 of Bank Financial Statements highlights Rent, Taxes, and Lighting as major Controllable Expenses. This chapter explains:

- ★ Meaning and relevance of Third Cost.*
- ★ FY 2024–2025 data of PSBs.*
- ★ Cost Savings through Branch-less Banking and Fintech Models.*

The strategies were developed after reviewing Schedule-16 of Multiple Banks and discussing with Officials.



A Study on ‘Third Cost’ In Banks

(Rent, Taxes and Lighting-Schedule 16 i.e., Operating Expenses of Banks in Balance Sheet)

In earlier days, primary channel of banks i.e., BRANCH is used to sell the bank products. This channel is a costly one. Over a period of time for the sake of customer convenience and also to reduce the high cost of primary channel, banks had developed many alternate or alternative delivery channels.

Banking is the lifeline of the economy of the country. The health of the banking sector is closely integrated to the health of the economy. The economy is traditionally subjected to the boom and recessionary cycles at frequent intervals. During the period of boom in the economy, the business of banking becomes relatively safer, profitable and robust. Conversely, during the period of recession, the business of banking undergoes stress with soaring impaired assets and reduced profitability.

The core business of banks is to accept the deposits for the purpose of lending. The deposits being the resources, carry a cost while the lending constitutes the assets of the banks and hence a source of income. Since the banks are commercial organizations, it is expected that their operations are profitable.

Sustainability, Competitiveness, Liquidity and profitability are the general performance indicators of the banks. In this background, it becomes imperative for the banks to undertake a cost-benefit-analysis of their activities, people, processes, products, infrastructure etc., to help determine the areas which are profitable and the areas which are less profitable. Such an exercise will enable the banks to undertake eliminating the wasteful costs, discontinue the loss making business propositions and lay more focus on profitable products and services.

Cost control in banks will be more of a strategic planning exercise, whereas, cost reduction will be both strategic and tactical. While introducing cost control strategies, banks would be taking steps to identify their major cost centers, identify major types of cost within each cost centre and choose the costs to focus on first.

On expenditure side the highest cost is “Cost of Deposits” followed by Payment to and Provisions for Employees and the Third Cost which is Rent, Taxes & Lighting – RTL (Other than operating expenses relating to insurance business and other expenditure). As spreads of the banking business is decreasing on account of increase in cost of deposits and decrease in yield on advances / investments and increase in NPAs. Control of every cost is essential, other-wise the rating of the banks will decrease and it is difficult to attract or mobilization of additional capital through public issue. If banks adopt good strategies, there is a lot of scope to control overheads by better utilization of alternate delivery channels instead of branch banking channel. This article is focused on how to minimize the Third Cost i.e., Rent, Taxes and Lighting overheads in Banking Sector.

One of the objectives of introduction of number of alternate delivery channels in Banking System like:

✓ ATMs.

✓ Cash Deposit Machines (CDMs).

✓ Internet Banking.

✓ Mobile Banking.

✓ Central Processing Centres (CPCs) for Retail Advances (for Home Loans, Car Loans, Mortgage Loans, Education Loans etc.).

✓ CPCs for MSME Advances (for Working Capital and Term Loans).

✓ Liability Processing Centres (for processing of Savings Bank Accounts, ATM Cards, Cheque Books etc.).

✓ Trade Finance Processing Centres (for processing of LCs, BGs and discount of Trade Bills).

✓ Cheque Clearing Processing Centres.

✓ Pension Processing Centres.



✓ Exclusive Locker Branches and Call Centres etc.

The objective is to reduce the per **transaction cost of bank transactions** and also for customer convenience.

Now CPCs became **manufacturing units** in Indian Banks for processing various bank products and as a result it reduces footfalls of bank customers at bank branches.

The Present Banking system is divided into TWO i.e., **Marketing** of bank products and **Processing** of bank products. Marketing function is being handled by branches

bank products.

and operations / processing function by Central Processing Centres (CPCs) and other alternate delivery channels.

Thereby Banks' Primary Channel i.e., branches became purely Marketing / Selling outlets to Sell various bank products including cross selling of various third-party financial products and Central Processing Centres (CPCs) are taking care of 75% to 80% of workload i.e., operations / processing functions of branches particularly at Tier-I, Tier-II and Tier-III cities / towns.

Whereas in rural areas still the primary channel i.e. branch continues to be an important channel to sell and processing

Top Five Banks Business Performance for the Financial Year Ending 2025

(₹ in Crores)

Name of the PSB	Spread as % Assets	Total Business (Deposits + Advances)	Per Branch Business	Profit
State Bank of India	2.50% (2.59%)	95,45,502	416.16	416.16
Punjab National Bank	2.35% (2.57%)	26,44,098	259.51	259.51
Bank of Baroda	2.56% (2.82%)	26,81,593	318.33	318.33
Canara Bank	2.20% (2.45%)	25,06,038	254.45	254.45
Union Bank of India	2.48% (2.63%)	22,63,263	262.53	262.53

(Note: In Brackets is 'Spread as % Assets' of Previous Year)

Analysis:

Top Five public sectors banks, affected on account of decrease in spreads (Spread as % Assets-As mentioned above), increase in overheads, increase in technology costs and increase in provisions for non-performing assets etc. for the financial year ending 2025. Age of alternate delivery channels in Indian banking system has completed more than Two and half decade. Most of the customers were migrated from branch banking to alternate delivery channels. Hence, there is scope to control overheads like Rent, Taxes and Lighting by better utilization of alternate delivery channels and UPI Payment System instead of branch banking model / channel.

Average per branch business is highest out of ToP Five Banks is SBI Bank (₹ 416.16 Crs.) followed by BoB (₹ 318.33 Crs.), UBI (₹ 262.53), PNB (₹ 259.51), Canara Bank (₹ 254.55 Crs.). Lowest per branch business is in

Punjab & Sind Bank (₹ 124.97 Crs.). Average per branch business of public sector banks is ₹ 234.75 Crs. To arrive, the optimum usage of bank branch, per branch business is the best indicator by comparing with industry average.

For better utilization of bank branches, banks should segregate total business of the branch into Digital Business Vs Non-Digital Business i.e., total business minus customer transactions through branch is Digital Business of the branch.

a) About Third Cost:

Main source of revenue to the Banks is Yield on Advances followed by Exchange on remittances, forex transactions, Commission on various services offered by the bank branches and Discount on Trade Bills (Usance and Sight Bills).

The following is Schedule 16 i.e., Operating Expenses of State Bank of India.

Schedules

forming part of the Profit and Loss Account for the year ended 31st March 2025

SCHEDULE 16 - OPERATING EXPENSES

	Year ended 31.03.2025 (Current Year) ₹	Year ended 31.03.2024 (Previous Year) ₹
(000s omitted)		
I. Payments to and provisions for employees*	64352,24,48	78336,98,41
II. Rent, taxes and lighting	6283,36,09	6081,83,48
III. Printing and stationery	883,96,70	824,47,35
IV. Advertisement and publicity	509,20,24	532,32,39
V. Depreciation on Bank's property	3528,90,73	3351,91,61
VI. Directors' fees, allowances and expenses	1,58,84	1,81,65
VII. Auditors' fees and expenses (including branch auditors)	317,38,56	298,28,96
VIII. Law charges	402,04,44	346,23,70
IX. Postages, Telegrams, Telephones etc.	800,48,84	662,12,53
X. Repairs and maintenance	1268,01,99	1198,06,57
XI. Insurance	8962,90,24	6224,12,20
XII. Other expenditure	30758,91,07	27002,62,50
TOTAL	118069,02,22	124860,81,35

* Payments to and provisions for employees includes exceptional items Nil for Current year [Previous year provision of ₹7100,00,00 thousand (₹5400,00,00 thousand for estimated liability on account of pension at uniform rate of 50% for all pensioners prospectively, in place of existing dual rate of calculation of pension and ₹1700,00,00 thousand on account of ex-gratia benefit and neutralisation of Dearness Relief to pre-November 2002 retirees and family

(Source: SBI Annual Report)

On expenditure side the highest cost is “Cost of Deposits” followed by Payment to and Provisions for Employees and the Third Cost is Rent, Taxes & Lighting (RTL) (Other than operating expenses relating to insurance business and other expenditure).

Rent, Taxes and Lighting of Top 5 Banks for FY 2021 to 2025

(₹ in Crs.)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	5253	5362	5702	6082	6283
Punjab National Bank	1295	1286	1318	1326	1392
Bank of Baroda	1506	1473	1568	1659	1819
Canara Bank	1120	1127	1109	1174	1085
Union Bank of India	1104	1071	1068	1090	1180

(Source: Annual Reports of PSBs)

Analysis:

Highest amount of RTL spent by SBI followed by BOB. This is due to number of branches, ATMs and Zonal / Regional Offices of the bank.

Best strategy to reduce high amount RTL is merger of nearest branches. While merging, study the branch profile based on locational advantage, rent and electricity paid by the branches, staff pattern, type of customers, potential

of business in particular place and profit contributed by of these branch etc. then take a decision for merging the branch by increase in the grade of the nearest branch or shifting the branch to unbanked areas in order to increase in business levels of the bank and to control RTL.

Percentage of Increase in RTL over 31.03.2024: The following chart shows the percentage of increase in Rent, Taxes and Lighting costs of the banks in 31.03.2025 financial year over 31.03.2024 financial year.



Rent, Taxes and Lighting of PSB for the FY 2024 and 2025

(₹ in '000)

Name of the PSB	2024	2025	Increase Over 2024	% of Increase	Remarks
State Bank of India	6081,83,48	6283,36,09	201,52,61	3.31	Lowest Increase
Punjab National Bank	1325,76,52	1391,73,78	65,97,26	4.98	
Bank of Baroda	1658,74,23	1819,39,22	160,64,99	9.69	
Canara Bank	1173,55,16	1084,84,88	-88,70,28	-7.56	Decreased
Union Bank of India	1090,25,46	1180,00,83	89,75,37	8.23	
Bank of India	924,25,71	990,07,45	65,81,74	7.12	
Indian Bank	635,64,07	674,34,25	38,70,18	6.09	
Bank of Maharashtra	280,41,93	326,51,12	46,09,19	16.44	
Central Bank of India	595,67,28	671,10,27	75,42,99	12.66	
UCO Bank	332,18,16	434,92,41	102,74,25	30.93	Highest Increase
Indian Overseas Bank	528,16,92	558,84,23	30,67,31	5.81	
Punjab & Sind Bank	139,23,76	146,90,47	7,66,71	5.51	

(Source: Annual Reports)

Analysis:

Average growth rate is 3% in RTL is considered to be reasonable, exceeding which will have effect on Bank's Profit. In Canara Bank the growth rate of RTL is negative; Canara Bank reduced substantially the RTL overheads by (-7.56%) when compared to previous year. Control of

RTL not only reduces the overheads of the bank but also indirectly reduces the manpower costs. Whereas in SBI above the nominal growth and when compare to average growth of public sector banks i.e. 3.31%, Whereas in UCO Bank Highest increase in RTL, when compare to previous year is 30.93%

Percentage of in RTL in Total Business of the Bank:

Top Five Banks Business Performance for the Financial Year Ending 2025

(₹ in Crores)

Name of the PSB	Total Business	Profit	Rent, Taxes and Lighting	% of RTL in Total Business as on 31.03.2025
State Bank of India	95,45,502	416.16	6283	0.07
Punjab National Bank	26,44,098	259.51	1392	0.05
Bank of Baroda	26,81,593	318.33	1819	0.07
Canara Bank	25,06,038	254.45	1085	0.04
Union Bank of India	22,63,263	262.53	1180	0.05

Analysis

Average percentage of RTL in total business should not exceed 0.06%, banks mentioned in the above table is more than the 0.06%. Whereas in State Bank of India and Bank of Baroda the percentage is 0.07% Punjab National Bank and Union Bank of India is 0.05%, Canara Bank

is 0.04%. The ideal percentage is 0.05% on account of increase in alternate delivery channels and shifting of back-office operations to central processing centres. Review of existing premises, usage % of alternate premises, RTL Policy, growth rate in business, competition / market share of the branch etc. are the parameters to control the RTL overheads.

Average Number of Customers and Staff “Per Branch” as on 31.03.2025

Name of the Bank	Staff
State Bank of India	10
Punjab National Bank	10
Bank of Baroda	9
Canara Bank	8
Union Bank of India	9
Bank of India	10
Indian Bank	7
Bank of Maharashtra	6
Central Bank of India	7
UCO Bank	6
Indian Overseas Bank	7
Punjab & Sind Bank	6

Analysis:

The number of branches and total number of employees is high in State Bank of India, followed by PNB and Bank of Baroda. If we take average number of employees per branch SBI is more and followed by PNB and Bank of India. In view of increase in alternate delivery channels in the banking system, number of employees per branch

is to be reduced gradually. The average number of employees of PSBs is around 6 per branch. In Bank of Maharashtra, UCO Bank and Punjab & Sind Bank is 6. Once the branches are trimmed on account of increase in alternate delivery channels and CPCs, proportionately the manpower costs will be reduced and cost of banking operations will also reduce.

Branch vs. ATM

Following Table Shows Number of ATMs and Branch Vs. ATMs Data as on 31.03.2025

Bank	Domestic Branches	ATMs Vs. Branches	Ratio of Branch Vs. ATMs	Remarks
State Bank of India	22,937	63,791	2.78	High
Punjab National Bank	10,189	11,822	1.16	High
Bank of Baroda	8,424	9,316	1.11	High
Canara Bank	9,849	11,954	1.21	High
Union Bank of India	8,621	8,910	1.03	High
Bank of India	5,306	4,085	0.77	Moderate
Indian Bank	5,901	3,078	0.52	Reasonable



Bank	Domestic Branches	ATMs Vs. Branches	Ratio of Branch Vs. ATMs	Remarks
Bank of Maharashtra	2,641	2,402	0.91	High
Central Bank of India	4,552	4,085	0.90	High
UCO Bank	3,302	2,522	0.76	Moderate
Indian Overseas Bank	3,269	3,497	1.07	High
Punjab & Sind Bank	1,817	1,047	0.58	Reasonable

Analysis:

Number ATMs are high in SBI followed by Canara Bank. If we take the ratio of Branch vs. ATM, the ratio is more in SBI followed by Canara Bank. Once, the Banks are popularizing the 'Mobile Banking' and 'UPI Payment Systems' through their Mobile Apps., this ratio can be minimized. The Average Ratio i.e., Branch Vs. ATM Ratio is 0.60 is Ideal one.

Banks are indeed reducing the number of ATMs due to the surge in digital transactions like UPI, and they are increasingly focusing on promoting their mobile apps to customers in both urban and rural areas. This strategy involves trimming ATM locations while expanding digital banking services, reflecting a shift driven by decreased cash usage and the lower operational costs of mobile apps compared to physical ATM networks.

Why this strategy is being adopted:

- ✓ **Declining ATM usage:** As more people use UPI for payments, there is a significant reduction in the frequency of ATM withdrawals.
- ✓ **Lower operational costs:** ATMs are expensive to maintain, requiring expenses for electricity, security, and physical space, while a mobile app can serve a much larger customer base at a lower cost.
- ✓ **Increased convenience of digital:** Digital payments are often faster and more convenient for everyday transactions than going to an ATM, and the rise of "Interoperable Cardless Cash Withdrawal" (ICCW) via UPI is further reducing the need for physical cards.
- ✓ **Shifting focus to mobile apps:** Banks are now emphasizing their mobile apps to provide a wider range of services, from account management to digital transactions, which can be accessed by customers anywhere, anytime.

Challenges and future considerations:

- ✓ **Digital literacy:** While promoting mobile apps is a good strategy, it's crucial to address the digital divide. Rural areas may face challenges related to digital literacy and infrastructure, which banks need to tackle through targeted programs and support.
- ✓ **Hybrid model:** Some banks might adopt a hybrid approach, such as keeping an on-site ATM and one off-site ATM per branch, to balance digital and physical banking needs in a post-cash world.

Some of the banks are using White and Brown labeled ATMs to reduce the cost of capital expenditure and other revenue expenditure to the bank. This is one good strategy to the banks to control the capital expenditure. But sometimes, if number of hits are more in a strategic location, it is beneficial to the bank to install own ATMs instead of using white and brown labelled ATMs. Instead of installing ATMs, banks should go for ATM-cum-CDM, thereby the cash receipts transactions at the branch reduced further. Whenever the life of the ATMs is over, it is better replaced with combo type alternate delivery channel like ATM-cum-CDM, thereby further cost of transaction will reduce further.

b) Strategies to Control Rent, Taxes and Lighting (RTL) Costs:

Develop "Rent, Taxes and Lighting Policy" of the bank: As spreads of the banking business is decreasing on account of increase in cost of deposits and decrease in yield on advances / investments and increase in NPAs. Control of every cost is essential, other-wise the rating of the banks will decrease and it is difficult to attract or mobilization of additional capital through public issue. To control RTL costs, banks have to develop RTL Policy. Policy guidelines of RTL should be discussed by the bank management on monthly, quarterly basis in review meetings of the regional / zonal / head office performance review meetings. Thereby RTL costs can be reduced / controlled substantially.



Review of the existing space of all branch premises:

Alternate delivery channels were introduced in bank 25 years back; at present most of the bank customers are habituated to use alternate delivery channels. Review of the existing space is one of the important strategy i.e., reduce or to increase the branch space based on the customer foot falls, number of the transactions held at the branches, business levels of the branch, demand deposits vs. time deposits, term loans vs. working capital loans, segmental customers like retail or SME or corporate, educated customers or non-educated customers, number of alternate delivery channels linked to the branches, shifting of back-office operations to central processing centres, number of staff members, rent paid by the bank with prevailing market price, capital expenditure spent by the bank for interiors, number and distance of branches situated surrounding to the existing branch etc. all these factors are to be verified while reviewing the existing space of the branch premises.

Searching for alternate premises: While searching new or alternative premises, factors to be considered by the bank are amount of rent to be paid per sq. ft., number of other bank branches located, number of business establishments, type of customers located, potentiality for bank business, number of years to reach break-even-point of the branch. Due to increase in alternate delivery channels of the banks and implementation of the concept “bank customer not branch customer” etc, prime locality is not a vital factor in selection process of the branch.

Shifting of ATMs to the branch premises: To save the rent and other infrastructure facilities costs of ATM, ATMs are to be shifted to branch premises instead of ATM located near to the branch, if the branch is situated in prime location. This way, Cash replenishment costs can be reduced and customers of the branch can be encouraged to use the branch ATM instead of using branch for cash requirement. Requirement of ATM space is normally 100 Sq. Ft., this space can be easily arranged by the branch in premises.

Merging of branches: The ideal distance between two branches of one commercial bank is in the range of 3 to 5 km in metros and in other locations 10 km. In metro, urban, semi-urban branches are crowded in same locality and the pie of the total business is shared among the branches. In crowded places, competition among branches is more, growth of the business is nominal and, in some cases, stagnated and negative growth is observed. In few branches the growth is on account of inflation and not real growth.

Hiring / Shifting of CPCs to unutilized own premises: In some cases, own premises of the banks are underutilized, due to decentralization of organization structure of the bank, decrease in business levels due to opening number of other banks in surrounding places. If underutilization of own premises is observed, bank should explore to hire the premises to other commercial establishments, and thereby it increases the revenue resources of the banks. In case of rented premises, de-hire the excess premises to the landlord; thereby RTL will reduce to some extent.

Close / Shift low hits ATM premises: At initial stages most of the banks have installed number of ATMs at different locations as a new initiative. For all location banks are incurring overheads like rent for the ATM Room, security staff, capital expenditure for interior decoration and also air-condition system and depreciation thereon, cash replenishment on monthly basis etc. Shifting of ATM to strategic location is one strategy to reduce the cost of operations of the bank.

Trimming of the branch premises wherever feasible: Trimming the branch premises is one strategy to reduce overheads of rent and electricity costs. Forecasting of business sometimes may not be achieved by the bank due to various reasons. Solution in this case is either de-hiring or trimming of the branch premises. This clause to be included in lease agreement with the landlord while hiring the premises. Some of the branches are holding like old records, furniture etc. for so many years in the branch premises. If retention limit of old records is over and furniture which is not useful, either it may be shifted to needy branches or to sale furniture through auction, thereby premises can be used in a better manner.

Optimum utilization of own premises: Some banks are having own premises, due to decentralization in the organization structure or decrease in business levels and opening of number of banks in surrounding areas, usage of branch premises decrease substantially, these premises are to be reviewed by the controllers and explore the possibility of shifting Central Processing Centres, Whenever surplus of space is available on account of decentralization of organization structure, the premises can be hiring to other commercial organizations. Thereby revenue will be generated to the bank.

Develop Standard Operating Procedure (SoP) for Rent, Taxes and Lighting Costs: Standard Operating Procedure (SoP) is a tool to the Controller of the branches to do the activity in a defined manner. It gives an idea to the operating staff, how to complete the specific task. SoP is



to be circulated to all the branches, thereby it is a tool for the branches to follow the guidelines of the bank without any deviation.

Re-design the branch with current requirements: After introduction of alternate delivery channels by the banks in large scale, footfalls of the customers are gradually reducing. Banks are encouraging the customers to use the alternate delivery channels and Head Offices of the Banks have also allotted targets to the Branches like number of ATM Cards to be issued, Internet Banking and Mobile Banking kits to be issued. Thereby it is beneficial both to the Bank (Cost Angle) and also Convenience to the Customers (i.e., 24 x 7 banking services).

This is a good opportunity to the bank to re-design the branches as per the current requirements, thereby substantial reduction of RTL and Fixed Assets cost like furniture and electrical gadget will come down. This not only reduces the RTL but also results in reduction in capital expenditure incurred by the branch for interior design etc.

Sale of outdated and redundant furniture / stationery laying at Head Office / Zonal Office / branches: Old furniture like computer monitors, broken chairs, old stationery, old record (even after retention period is over) are to be disposed off, thereby it creates space at the branch. Old iron furniture always consumes more electricity (if the branch is in air-conditioned) than wooden furniture. Old furniture not only occupies the costly branch space, but also leads to bad ambience. Once disposed or sale of old furniture / stationery by the branch, some revenue will be generated. Good maintenance always improves the face lifting / ambience of the branch.

Use of LED bulbs to save electricity: Electricity bill reduces by using Led Bulbs instead traditional lighting. Still bank branches are using traditional electrical systems (these may be in good condition) but it consumes more electricity. Even though it requires some additional capital expenditure but revenue expenditure will reduce substantially in the long run and also the new systems increase the face lifting of the branch.

Use of sensors in the branches / offices: In some branches / offices even though employees are not working in their work stations, still electricity appliances like lights, air-condition is ON position. It not only increases the monthly electricity bill but also the life the electrical appliances will decrease. Installation of sensors at important places in the branch decreases electricity cost substantially. Educating the staff is very important to control the RTL costs as

they are users of the branch in addition to the customers.

Use of Solar panels on the terrace of zonal office / head office / ATM rooms: Banks should encourage use of solar panels on the top of the branch premises (wherever feasible), thereby they can avoid stand-by generator system at the branches. Most of the branches are having standby generator system and recurring expenditure like oil, rent and operator salary is to be paid by the branches, but branches are using generator mostly in summer season. If branches install solar panels for electricity, it not only reduces the electricity costs but also reduces the dependence on alternate current system. Best example is Cochin Airport which is operated on solar energy system.

Digital Banking: Banks and Government of India are encouraging Digital Banking, it not only reduces the cost of bank operations but also customer convenience i.e., 24 x 7 banking. Digital banking reduces the circulation of money with the public and thereby there is cost reduction to the regulator in printing of currency and forged notes problem can be avoided. Here lot of customer education is required particularly regarding various risks in digital banking system. This is one way to reduce the overheads of RTL.

Channel-wise Costs figures: To control the cost and also to arrive cost-benefit-analysis of various channels of the banks, banks have to be developed channel-wise costs reports i.e., Internet banking, Automated Teller Machines, Mobile Banking, Central Processing Centres (for advances) etc. Through this data banks can take cost control measures in various channels of banking operations and popularize the best channels both from bank and customers point of view.

Parking space and Customer space: While selecting branch premises, parking space is an important aspect. Particularly high net worth customers prefer to visit the branch when adequate space of parking is available. If customers visit to the branch is more, up-selling and cross selling of the bank products are possible. On account of cross selling and up-selling business of the branch, RTL can be recovered through additional business of the branch.

Documents Archival Centres (DAC): While selecting a bank branch, provision for additional space for storage of old records, vouchers, documents etc are to be made. Some banks established “Documents Archival Centres (DAC)” at outskirts of the City / Town (where low-cost rent premises is available), at periodical interval the documents, old records, vouchers of all branches linked to DAC shifted



at regular intervals. This type of initiative further reduces the requirement of branch space which can be trimmed further to save the RTL costs further.

Premises Department or Subsidiary: In some banks, premises issues are handled by a separate department i.e., premises department, entire portfolio of bank's premises (own / rent) will be handled by the premises departments, they develop Standard Operating Procedures (SoP) for RTL and closely monitor the same. Here, specialist staff like civil engineers, electrical engineers to be recruited to check / control the various costs of bank own / rented premises and this department closely monitors and controls the budget given by the bank.

Some public sector banks opened a separate subsidiary and placed specialist staff like civil engineers and electrical engineers. Under this model, subsidiary of the bank is profit centre and not cost centre like premises department of the bank. Subsidiary of the bank not only providing services to the parent bank but also to the other banks for ambience works with the help their own staff and earn profits. This model gives additional revenue to the bank.

Leased Accommodation to Staff Members: Year-on-year rents payable by the banks for the leased accommodation provided to the staff members is on increasing trend. To arrest this situation wherever own space is available, banks may construct staff quarters to reduce overheads of rent paid to the staff members for the leased accommodation. To reduce the overheads of rent of staff accommodation and also to increase the productivity levels of staff, banks may provide staff quarters instead of paying amount for hiring accommodation to staff members.

To Sum Up:

To Sum Up, public sector banks spent ₹ 15,562 Crores for rent, taxes and electricity for the financial year ending 2025. This is only recurring and direct expenditure, other indirect expenditure like depreciation of capital expenditure on ambience, manpower costs etc. for the primary channel is not considered in above analysis. Some of the banks are having their own premises like Head Offices, Zonal Offices, District Head Quarters Branches etc, rent for these premises is not taken into account (had it been hired to others) while arriving total rent paid by the banks. If

we take all direct and indirect expenditure, the primary channel is a costly one.

Branch Less Banking Operations Best Example: Paytm does not have physical branches like commercial banks. While it once opened a few branches for its payments bank, it does not operate a network of branches and now relies on partner banks for its digital services like UPI payments. The company's offline merchant payment revenue grew to ₹2,580 crore, making up 47% of its total revenue on a standalone basis, and the net worth of the undertaking was approximately ₹ 960 crore.

Popularizing digital banking not only reduces the cost of primary channel but also helps in optimal utilization of Information Technology costs incurred by the banks. Implementation of cloud computing, block chain technology, data warehousing and mining, educating the customers about benefits of digital banking particularly to rural and semi-urban centres, results reduce dependency on primary channel. Along with the above implementation and review of RTL policy will help banks to decrease / control RTL costs and other overheads.

References:

- a) Top Five Banks Business Performance for the Financial Year Ending 2025-Annual Reports of PSBs.
- b) Schedule 16 i.e., Operating Expenses of State Bank of India-SBI Annual Report.
- c) Rent, Taxes and Lighting of Top 5 Banks for FY 2021 to 2025-PSBs Annual Reports.
- d) Rent, Taxes and Lighting of PSB for the FY 2024 and 2025-PSBs Annual Reports.
- e) 'Branch Less Banking' through FinTech Model-Guidelines on Digital Lending were issued vide Circular DOR.CRE.REC.66/21.07.001/2022-23 dated September 02, 2022.

An analysis of how FinTech companies are enabling branchless banking in India, focusing on reduced operational costs and the preferences of the younger generation.



Annexure I

‘Branch Less Banking’ through FinTech Model

How FinTech enables branchless banking and reduces costs:

- ✱ **Elimination of physical infrastructure:** By operating almost entirely through digital platforms, FinTech companies and neobanks significantly cut costs associated with physical branches. This includes expenses for rent, utilities, staff salaries, and infrastructure maintenance.
- ✱ **Operational efficiency:** The reliance on advanced technology like AI, machine learning, and automation allows FinTechs to streamline processes that are often manual and time-consuming in traditional banking. This leads to faster service, reduced human error, and lower manpower costs.
- ✱ **Data-driven insights:** AI and data analytics provide FinTechs with valuable insights into customer behaviour. This helps them optimize operations and personalize products, which can increase revenue and overall profitability.
- ✱ **Customer acquisition at lower cost:** Fintechs, especially those leveraging India’s Digital Public Infrastructure like the Unified Payments Interface (UPI), can onboard new customers with robust verification checks at a reduced cost. This infrastructure, which has seen massive adoption, provides a foundation for cost-effective customer growth.
- ✱ **Expanded market reach:** The branchless model allows FinTechs to serve previously underserved or unbanked populations in remote areas without a physical presence. This expands their customer base and contributes to financial inclusion, opening up new revenue streams.

How FinTech appeals to India’s younger generation:

The young generation (millennials and Gen Z) in India are driving the adoption of FinTech due to their preferences for convenience and a “mobile-first” approach.

- ✱ **Digital convenience:** This tech-savvy population expects 24/7 access to banking services from their smartphones, with quick and seamless user experiences. Fintechs and neobanks deliver this,

allowing customers to open accounts, manage finances, and make transactions from anywhere.

- ✱ **Speed and transparency:** Unlike the cumbersome paperwork and long queues often associated with traditional banks, FinTechs offer instant account setup and transparent processes. This aligns with the expectations of younger consumers for fast, efficient services.
- ✱ **User-centric design:** Many neobanks are built to be intuitive and user-friendly, providing modern features like personalized expense insights and budgeting tools that resonate with digitally native users.

Low fees and affordability: Many FinTech services appeal to price-conscious young people by offering low or zero-fee accounts and other cost benefits.

- ✱ **Innovation over legacy:** For younger consumers, trust is built through convenience and innovation rather than a long-established institutional history. As a result, the legacy reputation of traditional banks holds little appeal compared to the agility and personalized features of modern FinTechs.

Challenges and the future outlook:

While FinTech offers clear benefits, the branchless model in India also faces challenges:

- ✱ **Cybersecurity:** The shift to digital transactions increases vulnerability to cyberattacks, data breaches, and fraud, necessitating robust security measures.
- ✱ **Regulatory hurdles:** The rapid pace of FinTech innovation can outpace regulatory frameworks. In India, for instance, fully independent digital banks are not yet permitted by the RBI, requiring neobanks to partner with traditional banks.

Digital literacy and trust: In rural areas, low digital literacy and a lack of trust in digital transactions remain significant obstacles to adoption.

- ✱ **Service limitations:** Currently, many neobanks have limited offerings compared to traditional banks and rely on partnerships for features like large transactions and loans.



Ultimately, the future points toward increased collaboration between FinTechs and traditional banks, with FinTechs driving innovation and traditional banks providing regulatory backing and infrastructure. This hybrid approach

will likely accelerate financial inclusion while reducing costs and delivering a superior digital experience for India's young and tech-savvy population.



Chapter 8

Electricity Costs



Contents:

1. *Electricity / Lighting Costs in Banks.*
2. *Rent, Taxes and Lighting (Electricity).*
3. *Specimen of Cost Sheet.*
4. *'Model Cost Sheet' for Electricity Expenses.*
5. *Cost Sheet.*
6. *Energy Audit.*
7. *Cost Control Devices of Electricity (Sensors).*
8. *Control Electricity Costs 'EaaS Model'.*
9. *Efficiency Ratio.*
10. *EaaS Model.*
11. *To Sum Up.*
- Role of CMA in Controlling Electricity Costs of Banks-Annexure I.*
- Model Cost Sheets for Controllable Electricity Costs-Annexure II.*
- Face-lifting of Bank Branches impact on 'Electricity Costs'-Annexure III.*
- Alternatives for 'Standby Diesel Generators and UPS System' at Branches-Annexure IV.*
- References.*

Electricity is one of the fastest-growing expenses due to AC Intensive Branches and Central Processing Centers. This Chapter covers:

- ✱ **Importance of Energy Audits.**
- ✱ **"Energy-as-a-Service" (EaaS) Model.**
- ✱ **Role of CMAs in Controlling Power Costs.**

Strategies were based on Visits to Branches, Central Processing Centres, and Zonal Offices.



Electricity Costs

Indian Commercial Banks are experiencing increased electricity costs, primarily due to the energy consumed by air conditioning systems in their branches, administrative offices, ATM / CDM sites, and Central Processing Centers for Retail Loans, SME Loans, Trade Finance, Cheque Clearing Centres etc. Factors contributing to this rise

include the expanding scale of operations, increasing demand for climate-controlled environments to ensure operational efficiency and employee / customer comfort, and general increases in electricity tariffs. This growing operational expense is becoming a significant concern for banks' overall sustainability and financial performance, prompting them to explore energy-saving measures and more efficient cooling solutions.

Banks Today face Significant Challenges from Every Direction. The ongoing environment of Low, or even Negative, Interest Rates Continue to Create Intense Margin Pressure and Barriers to Growth. At the same time, increased Competition from Neo Banks and Fintech's Continue to Nibble away at the Edges of the Traditional Banking Business. Consumer Preferences and Expectations are Endlessly shifting and rising as New and Incumbent Digital Innovators redefine how services are Presented and Delivered.

In this Challenging Environment, Cost Management remains a Strong Imperative for the entire 'Global Banking Industry'. Across the World, Banks adopted different Strategies to reduce the 'IT Costs' and 'Overheads like Electricity' etc. 'Cloud Computing Model' to reduce 'IT Costs' and 'Energy as a Service (EaaS) Model' to reduce 'Electricity / Lighting Costs' are the few examples of 'Cost Reduction Tools / Strategies'.

Reasons for increase in Electricity Costs:

- ✱ **High Energy Consumption:** Banks have numerous locations, including numerous bank branches, administrative buildings, data centers, and ATM kiosks, all requiring significant energy for air conditioning.
- ✱ **Increased Demand for Comfort:** To ensure a comfortable environment for employees and customers, and to protect sensitive equipment like servers and ATMs, air conditioning is a necessity in a tropical country like India, leading to high energy usage.
- ✱ **Expansion of Operations:** As the banking sector grows, so does the number of locations, further increasing the overall energy footprint and electricity costs.
- ✱ **Rising Energy Tariffs:** The general cost of electricity in India has been on an upward trend, directly impacting the electricity bills of all commercial entities, including banks.

Implications for Banks:

- ✱ **Financial Strain:** Higher electricity costs directly

impact a bank's operating expenses, which can affect profitability.

- ✱ **Sustainability Focus:** Banks are under increasing pressure to adopt more sustainable practices and reduce their carbon footprint.
- ✱ **Operational Efficiency:** Banks are actively looking for ways to improve energy efficiency, such as investing in energy-efficient cooling systems, better insulation, and utilizing renewable energy sources.

a) Electricity / Lighting Costs in Banks:

Among the Operating Expenses incurred by Banks, Rent, Taxes, and Lighting (Electricity) Expenses are classified as Controllable Costs. Within this category, 'Electricity or Lighting' Expenses constitute a Principal Cost.

In efforts to attract a larger clientele to Branch Locations, Automated Teller Machine (ATM) and Cash Deposit Machine sites, as well as Central Processing Centres (for Retail and Micro, Small, and Medium Enterprises loans), Banks are allocating increased resources toward Ambience and Lighting. This investment consequently escalates 'Electricity Costs' due to the establishment of climate-controlled environments across these venues. Additionally, Branches, Administrative Offices, and

Central Processing Centres have installed High-Capacity ‘Diesel Power Generators’ to provide Direct Current in instances of ‘Power Failures,’ among other contingencies.

These initiatives not only exacerbate the ‘Cost of Operations’ but also generate significant Noise and contribute to elevated Carbon Emissions. The installation of Diesel Generators in proximity to or within Branch

Locations occasionally results in substantial ‘Operational Risks’ such as Short Circuits, Fire Hazards, and Ballasting attributed to High Voltage Currents. In light of rising Petrol and Diesel Prices, Operating Costs are inflating significantly on an annual basis, rendering them economically unfeasible as alternatives during power outages.

Rent, Taxes and Lighting (Electricity) (Schedule 16-Operating Expenses-Combined)

Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
01	State Bank of India	5253,17,14	5362,15,52	5702,00,53	6081,83,48	6283,36,09
02	Punjab National Bank	1294,88,88	1286,25,07	1317,88,96	1325,76,52	1391,73,78
03	Bank of Baroda	1505,92,01	1472,69,66	1568,36,89	1658,74,23	1819,39,22
04	Canara Bank	1120,14,79	1126,62,63	1108,91,83	1173,55,16	1084,84,88
05	Union Bank of India	1103,80,72	1070,67,32	1067,74,13	1090,25,46	1180,00,83
06	Bank of India	751,82,29	786,88,53	853,57,70	924,25,71	990,07,45
07	Indian Bank	602,83,47	613,74,14	620,98,45	635,64,07	674,34,25
08	Bank of Maharashtra	218,23,32	228,08,53	248,22,82	280,41,93	326,63,73
09	Central Bank of India	494,08,07	481,75,19	527,07,66	595,67,28	671,10,27
10	UCO Bank	256,77,43	267,52,62	293,91,46	332,18,16	434,92,41
11	Indian Overseas Bank	417,64,42	445,39,59	492,71,53	528,16,92	558,84,23
12	Punjab & Sind Bank	139,69,01	120,80,20	136,72,62	139,23,76	146,90,47

(Source: Annual Reports)

Electricity Costs are ‘Controllable Cost’:

To control electricity and air conditioning costs, Banks should conduct an Energy Audit, upgrade to energy-efficient systems like LED lighting and modern HVAC units, improve building insulation and sealing, implement smart controls and automation, perform regular maintenance on all equipment, and encourage employee behavioural changes such as turning off lights and equipment when not in use. Exploring on-site renewable energy generation and reviewing energy invoices can also yield significant long-term savings.

- ✳ **Perform an Energy Audit:** To understand how energy is used and identify specific areas for improvement. Monitor energy consumption: to find inefficiencies and opportunities for cost reduction. Validate energy

invoices: to ensure accuracy and uncover potential billing errors.

- ✳ **System Upgrades & Maintenance:** Invest in high-efficiency AC systems and LED lighting. LED lights can use up to 75% less energy than traditional bulbs. Improve building insulation and seal air leaks: around windows and doors to prevent conditioned air from escaping. Implement a preventive maintenance program: for HVAC systems to ensure they run efficiently and to prolong their lifespan.
- ✳ **Install Smart Thermostats and Automated Controls:** To regulate temperatures and turn systems off when rooms are unoccupied.
- ✳ **Use Motion and Presence Sensors:** to automatically



shut off lights and HVAC in empty areas, reducing wasted energy.

- ✱ **Optimize Airflow and Ventilation:** To enhance AC performance and minimize energy waste.
- ✱ **Educate Employees:** On energy-saving practices, such as turning off lights, unplugging chargers, and closing office doors.
- ✱ **Encourage the Use of Natural Light:** To reduce reliance on artificial lighting. Promote energy-efficient operations, such as running heavy equipment during off-peak hours.
- ✱ **Renewable Energy & Incentives:** Consider generating renewable energy on-site, such as installing solar panels, to lower energy bills. Explore available incentives, like government grants and tax breaks, for adopting energy-efficient technologies and practices.

b) Specimen of Cost Sheet:

A Cost Sheet for Controlling Business electricity expenses should track consumption by area / equipment, include both fixed (e.g., base charges) and variable (usage-based) components, detail energy-saving initiatives and their costs, and provide a comparative analysis against previous

periods or budgets to identify areas for improvement. The sheet can be structured to list different types of electricity costs (e.g., fixed monthly charges, variable consumption charges, demand charges), followed by data on energy usage and savings, and finally, the total cost for the period.

‘Model Cost Sheet’ for Electricity Expenses

In Banks, the high level of consumption of electricity is happening at Branches, Administrative Offices (Like Regional Offices, Zonal Offices, Head / Central Office), ATM Sites (Both on-site and off-site), Central Processing Centre, IT Hubs / Disaster IT Servers Locations, Bank permanent Staff Quarters for Officials, Call Centres etc.)

Electrical Installation Details:

- a) Sanctioned Load.
- b) Average Used Load.
- c) Average Power Factor.
- d) Peak Load.
- e) Connected Load.
- f) Total Tonnage of Air conditioners at Branch / Administrative Offices etc.
- g) Capacity & Make of UPS.
- h) Capacity & Make of DG Set.
- i) Details of ACs which are more than 10 Years Old (Type, Tonnage and Quantity).

Cost Sheet

Sl. No.	Elements of Cost	Last Month	Current Month	Reasons for Difference
1	Monthly Electricity Bill Charged either by State Government Electricity Board / Service Provider.			
	Monthly Electrical Installation Repair Charges (if any)			
	Depreciation on Electrical Installations.			
	Number of Units Consumed			
2	Solar Pannel Maintenance Cost (Where Top Roofs of the Branches / Administrative Offices / ATM Sites etc. covered with Solar Panels)			
	Power Generated (Units) through Solar Panels (In Units)			
	Depreciation on Solar Installations.			

Sl. No.	Elements of Cost	Last Month	Current Month	Reasons for Difference
3	DG Set Hiring Charges (Per Month)			
	Diesel Consumption per month for DG Set			
4	Number of Hours 'Power Cut' during the Month.			
5	List of Major Equipment and Devices.			
a) Based on the historical data pertaining to electricity expenditures within the branch, the regional office of the branches is required to finalize the "Electricity Cost Budget" on an annual basis. b) Incentivize the branch managers who effectively minimize the 'energy costs' in relation to the budget allocated to them. c) The branch managers and administrative offices that identify and rectify 'power leakages' periodically must communicate these findings to their controllers, who will subsequently relay the information to others. Consequently, the electricity costs for the region, module, or zone will experience a significant reduction.				

The above example details how to construct a Cost Sheet to Monitor and Control Electricity Costs.

i. Fixed Costs (Base Charges):

- ★ **Base Electricity Bill:** The fixed monthly charge from the utility provider.
- ★ **Meter Rental:** Fee for the electricity meter.
- ★ **Fixed Charges for Smart Meter/Energy Management System:** Any ongoing costs for installed energy-saving technologies.

ii. Variable Costs (Usage-Based);

- ★ **Consumption Costs:** Calculated based on the kilowatt-hours (kWh) used, multiplied by the rate per kWh.
- ★ **Peak Demand Charges:** Charges for maximum power demand during a billing period.
- ★ **Time-of-Use (TOU) Rates:** Higher rates during peak demand hours, lower rates during off-peak hours.
- ★ **Special Equipment Costs:** Electricity consumed by specialized equipment, if significant enough to track separately.

iii. Energy Saving Initiatives:

- ★ **Initiative Cost:** Cost of implementing energy-saving projects (e.g., upgrading lighting to LEDs, installing

smart thermostats).

- ★ **Estimated Savings:** Projected or actual reduction in electricity bills due to the initiative.

- ★ **Net Cost/Benefit:** The total cost of the initiative versus the savings achieved.

iv. Total Electricity Cost:

- ★ **Total Cost for the Period:** Sum of all fixed, variable, and net initiative costs for the current period.
- ★ **Average Cost per Unit:** Total electricity cost divided by total kWh consumed.
- ★ **Budgeted vs. Actual:** Comparison of the current period's costs against the established budget.

v. How to Use This Cost Sheet for Control?

- ★ **Monitor Regularly:** Track these costs at least monthly to identify trends.
- ★ **Compare and Analyse:** Use past cost sheets and budgets to pinpoint significant increases or decreases in costs.
- ★ **Implement Changes:** Use the data to make informed decisions about energy-saving initiatives, such as investing in energy-efficient equipment or modifying operational hours.



- ✳ **Track Progress:** Evaluate the effectiveness of implemented changes by observing their impact on the cost sheet.
- ✳ **Set Budgets:** Use previous data to forecast future electricity expenses and set realistic budgets, helping to prevent overspending.

c) Energy Audit:

An Energy Audit in Bank Branches and Administrative Offices is a comprehensive assessment that identifies where and how energy is consumed, making it an effective method to control electricity and air conditioning costs. By pinpointing areas of energy waste and inefficiency, audits provide actionable recommendations for operational changes and energy-saving technologies, leading to reduced energy bills and improved overall energy management.

i. Control of Electricity Costs through 'Energy Audit':

- ✳ **Identifies Energy Waste:** The audit examines all aspects of energy consumption, including lighting, HVAC systems, office equipment, and building insulation, to find areas where energy is being wasted or used inefficiently.
- ✳ **Pinpoints Inefficiencies:** It highlights issues such as poorly maintained air conditioning units, inefficient lighting, or outdated equipment that are contributing to high energy costs.
- ✳ **Provides Actionable Recommendations:** Based on the findings, the audit suggests specific, cost-effective solutions to improve energy efficiency. These can include: Implementing energy-saving technologies. Making operational changes to reduce consumption. Upgrading equipment, such as HVAC systems or lighting.
- ✳ **Establishes Energy Benchmarks:** An energy audit provides a reference point for managing future energy use, allowing banks to set goals and track progress in reducing their energy consumption over time.
- ✳ **Reduces Operating Costs:** By reducing overall energy usage, the audit directly lowers operating expenses, leading to significant cost savings for the bank.

ii. Components of an Energy Audit:

- ✳ **Energy Accounting and Bill Auditing:** Analysing energy bills to understand historical usage patterns, peak demand, and rate schedules to identify cost-saving opportunities.
- ✳ **Equipment and System Assessment:** Evaluating the performance of electrical equipment, including motors, fans, pumps, and the entire HVAC system.
- ✳ **Building Envelope Examination:** Checking factors like insulation and air leaks, which can significantly impact energy consumption for heating and cooling.
- ✳ **Lighting System Evaluation:** Assessing the efficiency of lighting systems and identifying opportunities for upgrades or adjustments.

iii. Details for Energy Audit Report:

The objective of Energy Audit is to review the condition of existing electrical installation and to recommend measures for further strengthening the system to Eliminate / Reduce the Electrical Wastages / Hazards and to Control the Energy Cost.

- ✓ Total Power Load Sanction, available to Branch from the concerned Electricity Supplier.
- ✓ Total connected Load of the Premises.
- ✓ Existing Maximum Power Demand of the Premises.
- ✓ Whether Enhancement / reduction of Power Load is required?
- ✓ Whether the Existing Energy Meter is adequate to Cater to the Existing Maximum Demand. If not, what is the enhancement required?
- ✓ Whether the Existing main MCB is adequate to Cater to the Total connected load of the premises. If not, what is the enhancement required?
- ✓ Whether resistance of the earth electrode is measure?
- ✓ What is the Value if measured. Within the Value is tolerable Limit. Whether Additional Work is required?
- ✓ Whether all the MCB's were checked for adequacy of capacity and loose connection.
- ✓ Whether all cables and wires are checked for its adequate rating and loose connection.
- ✓ Whether the UPS and its Battery Bank is safely placed away from inflammable materials.
- ✓ Whether adequate capacity contractor is used for timers used in the changeover of Air Conditioners and for Signage Boards to make auto ON / OFF.
- ✓ Whether all the Panel Boards and Distribution Boards were opened and checked for overheating, loose contact, blackening etc.



- ✓ Whether lightening arrestor is provided for the building in which the branch is located.
 - ✓ Whether water seepage is observed near any of the electrical equipment and wirings.
 - ✓ Whether Energy Saving measures were adopted or any further scope is available.
 - ✓ Whether provision is there in such a way that entire Electrical System which is not in use at night can be isolated by means of an isolator / industrial socket.
 - ✓ Whether Three Phase Power Supply is available and loan balance is maintained?
 - ✓ Whether all electrical equipment's and gadgets have got isolation facility.
 - ✓ Whether jointing of wires / cables exist.
 - ✓ Whether any loose contact is observed in any of the plug and sockets. If yes specify the locations.
 - ✓ Whether any extension box is used in the premises. If used whether the same advised to change the same immediately.
 - ✓ Whether the wiring materials, MCB etc., used is of Standard Quality (ISI) marked.
 - ✓ Whether ELCB is provided in the premises.
 - ✓ Whether all Switch Gears such as MCB, ELCB, and SFU etc are tested for its functionality.
 - ✓ Whether adequate number of 'Smoke and Heat Detectors' are in place and also whether they are in working condition.
 - ✓ Whether Access Control Door is intact.
 - ✓ Whether any unauthorized tapping of Electrical connection observed in the Bank Branch premises.
 - ✓ Whether any penalty is levied by the utility on electricity bill.
 - ✓ Age of Electrical wiring in Years.
 - ✓ Whether Master Control switch placed in the Branch or not? (To shut-off the Complete Electricity System of the Branch / Office).
- ✓ *Walk-through Audits*: Initial evaluations of energy consumption.
 - ✓ *Detailed Audits*: Exhaustive analyses of energy consumption and prospective savings opportunities.
 - ✓ *Investment-grade Audits*: In-depth financial assessment of prospective energy-saving interventions.

Energy Audits generally entail a meticulous evaluation of:

- ✓ Lighting Systems.
- ✓ Heating, Ventilation, and Air Conditioning (HVAC) Systems.
- ✓ Building Envelope and Thermal Insulation.
- ✓ Energy Management Systems.

Auditors scrutinize the energy invoices of the building and conduct discussions with facility managers and occupants to attain a holistic understanding of energy consumption patterns. The resultant findings are employed to formulate an energy management strategy that delineates specific recommendations aimed at enhancing energy efficiency and curtailing energy expenses. An energy audit serves as an indispensable instrument for discerning opportunities to mitigate energy consumption, decrease operational costs, and lessen environmental repercussions.

It furnishes invaluable insights for organizations endeavouring to optimize their energy utilization and implement sustainable practices.

v. Significance of Energy Audits in Sustainable Development:

Enhancing Energy Efficiency and Mitigating Emissions: Energy audits facilitate sustainable development by advocating for the adoption of energy-efficient technologies and methodologies. By uncovering opportunities to enhance energy efficiency and decrease energy costs, energy audits promote the execution of energy-saving strategies such as upgrading lighting systems, optimizing HVAC systems, and enhancing insulation. These initiatives not only lower energy consumption and operational expenses but also contribute to the diminishment of greenhouse gas emissions and environmental degradation.

Elevating Awareness and Cultivating a Culture of

iv. Energy Audit is a Methodical Procedure:

An energy audit represents a methodical procedure aimed at the assessment and analysis of the energy consumption and efficiency of a structure, facility, or industrial operation. The fundamental objective is to pinpoint avenues for energy conservation, financial savings, and ecological sustainability. Certified experts execute these audits by examining energy consumption trends, the efficiency of equipment, and the integrity of the building envelope to offer recommendations for enhancing energy efficiency and diminishing energy expenditures.

There exist three principal categories of Energy Audits:



Sustainability: Energy audits advance sustainable development by cultivating awareness regarding the significance of energy efficiency and ecological sustainability. By emphasizing the potential advantages of energy-saving initiatives and nurturing a culture of energy conservation, energy audits assist in fostering a mindset oriented towards responsible resource management and ecological stewardship.

Indispensable for Sustainable Development: In a brief, energy audits are crucial for fostering sustainable development by enhancing energy efficiency, minimizing environmental impact, and promoting a culture of responsible resource management.

Government Initiatives and Policies to Encourage Energy Audits: The Indian government has instituted a variety of initiatives and policies to advocate for the implementation of energy audits as a strategy for enhancing energy efficiency and diminishing environmental impact. One such initiative is the Perform Achieve Trade (PAT) scheme, which aspires to augment the energy efficiency of significant industrial consumers through obligatory adherence to defined energy consumption targets. Under the PAT scheme, designated consumers are mandated to conduct regular energy audits and adopt cost-effective measures for improving their energy performance.

Moreover, the Bureau of Energy Efficiency (BEE), operating under the auspices of the Ministry of Power, has instituted the Energy Conservation Building Code (ECBC) with the objective of advancing the design and construction of energy-efficient edifices. The ECBC delineates minimum energy performance criteria for newly constructed commercial buildings and furnishes guidelines for the execution of energy audits aimed at identifying potential enhancements in building performance. The BEE further provides certification programs for energy auditors to ascertain that professionals possess the requisite skills and expertise for conducting thorough evaluations of building energy consumption.

In addition, the Indian government has implemented an array of financial incentives and subsidies designed to motivate enterprises and industries to undertake energy audits and adopt energy-efficient practices. Such incentives encompass tax reductions, low-interest financing for the execution of energy conservation initiatives, as well as fiscal assistance for capacity development within the realm of energy management. Overall, governmental initiatives and policies assume a pivotal function in fostering the implementation of energy audits as a mechanism for

enhancing energy efficiency and mitigating environmental repercussions in India.

vi. Future Outlook for Energy Audits in Sustainable Development in India:

The prospective landscape for energy audits in the context of sustainable development within India appears favourable as enterprises, industrial sectors, and governmental entities increasingly acknowledge the significance of advancing energy efficiency and diminishing environmental ramifications. In light of escalating apprehensions regarding climate change and resource depletion, there exists an amplified cognizance concerning the necessity to transition towards a low-carbon economy through judicious resource stewardship. As the understanding of the prospective advantages associated with the execution of energy audits continues to expand, an augmented demand for proficient professionals possessing expertise in conducting thorough evaluations of building energy utilization is anticipated.

This initiative will generate avenues for the enhancement of skills within the domain of energy management via educational programs and certification courses tailored for prospective auditors. Moreover, technological advancements are anticipated to promote the implementation of energy audits by simplifying the processes associated with monitoring and analyzing data related to building performance. The amalgamation of intelligent building technologies and sophisticated analytical tools can equip enterprises with instantaneous insights regarding their energy consumption patterns and performance indicators.

This will empower enterprises to make knowledgeable determinations regarding the implementation of economically viable strategies for enhancing their operational efficacy. Initiatives spearheaded by governmental bodies aimed at fostering the uptake of energy audits are anticipated to catalyse growth within this domain by offering financial incentives, subsidies, and regulatory frameworks that facilitate adherence to defined objectives. Through the provision of incentives for enterprises to undertake periodic audits and execute the suggested interventions, governmental entities can expedite advancements toward fulfilling national objectives related to augmenting energy efficiency and mitigating environmental repercussions.

Overall, the prospective landscape for energy audits within the context of sustainable development in India appears



auspicious, as corporations, sectors, and government institutions progressively acknowledge the criticality of enhancing resource management methodologies. By confronting challenges such as gaps in awareness, limited access to qualified personnel, financial limitations, and technical obstacles, India can unveil substantial prospects for augmenting its overall resource efficiency through the extensive adoption of thorough evaluations via regular audits.

vii. Cost Control Devices of Electricity (Sensors):

Installing Sensors, such as occupancy sensors and light sensors, in bank branches and administrative offices can significantly reduce electricity costs by automating lighting and HVAC systems. By detecting occupancy and daylight levels, these sensors ensure that lights are only on when needed, and heating, ventilation, and air conditioning (HVAC) systems are adjusted for unoccupied spaces, preventing energy waste.

i. Sensors Reduce Electricity Costs:

- ✓ **Automated Lighting Control:** Occupancy sensors detect movement and can turn lights off in empty rooms or zones, preventing unnecessary energy use in areas that are not occupied.
- ✓ **Daylight Harvesting:** Light sensors can dim or turn off artificial lights when sufficient natural daylight is available, reducing the need for electricity for lighting.
- ✓ **HVAC Optimization:** Sensors provide data on room usage, which can be used to adjust heating, cooling, and ventilation for unoccupied spaces, leading to substantial energy savings.
- ✓ **Integration with Building Management Systems (BMS):** Data from various sensors can be fed into a BMS, allowing for more sophisticated control and optimization of energy systems throughout the building.

ii. Benefits beyond Cost Reduction:

- ✓ **Enhanced Operational Efficiency:** Sensors provide data that helps in managing and optimizing building operations.
- ✓ **Improved Environmental Performance:** Reducing energy consumption contributes to a lower carbon footprint.

- ✓ **Increased Comfort:** By adjusting climate controls based on occupancy, sensors can help maintain optimal comfort levels for employees and customers.

- ✓ **Examples of Sensor Applications:** Axis Bank has installed motion sensors in common areas and workstations to control LED lighting, in addition to using temperature and humidity sensors in its data centers to enhance cooling efficiency. Banks are increasingly using sensors to monitor energy usage, reduce costs, and achieve their sustainability goals by optimizing building performance.

c) Control Electricity Costs 'EaaS Model'

- ✓ Banks constitute a category of commercial edifices characterized by high energy consumption, necessitating substantial electricity and heating resources for operational efficacy, security measures, and the comfort of clientele. The mitigation of energy consumption within a banking institution not only diminishes its environmental footprint but also generates financial savings and enhances the institution's public image. Among the most efficacious strategies for reducing energy consumption in a banking context are interventions ranging from fundamental behavioural modifications to sophisticated technological implementations.
- ✓ **Assess Energy Use:** The initial phase in the endeavour to curtail energy consumption within a banking institution involves a comprehensive understanding of the quantity and specific areas of energy utilization. Banks may undertake an energy audit or employ smart metering technology to quantify and monitor energy consumption across various sectors and operational activities. This analytical approach facilitates the identification of wasteful practices and inefficiencies, thereby allowing for the prioritization of areas where improvements can be enacted. Furthermore, banks can benchmark their energy consumption against analogous institutions or industry standards to evaluate their performance relative to peers.

- ✓ **Implement Energy-saving Policies:** The subsequent step towards reducing energy consumption within a banking institution is the establishment of policies and practices that foster energy-conserving behaviours among employees and patrons. For instance, banks may create a 'green team' dedicated to enhancing awareness and engagement, furnish training and incentives to encourage staff adoption of energy-



efficient practices, and effectively communicate institutional goals and accomplishments to clientele. Additionally, banks can modify operational hours and schedules to optimize energy utilization and mitigate peak demand charges.

✓ **Upgrade Lighting System:** The tertiary step in the pursuit of reduced energy consumption within a banking institution involves the modernization of the lighting system to incorporate more energy-efficient alternatives. Lighting represents a substantial fraction of energy expenditure in banking environments, particularly in areas necessitating elevated illumination levels for both operational and security purposes. Banks may transition to LED or CFL lighting solutions, which consume less energy and possess a longer lifespan compared to traditional incandescent or halogen bulbs. Moreover, the installation of sensors, timers, or dimmers can facilitate the regulation of lighting levels and durations in accordance with occupancy and natural daylight availability.

✓ **Optimize HVAC System:** The fourth step aimed at diminishing energy consumption within a banking institution entails the optimization of the heating, ventilation, and air conditioning (HVAC) system, which is a significant contributor to energy usage and associated costs. Banks can enhance the efficiency and operational performance of their HVAC systems by replacing outdated or malfunctioning equipment, installing programmable thermostats, sealing ducts and windows, and adhering to regular maintenance protocols. Additionally, banks can adjust temperature and humidity settings to align with the comfort and health needs of both employees and customers, thereby preventing instances of overcooling or overheating.

✓ **Invest in Renewable Energy Sources:** The fifth measure to diminish energy consumption within a banking institution entails the investment in renewable energy sources, including but not limited to solar, wind, or biomass, for the autonomous generation of electricity or thermal energy. This strategic approach can mitigate reliance on the electrical grid, reduce the carbon footprint, and yield financial savings over an extended period. Financial institutions may consider the installation of solar panels on rooftops, wind turbines on their premises, or biomass boilers in their basements, contingent upon the availability and appropriateness of the respective resources. Additionally, banks have the potential to sell any surplus energy back to the grid or utilize it to energize

other operational facilities.

✓ **Use Smart Technologies:** The sixth strategy to curtail energy consumption within a bank involves the implementation of smart technologies that facilitate the automation, monitoring, and optimization of energy utilization and management. For instance, banking institutions may deploy smart devices, such as plugs, switches, or appliances, which are capable of remote control or responsive action to commands or signals. Furthermore, banks can leverage intelligent software solutions, including energy management systems, artificial intelligence, or blockchain technology, that possess the capability to analyse energy data, deliver insights and recommendations, and enable secure transactions and verification processes.

i. Energy as a Service (EaaS):

Banks in contemporary society encounter formidable challenges emanating from various fronts. The persistent milieu characterized by diminished, or at times negative, interest rates continue to exert considerable pressure on profit margins and presents obstacles to growth. Concurrently, the escalating competition posed by neobanks and fintech enterprises progressively erodes the foundational aspects of traditional banking operations. Consumer inclinations and anticipations are perpetually evolving, as both novel and established digital innovators redefine the modalities through which services are presented and delivered.

In this arduous landscape, the imperative of cost management remains paramount for the entirety of the global banking sector. Globally, banks have implemented diverse strategies aimed at curtailing information technology expenditures and overhead costs, such as those associated with electricity consumption. The adoption of cloud computing models to minimize IT expenses and the implementation of Energy as a Service (EaaS) frameworks to mitigate electricity and lighting costs stand as illustrative examples of cost reduction methodologies.

✱ Reconceptualizing Energy from a mere 'Cost' to a Strategic Opportunity:

Cost reduction initiatives are notably prominent within the banking sector. Recent surveys conducted within this sector reveal that 72 percent of the participating banks intend to engage in cost reduction initiatives to enhance their profit margins. The banking sector consistently prioritizes cost management, with many institutions achieving

commendable levels of operational efficiency. However, despite their continuous endeavours, a significant number still attain only average performance metrics. A majority of banks maintain optimistic projections regarding revenue growth, with many employing cost reduction strategies as a mechanism to bolster their bottom line (i.e., profitability).

The sustainability of any business, including banking, is contingent upon its ability to generate profits. Although banking is frequently regarded as the lifeblood of any nation's economy, ensuring a reasonable return on capital investments and maintaining service to the economy necessitates the profitability of banking institutions. To sustain profitability, the imperative for the banking sector is the 'efficient and effective management of costs' across all operational dimensions.

✱ Non-Interest Expenses:

A non-interest expense constitutes an operational expenditure incurred by banks, distinct from the interest expenses associated with customer deposits. This category encompasses the bank's operating and overhead expenditures, including the operational and maintenance costs for branches, head offices, and zonal offices, as well as IT costs, electricity, rent, stationery, insurance, and postage. Generally, non-interest expenses are integral to the daily operations of a banking institution; consequently, it is essential for banks to maintain their operational costs at an optimal level to maximize profitability. If operational costs are inadequately managed, they will have a direct and adverse impact on profits.

A financial institution characterized by diminished Operating Costs benefits from 'Economies of Scale' in the banking sector, as it can allocate Operating Costs across substantial revenue streams. Given that Non-interest Expenses represent a significant fraction of a Bank's total expenditures, they are classified as Bank Overheads and utilized in the computation of the Overhead Ratio. A Low Overhead Ratio is deemed advantageous as it indicates that the Bank experiences Reduced Operating Costs. Conversely, when a Bank consistently reports a High Overhead Ratio over an extended duration, it signifies the presence of High Operating Costs, which may adversely influence its reported profitability. Institutions must confront this issue by Strategically Minimizing their IT and Electricity Costs, as these factors predominantly contribute to Non-interest Expenses.

✱ Bank Efficiency Ratio:

The Bank Efficiency Ratio serves as a financial metric

employed to assess the operational performance of a Bank. It represents the proportion of Non-interest Expense relative to the Net Operating Revenue. The calculation for the Bank Efficiency Ratio is articulated as follows:

$$\text{Efficiency Ratio} = \frac{\text{Non-Interest Expense}}{\text{Net Interest Income} + \text{Non-Interest Income}}$$

An elevated Efficiency Ratio suggests that the Bank is confronted with Higher Operating Costs, which can have a direct detrimental impact on the net profit margin.

ii. Energy as a Service (EaaS) Model – 'Electricity Cost Control' Tool:

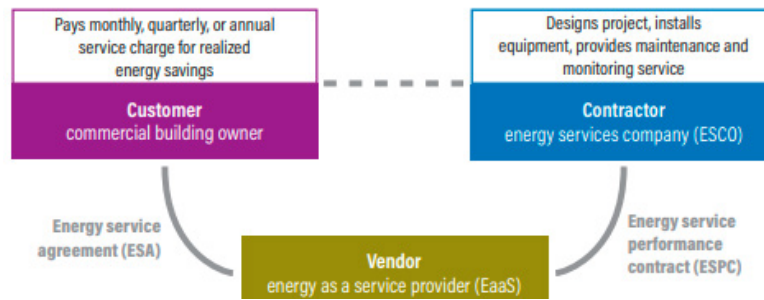
The Energy as a Service (EaaS) framework represents an innovative Business Model that supplants the traditional concept of "Energy as a Commodity" through the outsourcing of Energy Management. In this contemporary paradigm, Energy Suppliers furnish 'Corporate and Residential' Customers with Energy and ancillary Services such as Consulting, Systems Installation, and Usage Monitoring Software on a Subscription Basis, thereby alleviating Customers from the necessity of incurring any Upfront Capital Expenditure.

The transition towards the "Energy as a Service" Model is being facilitated by four dominant trends:

- ✱ Decarbonization.
- ✱ Reduction in Energy Costs.
- ✱ Electrification.
- ✱ Urbanization and
- ✱ Digitalization.

This model indeed serves as a solution through the integration of smart technologies, thereby fostering the adoption of advanced, low-carbon technologies. For instance, the model endorses the uptake of photovoltaic energy, as consumers are not obligated to procure the panels, which are included as part of the subscription offered by the energy provider. Furthermore, EaaS providers undertake the maintenance and monitoring of the energy supply, contributing to a reduction in customers' operating costs and enhancing their profitability. The model also presents advantages for electricity service suppliers, as it facilitates predictable and stable revenue streams.

EaaS Model



The EaaS provider delineates the scope of the project in accordance with the Customer's Requirements and enters into an Energy Services Agreement (ESA) for a Contracted Period to encompass Costs and Repayment of Services. Additionally, the provider formalizes an Energy Service Performance Contract (ESPC) with a Contractor or an Energy Service Company (ESCO) to Install the Energy measure, ensure Long-term Maintenance, and Guarantee Performance throughout the duration of the agreement. Typically, the ESCO Guarantees only a segment of the Expected Savings, while the EaaS provider assumes the Risk of actualizing the total anticipated savings.

The EaaS model generally transfers the responsibilities of financing, ownership, installation, and management of the performance of an energy asset from the customer to the service provider. Prior to the installation of an energy-saving measure, the provider conducts or coordinates preliminary and comprehensive energy assessments to identify potential savings opportunities. Upon finalization of the project scope and completion of construction, a measurement and verification (M&V) analysis is conducted to ascertain the actual savings. The customer is liable for a service fee, typically calculated based on the units of energy saved (commonly referred to as negawatts). The payment structure can be either a percentage of the customer's utility rate or a fixed amount per kilowatt-hour (kWh) saved. In any scenario, the customer's financial obligations are maintained below its existing utility rate. The provider guarantees a specified level of energy savings and modifies payments if such savings are not achieved. At the conclusion of the contract period (generally ranging from 5 to 15 Years), the Customer may acquire the equipment at Fair Market Value, request its removal by the provider, or opt to extend the contract.

The Model Provides Substantial Advantages to Clients, such as Intelligent Metering and Regular Billing instead

of Billing based on Kilowatt-Hours, which encompass:

- ✱ **Diminished Expenses.**
- ✱ **Enhanced Operational Quality.**
- ✱ **Increased Financial and Environmental Sustainability.**
- ✱ **Augmented Risk Management.**
- ✱ **Heightened Transparency.**

In a Complex Operating Landscape, Financial Institutions must promptly decrease their cost structure and prioritize liberating capital to invest in prospective growth, all while upholding service quality and competitive edge. Cost-reduction initiatives that have proven effective historically may not necessarily yield sustained success. Financial Institutions that recalibrate their Cost structure and reimagine Operating Models are optimally situated to enhance Profitability over the Long term.

EaaS assists commercial building clients with constrained access to capital in realizing greater energy and Operations & Maintenance savings. It mitigates operational and performance risks by abolishing customer ownership of equipment, ensuring energy savings, and linking service payments to performance outcomes. Despite these advantages, customer inertia, building limitations, utility program design, and insufficient stakeholder awareness present obstacles to acquiring energy as a service.

To Sum Up:

Indeed, controlling rising electricity costs is a critical focus for the banking sector, as air-conditioned environments in branches, offices, and ATM rooms drive significant overhead expenses. To address this, banks can implement energy management strategies by investing in energy-



efficient equipment, optimizing HVAC systems, utilizing renewable energy sources, and installing smart building technologies for better monitoring and control.

Strategies for Controlling Electricity Costs:

- ✳ **Invest in Energy-Efficient Equipment:** Replace old, inefficient air conditioning units with modern, high-efficiency models. Upgrade to LED lighting fixtures, which consume less power than traditional bulbs, and install smart lighting controls for further savings.
- ✳ **Optimize HVAC Systems:** Implement a regular maintenance schedule for air conditioning units to ensure they operate at peak efficiency. Use smart thermostats and building management systems (BMS) to precisely control temperatures, avoiding unnecessary cooling when spaces are not in use. Consider energy audits to identify specific areas of inefficiency within HVAC systems.
- ✳ **Utilize Renewable Energy Sources:** Install rooftop solar photovoltaic (PV) systems to generate clean, cost-effective electricity for banking facilities, reducing reliance on the grid.
- ✳ **Implement Smart Building Technologies:** Deploy sensors and Internet of Things (IoT) devices to monitor real-time energy consumption across different zones.

Use energy management software to analyse data, identify waste, and automatically adjust building systems to minimize energy use.

- ✳ **Promote Energy Conservation Culture:** Educate staff on simple energy-saving practices, such as turning off lights and equipment when not in use. Set energy efficiency targets for branches and provide incentives for meeting them.

By adopting a multi-faceted approach that combines technology, infrastructure upgrades, and behavioural changes, banks can effectively manage and reduce their significant electricity overhead costs.

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Annexure I

Role of CMA in Controlling Electricity Costs of Banks

A Cost and Management Accountant (CMA) plays a critical role in controlling electricity costs across an Indian commercial bank's extensive infrastructure by providing the financial analysis necessary for effective management. Instead of merely recording these utility expenses, the CMA's role is to track, analyse, and interpret the data to inform strategic, cost-saving decisions.

The CMA's functions encompass several areas of expertise:

Measurement and reporting:

- ✳ **Establish cost centers:** The CMA classifies the electricity consumption of different locations—branches, administrative offices, data centers, ATMs, etc.—into distinct cost centers. This allows for granular tracking and analysis of energy expenses for each functional unit.
- ✳ **Implement monitoring systems:** They help deploy and interpret data from advanced energy management systems (EMS) and smart meters. This provides real-time data on electricity consumption, revealing usage patterns and identifying potential inefficiencies.
- ✳ **Develop key performance indicators (KPIs):** The CMA helps management create KPIs, such as Power Usage Effectiveness (PUE) for data centers, to measure energy efficiency. This benchmarking helps evaluate performance against industry standards and internal goals.
- ✳ **Prepare cost reports:** Periodic reports are generated to show the actual electricity costs versus the budgeted figures. The CMA interprets these reports for management, highlighting key variances and their root causes.

Analysis and control:

- ✳ **Conduct variance analysis:** By comparing actual consumption against a standard or budgeted consumption, the CMA identifies and investigates the reasons for any discrepancies. This could reveal issues like malfunctioning equipment or procedural lapses.
- ✳ **Perform energy audits:** Working with technical experts, the CMA conducts financial and cost-benefit analysis for energy audits. This evaluates the financial viability of energy-saving measures, estimates potential savings, and calculates the payback

period for new investments.

- ✳ **Identify cost drivers:** CMAs break down electricity costs to identify the main drivers, such as peak-hour consumption, inefficient HVAC systems, or outdated IT equipment. This analysis guides targeted corrective actions.
- ✳ **Assess new initiatives:** When considering investments in new, energy-efficient technology—like LED lighting, server virtualization, or liquid cooling systems for data centers—the CMA provides financial modelling and ROI calculations to support the decision-making process.

Strategic decision support:

- ✳ **Support management decisions:** By providing data-driven analysis, the CMA helps management make informed decisions on capital expenditure for new infrastructure or technology upgrades.
- ✳ **Contribute to sustainability:** CMAs assist the bank in aligning its energy cost-reduction goals with broader sustainability and environmental, social, and governance (ESG) objectives. This can involve adopting renewable energy, optimizing IT infrastructure, and reducing overall carbon footprint.
- ✳ **Aid compliance and risk management:** The CMA ensures that the bank complies with India's energy regulations, such as the Energy Conservation Act, 2001, and schemes like Perform, Achieve, and Trade (PAT). This helps the bank mitigate financial risks related to non-compliance.

Recommendations and implementation:

- ✳ **Propose process improvements:** The CMA provides specific recommendations for process enhancements, such as optimizing cooling systems, improving airflow management in data centers, and encouraging behavioural changes among employees.
- ✳ **Advise on tariff optimization:** Using their expertise in financial data, the CMA can advise on strategies to optimize electricity consumption under Time-of-Day (ToD) tariffs, possibly shifting non-critical operations to off-peak hours.
- ✳ **Partner with other teams:** CMAs collaborate with technical teams, IT departments, and facilities management to ensure that cost-saving measures are implemented effectively across all locations.

Annexure II

Model Costs Sheets for Controllable Electricity Costs

Developing model cost sheets for controllable electricity costs in Indian commercial banks requires a structured approach to categorize, measure, and analyse consumption across diverse functions and locations. These models can assist banks in controlling overheads and managing expenses, especially in energy-intensive operations like data centers and ATMs.

The model cost sheets can be adapted for the different functional areas of a bank.

Key components of an electricity cost sheet: A standardized cost sheet should include the following components:

- ✱ **Location and facility details:** Unit-specific information such as branch code, address, and facility type (e.g., branch, ATM, data center).
- ✱ **Billing period:** The specific months and years covered by the report.
- ✱ **Consumption details:** Recording the units of electricity consumed (kWh or units) during the billing period.
- ✱ **Tariff and charges:** Applicable rates per unit, taxes, duties, and fixed charges, as per the tariff schedule of the respective state electricity board or private

distribution company (DISCOM).

- ✱ **Cost breakdown:** Segregating costs into distinct components.
- ✱ **Energy charges:** Variable cost based on units consumed.
- ✱ **Fixed charges:** Charges based on the sanctioned load.
- ✱ **Taxes and duties:** Government levies like electricity duty and Goods and Services Tax (GST).
- ✱ **Other charges:** Fuel and power purchase cost adjustment (FPPCA), late payment charges, etc.
- ✱ **Total cost:** The sum of all components for the billing period.
- ✱ **Benchmark analysis:** Comparison of actual consumption and cost against a standard or budget.
- ✱ **Variance analysis:** Identifying and explaining the difference between actual and standard costs.
- ✱ **Controllable vs. Uncontrollable costs:** Differentiating expenses that can be influenced by management from those that cannot.

Model cost sheet by facility type:

1. Bank branches and administrative offices: This cost sheet tracks a combination of consumption for IT equipment, lighting, and air conditioning.

Particulars	Budgeted Cost (₹)	Actual Cost (₹)	Variance (₹)	Reasons for Variance
i. Consumption Details				
Opening Meter Reading (kWh)				
Closing Meter Reading (kWh)				
Total Units Consumed (kWh)				
II. Cost Components				
Energy Charges (Rate / kWh)				
Fixed Charges (per month)				



Particulars	Budgeted Cost (₹)	Actual Cost (₹)	Variance (₹)	Reasons for Variance
Taxes and Duties				
III. Other Details				
Total Electricity Cost				
Cost per Square Foot				
Cost per Employee (for admin offices)				

2. ATM / CDM centres: ATM and Cash Deposit Machine (CDM) sites have high operating energy costs, mainly due to air conditioning and electronic equipment.

Particulars	Budgeted Cost (₹)	Actual Cost (₹)	Variance (₹)	Reasons for Variance
I. Site Information				
ATM ID				
Site Type (On-site / Off-site)				
II. Consumption Details				
Total Units Consumed (kWh)				
III. Cost Components				
Energy Charges				
Fixed Charges				
Taxes and Duties				
Total Electricity Cost				
IV. Performance Metrics				
Cost per Transaction				
Cost per Unit (kWh)				
Cost per Day				

3. Central processing and cheque processing centres: These larger-scale facilities involve greater energy use for machinery and servers.

Particulars	Budgeted Cost (₹)	Actual Cost (₹)	Variance (₹)	Reasons for Variance
I. Facility Information				
Centre Code				



Particulars	Budgeted Cost (₹)	Actual Cost (₹)	Variance (₹)	Reasons for Variance
I. Area (Square Feet)				
Consumption Details				
Total Units Consumed (kWh)				
II. Cost Components				
Energy Charges (based on HT tariff)				
Fixed Demand Charges				
Taxes and Duties				
Power Factor Surcharge/ Penalty				
Total Electricity Cost				
III. Performance Metrics				
Cost per Item Processed				
Cost per Unit (kWh)				
Cost per Square Foot				

4. Data centres: Data centers are the most energy-intensive facilities, with significant costs from servers and cooling systems.

Particulars	Budgeted Cost	Actual Cost	Variance	Reasons for Variance
I. Facility Information				
Date Centre Name				
II. Energy Usage (Sub-metered)				
IT Load (kWh)				
Cooling Load (kWh)				
Other Utilities (kWh)				
Total Consumption (kWh)				
III. Cost Components				
Energy Charges (based on bulk tariff)				
Fixed Demand Charges				



Particulars	Budgeted Cost	Actual Cost	Variance	Reasons for Variance
Backup Power (Diesel) Cost				
Total Electricity Cost				
IV. Efficiency Metrics				
Power Usage Effectiveness (PUE)				
Cost per kW of IT Load				

5. IT department: This cost sheet tracks general IT infrastructure not housed in a dedicated data center.

Particulars	Budgeted Cost (₹)	Actual Cost (₹)	Variance (₹)	Reasons for Variance
I. Consumption Details				
Total Units Consumed (kWh)				
II. Cost Components				
Allocation from main office bill				
III. Assets and Metrics				
No. of Servers				
No. of Workstations				
Cost per Workstation				

General recommendations for implementation:

- ✳ **Sub-metering:** For large facilities like data centers, install sub-meters to track consumption by function (e.g., IT vs. cooling). This is crucial for accurate cost allocation and management.
- ✳ **Standardization:** Adopt standard cost codes and reporting frequencies to ensure consistency across all bank locations and functions.
- ✳ **Performance indicators:** Use metrics like “Cost per Unit” (kWh), “Cost per Square Foot,” or “Cost per Transaction” to compare efficiency across similar locations and monitor performance over time.

- ✳ **Data collection:** Implement a system for collecting consumption data (e.g., smart meters) and automating reports to improve accuracy and efficiency.
 - ✳ **Cost reduction initiatives:** Use the cost sheets to identify outliers and prioritize energy-saving projects, such as LED lighting, insulation for ATMs, and upgrading to energy-efficient equipment.
 - ✳ **Budgeting:** Use historical data from cost sheets to create realistic budgets and set performance targets for different banking units.
- A comprehensive cost-benefit analysis (CBA) is essential for commercial banks to justify modernizing their branches. While the initial capital expenditure (CapEx)

Annexure III

Face-lifting of Bank Branches impact on ‘Electricity Costs’

and recurring operational expenses (OpEx) for utilities like electricity are significant, the potential benefits in customer satisfaction, operational efficiency, and revenue can offer a substantial return on investment (ROI). The CBA helps determine if the investment is strategic or a financial drain.

Cost-benefit analysis for bank branch modernization:

Costs (CapEx and OpEx):

Capital expenditure (CapEx):

- ★ **Infrastructure and construction:** Costs associated with significant renovations, new construction, or “face-lifting” to create a modern, inviting aesthetic. This can include architectural fees and permits.
- ★ **Technology hardware:** The purchase and installation of new tech gadgets, such as interactive teller machines (ITMs), tablets, digital signage, queue management systems, and advanced security cameras.
- ★ **HVAC systems:** Installation of modern, energy-efficient air conditioning systems and other climate control technologies.
- ★ **Lighting systems:** Installation of full-spectrum, efficient LED lighting systems that are more aesthetically pleasing and can be automated for energy savings.
- ★ **Networking and IT infrastructure:** Upgrading network infrastructure, servers, and other back-end systems to support new technology and ensure robust connectivity.

Operational expenses (OpEx):

- ★ **Increased electricity costs:** Modern features like full lighting and air conditioning will increase energy consumption. However, efficient systems and smart controls can help mitigate this.
- ★ **Higher maintenance costs:** New technology and equipment will require ongoing maintenance, repairs, and technical support.

★ **Staff training:** Investment in training staff to operate new systems and provide enhanced, technology-enabled customer service.

★ **Software licensing and support:** Licensing fees for new software, including core banking updates, queue management, and customer relationship management (CRM) tools.

★ **Cybersecurity measures:** Increased investment in cybersecurity to protect new digital systems and customer data.

Benefits (Tangible and Intangible):

Increased revenue:

- ★ **Higher customer acquisition:** A modern, tech-enabled branch attracts new, often younger, tech-savvy customers. Some studies show a 20-30% increase in customer acquisition rates.
- ★ **Higher customer retention:** Enhanced service and a seamless omnichannel experience can improve customer loyalty and retention by 15-25%.
- ★ **Increased cross-selling:** Staff freed from routine transactions can focus on consultative selling and advising on more complex products, leading to a 10-15% growth in revenue per customer.
- ★ **Expanded service offerings:** Technology like video-enabled kiosks can extend service hours and offerings beyond standard business hours.

Reduced operational costs:

- ★ **Improved operational efficiency:** Automation through AI and technology upgrades can lead to a significant reduction in operational costs. Some banks have seen reductions of up to 20-35%.
- ★ **Reduced staffing costs:** Self-service options handle routine transactions, allowing banks to reallocate staff from teller duties to higher-value roles, reducing the need for traditional teller positions.
- ★ **Optimized physical footprint:** Technology like



Interactive Branch Kiosks (IBKs) can reduce the necessary branch size, leading to lower real estate and rental costs. One IDC study noted a 20% average reduction in branch size.

- ✱ **Lower error rates:** Automated processes reduce manual human errors, minimizing costs associated with corrections and reconciliation.

Enhanced customer experience:

- ✱ **Reduced wait times:** Queue management systems and self-service kiosks can drastically cut customer waiting times, improving satisfaction. Average wait times have been reduced by nearly 50% in some modern branches.
- ✱ **Personalized service:** Staff can use customer analytics to offer tailored recommendations and more personalized interactions, creating a superior customer journey.
- ✱ **Seamless omnichannel experience:** Modernization bridges the gap between digital and physical banking, offering a consistent experience across all channels.
- ✱ **Brand perception:** A sleek, modern branch creates a perception of a forward-thinking, trustworthy, and innovative financial institution.

Strategic and competitive advantage:

- ✱ **Market differentiation:** A modern branch network can

distinguish a bank from its competitors and increase market share.

- ✱ **Data-driven insights:** New technology provides valuable data on customer behavior, allowing for more informed and strategic decision-making.
- ✱ **Increased agility:** Cloud-based and modular technologies offer greater agility, allowing banks to adapt to market changes faster.
- ✱ **ESG alignment:** Energy-efficient building designs and technology can demonstrate a bank's commitment to sustainability, attracting environmentally conscious customers.

Bank branch modernization requires a careful CBA to weigh the significant initial and recurring costs against the substantial, long-term benefits. While aesthetic upgrades and increased utility bills are valid concerns, the strategic value lies in enhancing customer experience, boosting operational efficiency, and increasing revenue. A well-executed modernization project can transform branches from a cost center into a strategic asset, ensuring the bank's competitiveness and growth in an increasingly digital landscape.

Bank branches can reduce electricity costs by adopting several alternatives to diesel generators and optimizing their UPS systems. These strategies include implementing

Annexure IV

Alternatives for ‘Standby Diesel Generators and UPS System’ at Branches

solar power, deploying advanced battery energy storage, and improving overall energy management.

Renewable energy sources:

- ★ **Solar power with battery backup:** For both rural and urban branches, a rooftop solar photovoltaic (PV) system with an integrated battery energy storage system (BESS) can significantly reduce or even eliminate reliance on the grid and diesel generators.
- ★ **Cost savings:** The levelized cost of electricity (LCOE) for solar is substantially lower than for diesel, offering long-term savings.
- ★ **Uninterrupted power:** BESS stores excess solar energy, ensuring a continuous, clean power supply during outages, even at night or on cloudy days.
- ★ **Reduced emissions:** This approach drastically lowers the branch’s carbon footprint and eliminates the noise and air pollution associated with diesel generators.
- ★ **Grid-tied solar with net metering:** In locations with reliable grid connectivity, a bank can install a grid-tied solar system. This allows them to use solar power during the day and sell excess electricity back to the grid for credits, further reducing energy expenses.
- ★ **Hybrid energy systems:** For optimal efficiency, branches can install a hybrid system that intelligently switches between solar power, battery storage, and the grid based on availability and cost. Some advanced systems can even integrate with a smaller, more efficient generator if required for extended outages.

Advanced battery and backup systems:

- ★ **High-efficiency lithium-ion batteries:** Modern lithium-ion batteries are more efficient and have a longer lifespan than traditional lead-acid batteries, offering better performance and lower total cost of ownership. Some systems offer rapid charging and remote monitoring to manage power usage effectively.
- ★ **Energy storage as a service (ESaaS):** Banks can partner with energy companies to install and manage battery systems with no upfront capital investment. The energy provider may offer the service for a fixed monthly fee, guaranteeing a certain uptime and managing all maintenance.

- ★ **Off-grid solutions for critical loads:** In areas with poor grid reliability, an off-grid system using a solar array and BESS can be dedicated solely to critical equipment like servers, CCTV, and essential computers. This ensures vital services remain operational around the clock.

UPS system optimization:

- ★ **Right-sizing UPS systems:** An energy audit can help branches properly size their UPS systems to match the actual load. Many organizations have oversized UPS units, leading to inefficient operation and higher energy consumption.
- ★ **High-efficiency UPS units:** Upgrading to newer, more energy-efficient UPS technology, such as models with 95%+ efficiency ratings, can reduce energy wastage.
- ★ **Managed power cycling:** For non-critical systems, banks can implement managed power schedules to automatically shut down or put equipment into sleep mode during non-business hours. Smart plugs and remote management systems can be used to control “phantom loads” that draw power even when turned off.

Branch-wide energy management:

- ★ **Energy-efficient lighting:** Replacing traditional lighting with LED bulbs can cut lighting energy costs by up to 90%.
- ★ **Efficient IT infrastructure:** Migrating on-premises servers to cloud-based services can reduce the energy required for branch IT infrastructure. This also minimizes the load on UPS systems and backup generators.
- ★ **Building management systems (BMS):** A centralized BMS can automate and optimize energy use for heating, ventilation, air conditioning (HVAC), and lighting based on occupancy and time of day.
- ★ **Employee training and awareness:** Simply training staff on energy-saving practices, such as turning off lights and equipment, can make a significant collective impact on electricity expenditure.



Chapter 9

Rental Costs



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Rent, Taxes and Lighting.

Factors Contribute to determine the Size of the 'Branch Premises'.

2. Rent Policy.

3. Cost-Effective Site Selection.

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Cost-Benefit-Analysis (CBA) of Bank Branch Premises Rent. Annexure I.

How to Develop Cost Sheets to Control Rent of Bank Branches / Administrative Offices. Annexure II.

Role of Cost Accountant in Controlling Rental Costs. Annexure III.

Model Cost Sheet for Bank Property. Annexure IV.

Verification of Rent Costs by the Branch Auditor. Annexure V.

References.

With increased adoption of Digital Banking, the need for Large Physical Branches is reducing. This allows banks to Lower Rental Expenses. The Chapter highlights:

- ✱ *Cost-effective location selection.*
- ✱ *Benefits of smaller digital branches.*
- ✱ *Role of CMAs in optimizing rental decisions.*

Practical insights were drawn from Branch Officials and International Banking Practices.



Rental Costs

To Control Branch Premise / Administrative Offices Rent Overheads, Indian Banks' Boards of Directors must establish comprehensive 'Rental Policy', including operational guidelines for acquiring premises and delegating powers at various levels, ensuring compliance with contractual obligations and non-discriminatory decisions based on metropolitan, urban, semi-urban, or rural locations. Banks should also analyse market rates and transaction volumes to identify cost-effective locations and negotiate lease terms strategically to reduce monthly costs.

Strategies to Control Rent Costs

- ✓ Indian banks have been **Reducing the Size of their Branches** and optimizing their physical presence to control costs like rent and to adapt to declining customer footfalls, driven by increased digital banking and changing consumer behaviour, especially post-COVID-19. Banks are also aiming for better cost-income ratios by moving to smaller spaces in some cases, as digital usage has significantly increased.
- ✓ Locating bank branches in large, **Established Gated Communities** in India could be a viable strategy to boost business and potentially control costs by offering access to a concentrated, high-value customer base and reducing marketing expenses. This location-based strategy provides access to residents who are already invested in a high-quality, secure living environment and are likely to have specific financial needs, such as mortgages and wealth management, that can drive business growth.
- ✓ Banks can Establish Specialized Locker Branches as an effective strategy to target High Net Worth Individuals (HNIs), creating a dedicated environment to cultivate relationships and cross-sell financial products and services to this valuable customer segment. This approach leverages the trust associated with secure locker storage to introduce clients to wealth management, investment opportunities, and other personalized services offered by the bank.

Rent, Taxes and Lighting (Schedule 16-Operating Expenses-Combined)

Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
01	State Bank of India	5253,17,14	5362,15,52	5702,00,53	6081,83,48	6283,36,09
02	Punjab National Bank	1294,88,88	1286,25,07	1317,88,96	1325,76,52	1391,73,78
03	Bank of Baroda	1505,92,01	1472,69,66	1568,36,89	1658,74,23	1819,39,22
04	Canara Bank	1120,14,79	1126,62,63	1108,91,83	1173,55,16	1084,84,88
05	Union Bank of India	1103,80,72	1070,67,32	1067,74,13	1090,25,46	1180,00,83
06	Bank of India	751,82,29	786,88,53	853,57,70	924,25,71	990,07,45
07	Indian Bank	602,83,47	613,74,14	620,98,45	635,64,07	674,34,25
08	Bank of Maharashtra	218,23,32	228,08,53	248,22,82	280,41,93	326,63,73
09	Central Bank of India	494,08,07	481,75,19	527,07,66	595,67,28	671,10,27
10	UCO Bank	256,77,43	267,52,62	293,91,46	332,18,16	434,92,41
11	Indian Overseas Bank	417,64,42	445,39,59	492,71,53	528,16,92	558,84,23
12	Punjab & Sind Bank	139,69,01	120,80,20	136,72,62	139,23,76	146,90,47

(Source: Annual Reports)



Factors Contribute to determine the Size of the 'Branch Premises'

(For New, Existing and Shifting Proposals)

- 'Business Potential' / Deposits / Advances / Wealth Management / Third Party Products (Cross Selling-Life, Health, General Insurance, Mutual Funds, DEMAT Accounts etc.) / Up-Selling (Home Loans, Car Loans, Education Loans, Mortgage Loans, Personal Loans etc.) / Lockers etc.
- 'Break-Even-Point' of the Business and Number of Years.
- Number of other 'Public Sector / Private Sector / Foreign Branches' located nearby.
- 'Market Share' of Other Banks.
- Availability of 'Transport Facilities' nearby for the Customers.
- Availability of 'Car Parking / Vehicle Parking' Space.
- Availability of 'Security Systems' like Police Station, 'Public Movements' etc.
- Number of 'Financial and Non-financial Products or Services' offered by the Branch.
- Type of 'Segmental Customers' like:
 - ✓ 'Retail / Personal' Segment Customers.
 - ✓ 'MSME' Segment Customers.
 - ✓ 'Agriculture' Segment Customers.
 - ✓ 'Mid Corporate' Segment Customers.
 - ✓ 'Corporate' Segment Customers.
 - ✓ 'NRE' Segment Customers.
 - ✓ 'High Net Worth' Segment Customers etc.
- Number of 'Cash and Non-Cash Transactions' (Based on Vouchers).
- 'Locational Advantages' of the Branch.
- 'Type of Customers' (Techno Savy / IT Sector Customers).
- Number of 'Alternate Delivery Channels' available.
- Number of 'Customer Migrated / Using Alternate Delivery Channels' like ATMs / CDMs/ Internet Banking / Mobile Banking / Call Centres / Business Correspondents.
- 'Distance / Radius of Branches' of the same Bank Branches located within radius of 3 to 4 KMs.
- 'Customer Space-60%' and 'Staff Space-40%' required for the proposed Branch.
- 'Alternate Delivery Channels' like ATMs / CDM / Kiosks required.
- For Captive Branches-Business Potentiality / Profitability.
- 'Foot Prints' of the Customers (Visited Branch Premises for Banking Transactions).
- Prevailing 'Commercial Space Cost' for Hiring Branch Premises etc. etc.

Strategic Planning:

- ✱ **Establish a Formal Policy:** The Board of Directors should create a policy and operational guidelines for acquiring premises on lease or rent, ensuring compliance with all contractual terms and non-discriminatory practices.
- ✱ **Differentiate Location-Based Norms:** The policy should include specific norms for renting in metropolitan, urban, semi-urban, and rural areas to tailor strategies to different market conditions.
- ✱ **Delegate Powers:** Clearly define the levels of authority

for decision-making related to acquiring and de-hiring premises to streamline processes and prevent delays.

Cost-Effective Site Selection:

- ✱ **Market Analysis:** Conduct thorough analysis of market rent rates and potential transaction volumes in different locations to identify the most cost-efficient options for new branches.
- ✱ **Strategic Negotiation:** Leverage market knowledge and competitive offers to negotiate lease terms, seeking favourable rent structures and conditions that reduce monthly overheads.



- ✱ **Consider Alternate Spaces:** Evaluate alternative space options, such as smaller footprints or shared facilities, if they can significantly reduce rent costs without compromising essential services.

Operational Control:

- ✱ **Regular Review of Leases:** Periodically review existing lease agreements to assess their ongoing alignment with current market rates and the bank's strategic needs.
- ✱ **Consolidate or Relocate:** Analyse the performance of existing branches and consider consolidating less productive branches or relocating them to more cost-effective premises to reduce rent expenses.
- ✱ **Monitor Key Performance Indicators:** Track monthly rent expenses, along with other relevant overheads, to identify trends and areas for potential reduction and improvement in operational efficiency.

a) Rent Policy:

Indian Commercial Banks can Control Branch Rent Overheads by adhering to Branch / Administrative Office Rent Policy that mandates policy development, including location-specific norms and delegation of powers for acquiring premises. Strategic planning involves location analysis, optimizing facility usage, and negotiating favourable lease terms, while policy development should include directives for cost-effective rentals, rightsizing branch networks based on footfall and technology adoption, and regular reviews of existing premises to ensure they remain cost-efficient.

- ✱ **Board-Level Policy:** Boards must lay down a policy for acquiring premises, detailing operational guidelines for leasing and de-hiring.
- ✱ **Delegation of Powers:** Delegate authority to various levels of management to make decisions regarding premise acquisition, ensuring efficiency and timely action.
- ✱ **Location-Specific Norms:** Develop separate guidelines for rent norms in metropolitan, urban, semi-urban, and rural areas, considering local market rates.
- ✱ **Data-Driven Location Analysis:** Conduct thorough market research and footfall analysis for each branch to determine optimal locations and lease terms that

maximize value and customer access.

Cost-Saving Strategies:

- ✱ **Lease Term Optimization:** Negotiate longer leases to potentially secure better rates and stability, balancing cost with the risk of being locked into unfavourable terms.
 - ✱ **Rightsizing and Consolidation:** Review the branch network to right size or consolidate smaller, less viable branches based on technology adoption and customer behaviour to reduce redundant rental costs.
 - ✱ **Technology Integration:** Leverage digital banking and remote banking services to reduce the need for large physical footprints, thereby lowering rental expenses.
 - ✱ **Negotiate Terms:** Implement a robust negotiation strategy to secure competitive rental rates, especially for new leases or renewals, leveraging market insights and competition.
 - ✱ **Lease vs. Buy Decisions:** Strategically evaluate the long-term benefits of purchasing versus leasing for critical locations, considering capital expenditure, maintenance, and rental cost savings.
- ### Policy Implementation & Monitoring:
- ✱ **Regular Review:** Schedule periodic reviews of existing leases to assess performance, cost-effectiveness, and potential opportunities for renegotiation or relocation to more affordable spaces.
 - ✱ **Compliance:** Ensure all lease agreements and transactions comply with bank policies, regulatory guidelines, and contractual obligations.
 - ✱ **Performance Metrics:** Establish key performance indicators (KPIs) for branch premises cost management, tracking rental expenditure against budgeted amounts and revenue generated by the location.

To control branch premise rent, Indian commercial banks should employ cost-effective site selection by focusing on high-transaction areas, opting for smaller or more efficient spaces, and utilizing technology to reduce physical footprint. Effective negotiation strategies include leveraging their large transaction volume for discounts,



sharing leasehold costs, and agreeing on shorter lease terms or renewal options to adapt to changing market conditions.

b) Cost-Effective Site Selection:

- ★ **Analyse Transaction Volume & Footfall:** Banks should prioritize locations with high footfall and potential transaction volume, as this directly correlates with a branch's revenue-generating capacity, justifying a potentially higher rent in a prime location.
- ★ **Optimize Space Utilization:** Consider smaller, more cost-effective spaces that are still adequate for the branch's operations, rather than large, unused areas.
- ★ **Leverage Digitalization:** Banks can reduce physical footprint by increasing the use of digital channels, ATMs, and remote banking services, which can allow for smaller branch sizes in less expensive locations.
- ★ **Consider Rural vs. Urban Locations:** Evaluate if a rural or semi-urban location with lower per-square-foot rent but still sufficient transaction volume would be a more cost-effective choice than a higher-rent urban spot.

Negotiation Strategies:

- ★ **Negotiate Rent per Square Foot:** Banks can leverage their market position and large potential transaction volumes to negotiate lower rent per square foot.
- ★ **Share Leasehold Costs:** Explore sharing the costs of the lease deed, such as stamp duty and registration charges, with the property owner to reduce upfront and ongoing expenses.
- ★ **Opt for Flexible Lease Terms:** Propose shorter lease terms with renewal options, giving the bank the flexibility to adapt to changing operational needs and market rent fluctuations.
- ★ **Build Strong Relationships:** Cultivate relationships with landlords to potentially achieve favourable terms or avoid rent increases during lease renewals.

Other Considerations:

- ★ **Standardized Lease Terms:** Banks can develop standardized lease terms and conditions that protect their interests and are acceptable to most landlords,

creating a consistent framework for negotiations.

- ★ **Regularly Review and Audit:** Periodically review rental agreements and audit branch overheads to ensure they align with cost-effectiveness goals and to identify opportunities for further savings.

c) Operational Strategies for Cost Control:

Indian commercial banks control branch rent costs by strategically selecting and optimizing locations, negotiating favourable lease terms with landlords, implementing strong operational controls over property usage, and conducting regular financial reviews to identify and reduce overheads. The Bank Head Office does not directly manage individual branch rents but sets broad prudential norms and overseas bank operations that influence cost-efficiency.

Location Analysis and Optimization:

- ★ **Data-Driven Decisions:** Banks analyse potential locations based on customer footfall, transaction volume, and accessibility to ensure new branches are profitable and do not incur excessive rent for the expected business.
- ★ **Branch Network Rationalization:** Regularly review the existing branch network to consolidate or close underperforming branches that contribute to high fixed costs, including rent.

Space Utilization and Renovation:

Efficient Layouts: Banks design branch interiors to maximize space utilization, ensuring all available space is functional and necessary for operations.

- ★ **Lease Renegotiation:** If a branch is underperforming, banks may renegotiate the lease terms with the landlord or look for a smaller, more affordable space to reduce overhead.

Property Management:

- ★ **Vendor Management:** Closely monitor and control costs associated with property upkeep, utilities, and maintenance.
- ★ **Lease Audits:** Periodically audit lease agreements to ensure compliance and identify potential areas for cost savings.



Financial Strategies for Cost Control:

Budgeting and Forecasting:

- ✱ **Annual Budgets:** Banks set annual budgets for branch expenses, including rent, and monitor them closely to stay within financial limits.
- ✱ **Performance Tracking:** Implement systems to track rental costs against budgeted amounts and identify variances.

Financial Controls:

- ✱ **Internal Audits:** Conduct regular internal audits of branch expenses, including rent payments, to ensure accuracy and prevent overspending.
- ✱ **Approval Processes:** Establish clear approval processes for new lease agreements and lease renewals, ensuring that decisions are made based on financial viability and return on investment.

Lease Negotiation and Terms:

- ✱ **Market Research:** Conduct thorough research on current market rental rates for commercial properties to ensure the bank negotiates competitive lease terms.
- ✱ **Long-Term Leases:** Enter into long-term leases with landlords to secure stable rental rates and avoid frequent increases.

Regulatory Influence (Indirect):

The RBI's regulatory framework for banks emphasizes sound financial management and corporate governance, which includes controlling operational costs. While the RBI doesn't dictate specific rent amounts, its oversight encourages banks to implement efficient cost-control measures to maintain profitability.

To control monthly branch premise rent, Indian commercial banks use various formats and layouts, such as:

- ✓ Smaller Branches.
- ✓ Digitally Focused Branches.
- ✓ Pop-up kiosks.
- ✓ ATM / CDM Sits.
- ✓ Wealth Management Branches.
- ✓ Specialized Branches like Personal / Retail, MSME, Agriculture, Mid Corporate and Corporate Branches etc.

- ✓ Central Processing Centres for Retail Assets, SME Loans, Trade Finance Centres etc.
- ✓ Regional Office, Zonal Office etc. and
- ✓ Integrated spaces within existing Retail Outlets, to reduce space requirements and thus rent overheads.

They also optimize existing layouts by redesigning them for better customer flow and staff efficiency, incorporate shared facilities, and leverage strategic location choices to find properties that balance cost with accessibility and transaction volume.

d) Strategies for Controlling Branch Premises Rent:

Smaller, Digitally Focused Formats:

- ✱ **Digital Branches:** These branches are smaller, requiring less physical space, and focus on self-service kiosks and digital transactions, reducing the need for large waiting areas and numerous tellers.
- ✱ **Pop-up/Kiosk Branches:** These are temporary or very small, semi-permanent units placed in high-traffic areas like shopping malls or railway stations to reach customers without the overhead of a full-fledged branch.

Layout Optimization and Shared Facilities:

- ✱ **Efficient Layout Design:** Redesigning existing branches to improve customer flow, reduce waiting times, and allow for more efficient use of space can potentially reduce the total area needed.
- ✱ **Shared Facilities:** Banks can explore sharing back-office facilities or infrastructure, especially in areas with multiple branches, to reduce the overall footprint and associated costs.

Strategic Location and Property Sourcing:

- ✱ **Data-Driven Location Selection:** Banks use data analytics to identify locations based on demographics and potential transaction volume, helping them to choose cost-effective properties that still serve their customer base effectively.
- ✱ **Negotiation and Alternative Properties:** Engaging in detailed property assessments to find locations with lower rental rates and negotiating favourable lease terms are crucial.



Integrating with Other Formats:

- ★ **Partnerships with Retailers:** Banks can set up their branches or service points within larger retail stores or malls, utilizing existing infrastructure and sharing rent costs.

e) Why the shift is occurring and its impact?

By adopting these strategies, banks can reduce their physical footprint, decrease the square footage required for each branch, and consequently lower their monthly rent expenditures. Increase in Alternate Delivery Channels for Banking, such as ATMs, online, and mobile banking, leads to a decrease in the need for physical branch layouts, as banks reduce their brick-and-mortar footprint by closing some branches or repurposing existing ones for different functions. Customers increasingly prefer Digital Interactions for convenience and efficiency, shifting transactions away from physical branches.

- ★ **Increased Digital Adoption:** The widespread use of ATMs, internet banking, mobile apps, and other electronic channels means fewer customers visit physical branches for routine transactions.
- ★ **Customer Preference for Convenience:** Customers often choose the speed and ease of digital services over the time and effort required to visit a bank branch.
- ★ **Reduced Foot Traffic:** With fewer customers coming to branches, the need for large, physical spaces with extensive counter services decreases.
- ★ **Branch Rationalization:** Banks respond by either closing underutilized branches or downsizing them. They may repurpose the reduced space for more advisory services or to accommodate different customer needs.
- ★ **Focus on Experience:** The trend is towards creating more integrated, “omnichannel” experiences where digital and physical channels work together seamlessly, with physical branches evolving into more specialized service centers.

In essence, the growth of alternative channels makes physical branches less essential for daily banking operations, leading to a shrinking or changing role for them within a bank’s overall strategy.

f) Footfalls and Transactions Shape Branch Layouts:

Customer footfalls and transaction data directly determine bank branch layouts by indicating customer traffic, peak hours, service needs, and the types of services required, which in turn influence the design of the physical space to enhance customer experience and operational efficiency. Analysing these metrics helps banks optimize space for customer amenities, staff functions, product displays, and technology integration, ensuring the branch layout supports current and future customer needs.

- ★ **Customer Traffic Analysis:** Data on customer footfalls reveals the volume of people visiting a branch, which helps determine the overall size and capacity needed. Higher traffic might necessitate more space for queues, waiting areas, and customer service desks.
- ★ **Peak Hours and Seasonal Patterns:** Analysing transaction data helps identify peak hours, days, and seasonal trends. Branch layouts can be designed to accommodate these fluctuations, for example, by optimizing staff allocation or providing more self-service options during busy periods.
- ★ **Transaction Types and Service Demands:** The types of transactions and services customers perform (e.g., cash withdrawals, loan applications, digital banking support) directly influence the layout. A branch with high demand for complex services like financial advisory might need dedicated private consultation rooms, while a high-volume transaction branch might require more efficient counter layouts or self-service kiosks.
- ★ **Demographics and Customer Needs:** Demographic information and customer surveys provide insights into who is using the branch and their expectations. This data helps in designing accessible and comfortable spaces, with features like ramps, comfortable seating, and clear signage to cater to diverse customer groups, including the elderly and differently-abled.
- ★ **Digital Integration:** Banks use data to understand how digital banking impacts in-branch needs. If a branch sees many customers needing help with digital services, the layout may include space for digital support, training, and integrated technology like digital signage.
- ★ **Operational Efficiency:** A well-designed layout based



on footfall and transaction data improves operational efficiency. It ensures smooth customer flow, reduces wait times, and optimizes the placement of staff and resources to provide a better service experience.

- ✳ **Future Planning and Optimization:** Banks use this data to optimize their branch network, leading to decisions about branch downsizing, relocating, or redesigning to meet changing customer needs.

By understanding how customers use their branches, banks can create spaces that are not only functional but also provide a positive and modern in-person banking experience.

a) Bank Branch Models:

Smaller Branch Sizes:

Indian banks have been reducing the size of their branches and optimizing their physical presence to control costs like rent and to adapt to declining customer footfalls, driven by increased digital banking and changing consumer behaviour, especially post-COVID-19. Banks are also aiming for better cost-income ratios by moving to smaller spaces in some cases, as digital usage has significantly increased.

As Digital Banking Grows, Branches Get Smaller

With consumers increasingly using mobile phones and the internet for banking services, major banks are reducing the size of new branches.

Kerala-based Federal Bank, for example, has shrunk the size of its newly built branches from 1,200-1,800 square feet to 800-odd square feet.

Digital banking has also paved the way for banks to remodel their branch banking by allowing technology to play a major role.

Reasons for the Size Reduction:

- **Digital Banking Growth:** Consumers increasingly use mobile phones and the internet for banking, reducing the need for large physical spaces.
- **Technology's Role:** Banks are leveraging technology to reshape branch banking, allowing for smaller, more efficient operations.
- **Cost Reduction & Profitability:** Shrinking branch size helps reduce operational costs, which in turn improves profitability for banks.
- **Changing Branch Operations:** The size and the number of staff required at branches change with the growth of digital services.

Reasons for Smaller Branch Sizes:

- ✳ **Cost Control:** Banks are looking to reduce occupancy costs, with some successfully negotiating lower rents with landlords.
- ✳ **Reduced Footfalls:** The pandemic accelerated the trend of customers shifting to online banking, leading to fewer physical visits.
- ✳ **Digitalization:** Increased reliance on digital channels like internet banking and mobile apps means that many routine transactions no longer require a branch visit.
- ✳ **Strategic Rationalization:** Banks are rethinking their branch networks as part of a long-term strategy to

align with increased digitization and achieve better cost-income ratios.

Impact on Branch Strategy:

- ✳ **Move to Smaller Spaces:** Where feasible, banks are opting for smaller office spaces to house their branches.
- ✳ **Negotiating with Landlords:** Banks are often able to negotiate rent reductions, particularly in metropolitan areas.
- ✳ **Rethinking Branch Planning:** The change in consumer behaviour necessitates a revaluation of branch planning and location parameters.



The Bigger Picture:

- ✱ This trend is not just about cutting costs but also about adapting to long-term strategic goals of greater digitization and customer convenience in the digital age.
- ✱ The shift was notable after the COVID-19 pandemic, which significantly boosted online banking activities.

b) Locating Bank Branches in Gated Communities:

Locating bank branches in large, established gated communities in India could be a viable strategy to boost business and potentially control costs by offering access to a concentrated, high-value customer base and reducing marketing expenses. This location-based strategy provides access to residents who are already invested in a high-quality, secure living environment and are likely to have specific financial needs, such as mortgages and wealth management, that can drive business growth.

Potential Benefits:

- ✱ **Access to a Concentrated Customer Base:** Gated communities offer a dense population of potential customers in one location, making it easier to reach and serve them.
- ✱ **Targeted Marketing:** With a built-in demographic of residents, banks can conduct more targeted and cost-effective marketing campaigns within the community.
- ✱ **Higher Disposable Income:** Residents in gated communities often have a higher disposable income and may require more sophisticated financial products and services.
- ✱ **Reduced Operational Costs (Potentially):** By strategically locating branches, banks could potentially reduce overhead costs associated with serving a wider, more dispersed customer base.
- ✱ **Enhanced Security and Safety:** Gated communities provide a secure environment for both customers and bank operations, reducing risks related to theft or security breaches.
- ✱ **Brand Association:** Associating a bank with a premium, secure, and well-managed living environment can enhance the bank's brand image.

Potential Drawbacks and Considerations:

- ✱ **Initial Investment:** Setting up a branch within a gated community may involve significant upfront costs.
- ✱ **Limited Reach:** While efficient for serving the immediate community, this strategy might limit the bank's ability to attract customers outside the gated area.
- ✱ **Competition:** Existing financial service providers might already be serving these communities.
- ✱ **Customer Needs:** Banks would need to ensure that their offerings are tailored to the specific needs and lifestyle of the residents.
- ✱ **Regulatory Approvals:** Gaining approval to establish a branch within a gated community may have specific requirements.

Strategic Considerations:

- ✱ **Data Analytics:** Banks can use data analytics to identify communities with a high concentration of their target customers and tailor their product and service offerings accordingly.
- ✱ **Digital Integration:** Complementing physical branches with robust digital banking services can enhance customer experience and reduce costs.
- ✱ **Partnerships:** Collaborating with the gated community developers could facilitate the establishment of branches and marketing efforts.

c) Specialized Locker Branches:

Banks can establish specialized locker branches as an effective strategy to target High Net Worth Individuals (HNIs), creating a dedicated environment to cultivate relationships and cross-sell financial products and services to this valuable customer segment. This approach leverages the trust associated with secure locker storage to introduce clients to wealth management, investment opportunities, and other personalized services offered by the bank.

Why it's an effective strategy:

Targeted Access to HNIs: By creating a niche, banks can directly attract individuals seeking secure storage for their valuables, who are often also HNIs.



- ✳ **Building Relationships:** A specialized branch provides a focused setting to build stronger relationships and provide a higher level of personalized service to these clients.
- ✳ **Cross-Selling Opportunities:** This dedicated space allows for discreet conversations and tailored pitches for various financial products and services, from wealth management to exclusive investment opportunities.
- ✳ **Enhanced Customer Experience:** A specialized branch can offer a premium experience for customers, emphasizing security and discretion, which resonates with the needs of HNI clients.
- ✳ **Leveraging Trust:** The inherent trust in banks for safeguarding valuables can be extended to the financial products and services they offer, making clients more receptive to their recommendations.

Examples of services that can be offered:

- ✳ **Wealth Management Services:** Personalized advice on managing and growing significant assets.
- ✳ **Exclusive Investment Opportunities:** Access to private equity, hedge funds, real estate, and other investment vehicles.
- ✳ **Personalized Financial Advisory:** Tailored guidance on investment, estate planning, and other financial matters.
- ✳ **Private Banking Services:** Dedicated support and bespoke solutions for high-net-worth clients.

d) Bricks and Clicks ‘Converge’:

The rise of digital banking has undoubtedly transformed the financial landscape. Customers can now manage their finances seamlessly from their smartphones, blurring the lines between physical and virtual interactions. This begs the question: Are physical bank branches relics of the past, or do they still have a place in the digital-first world?

While traditional transactional banking is rapidly migrating online, physical branches are evolving to serve a broader and more strategic purpose. Gone are the days of sterile teller lines and impersonal interactions. The future of branch banking lies in community engagement, experiential banking, and building deeper relationships with customers.

Shifting Landscape of Branch Banking:

The digital revolution has swept through industries, and banking is no exception. Gone are the days of waiting in long lines for simple transactions like checking balances or depositing checks. Now, 82% of banking interactions occur through digital channels, according to a 2021 EY report. This shift has led to a 30-50% decline in foot traffic at bank branches.

Brick-and-mortar branches aren’t disappearing entirely. Instead, they’re undergoing a metamorphosis, shedding their transaction-centric skin and embarking on a journey of transformation. The future of bank branches lies not in replicating online convenience, but in offering something fundamentally different: an experience.

From Robots to Robots (of a Different Kind):

- ✳ Remember those clunky ATMs from the 80s that barely spat out cash? Compare that to today’s sophisticated self-service kiosks that can handle complex transactions, from bill payments to loan applications. These “digital tellers” aren’t replacements for human interaction, but rather efficient tools that free up branch staff for higher-value activities.
- ✳ Imagine a bustling coffee shop where a barista takes your order and prepares your drink with personalized flair, while a self-service station handles refills and simple requests. In the same way, branches of the future will leverage technology to streamline routine tasks, allowing personnel to focus on building relationships and providing expert advice.

Beyond Transactions: A Hub for Human Connection:

While robots handle the mundane, humans will become the heart and soul of the transformed branch. They’ll act as financial guides, trusted advisors, and community connectors. Imagine:

- ✳ **Financial wellness workshops:** Helping customers understand budgeting, investing, and other financial concepts.
- ✳ **Small business consultations:** Providing personalized guidance to local entrepreneurs.
- ✳ **Community events:** Hosting financial literacy programs, career fairs, or art exhibitions, fostering a sense of belonging and collaboration.

These human-centric interactions are where branches have



a distinct advantage over digital channels. They build trust, foster loyalty, and create a sense of community that goes beyond mere transactions.

e) Branch Design: From Sterile to Stimulating:

The future branches will be inviting, interactive spaces that engage all senses:

- ✱ **Warm, welcoming environments:** Think comfortable seating, natural light, and artwork that reflects the local community.
- ✱ **Interactive technology:** Touchscreens for financial planning simulations, co-working spaces equipped with VR technology, and digital exhibits showcasing innovative financial solutions.
- ✱ **Experiential zones:** Dedicated areas for children to learn about money management, or cafes offering financial consultations over a cup of coffee.

These design elements create a positive and engaging experience that sets branches apart from the cold, impersonal feel of online banking.

Data-Driven Decisions: Branch Evolution, Not Extinction:

The transformed branch isn't just about aesthetics; it's about understanding and catering to customer needs. Banks will leverage data analytics to:

- ✱ **Track branch usage patterns:** Identify which services are most in demand and optimize staffing accordingly.
- ✱ **Measure customer sentiment:** Gain feedback on the branch experience and make data-driven decisions for improvement.
- ✱ **Personalize branch offerings:** Tailor services and events to the specific needs of the local community.

This data-driven approach ensures that branches remain relevant and valuable in the evolving financial landscape.

A Symbiotic Future:

The future of banking isn't about bricks versus clicks, but about harmonious co-existence. Physical branches will thrive as experience centers, complementing the convenience of digital channels. They'll offer personalized

advice, human connection, and a sense of community, things that the digital world cannot fully replicate. By embracing this transformation, banks can create a seamless and customer-centric financial experience that wins hearts and secures loyalty in the digital age.

Human Touch Still Matters:

While digital banking reigns supreme for quick check-ins and basic transactions, nearly 70% of customers still see value in the human touch offered by physical bank branches. This isn't about clinging to the past; it's about acknowledging the unique strengths that branches bring to the table, strengths that resonate deeply with customers and remain irreplaceable in the digital age.

Beyond Transactions: Personalized Guidance and Complex Support:

Unlike faceless algorithms, branch staff can:

- ✱ **Offer personalized advice:** Tailored to your individual circumstances, goals, and risk tolerance. A skilled advisor can help you navigate investment options, plan for retirement, or devise a debt repayment strategy that aligns with your unique needs.
- ✱ **Demystify financial jargon:** Let's face it, financial terms can be confusing. Branch staff can explain intricate concepts in clear, easy-to-understand language, empowering you to make informed decisions about your finances.

Provide hand-holding for complex transactions: Buying a house? Applying for a loan? Starting a business? These intricate processes can be daunting, and having a knowledgeable human guide by your side can make a world of difference. Branch staff can walk you through the paperwork, answer your questions, and ensure a smooth and stress-free experience.

Building Trust and Long-Term Relationships:

In a world increasingly dominated by digital anonymity, the face-to-face interaction offered by branches fosters trust and builds rapport. This is especially crucial for:

- ✱ **First-time customers:** Navigating the financial world can be intimidating, especially for young adults or newcomers to a country. A welcoming branch environment and friendly staff can ease their concerns and establish a positive association with the bank.



- ✳ **Senior citizens:** Digital literacy isn't always a given for older generations. Branches offer a safe space where they can access financial services with assistance and personalized attention.
- ✳ **Customers facing financial challenges:** Dealing with debt, foreclosure, or other financial difficulties can be emotionally charged. A compassionate and understanding branch representative can provide much-needed support and guidance during difficult times.

More Than Just Banking: A Community Hub:

Branches can transcend their financial function and become vibrant community hubs, fostering a sense of belonging and connection.

- ✳ **Financial literacy workshops:** Empowering individuals of all ages to make informed financial decisions.
- ✳ **Small business consultations:** Supporting local entrepreneurs with expert advice and resources.
- ✳ **Community events:** Partnering with local organizations to host art exhibitions, career fairs, or educational workshops, building goodwill and strengthening community ties.

These initiatives go beyond financial services, establishing the bank as a trusted partner and active member of the community. This fosters loyalty and creates a positive brand image that resonates deeply with customers.

Examples of the Human Touch in Action:

- ✳ **Bank of America's Community Development Banking:** Provides financial education workshops, small business development resources, and affordable lending options to underserved communities.
- ✳ **HSBC's "Living Lab" branches:** Feature interactive exhibits, co-working spaces, and personalized financial consultations, fostering a sense of community and innovation.
- ✳ **JPMorgan Chase's "Advancing Black Pathways":** Commits to investing in Black and Latinx communities through lending, hiring initiatives, and financial literacy programs.

These initiatives showcase the powerful impact of the human touch in banking, highlighting how branches can go beyond transactions and build meaningful connections with their customers and communities.

The human touch offered by physical branches remains a vital ingredient in building trust, providing personalized support, and fostering community engagement. While digital banking offers undeniable convenience, it cannot replicate the human connection and emotional intelligence that branches bring to the table. By embracing this unique strength, banks can create a truly customer-centric experience that wins hearts and builds long-term loyalty in the digital age.

Reimagining the Branch: Community Engagement and Experiential Banking

From Transaction Centers to Community Hubs:

- ✳ Modern branches are transforming into vibrant community spaces, hosting events, workshops, and financial literacy programs.
- ✳ They partner with local businesses and organizations to create a sense of belonging and collaboration.
- ✳ This fosters brand loyalty and positions the bank as a trusted partner in the community.

Beyond Banking: Embracing Experiential Banking:

- ✳ Branches are becoming interactive spaces with technology woven seamlessly into the experience.
- ✳ Think robotic advisors, interactive financial planning tools, and VR simulations to help customers visualize their financial future.
- ✳ These engaging experiences build brand affinity and differentiate the bank from purely digital competitors.

Examples of Innovative Branch Design:

- ✳ Bank Leumi's flagship branch in Israel features a co-working space, a café, and even a children's play area.
- ✳ Barclays' innovation hubs offer financial planning consultations, workshops, and interactive exhibits.
- ✳ HSBC's "Living Lab" branches test new technologies and gather customer feedback in real-time.

Benefits of Community Engagement and Experiential Banking:

- ✳ Increased customer engagement and loyalty.
- ✳ Enhanced brand image and differentiation.
- ✳ Attraction and retention of talent.
- ✳ Opportunities for cross-selling and upselling.
- ✳ Positive impact on the local community.
- ✳ The Future of Branch Banking is Collaborating, Not Competing.

Branch Banking in the Digital Ecosystem:

- ✳ Physical branches complement, not compete with, digital channels.
- ✳ They act as customer acquisition points, onboarding centers, and hubs for personalized support.
- ✳ Seamless omnichannel integration ensures a consistent and convenient customer experience.

Collaboration with FinTech's:

- ✳ Banks are increasingly partnering with fintech startups to leverage their innovative technologies and reach new customer segments.
- ✳ This allows them to offer cutting-edge financial services within the branch environment.

Data-Driven Insights:

- ✳ By analysing customer behaviour and branch usage data, banks can personalize their offerings and optimize the branch experience.
- ✳ This ensures that branches remain relevant and valuable in the digital age.

Bricks and Clicks Working in Harmony:

The future of branch banking is not about survival, but transformation. By embracing community engagement, experiential banking, and collaboration, physical branches can evolve into strategic assets that differentiate banks in the digital-first world. They can foster deeper customer relationships, build brand loyalty, and contribute positively to the communities they serve.

The future of banking is not about physical versus digital,

but about creating a seamless and personalized experience that meets customers wherever they are. Branch banking, when reinvented with the human touch and innovative technologies, can play a vital role in achieving this vision.

f) RBI Guidelines in brief:

- ✳ Banks to focus on evolving a proper system for examining proposals for securing premises and making a realistic assessment of the attendant terms and conditions.
- ✳ Boards of Directors of the banks should lay down policy and formulate detailed operational guidelines covering all areas in respect of acquiring premises on lease / rental basis for their use including delegation of powers at various levels. The guidelines should prescribe norms separately in respect of metropolitan, urban, semi-urban and rural areas. The guidelines should ensure that the contractual obligations are complied with and the decisions taken for hiring / de-hiring of premises are non-discriminatory. While delegating powers banks may ensure that decisions for surrender or shifting of premises other than at rural centres are taken at Central Office level by a committee of senior executives.
- ✳ The banks' Boards may also determine the rate of interest on Quarterly rests on premises loans. For this purpose, the Boards should lay down a separate policy in respect of loans granted to landlords who provide to them premises on lease/rental basis.
- ✳ In order to ensure that genuine grievances of the landlords are dealt with expeditiously keeping in view all relevant factors, banks may evolve a suitable machinery for dealing with such grievances.

The following are the issues in respect of Leased Premises:

- a) **Enhancement in the rent on expiry of lease.**
- b) **Compensation to landlord of increase in taxes during the currency of the lease.**
- c) **Delay in renewing lease agreements.**
- d) **Measurement of Area at the Time of Hiring.**
- e) **Registration of Lease Deed.**
- f) **Surrender of Premises: Banks being commercial organisations have to take commercial aspects into account while deciding increases in rents or surrender of premises.**



To Sum Up:

Bank Branch and Administrative Office rental costs are a significant overhead, and now is a crucial time to address them. With increasing technology, decreasing customer footfalls, and more digital channels, banks can significantly reduce their property expenses by right-sizing branches, consolidating administrative offices, renegotiating leases, or even closing underperforming branches.

Why the Time is Right for Cost Control?

- ✱ **Technological Advancements:** Digital banking, mobile apps, and ATMs offer customers convenient alternatives, reducing the need for physical branch visits.
- ✱ **Customer Behaviour Shift:** Footfalls at bank branches are declining, making large physical spaces less efficient for serving customers.
- ✱ **Efficiency of Digital Channels:** Alternate delivery channels are growing in popularity, enabling banks to serve more customers with less physical infrastructure.

Strategies to Control Rent Overheads:

- ✱ **Right-Sizing Branches:** Banks should evaluate their current branch network and right-size or relocate branches to more efficient, smaller spaces.
- ✱ **Branch Consolidation:** Consider consolidating underperforming branches into larger, more central locations or converting them to digital-only hubs.
- ✱ **Administrative Office Restructuring:** Similar to

branches, administrative offices can be streamlined, consolidated, or optimized for remote work to reduce their footprint and rental costs.

- ✱ **Lease Renegotiation:** Actively seek to renegotiate existing leases to secure more favorable terms or shorter-term leases for new locations.
- ✱ **Invest in Digital Infrastructure:** By investing in powerful and user-friendly online banking and mobile platforms, banks can encourage greater adoption and further reduce reliance on physical branches.
- ✱ **Optimized Branch Design:** Future branches can be designed as small, modular, and paperless spaces focusing on customer service and advanced digital solutions.

To control overhead costs like rent, banks can adopt methods such as Activity-Based Costing (ABC) to assign costs accurately, Marginal Costing to analyse fixed costs' impact, and general cost management techniques like budgeting, expense monitoring, and variance analysis. The goal is to understand which activities drive costs and implement measures to reduce or optimize these expenses for financial stability and profitability.

References:

- a) Rent, Taxes and Lighting Costs for the Financial Years 2021 to 2025-Annual Reports of Public Sector Banks.
- b) Verification of Rent Costs by the Branch Auditor-Concurrent Audit Guidelines of the Banks.

Annexure I

Cost-Benefit-Analysis (CBA) of Bank Branch Premises Rent

To conduct a Cost-Benefit-Analysis (CBA) of premises rent for an Indian bank, one must compare the total costs of renting against the total benefits derived over a specified time period. This assessment helps determine if the rent expense is a profitable and efficient use of the bank's capital, as banks must carefully manage funds to maximise lending and investment returns.

Key steps for the cost-benefit analysis:

Step 1: Define the scope: Clearly specify the project, which, in this case, is the opening or continuation of a branch or ATM at a rented premises. Identify the metrics for success, such as business growth, customer base expansion, and increased non-interest income.

Step 2: List and quantify all costs: Identify all direct and indirect costs associated with the leased property. These must be assigned a monetary value for the entire duration of the lease.

Rental costs: Calculate the total rent payable over the lease period, accounting for fixed escalation clauses typically found in bank lease agreements.

Upfront costs: Include the security deposit and any legal and registration fees for the lease deed.

Fit-out and modification costs: Document all expenses for structural changes to meet the bank's operational and security standards, such as building a strong room, installing CCTV, and fitting ATMs.

Operating expenses: Include the cost of maintenance (unless covered by the landlord), property taxes, and utility bills, especially for ATMs.

Relocation costs: If the bank frequently relocates branches, include the costs and disruption of moving.

Capital opportunity cost: Factor in the opportunity cost of using capital for rent payments instead of more profitable avenues like lending or investments.

Regulatory reporting cost: Public sector banks must report all negotiated contracts for rentals.

Step 3: List and quantify all benefits: Identify all

quantifiable and non-quantifiable benefits that the bank derives from the leased premises.

Income generation: Calculate the revenue from transactions, loan origination, and deposits generated by the new branch or ATM.

Strategic advantages: Quantify the financial impact of having a presence in a prime location with high foot traffic, which leads to business growth and customer base expansion.

Lower capital expenditure: Contrast the capital outflow of renting with the large, fixed capital costs of buying a property.

Flexibility: Quantify the financial value of being able to relocate the branch easily to respond to changing market dynamics, such as shifts in demographics or competitor activity.

Reduced maintenance liability: If the lease agreement specifies, estimate the cost savings from the landlord bearing the property maintenance expenses.

Non-interest income: Account for the increase in non-interest income from cross-selling other financial products to customers who visit the branch.

Step 4: Calculate the Net Present Value (NPV): To account for the time value of money, discount all future costs and benefits to their present value. The formula for NPV is:

$$NPV = \sum_{t=0}^n \frac{(B_t - C_t)}{(1 + r)^t}$$

Bt = Benefits at time t.

Ct = Costs at time t.

r = Discount rate (reflects the bank's cost of capital and risk).

t = Time period (year).

n = Total Project duration.

Step 5: Calculate the cost-benefit ratio (CBR): To find the cost-benefit ratio, divide the total present value of the benefits by the total present value of the costs.



CBR = (Present Value of Total Benefits) / (Present Value of Total Costs)

If CBR > 1: The benefits outweigh the costs, indicating the lease is economically viable.

If CBR < 1: The costs exceed the benefits, suggesting the lease is not economically viable.

Step 6: **Conduct sensitivity analysis:** Test how changes in key assumptions, such as the discount rate, rental rates, or business growth projections, affect the NPV

and CBR. This helps assess the robustness of the decision and the project's risks.

Step 7: **Finalise the recommendation:** Use the findings from the CBA to make an informed recommendation on whether to proceed with or terminate a rental agreement. Present the findings with clear justifications, including any limitations or uncertainties in the analysis. For example, if a branch's CBA shows a low return, but the branch is crucial for fulfilling social obligations (like in rural areas), this can justify the decision.



Annexure II

How to Develop Cost Sheets to Control Rent of Bank Branches / Administrative Offices

Developing cost sheets to control the rent of bank branches and administrative offices involves comprehensive cost analysis and evaluation of real estate expenses. A bank needs to implement cost management practices that go beyond just the monthly rent to account for the total cost of occupancy for each location.

Components of a cost sheet for bank premises: The following are the key elements to include when creating a detailed cost sheet for a bank branch or administrative office to manage and control rent effectively:

1. Direct occupancy costs:

Rent: The most significant and primary cost. This should be recorded on a per-unit basis (e.g., per square foot or meter) for easy comparison with market rates and other properties.

Property taxes: Include all municipal, state, and other property taxes.

Common area maintenance (CAM) charges: Fees paid for the upkeep of shared spaces like lobbies and parking lots.

Insurance: Premiums for property, fire, and other relevant insurance policies.

Utilities: Costs for electricity, water, and gas.

Repair and maintenance: Regular and preventive maintenance costs.

2. Indirect occupancy costs:

Branch-specific depreciation: Depreciation on furniture, fixtures, and other administrative fixed assets located at the branch.

Security costs: Expenses for security personnel, alarms, and surveillance systems.

Custodial/cleaning fees: Costs associated with keeping the premises clean.

Site-specific improvements: Capital expenditures (CapEx) for specific modifications, like building a strong room, amortized over the lease period.

3. Strategic and analytical elements:

Total occupancy cost (TOC): This provides the total cost of operating the physical space, which is more accurate than just using the rent amount.

Total Occupancy Cost = Direct Occupancy Costs + Indirect Occupancy Costs.

Cost per square foot: This is a crucial metric for evaluating and comparing different branches. It is calculated by dividing the Total Occupancy Cost by the total square footage of the premises.

Cost per Square Foot = (Total Occupancy Cost) / (Total Square Footage)

Revenue per square foot: For branches, this metric helps determine the cost-effectiveness of the location. It can be calculated by dividing the revenue generated at that branch by its square footage.

Revenue Per Square Foot = (Revenue Generated at Branch) / (Total Square Footage)

Footfall/transaction volume: Including this data on the cost sheet helps correlate occupancy cost with business activity, which is particularly relevant for high-traffic branch locations.

Using Cost Sheets to Control Rent: The information from these cost sheets can be used in several ways to effectively control rent:

✳ **Benchmark analysis:** Compare the cost sheets of multiple branches and administrative offices to identify outliers. Locations with significantly higher costs per square foot or lower revenue per square foot should be reviewed.

✳ **Negotiating leases:** Armed with comparative market data and an understanding of the total cost of occupancy, the bank can negotiate more favorable rental terms upon renewal. This includes capping rent increases, as banks often do for long-term leases.

✳ **Make-or-buy analysis (rent vs. own):** By analysing the Total Occupancy Cost, a bank can perform a cost-benefit analysis to determine whether it is more



economical to rent or to purchase a property for its operations.

- ✱ **Location strategy:** Analysis of cost sheets can inform strategic decisions about new branch locations. By comparing the projected occupancy costs and revenue potential of different areas, the bank can optimize its real estate distribution.
- ✱ **Technology integration:** Implementing a real estate

expense management software solution allows for centralized expense tracking and automated data entry, providing real-time insights into spending patterns and streamlining the entire process.

- ✱ **Optimizing space utilization:** For administrative offices, cost sheets can be used to analyze and optimize the use of existing space, potentially leading to a smaller footprint and lower costs.



Annexure III

Role of Cost Accountant in Controlling Rental Costs

A Cost Accountant's role in controlling rental costs for a bank's branches, ATMs, and offices is crucial for optimizing the bank's operational efficiency and profitability. Through systematic analysis, budgeting, and performance evaluation, a Cost Accountant ensures the bank gets the best possible value from its leased properties.

Role of a cost accountant in controlling rental expenses:

1. Cost analysis and justification:

Feasibility study for new sites: Before a bank opens a new branch or installs an ATM, a Cost Accountant performs a detailed analysis to justify the rental expense. They assess location, customer traffic, market demand, and potential profitability to ensure the site offers a solid return on investment.

Optimal space analysis: They analyse the required square footage for different locations (e.g., Metro, Urban, Rural) to prevent leasing excessively large or expensive spaces.

Benchmarking rent: By comparing potential rent with market rates and other similar bank properties, the Cost Accountant ensures the bank does not overpay.

2. Lease agreement and negotiation:

Negotiation support: The Cost Accountant provides data-driven support during lease negotiations, focusing on total cost, lease duration, and rent escalation clauses. They advise on the most favourable terms for the bank.

Agreement review: They meticulously review proposed lease agreements to identify any hidden costs, unfavourable clauses, or ambiguous language that could lead to unexpected expenses.

Cost vs. ownership analysis: The Cost Accountant may perform a "rent vs. buy" analysis for a property. This evaluation helps the bank decide whether leasing or purchasing is the most financially sound long-term strategy for a specific location.

3. Budgeting and forecasting:

Rental budget preparation: Based on existing agreements and market data, they prepare detailed and realistic budgets for rental expenses across all locations.

Forecasting increases: Cost Accountants forecast future rental costs by considering factors like lease expiration dates, renewal options, and market trends. This helps the bank anticipate and plan for future expenses.

4. Performance measurement and variance analysis:

Reporting: They prepare regular reports on rental expenditures, comparing budgeted costs against actual costs. These reports are presented to management for review.

Variance analysis: The Cost Accountant investigates any significant variances between the budget and actual spending. This pinpoints areas of overspending or inefficiencies in rental costs.

Performance monitoring: They evaluate the performance of each leased property to ensure it continues to meet strategic objectives and profitability targets. This can inform decisions to renew, renegotiate, or close a location.



Annexure IV

Model Cost Sheet for Bank Property

Model cost sheet for a bank property: A model cost sheet for a bank branch or office provides a detailed breakdown of all associated rental expenses. It helps standardize cost tracking and enables effective control.

Category	Specific Cost Component	Calculation Basis	Example Details
Direct Rental Costs	Rent per square foot / month.	Negotiated rate per square foot or lump-sum rent.	₹ 100 per sq. ft for 2,500 sq. ft branch.
	GST / Taxes on rent.	Applicable tax rate on rent.	-- GST on rental value.
	Rent escalation clause.	Predetermined percentage increase per year or renewal period.	-- increase after every 5 years.
	Lease duration.	Initial lease period and renewal options.	5 Years initial, with two 5 Years renewal options.
Facility Operating Costs (Borne by Bank)	Electricity Charges.	Based on actual consumption; may require separate commercial meter.	Separate commercial meter for ATM, lighting, AC
	Water Charges	Based on actual consumption or fixed agreement.	Municipal water supply.
	Maintenance Costs	Routine repairs, upkeep of premises.	Part of negotiated lease or managed internally.
	Security Services.	Charges for guards, alarm systems, etc.	Third-party security company costs
Fit-out and Capital Costs (Amortized)	Fit-out and furnishing	Initial cost of preparing the space	Amortized over the lease period
	Equipment (ATMs, servers)	Cost of installing and maintaining equipment	Amortized over the asset's useful life
	Legal fees	Costs associated with legal review of the lease agreement	One-time expense
Administrative and Other Overheads	Administrative expenses	Costs for processing rent, managing contracts, etc.	Internal processing costs
	Insurance	Property and liability insurance	Annual premium

Example of cost sheet usage:

Forecasting: A Cost Accountant can use the sheet to forecast a branch's total rental expense over a 15-year lease (initial 5 years plus two renewals), including the effect of rent escalation.

Comparison: The sheet can be used to compare the total cost of two potential locations, including all hidden or variable expenses, to make an informed decision.

Performance review: A Cost Accountant can compare the actual monthly cost of a branch with the standard cost sheet to identify and investigate any unexpected deviations.



Annexure V

Verification of Rent Costs by the Branch Auditor

In Indian commercial banks, while conducting a branch audit, the auditor verifies rent costs and overheads to ensure the payments are proper, accurately recorded, and comply with all applicable regulations. The verification procedures help detect fraud, window dressing, and other irregularities in the branch's financial reporting.

Key areas for verifying rent costs:

Verification of the lease or rent agreement: The auditor checks the original rent agreement or lease deed to confirm the terms and conditions, such as the monthly rent amount, the security deposit, and the duration of the lease.

Rent payments: The auditor verifies that rent payments are made according to the terms of the agreement. This includes checking payment records against the general ledger and bank statements.

Authority for payment: The auditor confirms that the rent payment has been properly authorized by the competent authority within the bank.

TDS compliance: The auditor checks that Tax Deducted at Source (TDS) has been properly calculated on the rent paid, deposited with the government within the specified time, and that the necessary documentation (e.g., Form 15G/15H) has been collected.

Lease validity: The auditor ensures the lease is still valid and has not expired, especially when the branch is on rented premises.

Comparison and analysis: The auditor compares the rent paid to the previous year's rent and investigates any significant variances. This can help identify unauthorized rent hikes or other discrepancies.

Key areas for verifying overhead costs:

Authorization for expenses: The auditor verifies that all overhead expenditures have been properly sanctioned and approved by the appropriate authority, according to the bank's internal policies and delegated powers.

Correct accounting treatment: The auditor checks that the expenses are properly categorized, distinguishing between capital and revenue expenditures.

Physical verification: For assets procured for the branch, especially when located on leased premises, the auditor may verify the physical existence of the assets and check the relevant purchase bills and invoices.

Accrual of expenses: At the end of the financial year, the auditor verifies the accrual of expenses, such as rent, electricity, and telephone bills, to ensure they are recorded in the correct accounting period.

TDS on other overheads: The auditor verifies that TDS has been deducted on other applicable payments, such as those made to contractors or professionals, and that tax payments are remitted on time.

Review of expense register: The auditor scrutinizes the general expense register for unusual or non-recurring items to ensure no unauthorized or fraudulent payments have been made.

Reconciliation of accounts: The auditor checks reconciliations of utility accounts and other payment schedules to ensure proper accounting.

Reporting unusual items: Any expense considered sizable or unusual should be investigated and reported, along with its proper authorization.



Chapter 10

Safe Deposit Locker Costs



Contents:

1. <i>Introduction.</i>	10. <i>Advantages of ‘Locker Houses’ for ‘Cluster’ of Bank Branches.</i>
2. <i>RFID and GSM Technology – Smart Bank Locker Security System.</i>	11. <i>Centralization of Lockers.</i>
3. <i>Safe Deposit Locker System Process.</i>	12. <i>Success Story – Centralization of Lockers – ICICI Bank.</i>
4. <i>Forecasting the Usage of Safe Deposit Lockers by Customers at Bank Branches.</i>	13. <i>To Sum Up.</i>
5. <i>Centralization of lockers-Cost Control & Business Consideration.</i>	<i>Cost of Arriving Locker Rent-Annexure I.</i>
6. <i>Centralization of Lockers for Cluster of Branches.</i>	<i>Maximize the Revenue through Locker Business-Annexure II.</i>
7. <i>Time and Motion Study in Locker Operations.</i>	<i>Setting of Exclusive Locker Houses-Annexure III.</i>
8. <i>Locker Houses at Strategic Locations.</i>	<i>References.</i>
9. <i>Centralization Vs. Decentralization of the Locker Business.</i>	

Technological Advancements like RFID and GSM-based Lockers improve Security and reduce Manpower needs. This Chapter covers:

- ✱ **Smart Locker Technologies**
- ✱ **Centralized Locker Models for Cost Savings.**
- ✱ **ICICI Bank’s Success Story.**

Insights were Collected from Branch Officials managing Locker Operations.

Safe Deposit Lockers Costs

The financial detriment to Commercial Banks stemming from the current below-cost pricing of Safe Deposit Locker services is substantial. For every 500 lockers situated in metropolitan areas, cities, and urban locales, banks are incurring losses approximating ₹10 lakhs annually. The ramifications of the inadequate pricing of lockers appear increasingly dire when it is acknowledged that the advantages are largely accrued by a segment of society that is comparatively affluent and arguably undeserving of such benefits. A viable solution to this issue lies in the 'Centralization of Safe Deposit Lockers' by Commercial Banks, as opposed to maintaining 'Safe Deposit Lockers at Each Branch Location'. This is predicated on a comprehensive 'Time and Motion Study of Safe Deposit Lockers' in banking institutions, alongside a 'Cost-Benefit Analysis' of these services. Centralizing Safe Deposit Lockers represents a strategic approach for Commercial Banks to enhance revenue derived from locker products, contrasting with the existing paradigm of providing lockers at every branch.

The Safe Deposit Locker (SDL) facility constitutes one of the 'Value Added Services' offered by banks to their clientele. Banks supply specially engineered lockers obtained from reputable manufacturers, which are housed within robustly constructed strong rooms at bank branches to ensure the secure storage of clients' valuables.

The Safe Deposit Locker (SDL) service is accessible at

multiple bank branches throughout India. Banks offer lockers of various dimensions to accommodate the diverse requirements of their customers at the following locations:

- Metropolitan Areas.
- Urban Centers.
- Suburban Regions.
- Semi-Urban Territories.
- Rural Localities.

The Safe Deposit Locker facility can be utilized by:

- Individuals-either singularly or in Conjunction.
- Partnership Firms.
- Companies.
- Associations.
- Clubs.

Rent for Safe Deposit Lockers is to be remitted annually in advance by the hirer. Locker hirers possess the option to remit three years' rent in advance. Locker rental fees may fluctuate based on the Geographical Location of the Bank Branch (i.e., Rural, Semi-urban, Urban, or Metropolitan) as well as the size of the locker.

In metropolitan and urban locations, the prevalence of bank branches (both public and private sector) is heightened due to the significant business potential. The density of branches is also greater in Tier-1, Tier-2, and Tier-3 areas when contrasted with Tier-4, Tier-5, and Tier-6 regions (encompassing semi-urban and rural areas).

RFID and GSM Technology Smart Bank Locker Security System.



The "Smart Bank Locker Security System" incorporates RFID, Biometric Fingerprint Identification, password protection, and GSM Technology. This system ensures that only authenticated individuals can unlock and retrieve essential documents and jewellery from the lockers.

Within this security framework, RFID, Biometric Fingerprint recognition, password access, and GSM technology are employed.

During the authentication process, the user initially swipes an RFID tag across the RFID reader, followed by the scanning of the fingerprint of the authenticated individual, which the system subsequently cross-verifies with the existing database records. In the event of a discrepancy, the system activates the alarm to notify security personnel.

If the fingerprint is validated, the system then permits access for the authorized individual to input the password.

(Source: ICICI Bank Web-Site)



a) Safe Deposit Locker System Process:

The procedural framework of the Safe Deposit Locker System and the temporal duration required for the entire process, as determined by a 'Time and Motion Study', is delineated as follows:

Opening of Safe Deposit Locker Account and its Operations: When a client expresses the desire to engage in the acquisition of a Safe Deposit Locker from the Bank Branch, the subsequent steps delineate the procedure for 'Opening and Operating' the Safe Deposit Locker System:

Step-1: The Client is required to complete the 'Standard Application form' formulated by the Bank for the Safe Deposit Locker, affixing a recent photograph and providing their signature.

Step-2: The Client must present the 'Know Your Customer (KYC) Documents' in conjunction with the Standard Application Form.

Step-3: The Client is to complete the 'Pay-in-Slip' for the 'Locker Rental fee' corresponding to the Locker intended for acquisition.

Step-4: The Client must fill out the 'Fixed Deposit Form' alongside the Pay-in-Slip for the Annual Rental fee of the Safe Deposit Locker, where the interest accrued on the Fixed Deposit shall be utilized for the Annual Rental fee in accordance with the Client's Standing Instructions.

Step-5: The Client is to complete the 'Locker Agreement', ensuring the affixation of the necessary stamps in compliance with the 'Indian Stamp Act'.

Step-6: (Steps 1 through 5) All submitted documents are to be scrutinized and verified by the 'Locker Authorized Official' in accordance with the prevailing Systems and Procedures of the Bank.

Step-7: The particulars of the prospective locker Hirer must be duly recorded in the appropriate Registers as per the Bank's Systems and Procedures.

Step-8: The Locker Authorized Official is responsible for entering the relevant details of the Hirer into the 'Core Banking System' under the "Locker Module".

Step-9: Upon thorough examination of all documents, the Locker Key shall be entrusted to the Hirer, contingent upon the confirmation of Locker Rent Payment and Standing

Instructions concerning Fixed Deposit Interest for the Hirer's Annual Locker Rent.

Step-10: The signatures of the Client(s) are to be obtained in the 'Locker Access Register', with the inclusion of the Date, Time, and Locker Number, which must be duly verified and endorsed by the Locker Authorized Official to facilitate access to the newly allocated Locker by the Hirer.

Step-11: The Client shall be escorted to the Locker Room, where the assigned Locker will be demonstrated through the utilization of the Master Key (Bankers' Key) alongside the Locker Holder Key.

Step-12: Upon completion of the Locker operation by the Client, the designated Official is mandated to verify the Locker to ensure that it is "Properly Locked" and to 'Certify' this verification in the Locker Access Register (on the same page as mentioned in Step No.10).

Step-13: The particulars, including Time and Date of Locker Access, must be recorded in the Core Banking System, which will subsequently generate an 'SMS' to the Client's Registered Mobile.

Total Process Time: For the establishment of a 'Safe Deposit Locker (New Account)' for a Singular Locker Hirer:

- ✓ Steps 6 through 13 will approximately require 1 Hour (50 Minutes); this duration is contingent upon the distance from the Banking Hall to the Locker Room, the number of individuals associated with each Locker (Jointly / Either or Surviving), as well as the nature of Hirers such as Companies, Trustees, or Societies, which will necessitate a more extensive scrutiny and processing of the Documents.

Total Process Time: For Existing Locker Holders – For Each Operational Activity:

- ✓ Steps 10 through 13 will require approximately 20 Minutes; this time is subject to the distance from the 'Banking Hall' to the 'Locker Room', among other factors.

b) Forecasting Usage of Safe Deposit Lockers by Customers at Bank Branches:

It is inherently challenging to ascertain the frequency with which customers will engage in locker operations on a day-to-day basis, as this is contingent



upon various factors including:

- ✓ The urgency exhibited by the customer in either retrieving or depositing significant documents or valuable jewellery stored within the locker.
- ✓ Seasonal festivities, as locker activity tends to reach its zenith during celebratory periods.
- ✓ Occurrences of auspicious events within the households of hirers, as well as among friends and relatives.
- ✓ The marriage season, during which there is a marked increase in locker operations compared to other periods.
- ✓ The necessity to secure loans against gold (to pledge to financial institutions) or to obtain loans based on security documents (via mortgage) and similar transactions.

Due to the aforementioned factors, it may not be feasible for bank branches to designate a dedicated staff member specifically for locker operations within the institution.

This is particularly salient in contexts where the average number of lockers at branches falls within the range of 600 to 1,000.

c) Centralization of Lockers-Cost Control & Business Consideration:

Centralization of lockers for a cluster of Indian Commercial Bank Branches can create a cost advantage by reducing infrastructure, operational costs, and staffing needs, while also improving service levels by offering access to a wider range of security and specialized services for High Net-Worth Individuals (HNIs). However, implementing such a model requires careful planning to ensure customer convenience, security protocols, and effective management of the central facility to meet the expectations of HNI customers.

Centralization of Lockers for Cluster of Branches

Centralizing Lockers for a cluster of Indian commercial bank branches is a potential strategy to achieve cost advantages by reducing operational overhead and to enhance service levels for High Net-Worth Individuals (HNIs) by providing better facilities and security. This approach allows banks to concentrate resources on fewer, better-equipped locations rather than maintaining multiple, smaller locker facilities, leading to economies of scale and improved customer experience for HNI clients.

Cost Advantages:

- *Reduced Operational Costs:* Banks can save on costs associated with maintaining multiple branches, such as rent for smaller branches, security personnel, and equipment, by consolidating locker facilities into a larger, more central location.
- *Economies of Scale:* Operating a single, centralized facility is more efficient than managing several dispersed ones, leading to cost savings through bulk purchasing and streamlined processes.
- *Optimized Resource Allocation:* Centralization allows for the rationalization of resources and the elimination of redundancies across the bank's network.

Increased Service Levels for HNIs:

- *Superior Facilities:* A centralized hub can accommodate larger, higher-security, and potentially more technologically advanced locker facilities, providing a better overall experience for HNIs.
- *Enhanced Security:* Consolidating assets into one secure location can improve overall security for the lockers, as banks can invest more in robust security measures for a single, high-value facility.
- *Focus on Specialized Needs:* By serving HNIs from a dedicated, centralized location, banks can also offer more tailored services, including personalized assistance and customized solutions for their specific needs.

Implementation Considerations:

- *Strategic Branch Network Design:* The success of centralization depends on careful planning to ensure the centralized facility is easily accessible to HNI customers from various branches within the cluster.
- *Technological Integration:* Banks can integrate technologies like Artificial Intelligence (AI) and machine learning (ML) to drive personalized customer service and operational efficiency within these centralized centers.
- *Customer-Centric Approach:* The shift towards centralization should be balanced with customer convenience, ensuring that the new model still meets the needs of the existing customer base.

Cost Advantages:

- ✱ **Reduced Infrastructure Costs:** Instead of multiple branches maintaining their own locker facilities, a single, centralized facility requires less overall space and fewer physical resources to build and maintain.
- ✱ **Operational Efficiency:** Centralization consolidates locker management, including security, inventory tracking, and customer access, leading to greater operational efficiency and fewer points of failure.
- ✱ **Staffing Optimization:** Banks can optimize staffing by having specialized teams manage the central locker facility, rather than having general staff at each branch handle these specialized services.

Improved Service Levels for HNIs:

- ✱ **Enhanced Security:** A centralized location can accommodate more advanced security systems, such as heightened surveillance, biometric access, and robust physical barriers, which are attractive to HNI customers concerned about the safety of their valuables.
- ✱ **Specialized Service:** HNIs often require personalized services. A Central facility can be equipped to offer a Higher Caliber of Service, including dedicated staff,

private viewing rooms, and concierge services.

- ✱ **Broader Access and Availability:** Centralization can improve availability, as it pools lockers from multiple branches into one location, potentially offering a larger selection of locker sizes and types.
- ✱ **Seamless Customer Experience:** For HNI customers with accounts at multiple branches within the cluster, a centralized locker facility can provide a consistent and convenient experience, eliminating the need to manage multiple locker access points.

Considerations for Successful Implementation:

- ✱ **Customer Convenience:** While centralizing, it's crucial to maintain accessibility for HNI customers, perhaps by offering shuttle services or flexible access hours to the central facility.
- ✱ **Security and Compliance:** The central facility must adhere to the highest security and regulatory standards, as banks are accountable for the safety of customer assets.
- ✱ **Technology Integration:** Seamless integration of technology is essential for efficient management, customer access, and communication with the central facility from the member branches.

Lockers for ALL

"Lockers for Everyone. Currently, only some Bank Branches offer Locker facilities. If banks centralize their lockers in one location, called a Locker House, serving a group of branches, it would not only lower the banks' operational costs but also make lockers accessible to all who need them."

The concept of centralizing bank lockers into a dedicated "Locker House" for a cluster of branches is a proposed strategy that some research suggests could significantly reduce banks' operational costs and potentially increase locker availability. This approach is not yet a standard practice, but it reflects a move towards more efficient, potentially automated, safe deposit systems.

Potential Benefits of Centralized Locker Houses:

- **Reduced Operational Costs:** A primary advantage for banks would be the ability to streamline operations. Instead of constructing and maintaining expensive, high-security strong rooms in numerous branches (each requiring adherence to strict specifications), a single, purpose-built, secure facility would serve several branches. This would reduce overheads related to real estate, construction, security infrastructure, and maintenance across multiple locations.
- **Increased Availability:** By pooling the demand from several branches into one large facility, a "Locker House" could offer a greater variety of locker sizes and ensure higher overall availability to meet customer demand more effectively, potentially eliminating the long waiting lists often found at individual branches.
- **Enhanced Security & Efficiency:** A centralized facility could justify investment in advanced security measures, such as biometric access controls, 24/7 CCTV surveillance, and seismic sensors, which might be cost-prohibitive for smaller, individual branches. Modern, automated systems within these facilities could also provide discreet, unaccompanied, self-service access to customers, removing the need for staff escorts and extending access hours beyond traditional banking times.
- **Profitability:** Research indicates that the current in-branch locker systems are often underpriced and a drain on bank revenues. Centralization, combined with a cost-effective, automated system, could transform lockers into a more lucrative source of non-interest income for banks.



d) 'Time and Motion' Study in Locker Operations:

Initially conceptualized by F.W. Taylor in the realm of Scientific Management

- ✱ Should the bank branch assign additional responsibilities to its personnel alongside their primary banking duties, the ensuing challenges may affect both customers (including locker users) and bank officials:
- ✱ When a locker hirer intends to 'access their locker' at the branch, they must approach the designated official. If this official is tasked with multiple responsibilities, attending to locker operations may be perceived as an interruption while they assist other clients such as depositors, borrowers, and those utilizing remittance services. Consequently, this may hinder the provision of timely service to the locker hirer.
- ✱ If the bank official prioritizes locker customers, there may be a resultant delay in attending to non-locker clientele. This situation leads to:
 - ✓ Both categories of customers (locker and non-locker) experiencing dissatisfaction due to the 'additional charges/multiple tasks' being managed by a single bank official.
 - ✓ The existence of multiple responsibilities not only causes inconvenience to both types of customers but also heightens the likelihood of errors, thereby amplifying the 'operational risks' faced by the bank branch.
 - ✓ On days with a high volume of locker users, the official may be unable to devote sufficient time to non-locker customers. As a result, customer complaints are anticipated to rise, given that each locker operation for a client typically requires a

minimum of 20 to 30 minutes due to the following procedural steps involved in locker operations:

- ✱ Verification of the locker customer's credentials, including photograph and signature, within the core banking system (specifically, the locker module in CBS).
- ✱ Acquisition of the locker hirer's signature, including the date and time, as well as the signature attestation from the customer, documented in the locker access register.
- ✱ Accessing the safe deposit locker room to operate the master key of the locker, thereby granting the locker hirer the ability to open their locker using the key provided by the bank.
- ✱ Upon completion of the locker operation, the same official must reassess whether the locker hirer has securely locked the locker, and must document this verification in the locker access register (a protocol adhered to by the majority of banks).
- ✱ If a Bank Branch possesses between 600 and 1,000 Lockers, and it is posited that, on average, 6 Customers frequent the Branch daily for Locker-related transactions, the Official is required to allocate a minimum of 3 Hours for the provision of Locker Operation Services. In light of Cost Control initiatives, Austerity measures, and Optimal utilization of Human Resources implemented by Banks, there exists a strategic approach wherein the responsibilities of 'Locker-in-Charge' are assigned as an additional duty to those Officials managing Deposits, Advances, Remittances, and similar activities.

Locker Houses at Strategic Locations

Strategic branch placement in high-net-worth (HNI) locations, such as gated communities, is a proven strategy for banks to boost revenue through exclusive services. By catering to the specific needs of affluent clients, banks can foster stronger relationships, leading to more successful cross-selling and upselling opportunities.

Strategic advantages of exclusive branches:

- Location-based exclusivity: Placing an exclusive branch within or near a gated community or other HNI hub offers convenience and a sense of exclusivity that appeals to affluent clients. This prime location signals that the bank is committed to serving their specific needs, attracting a loyal and high-value customer base.



- Targeted relationship management: An exclusive branch model allows for a more personalized, private banking experience. The proximity to HNI clients' residences and the lower foot traffic volume enable branch staff to build strong, long-term relationships, understand their clients' financial goals, and provide bespoke services.

- Enhanced security and privacy: Offering exclusive locker houses addresses the HNI client's need for security and privacy when storing valuables and important documents. High-tech security measures and discreet access are key components of a premium banking experience.

Opportunities for wealth management:

Once a trusted relationship is established through exclusive services like lockers, the bank can capitalize on opportunities to provide comprehensive wealth management services.

- Financial planning: Expert wealth managers can assist HNI clients with creating robust financial plans that encompass saving, spending, and investment objectives. This includes guidance for major life milestones such as retirement and education funding.

- Portfolio management: Wealth managers can create customized investment strategies and diversified portfolios across various asset classes – including equities, bonds, and alternative investments like real estate and hedge funds – that align with an HNI client's risk tolerance and financial goals.

- Specialized services: HNI clients often require more complex financial services, such as estate and tax planning. Exclusive branches staffed with specialists can provide these high-value services, including drafting wills, establishing trusts, and implementing tax-efficient strategies.

Cross-selling and upselling strategies:

The premium experience offered at exclusive branches provides a strategic entry point to offer additional products and services.

- Cross-selling complementary products: A client who has a safe deposit locker can be offered other complementary banking products. For example:

- Higher-tier accounts: Upgrade from a basic savings account to a high-tier version with exclusive benefits like higher transaction limits or lower fees.

- Investment products: Offer investment opportunities such as mutual funds, stocks, or bonds.

- Insurance products: Suggest life, health, or property insurance to provide additional security for assets.

- Upselling premium services: The strong relationship with an HNI client allows staff to recommend premium versions of existing products:

- Higher credit limits: Offer credit cards with higher limits, enhanced rewards, and travel perks.

- Specialized loans: Provide access to exclusive loans, such as loans against shares or property, with better terms and quick approval.

Relationship-based recommendations: Rather than pushy "hard sales," staff can use the client relationship to identify opportunities naturally. For instance, a casual conversation about retirement could lead to a referral for a financial advisor specializing in retirement planning. This consultative approach builds trust and long-term loyalty.



e) Centralization Vs Decentralization of the Locker Business:

The subsequent points elucidate the Disadvantages inherent in the 'Distributed System of Locker Facilities' across all Branches:

- ✓ The presence of a 'Distributed System' engenders inconvenience for both Non-locker and Locker Customers, consequently disrupting the overall Customer Service experience.
- ✓ The establishment of 'Locker Houses' or Centralized Processing Centers (CPCs) has been demonstrated to enhance the 'Productivity of Bank Officials' while concurrently diminishing the incidence of Errors in Banking Operations. The Multi-tasking Approach, wherein Locker Operations are assigned as an ancillary duty to Officials alongside their routine Banking Operations, tends to diminish Productivity and increase the likelihood of Errors, thus heightening Operational risk.

'Cluster-Wise' Centralization of Locker Services (For a Group of 10 to 20 Branches):

Within Metropolitan Areas, Cities, and Urban Locales (Encompassing Tier-1 to Tier-3 Classifications), the Concentration and density of Bank Branches significantly surpass those found in Semi-Urban and Rural regions (Tier-4 to Tier-6). It is observed that in Metropolitan, Urban, and City contexts, an Average of 10 to 20 Branches are situated within a proximity ranging from 100 to 200 Meters, attributable to the heightened Business potential present in these locales.

The subsequent points delineate the Advantages associated with 'Cluster-Wise' Centralization of the Bank's Locker Product, specifically the establishment of 'Locker Houses' as opposed to Locker facilities at each Branch.

Advantages of 'Locker Houses' for 'Cluster' of Bank Branches:

As Commercial Banks increasingly emphasize "Cost Optimization" regarding Bank Transaction Costs, Overheads, and Human Resource Expenses, the Centralization of Safe Deposit Lockers not only facilitates Cost Optimization but also engenders additional Tangible Benefits for the Banks.

The following Monetary and Non-monetary advantages

accrue to Banks as a result of the Centralization of Safe Deposit Lockers, specifically through the creation of 'Locker Houses':

a) Premises: A Locker Room necessitates a minimum spatial requirement of 300 to 400 Square Feet (contingent upon the number of Locker Cabinets) to efficiently accommodate the following:

- ✓ A minimum of 400 to 600 Lockers (particularly in Metropolitan, Urban, and City environments).
- ✓ A Dressing Table complete with a Mirror and Carpet within the Locker Room.
- ✓ Unhindered Movement/Passage for Locker Hirers within the Locker Room.
- ✓ Sufficient spatial allocation between TWO Locker Cabinets.
- ✓ Provision of adequate space to facilitate the Cleaning of the Locker Room on a Daily Basis.
- ✓ In certain instances, branches may be deficient in parking facilities for locker hirers, resulting in potential theft and inconvenience after the hirer vacates the branch premises.

The process of Centralization will preclude the occurrence of Spatial Wastage due to the meticulous Design/Layout of "Locker Houses".

Post-transition of Lockers from the existing Branches, the Branches can optimize the utilization of 'Locker Room Space' or De-hire (Excess Carpet Area) or procure an appropriately sized premises with less Carpet Area, taking into consideration Business Potential and the Coverage of a larger Customer base, among other factors.

As Digital Banking Expands, Branches Decrease in Size (Reduction in Rental Expenditure of Premises):

Financial Institutions are Re-engineering their Branches to enhance their Technological Integration.

For instance, Federal Bank, headquartered in Kerala, has Significantly Reduced the Dimensions of its Newly Established Branches from 1,200 - 1,800 Square Feet to Approximately 800 Square Feet.

b) Optimal Utilization of Human Resources: In the case of a Cluster of Branches, should Banks establish a ‘Locker House / Branches’, they not only optimize Manpower Costs but also mitigate other overhead expenses, significantly enhancing the Bank’s Customer Service. The anticipated number of Lockers to be accommodated in a ‘Locker House’ is approximately 3,000 to 4,000 (Dependent on the Market Potential / Demand for Safe Deposit Lockers). The ‘New Business Model’ yields several additional advantages:

- ✓ Continuous Services can be offered by the Banks (from 9 am to 9 pm-12 Hours).
- ✓ Appropriate facilities with adequate parking provisions can be made available to locker users, thereby augmenting customer satisfaction.
- ✓ A mere two Officers are adequate to manage 3,000 to

4,000 Lockers in a ‘Locker House’. This arrangement optimizes Human Resource Expenditures.

- ✓ There exists potential for further expansion of Locker Business if Banks establish exclusive “Locker Houses”. This initiative enhances Non-Interest Income for the Bank.
- ✓ The establishment of a ‘Locker House’ constitutes a Specialized Function of the Bank. Consequently, it enhances the efficiency and productivity of Locker Operations while minimizing Errors. This approach alleviates Operational Risks.
- ✓ The other discernible benefits encompass a decrease in overall Electricity Expenditures, other Overheads, and Rental Costs (when compared to lockers that are dispersed within Bank Branches).

Centralization of Lockers

It’s possible to leverage branch networks by centralizing lockers or creating exclusive, high-touch locker-only branches to sell wealth management products to High-Net-Worth (HNI) customers, addressing decreasing customer footfall from digital channels. This strategy attracts HNIs to physical branches for specialized services, creating an omnichannel experience that blends digital convenience with personalized, in-person interactions for complex financial products like wealth management.

Strategies for Leveraging Branches for Wealth Management:

Centralized, Exclusive Lockers:

- *Strategic Location:* Instead of distributing lockers widely, concentrate them in a few key locations, such as luxury branches or areas with a high concentration of HNI clients.
- *High-End Amenities:* Equip these centralized locker facilities with premium waiting lounges, private meeting rooms, and personalized services to create a luxurious and exclusive experience.
- *Integrated Service:* Have dedicated wealth management advisors present at these locations to engage with clients, offer personalized consultations, and facilitate sales of wealth management products directly.

Locker-Exclusive Branches:

- *Specialized Concept:* Develop a new branch format focused primarily on secure locker services, but also designed to attract HNIs with a sophisticated environment and high-value offerings.
- *Enhanced Security and Privacy:* Market these branches as secure and private spaces for storing valuables and, by extension, for discussions about sensitive financial matters and wealth management strategies.
- *Targeted Marketing:* Promote these specialized branches through targeted advertising and digital marketing campaigns to reach HNI segments, highlighting the unique value proposition of secure storage and personalized financial advice.

Addressing the Decline in Footfall:

- *Omnichannel Experience:* This approach acknowledges the trend towards omnichannel customer journeys, where physical and digital interactions are intertwined. While digital channels attract a broad customer base, the exclusive branch model provides a curated, high-value physical experience for specific client segments like HNIs.
- *Personalization and Trust:* Wealth management products require personalized advice and a high degree of trust. By offering a more hands-on, personalized interaction at these specialized branches, banks can build stronger relationships and foster greater client loyalty than through purely digital platforms.



c) Premises Rental Expenditures: The location for the Locker House may be strategically identified at a mid-point within the Cluster of Branches and in Non-Commercial Areas where Public Traffic is Moderate owing to Security Considerations. In such locations, the Rent (Real Estate Cost) is comparatively lower than that in Commercial or Prime Districts. A significant proportion of Locker Users are often located far from the Branches, as their Residential Areas are distanced from Commercial Zones.

During the Tender Process, the Bank may stipulate conditions to prospective Landlords that the 'Locker House' must be constructed in accordance with the Bank's Design / Layout / Specifications.

d) Image Development: One of the strategies to augment the number of Locker Customers utilizing the Bank's Locker Facility is the Image Building Process or 'Unique Selling Proposition (USP)'. To achieve effective Image Building, the following measures should be undertaken by the Banks when selecting Locations for 'Locker Houses':

- ✱ Sufficient Space must be allocated for Car Parking at the "Locker House" for the convenience of Locker Users. This type of facility is often unfeasible at Branches situated in Commercial / Prime Areas. Given that many Locker Holders are either 'High Net-Worth Individuals' or 'Elite Customers' who utilize their OWN Vehicles when Visiting the Bank Branches to access their Lockers.
- ✱ A 'Comfortable Lounge' Area is essential for the seating of 'Elite Customers', along with the implementation of an Electronic Token System, among other amenities.
- ✓ "Promotion of Bank Products" should be prominently displayed within the Lounge, including 'Third Party Products' and the Bank's 'Wealth Management Services', among others.
- ✓ The establishment of a robust 'Relationship Management' framework with banking 'High Net Worth' or 'Elite' clientele constitutes a critical strategic approach to mobilizing further business from this demographic. This can be effectively achieved through the implementation of 'Locker Houses' by financial institutions. In light of advancements in banking products, operational methodologies, and an increase in alternative delivery channels, the frequency of customer visits to bank branches is progressively diminishing,

particularly in metropolitan, urban, and city environments.

- ✓ Customers predominantly visit bank branches for a limited number of transactions, such as accessing various types of loans or utilizing locker services. (In certain financial institutions, prospective borrowers seeking retail loans or MSME loans are opting to visit Central Processing Centers instead of traditional branches). The provision of locker access represents a product that facilitates customer interaction; however, if locker facilities are exclusively available at bank branches, it becomes exceedingly difficult to focus on the needs of High-Net-Worth Customers. Consequently, the establishment of 'Locker Houses' offers substantial advantages to banks compared to the traditional locker facilities made available through their branches.

Success Story – Centralization of Lockers

ICICI Bank has pioneered an innovative and state-of-the-art locker service in India, known as the 'Smart Vault'. This service ensures the security of locker hirers' valuables while providing the convenience of access at any time and on any day.

It epitomizes excellence in convenience and safety; the Smart Vault integrates cutting-edge robotic technology and high-level security features.

The Smart Vault operates through groundbreaking robotic technology that minimizes human intervention during locker operations. The advanced Radio Frequency Identification (RFID) system scans customer requests and retrieves lockers using a robotic arm from the bank's secure and robust vault.

Customer lockers are made conveniently accessible to clients at a designated kiosk. Upon completion of the customer's usage of the locker, the robotic arm retrieves the customer's locker and securely returns it to its original location.

Link: <https://www.youtube.com/watch?v=3CZJvku5ym4>

(Source: ICICI Bank)

A thorough "Time and Motion Study", alongside a "Cost-Benefit Analysis" concerning the non-financial banking product of locker hiring, reveals discernible advantages for commercial banks through the establishment of 'Locker Houses', including:



- ✱ The provision of ‘Unique Customer Service’ tailored to ‘High Net Worth / Elite Customers’ within banking institutions.
- ✱ The creation of “Locker Houses” serving clusters of branches yields cost advantages for banks, such as:
 - ✓ A decrease in ‘Real Estate Costs’, specifically in rental expenditures.
 - ✓ Optimal utilization of manpower alongside a reduction in Manpower costs.
 - ✓ Enhanced customer service at bank branches (including depositors and borrowers).
 - ✓ A minimization of operational risks associated with bank branches.

Given that Bank Branch customers are dispersed throughout urban areas due to the expansion of cities and metropolitan regions in all directions, this represents an opportune moment for banks to establish “Locker Houses” at strategically advantageous locations.

To Sum Up:

Banks to centralize safe deposit lockers into dedicated “locker houses” within metro, city, and urban areas, especially for clusters of branches, to reduce operating costs and enhance customer service. This model offers potential benefits by consolidating infrastructure and streamlining operations, but it’s a strategic shift from the current model where lockers are primarily located within individual bank branches.

Benefits of a “Locker House” Model:

- ✱ **Cost Efficiency:** Centralizing lockers could reduce the overhead costs associated with building and maintaining strong rooms in every branch, optimizing resource allocation.
- ✱ **Customer Convenience:** Customers could access a wider selection of locker sizes at a single, convenient

location for a group of branches, improving customer satisfaction.

- ✱ **Streamlined Operations:** A dedicated facility could allow for specialized security personnel and infrastructure, potentially leading to more efficient and robust locker management.
- ✱ **Scalability:** Locker houses could be designed to scale with demand, providing more capacity than a dispersed branch network.

A shift to a centralized locker house model would move away from the distributed, branch-based system to a consolidated approach in urban centers. This strategic suggestion aims to balance cost savings with enhanced customer experience, but it would require substantial planning and investment to implement effectively.

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Annexure I

Cost of arriving Locker Rent

Indian commercial banks calculate locker rent by factoring in the costs of providing the locker service, along with a profit margin (spread). The common banking practices in India, the key components for arriving at the monthly locker rent include:

- ✱ Depreciation of the locker cabinet
- ✱ Carpet area of the locker room and its rent
- ✱ Locker officer time spent on operations
- ✱ A spread element for profit
- ✱ Adjustments based on locker size and branch location

Cost calculation for a single locker:

The total cost to be recovered from a single locker can be determined by aggregating the various cost components over a period, such as one year, and dividing it by the total number of lockers.

Total Cost per Locker (Annual) = Locker Cost + Operation Costs + Rent Allocation.

a) Locker cabinet depreciation:

First, calculate the annual depreciation of the locker cabinet. This can be done using either the Straight-Line Method (SLM) or the Written Down Value (WDV) method.

Straight-Line Method: Assumes a consistent depreciation expense each year.

Annual Depreciation = (Original Cost – Residual Value) / Useful Life.

Written Down Value Method: Applies a fixed Depreciation rate to the Asset's current book value each year.

Annual Depreciation = WDV at Start of Year x Depreciation Rate.

b) Locker room rent allocation:

The total rent for the branch must be allocated to the locker

room based on its carpet area.

Step 1: Calculate the monthly rent per square foot for the Branch.

Rent per Sq. Ft. (Monthly) = (Total Branch Rent / Total Branch Carpet Area)

Step 2: Determine the monthly rent attributable to the locker room.

Locker Room Rent (Monthly) = Locker Room Carpet Area x Rent per Sq. Ft.

Step 3: Allocate the locker room rent to each locker.

Rent per Locker (Monthly) = (Locker Room Rent: Monthly / Number of Lockers)

c) Locker officer's Time allocation:

The locker officer's salary is a human resource cost that must be recovered. The cost can be allocated based on the total time spent handling locker-related tasks, like managing access and documentation.

Step 1: Calculate the locker officer's monthly salary equivalent.

Officer Salary (Monthly) = (Annual Salary / 12 Months).

Step 2: Estimate the percentage of time the officer spends on locker operations.

Officer Cost per Locker (Monthly) = (Office Time Cost: Monthly / Number of Lockers).

Monthly locker hiring cost calculation:

The monthly locker charge is derived from the total monthly cost of providing the service, plus a profit margin (spread) and an adjustment based on the locker's size and location.

Monthly Locker Rent = ((Depreciation + Rent + Officer Cost) / 12) x Size Factor + Spread

✱ **Cost per locker (monthly):** Sum the monthly allocated costs for depreciation, rent, and officer's time.



- ★ **Size factor:** Banks charge more for larger lockers and less for smaller ones. This factor ensures the rent reflects the premium space.
- ★ **Spread element:** This is the profit margin for the bank, which is added to the total cost to arrive at the final rental price.
- ★ **Location:** In addition to these internal calculations, Indian banks adjust prices based on location. Metro and urban branches typically have higher rents than semi-urban or rural ones, reflecting higher operational costs like rent.

Example:

- ★ A larger locker size will have a higher Size Factor.
- ★ A branch in Mumbai (Metro) will have a higher rent allocation due to higher total rent, resulting in a higher overall charge than a branch in a rural area.

This systematic approach ensures that all operational and capital expenses are covered, allowing the bank to turn a profit while maintaining a tiered pricing structure that reflects the different levels of service and space provided.



Annexure II

Maximize the Revenue through Locker Business

The bank branch's strategy to maximize revenue and control costs associated with its locker facilities. By ensuring all lockers are to be rented (NO Vacant Locker), banks can avoid financial losses from unused Lockers and associated operating costs. The strategy relies on data-driven forecasting to match locker supply (Based on the HNI Customers of the Branch and potential demand for Lockers) etc.

The core principles of the strategy:

Maximize revenue by ensuring zero vacancy: A bank locker is a product that generates rental income for the bank.

- ✱ When a locker is vacant, it is an idle asset that provides no return on investment, thereby creating a lost revenue opportunity.
- ✱ Achieving full occupancy ensures that the bank is maximizing the revenue-generating potential of its locker inventory.

Reduce idle capital expenditure (CapEx):

- ✱ Purchasing and installing locker cabinets is a significant initial capital expenditure for a bank.
- ✱ If a bank overestimates demand and installs more lockers than it can rent out, this capital becomes idle.
- ✱ By basing purchasing decisions on a realistic forecast, the bank can avoid unnecessary CapEx and invest its funds more efficiently elsewhere.

Control recurring operating costs: A bank's recurring costs for its locker facility are largely fixed, regardless of the occupancy rate. These include:

- ✱ **Locker room rent:** The branch has to pay rent for the

physical space housing the lockers, whether they are occupied or not.

- ✱ **Maintenance and security:** There are ongoing costs for security systems, staff to manage the facility, and general maintenance.

An empty locker cabinet still contributes to these expenses, but an occupied one generates income to cover them. Maximizing occupancy is key to increasing the facility's profitability.

How banks forecast locker demand: To execute this strategy, banks use data to accurately predict the need for new lockers:

HNI customer data: High-Net-Worth Individuals (HNIs) are a primary customer segment for bank lockers, as they have valuable assets that require secure storage. Banks analyse the size and growth of their HNI customer base to anticipate future locker demand.

Potential demand in the area: The bank branch evaluates the demographics and wealth profile of its local area of operation. For instance, an area with a growing affluent population and a high concentration of jewellery stores or other valuable assets is a good indicator of high potential demand.

Analysing historical data: Banks can also analyse the history of their existing locker facility to understand patterns of demand and assess current capacity.

In summary, a data-driven, profit-maximizing strategy for bank locker facilities. It treats lockers as a finite resource and a revenue-generating product, emphasizing that intelligent forecasting and full occupancy are crucial to controlling costs and ensuring a positive return on investment.



Annexure III

Setting of Exclusive Locker Houses

Setting up exclusive “Locker Houses” branches to serve High-Net-Worth Individuals (HNIs) in gated communities is a viable strategy for Indian banks to capture a high-value market. This approach aligns with the growing demand for personalized and discreet financial services among India’s affluent population, which is expected to grow significantly.

Strategic advantages:

- ★ **Targeted and superior service:** These branches can offer HNIs dedicated relationship managers, priority service, and privacy, directly addressing their need for a premium, non-traditional banking experience.
- ★ **High-demand locker services:** RBI’s stringent new locker regulations for banks have created a surge in demand for reliable and modern locker facilities. A dedicated Locker House could feature state-of-the-art security, biometric access, and CCTV surveillance, exceeding standard branch offerings to meet high-end client expectations.
- ★ **Cross-selling opportunities:** A relationship built on secure locker services can serve as an entry point to introduce a suite of other products, including wealth management, insurance, mutual funds, and bespoke lending options.
- ★ **Strategic location:** Placing these exclusive branches within or near high-end gated communities makes services highly convenient for the target clientele, fostering loyalty and deeper relationships.
- ★ **Reduced operational risk:** By segregating HNI services into specialized branches, banks can minimize the risk of high-value transactions being processed in standard, high-footfall branches.
- ★ **Brand reputation:** A specialized, premium service enhances the bank’s brand image, attracting more affluent clients and positioning the bank as a leader in wealth management.

Key business components:

Locker business:

- ★ **State-of-the-art facilities:** Provide lockers of various sizes with advanced security features like biometric or iris scanners, tamper-proof locks, and 24/7 CCTV surveillance
- ★ **Premium features:** Offer climate-controlled vaults for sensitive documents, private rooms for locker operations, and comprehensive insurance options,

which RBI rules require banks to offer with a liability limit of 100 times the annual rent.

Wealth management services:

- ★ **Personalized advisory:** A dedicated relationship manager will provide expert guidance on complex financial needs, from customized portfolio management to tax and succession planning.
- ★ **Exclusive investment products:** Offer access to private equity, alternative investment funds (AIFs), unlisted equities, and structured products, which are typically only available to HNIs.
- ★ **Estate and succession planning:** Assist with structuring wills, trusts, and other legal arrangements to ensure smooth wealth transfer and preservation.

Third-party product distribution:

- ★ **Strategic partnerships:** Use the dedicated HNI platform to sell carefully curated third-party products from trusted partners. These could include insurance, mutual funds, and other financial instruments.
- ★ **Customized selection:** The range of products offered should be tailored to the specific needs and risk appetites of the HNI demographic.

Implementation steps:

- ★ **Market analysis:** Identify high-value gated communities in major cities like Hyderabad, Bengaluru, and Mumbai with a high concentration of affluent residents.
- ★ **Build the infrastructure:** Design a branch with a premium and discreet ambiance, ensuring top-tier security for the locker vault and privacy for client interactions.
- ★ **Hire specialized staff:** Recruit and train relationship managers with expertise in wealth management, private banking, and a deep understanding of the HNI market.
- ★ **Develop a product suite:** Create a compelling package of integrated services that include premium locker facilities, bespoke wealth management solutions, and exclusive third-party products.
- ★ **Launch and marketing:** Use targeted marketing campaigns and direct outreach to HNI prospects within the identified communities. Host exclusive, invite-only events to build relationships and showcase the new offering.



Chapter 11

Cost of Cash (Branch + ATMs)



Contents:

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Maintaining Cash involves Ordering, Carrying, and Holding Costs. Excess Cash means Idle Money. The Chapter explains:

- ✱ *Differences between Receipt-oriented and Payment-oriented Branches.*
- ✱ *EOQ Model for Cash Management.*
- ✱ *Role of CMAs in Optimizing Cash Balances.*

Content is based on discussions with Cash Departments and Cash Replenishment Agencies.



Cost of Cash (Branch + ATMs)

Indian commercial banks face significant challenges with “just-right” cash holdings, excessively low cash levels create opportunity costs from lost interest and can lead to image risk if customers can’t withdraw funds, while excessively high levels tie up capital, which could otherwise be invested for returns. Banks manage this by forecasting demand, optimizing cash in Vault or ATMs or CDMs, and using technology to improve cash management, though challenges like managing denominations and ensuring sufficient liquidity remain, according to industry discussions.

Challenges of “Just-Right” Cash Holding:

Opportunity Costs:

- ✳ **Lost Investment Returns:** Money held as cash in branches and ATMs cannot be invested in higher-return financial instruments, leading to foregone profits for the bank.
- ✳ **Inflation:** Holding too much cash can diminish over time due to inflation, a direct financial loss.

Image Risk and Customer Dissatisfaction:

- ✳ **Liquidity Shortfalls:** When cash levels are too low, banks may be unable to meet customer withdrawal demands, leading to customer frustration and a negative perception of the bank’s reliability.

- ✳ **Reputational Damage:** Inability to provide cash services can quickly damage a bank’s reputation, especially in a cash-dependent economy, and can be difficult to recover from.

Strategies for Managing Cash Holdings:

- ✳ **Forecasting and Demand Management:** Banks use data and analytics to predict customer cash needs and optimize cash distribution between branches and ATMs.
- ✳ **Cash Optimization and Technology:** Implementing systems to track cash denominations and identify underutilized cash at specific points helps optimize flows.
- ✳ **Intraday and Real-time Management:** Leveraging technology to enable faster cash movement between branches and managing intraday cash positions can significantly improve liquidity management.
- ✳ **Cash-in-Transit Optimization:** Efficiently managing the movement of cash to and from ATMs and branches reduces costs and ensures availability.

Reserve Bank of India Guidelines:

Policy and Guidelines: The Reserve Bank of India (RBI) sets guidelines and regulations that influence how banks manage their cash, aiming to balance operational efficiency with financial stability. The banking sector to improve cash management efficiency.

Cash Balances (Branches + ATMs + CDMs) as on 31.03.2025

(‘000 Omitted)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	213201,53,63	318265,20,71	247087,57,52	225141,69,61	227217,49,40
Punjab National Bank	43958,82,83	85736,11,66	78176,57,52	65032,91,16	64304,60,79
Bank of Baroda	38841,03,76	71184,40,53	54882,63,14	54839,83,34	56068,49,44
Canara Bank	43111,62,29	51602,91,25	54988,44,54	71068,18,36	89998,56,75
Union Bank of India	37880,46,13	461,12,59,11	50254,27,41	52897,50,24	89503,48,24
Bank of India	60697,56,78	402,80,57,78	44034,50,54	38556,26,87	51730,42,53
Indian Bank	27545,08,17	58554,60,97	32692,63,01	32702,75,93	31947,64,88
Bank of Maharashtra	12882,48,23	19721,92,62	18507,72,06	21161,33,96	37992,99,37

Name of the PSB	2021	2022	2023	2024	2025
Central Bank of India	32187,84,20	38033,69,74	27432,91,98	22954,68,91	22931,10,16
UCO Bank	9445,41,44	10287,54,69	10300,01,44	10197,17,22	10358,91,52
Indian Overseas Bank	12189,20,63	22749,65,47	17150,18,08	16904,56,29	18115,54,82
Punjab & Sind Bank	7208,51,55	6139,23,84	6225,40,08	7312,46,45	8793,80,11
Total	539149,59,64	768668,48,37	641732,87,32	618769,38,34	708963,08,01
Opportunity Cost of Interest @ Repo Rate					
5.50% (As on 01.10.2025)	29653,22,78	42276,76,66	35295,30,80	34032,31,60	38992,96,94

(Source: Annual Reports of PSBs)

Note: The Opportunity Cost of Cash holdings of 12 Public Sector Banks as on 31.03.2025 is ₹ 38,993 Crores (@ Repo Rate of 5.50%) Plus Insurance Premia paid to the Insurance Companies per annum for Various Risks like Fire, Theft and Burglary etc.

a) Demand Deposits requires more Cash Balance at the Branches:

Commercial banks in India need to hold a larger cash balance at their branches when they have more demand deposits like Savings Bank and Current Accounts because these funds are payable on demand and can be withdrawn by customers at any time. Similarly, working capital loans and overdrafts involve a higher level of fund movement and potential cash outflows, requiring banks to maintain sufficient liquidity to meet these obligations.

The following aspects increases the need for cash reserves:

- ★ **Demand Deposits (Savings & Current Accounts):** These are funds that customers can withdraw from their accounts without prior notice. A larger volume of these deposits directly translates to a greater potential

for daily cash withdrawals, necessitating higher branch cash balances to meet these demands.

- ★ **Overdrafts:** While overdrafts are a form of credit, they involve a customer's ability to withdraw more funds than available in their account up to a specified limit. Managing these accounts requires banks to have readily available cash to facilitate these drawdowns and meet the associated liabilities.

- ★ **Working Capital Loans:** These are short-term loans provided to businesses to cover their day-to-day operating expenses. A higher volume of working capital loans implies that a bank is providing more funds to businesses, which increases the potential cash outflow from the bank and thus the need for higher cash reserves.

EOQ Model

To control idle cash in Indian bank branches using the EOQ method, a bank branch can determine the optimal cash order quantity by calculating the square root of $[(2 * \text{Monthly Cash Demand} * \text{Cost per Cash Order}) / \text{Cost of Holding Excess Cash}]$. This EOQ (Economic Order Quantity) helps minimize costs by balancing the expense of placing orders for cash against the expense of holding too much cash, ensuring sufficient liquidity for transactions without excessive idle balances.

b) More ADCs means less Cash Balance at Bank Branches:

A reduced cash balance at Indian commercial bank branches is necessary when customers increasingly use alternate delivery channels (ADCs) like ATMs, internet banking, mobile banking, and UPI. These digital and remote channels allow customers to perform transactions and access banking services without needing to visit a branch, which shifts the demand for physical cash away

from the branches themselves and thus reduces the need to hold large cash reserves there.

How ADCs impact Cash requirements at Branches:

- ★ **Reduced footfall:** With online banking, mobile apps, and UPI, customers can make payments, transfer money, and manage their accounts from anywhere, anytime, reducing their reliance on physical branches.



- ✱ **Shift in transactions:** Many routine transactions, such as bill payments, account inquiries, and fund transfers, are now conducted digitally instead of in person at the branch counter.
- ✱ **Lower demand for cash withdrawals:** Customers can also withdraw cash from ATMs, which are a form of ADC, rather than from the branch teller, leading to less demand for cash at the branch itself.
- ✱ **Increased convenience and accessibility:** The 24/7 availability and convenience of digital channels mean fewer customers will need to visit a branch for their banking needs.

Therefore, as more customers adopt these alternate channels, the cash that banks need to keep at their branches for day-to-day operations can be significantly reduced, leading to lower operating costs and more efficient cash management.

c) More Cash means 'Opportunity Costs':

Having excess cash at Indian bank branches indeed creates several financial and operational burdens, including opportunity costs (lost interest income), higher insurance and security costs to protect the cash, increased operational expenses for handling and transferring cash, and potentially higher staff costs associated with managing large cash transactions. These factors emphasize the need for efficient cash management to balance the costs of holding excess cash against the risks and expenses of insufficient cash.

Detailed Explanation of the Burdens:

- ✱ **Opportunity Cost of Funds:** Cash held at a branch is not earning interest or being invested in revenue-generating assets like loans or securities. The potential

interest income that could have been earned by investing this idle cash is a significant opportunity cost for the bank.

- ✱ **Increased Insurance Premiums:** Banks must purchase insurance to cover the risks associated with holding large amounts of physical cash, such as theft, fire, or other damage. Higher cash balances directly translate to higher insurance costs.

Higher Operational Costs (Ordering Costs):

- ✱ **Currency Chest Logistics:** Banks incur costs for transporting cash from the central currency chest (managed by the Reserve Bank of India or designated banks) to their branches.
- ✱ **Cash Management:** Handling, counting, and securing large volumes of cash requires sophisticated infrastructure and systems, which adds to operational costs.
- ✱ **Increased Staff Costs:** Managing cash transactions (deposits, withdrawals, exchanges) with customers requires a significant amount of staff time and resources. Higher cash volumes at branches lead to greater staff expenditure for these tasks.

Why Cash Balance is Crucial:

Banks must carefully manage their cash positions to strike a balance between avoiding the significant costs of excess cash and meeting customer demand and regulatory requirements for cash availability. Holding too much cash is expensive, but having too little can lead to lost customer satisfaction, missed business opportunities, and potential penalties. Effective cash management is therefore a vital part of maintaining profitability and operational efficiency.

Total Deposits (Time and Demand Deposits)-Public Sector Banks

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	36,81,277	40,51,534	44,23,778	49,16,077	53,82,190
Punjab National Bank	11,06,332	11,46,218	12,81,163	13,69,713	15,66,623
Bank of Baroda	9,66,997	10,45,939	12,03,688	13,26,958	14,72,035
Canara Bank	10,10,875	10,86,409	11,79,219	13,12,367	14,56,883
Union Bank of India	9,23,805	10,32,393	11,17,716	12,21,528	13,09,750
Bank of India	6,27,114	6,27,986	6,69,586	7,37,920	8,16,541

Name of the PSB	2021	2022	2023	2024	2025
Indian Bank	5,38,071	5,93,618	6,21,166	6,88,000	7,37,154
Bank of Maharashtra	1,74,006	2,02,294	2,34,083	2,70,747	3,07,143
Central Bank of India	3,29,973	3,42,692	3,59,296	3,85,011	4,12,697
UCO Bank	2,05,919	2,24,073	2,49,338	2,63,130	2,93,542
Indian Overseas Bank	2,40,288	2,62,159	2,60,883	2,85,905	3,11,939
Punjab & Sind Bank	96,108	1,02,137	1,09,665	1,19,410	1,29,774
Total Deposits	99,00,765	1,07,17,362	1,17,09,581	1,29,04,945	1,41,96,271
4% of DTL for CRR (Without any Interest)	3,96,031	4,28,694	4,68,383	5,16,198	5,67,851
Cash Holding (₹ in Crs.) (Opportunity Cost)	5,39,150	7,68,668	6,41,732	6,18,769	7,08,963
Total Idle Funds	9,35,181	11,97,362	11,10,115	11,34,967	12,76,814
Opportunity Cost of Interest @ Repo Rate 5.50% (As on 01.10.2025) on Idle Funds	51,435	65,855	61,056	62,423	70,225

Note: As of March 31, 2025, the Total Idle Funds Cost held by 12 public sector banks amount to ₹70,225 crores, with an opportunity cost of interest calculated at the Repo Rate of 5.50%. If these funds were placed from time deposits or borrowed from the call money market, the opportunity cost would be significantly higher than ₹70,225 crores.

d) Receipt Oriented Vs. Payment Oriented Branches:

Receipt-oriented branches in Indian commercial banks typically require a lower cash balance than payment-oriented branches because their primary function is to receive and collect cash, while payment branches are focused on disbursing cash, which necessitates a larger reserve to meet outgoing demands.

Rationale:

- ★ **Receipt-Oriented Branches:** These branches primarily handle deposits and collections. When cash comes in, the cash balance increases. While some of this cash will be transferred to a bank account for security, the branch still ends up with a net inflow, meaning it doesn't need to hold a massive cash reserve for immediate outgoing payments.
- ★ **Payment-Oriented Branches:** These branches act as disbursement points, paying out money to customers for withdrawals, loan disbursements, and other services. To fulfil these ongoing payment obligations, they must maintain a larger cash reserve to meet the constant demand for cash.

Factors influencing cash balance needs:

- ★ **Branch Activity:** The nature of transactions (deposits vs. withdrawals) dictates the cash flow.

- ★ **Cash Management Strategies:** Banks implement automated cash management solutions to optimize cash levels, reduce risks, and improve security.
- ★ **Security Risks:** Holding large amounts of cash creates security risks, so banks aim to keep cash balances at optimal levels, transferring excess cash to central repositories or accounts.

e) Excess Cash to be Deposited in Currency Chest Branch by Commercial Banks:

A commercial bank's deposit of excess cash into an RBI currency chest is treated as a deposit to its current account at the Reserve Bank of India (RBI), which is then reckoned for Cash Reserve Ratio (CRR) calculations, as these are funds held directly by the bank with the central bank.

Deposit to Current Account:

- ★ When a commercial bank deposits excess cash into a currency chest, the RBI records this as a debit to the bank's current account with the RBI, effectively increasing the bank's balance with the central bank.
- ★ The currency chest is a facility managed by the RBI for stocking and distributing currency, so transactions into it are direct transactions with the RBI.



Relevance for CRR:

- ✱ The Cash Reserve Ratio (CRR) is the percentage of a bank's total deposits that must be held as cash with the RBI.
- ✱ Since depositing cash into a currency chest result in

the cash being held by the RBI, it is considered part of the bank's balance with the RBI.

Therefore, these funds held at the RBI are directly included in the calculation of the bank's CRR requirement, according to the definition of CRR.

Excess Cash to be Deposited in Currency Chest by Bank Branches

Depositing excess branch cash into an RBI currency chest is a beneficial strategy for banks because the funds are credited to their account at the RBI and count towards their Cash Reserve Ratio (CRR) requirement, not the Statutory Liquidity Ratio (SLR), thus avoiding the need to borrow from the call money market to meet CRR shortfalls. This method optimizes cash management by ensuring reserves are readily available for CRR compliance while minimizing operational costs and risks associated with holding large cash reserves at branches.

Understanding Cash Holdings, SLR, and CRR:

- *SLR (Statutory Liquidity Ratio):* Commercial banks must hold a specific percentage of their Net Demand and Time Liabilities (NDTL) in liquid assets like cash, gold, or government-approved securities.
- *CRR (Cash Reserve Ratio):* Banks must also maintain a certain percentage of their NDTL as cash reserves with the Reserve Bank of India (RBI).
- *Currency Chests:* These are strong rooms managed by banks to store RBI notes and coins, helping them manage cash needs efficiently and reduce idle cash balances at branches.

How the Strategy Works:

- *Excess Cash is Identified:* Banks hold cash at their branches for daily operational requirements. Any cash exceeding these needs is considered excess.
- *Deposit into Currency Chest:* Instead of keeping large cash reserves at branches, banks deposit this excess cash into the RBI's currency chest.
- *RBI Credit:* The RBI credits the corresponding amount to the bank's account, effectively making it part of the bank's cash reserves.
- *CRR Compliance:* This credited amount is then used to meet the bank's CRR requirements with the RBI, as it's considered part of the bank's reserves with the central bank.

Why This Strategy is Advantageous:

- *Avoids Call Money Borrowing:* Banks can fulfil their CRR obligations by utilizing their own cash, deposited in the currency chest, rather than borrowing from the call money market to cover shortfalls.
- *Reduced Costs:* This strategy reduces the costs and risks associated with managing and transporting large amounts of physical cash at numerous branches.
- *Improved Liquidity Management:* It provides a more efficient way for banks to manage their cash and liquidity positions across the system.

f) Optimal utilization of Currency Chests of RBI:

Commercial banks should optimally utilize the Reserve Bank of India (RBI) currency chests to deposit their excess cash, as this cash then counts towards their required Cash Reserve Ratio (CRR), eliminating the need to borrow from the call money market to meet CRR requirements. By transferring excess branch cash to these RBI-linked chests, banks can effectively reduce their CRR obligations and simultaneously improve their liquidity, avoiding costly interbank borrowing for this purpose.

How it Works:

- ✱ **Excess Cash Management:** Branches with more cash than they need for daily transactions can deposit this surplus into their linked currency chest.
- ✱ **CRR Compliance:** The cash held in these RBI currency chests counts towards the bank's statutory CRR requirement.
- ✱ **Reduced Borrowing:** Since their CRR is being met

with their own excess cash in the chests, banks do not need to borrow money from the call money market to maintain their required reserves.

Benefits for Commercial Banks:

- ★ **Cost Savings:** Banks save on the interest payments they would otherwise make on money borrowed from the call money market.
- ★ **Improved Liquidity:** By efficiently utilizing currency chests, banks can manage their cash flow more effectively and ensure they have sufficient liquidity without relying on external borrowing.
- ★ **Compliance:** It helps banks meet their CRR obligations in a timely and efficient manner.

Closing Cash Balance of Banks is Counted for SLR Purpose

Physical cash in hand, which includes cash in bank vaults and cash in ATMs, counts towards a bank's Statutory Liquidity Ratio (SLR) requirement in India. The SLR mandates that banks maintain a portion of their Net Demand and Time Liabilities (NDTL) in the form of liquid assets, which can include cash, gold, and government securities, with the current SLR set at 18% as of October 2025.

g) Rural Vs. Urban Branches:

Rural branches need higher cash holdings than urban branches in India primarily due to lower financial literacy and less access to digital banking services among customers in rural areas, leading to a greater reliance on cash for transactions. Urban customers often have more awareness and access to digital platforms, reducing their need for physical cash from the bank.

Factors Contributing to Higher Cash Needs in Rural Branches:

- ★ **Lower Financial Literacy:** Many rural customers lack in-depth knowledge of financial products and services, making them more comfortable with cash transactions rather than digital or electronic payments.
- ★ **Limited Digital Infrastructure:** Access to smartphones, reliable internet, and digital banking platforms is often poorer in rural areas, forcing greater reliance on physical cash.
- ★ **Cash-Dominant Economy:** The economies of many rural areas are still heavily cash-dependent, with a larger portion of daily transactions conducted using physical currency.
- ★ **Barriers to Accessing Services:** Rural populations may face physical barriers and infrastructure gaps that limit their ability to access formal financial services easily, reinforcing the need for cash for daily needs.
- ★ **Customer Preference:** Many rural customers, due to limited exposure or a preference for tangible money, prefer holding physical cash for various personal and business transactions.

h) Cash Holding Costs:

Indian commercial banks' branch cash holding costs include expenses like security, transportation, and staff salaries for managing cash reserves, while ordering costs encompass the expenses associated with replenishing cash, such as the cost of transporting cash from the RBI's currency chests to the branch. Banks must adhere to RBI regulations for cash management and maintenance, utilizing currency chests to streamline operations and avoid daily interactions with the RBI for cash deposits and withdrawals.

- ★ **Cash Holding Costs:** These are the expenses a bank branch incurs to maintain its cash reserves:
- ★ **Security:** The cost of maintaining secure storage facilities (safe vaults) and employing security personnel to protect the cash within the branch.
- ★ **Transportation:** Expenses related to the secure transport of cash to and from the branch, including the use of security vans and personnel for Cash in Transit (CIT) services.
- ★ **Staffing:** The salaries and training costs for bank employees responsible for counting, managing, and verifying cash at the branch.

Opportunity Cost: The financial opportunity cost of holding cash in a branch, as this capital could otherwise be invested or used to generate income.

- ★ **Ordering Costs:** These are the costs associated with ordering and receiving fresh cash for a bank branch:
- ★ **Transportation from /to RBI Currency Chests:** The cost incurred when a branch requests cash from an



RBI currency chest to replenish its holdings.

- ✱ **Service Charges:** The service charges levied by the RBI or designated currency chest-holding banks for cash deposits and withdrawals.
- ✱ **Administrative Costs:** Internal administrative costs related to processing requests for cash replenishment and managing the inventory of cash.

Operational Aspects and RBI Regulations:

- ✱ **Currency Chests:** Banks maintain currency chests authorized by the RBI to act as central hubs for cash distribution. This allows branches to receive and deposit cash without daily transactions with the RBI.
- ✱ **Daily Cash Management:** Branches are required to maintain cash balances within specific limits, and any excess cash is kept in the currency chest.

Cash Pick Ups from Cash Deposit Machines (CDMs)

Based on the cash balance in a Cash Deposit Machine (CDM), banks can optimize cash pickups by balancing the opportunity cost of holding cash against transport and manpower costs. By analysing cash levels dynamically, banks can create efficient collection schedules, rather than adhering to static, frequent intervals.

How banks optimize cash collection from CDMs: To determine the optimal time and frequency for cash pickups, banks consider the following factors:

- **Opportunity cost of cash:** Cash held idle in a CDM is a lost opportunity to earn interest or be used for other investments. The higher the cash balance, the greater the opportunity cost, which increases the incentive for a bank to collect it sooner.
- **Transport and manpower costs:** The physical collection of cash by an armoured vehicle service is a significant operational expense. The more frequent the pickups, the higher the transport and manpower costs.
- **Balancing the trade-off:** Banks use advanced cash logistics and optimization software to analyse these competing costs. The goal is to find the “sweet spot” where the savings from collecting cash early (reduced opportunity cost) outweigh the increased expenses of more frequent trips (transport and manpower costs).

Key technologies that enable optimized cash collection: Banks use sophisticated tools and processes to implement dynamic cash collection strategies:

- **Forecasting and data analytics:** By leveraging artificial intelligence (AI) and machine learning, banks can predict cash deposit patterns for each CDM. This allows them to anticipate when a machine will reach an optimal cash level for collection, rather than collecting on a fixed schedule.
- **Cash-in-transit (CIT) route optimization:** Sophisticated algorithms analyse traffic patterns, distance, and the number of CDMs needing service to plan the most efficient routes for armoured vehicles. This reduces fuel costs and manpower hours.
- **Cash recycling machines (CRMs):** These advanced machines accept cash deposits and then re-dispense that cash for withdrawals, forming a closed-loop system. CRMs drastically reduce the need for physical cash transportation and replenishment, thereby cutting costs and improving efficiency.
- **Real-time monitoring:** Banks use cloud-connected systems to get a real-time view of cash levels in their CDMs and other terminals. This allows them to dynamically schedule pickups and respond to changing conditions, such as unexpectedly high deposit volumes, to prevent machines from reaching their capacity.

Benefits of dynamic cash management: By implementing these strategies, banks can achieve multiple benefits:

- **Minimizes opportunity costs:** Reduces the amount of time that deposited money sits idle and uninvested.
- **Lowers operational costs:** Decreases expenses related to cash transport, manpower, and manual handling.
- **Enhances security:** Reduces the total amount of cash in the system and minimizes the manual handling of money, which lowers the risk of theft and fraud.
- **Improves customer satisfaction:** Ensures CDMs and other cash points remain functional, with lower risks of machines becoming full and unavailable for transactions.



i) Ordering Costs Vs. Carrying Costs of Cash Balances at Branches / ATMs:

Ordering Costs for branch and ATM cash balances, which include staff costs for handling, security costs for guarding, transportation costs for moving cash, and transit insurance costs to cover potential losses during transport. The Carrying Costs of cash balances in bank branches are indeed the opportunity costs of tying up funds, along with the expenses for insurance against theft and other such risks.

Ordering Costs (Costs of Getting Cash to a Location):

These are the expenses incurred to acquire and transport cash when a branch or ATM's cash balance runs low.

- ✳ **Staff Costs:** Salaries and benefits for employees involved in cash handling, counting, and reconciliation.
- ✳ **Security Costs:** Expenses for security personnel and systems to protect cash at branches and during transit.
- ✳ **Transit Insurance Costs:** Premiums paid to insure cash against risks during its transportation.
- ✳ **Transportation Costs:** The cost of using dedicated vehicles and drivers for the physical movement of cash from currency chests to branches and ATMs.

Carrying Costs (Costs of holding cash at a location):

These are the costs associated with maintaining cash in a branch or ATM.

- ✳ **Opportunity Costs:** The potential returns a bank could have earned by investing that cash in other assets, instead of holding it as a physical balance.
- ✳ **Insurance Costs:** Premiums to cover risks such as theft, burglary, or fire that could lead to the loss of cash.

J) Understanding the EOQ Model for Cash Management of Banks:

- ✳ The EOQ model, typically used for inventory management, can be adapted for cash management in bank branches. In this context:
- ✳ Monthly Cash Demand (D) is the total amount of cash the branch is expected to need for transactions over a year.

- ✳ Cost per Cash Order (S) is the fixed cost associated with receiving a cash shipment from the link branch or central office. This includes costs like staff time and transportation.
- ✳ Holding Cost per Unit (H) is the cost of holding excess cash, which includes the opportunity cost of funds that could be invested, potential losses from theft, and costs of secure storage.

Steps to Apply EOQ to Cash Management:

- ✳ **Forecast Monthly Cash Demand (D):** Analyse historical transaction data, including daily withdrawals and deposits, to predict the branch's monthly cash needs.
- ✳ **Estimate the Cost of Placing a Cash Order (S):** Determine the fixed costs incurred each time cash is ordered or transferred. This could involve staff time to prepare requisitions, processing fees, and logistical costs for the transfer.
- ✳ **Calculate the Holding Cost per Unit (H):** Quantify the cost of holding cash. This includes the opportunity cost of idle funds (which could have been invested at a certain rate) and costs related to physical security.
- ✳ Apply the EOQ Formula:
 - ✓ $EOQ = \sqrt{[(2DS) / H]}$.
 - ✓ The result provides the ideal cash quantity to order from the link branch to minimize total cash management costs.

Benefits:

- ✳ **Reduced Idle Cash:** By ordering the EOQ, branches avoid holding excessive cash that generates no return.
- ✳ **Improved Liquidity:** The optimal order quantity helps ensure enough cash is available to meet customer demand without unnecessary delays or multiple, costly orders.
- ✳ **Cost Optimization:** The method directly balances ordering costs with holding costs to find the most cost-effective cash balance.

Considerations for Indian Banks:

- ✳ **Regulatory Requirements:** Banks must maintain reserves (e.g., Cash Reserve Ratio, Statutory Liquidity



Ratio) mandated by the Reserve Bank of India (RBI), which can influence cash management decisions.

- ✱ **Hierarchical Structure:** Indian banks often use a hierarchical system (Central Office, Link Branches, other branches) for cash management, so the EOQ model should be applied at each relevant level.
- ✱ **Cash Flow Volatility:** The accuracy of the EOQ model depends on predictable cash flows; banks must account for seasonal variations and economic factors that can make cash flows volatile.

k) EOQ Model for ATMs:

To control idle cash in Indian bank ATMs using the EOQ method, calculate the Economic Order Quantity (EOQ) for cash by determining the monthly demand for cash, the fixed cost per cash replenishment order, and the monthly holding cost per unit of cash to minimize the total costs of ordering and holding cash. The calculated EOQ represents the optimal amount of cash to replenish in an ATM, which balances the frequency of replenishment against the cost of holding excess cash, thereby reducing idle cash and associated costs.

EOQ Concept for ATMs:

- ✱ **Purpose:** EOQ is a classic inventory management model that helps businesses find the ideal order quantity to minimize total inventory costs, which for ATMs includes holding costs and order costs.
- ✱ **Goal:** By finding the optimal cash “order” size, banks can reduce the total cost of managing cash in ATMs, ensuring enough cash to meet demand without excessive idle balances.

Define Key Terms for ATM Cash:

- ✱ **Demand (D):** This is the total monthly cash needed by a specific ATM, based on historical withdrawal patterns and projected demand.
- ✱ **Ordering Cost (S):** This is the fixed cost incurred each time an ATM is replenished. This includes the cost of the transportation, security, and processing involved in a single cash delivery.
- ✱ **Holding Cost (H):** This is the cost to hold one unit of cash in the ATM for a year. For banks, this could include the cost of capital tied up in idle cash, the cost of insuring that cash, and the opportunity cost of not

investing that money elsewhere.

Apply the EOQ Formula:

- ✱ **Formula:** The EOQ formula is: $Q = \sqrt{(2DS / H)}$.
- ✱ **Calculation:**
 - ✓ D: Calculate the total monthly cash withdrawals from the ATM.
 - ✓ S: Determine the cost of one cash replenishment order.
 - ✓ H: Calculate the monthly cost of holding a single unit of cash.
- ✱ **Solve:** Plug these values into the formula to find Q, the economic order quantity for cash.

Implement the EOQ for ATM Cash Management:

- ✱ **Set Replenishment Levels:** Once the EOQ is calculated, it serves as a guide for cash replenishment.
- ✱ **Balance Costs:** This model helps banks strike a balance between replenishing too frequently (increasing ordering costs) and replenishing too little (leading to idle cash costs and potential cash-outs).
- ✱ **Monitor and Adjust:** Banks should regularly monitor ATM cash levels and adjust replenishment strategies as demand patterns change, using EOQ as a foundation for continuous improvement.

l) Different Models of Cash Forecasting for ATMs:

To control idle cash balances, Indian commercial banks forecast customer cash demand by analysing historical transaction data and using advanced modelling techniques like ARIMA and machine learning algorithms to predict future withdrawals, which informs optimized cash replenishment for ATMs and branch operations. Effective forecasting reduces both cash shortages and excess cash holdings, ensuring efficient liquidity management by maintaining appropriate levels of funds for customer needs and investing surplus cash productively.

Understand Customer Demand:

- ✱ **Analyse Historical Data:** Banks collect and analyse extensive data on customer cash withdrawal patterns, deposit volumes, and account activity to understand daily, weekly, and seasonal fluctuations in cash demand.



- ★ **Segment Data:** Categorizing demand based on factors like location, customer segment, and specific events (e.g., holidays) can enhance the accuracy of forecasts.

Implement Forecasting Models:

- ★ **Statistical Models:** Models like Autoregressive Integrated Moving Average (ARIMA) and Seasonal ARIMA (SARIMA) are used to identify and model trends and seasonality in cash demand.
- ★ **Machine Learning:** Deep Learning (DNN) and other algorithms like Long Short-Term Memory (LSTM), Random Forest (RF), and Convolutional Neural Networks (CNN) offer enhanced accuracy in predicting future cash needs, especially in volatile environments.
- ★ **Exogenous Factors:** Incorporating external factors such as local events, economic conditions, or even the impacts of major events like a pandemic into the models can further improve forecast precision.

Optimize Cash Management:

- ★ **Cash Budgets:** The insights from forecasting are used to create dynamic cash budgets, which estimate future cash inflows and outflows to anticipate cash requirements and surpluses.
- ★ **Automated Replenishment:** Forecasting models are integrated into decision support systems to optimize cash replenishment for ATMs and branches, reducing both the cost of holding excess cash and the risk of stock-outs.
- ★ **Liquidity Management:** Banks use accurate cash forecasts to make informed decisions about managing their overall liquidity, ensuring they have enough cash to meet immediate obligations and investing any surplus in short-term, liquid assets to generate returns.

Benefit from Digitalization:

- ★ **Real-time Analytics:** Digital technologies provide banks with real-time access to account balances and transaction data, enabling more responsive cash management.
- ★ **Automated Tools:** Automation of payment and

collection processes, as well as advanced forecasting and reporting tools, help banks efficiently manage cash flow and minimize manual errors.

m) Role of Cost Accountants in Cash Management Process:

The cost accountant's crucial role in managing cash balances, specifically by using the Economic Order Quantity (EOQ) model to find the optimal cash level at branches and ATMs, thereby minimizing carrying and ordering costs. Cost accountants are responsible for analysing costs and providing financial data to support decision-making and improve efficiency, a process directly applicable to optimizing cash management strategies.

Role of the Cost Accountant:

- ★ **Cost Analysis:** Cost accountants identify, measure, and analyse costs to provide data that aids in making informed decisions for cost control and management.
- ★ **Financial Efficiency:** They help improve the financial efficiency of operations by tracking expenses and identifying areas for cost reduction.
- ★ **Strategic Support:** Cost accountants provide data-driven insights that support strategic planning and decision-making, which is essential for effective cash management.

Cash Management with EOQ:

- ★ **Cash Management:** This involves controlling the amount of cash held in cash management accounts (CMAs), such as those at bank branches and ATMs.
- ★ **EOQ Model:** The Economic Order Quantity model is a tool used to determine the optimal amount of inventory or cash to hold to minimize total costs.
- ★ **Balancing Costs:** The EOQ model aims to find the point where the carrying costs (costs of holding cash) and ordering costs (costs of replenishing cash) are at their minimum, leading to an optimal cash balance.
- ★ **Optimal Cash Levels:** By applying the EOQ method, cost accountants help determine the best cash balance levels for branches and ATMs, ensuring sufficient cash availability without excessive holding costs.



To Sum Up:

Minimizing idle cash balances in bank branches increases branch profitability by reducing unnecessary holding costs. This requires a thorough analysis of various factors, including the types of deposits (demand vs. time), whether a branch is a net receiver or payer of funds, the penetration of alternative delivery channels, the branch's geographic location (urban vs. rural), and the financial literacy of its customers.

Factors Influencing Cash Needs:

Type of Deposits:

- ✱ **Demand Deposits:** (e.g., savings and current accounts) require more liquid cash as they can be withdrawn at any time.
- ✱ **Time Deposits:** (e.g., fixed deposits) are for a fixed period and less likely to be withdrawn on demand, reducing the need for readily available cash, according to Bajaj Finserv.

Receipts vs. Payments Branch:

- ✱ **Receipts Branches:** (receiving more deposits than withdrawals) may require less cash, especially if alternative payment channels are popular.
- ✱ **Payments Branches:** (making more withdrawals) will naturally have higher cash requirements.

Alternative Delivery Channel (ADC) Penetration:

A high level of ADC penetration (like mobile banking or online platforms) reduces reliance on physical branches for transactions, decreasing the need for cash, says a report from the World Bank.

Urban vs. Rural Location:

- ✱ **Urban branches:** often have higher ADCs and more tech-savvy customers, potentially reducing cash needs.
- ✱ **Rural branches:** may have a higher cash dependency due to lower ADC penetration and different customer behaviours, notes the World Bank.

Customer Education Level:

Customers with higher financial literacy and comfort with digital channels may use ADCs more, reducing branch cash requirements.

To sum up, Minimizing idle cash frees up funds that can be invested or lent, generating higher returns for the bank, according to the Himachal Pradesh University. Holding excessive cash incurs storage and security costs. Reducing these balances directly lowers a branch's operating expenses. Optimal cash management leads to more efficient use of bank resources, contributing to the overall profitability of the branch and the bank.

References:

- a) Cash Balances (Branches + ATMs + CDMs) as on 31.03.2025-Annual Reports of PSBs.
- b) EOQ Model-ICMAI Literature on Economic Order Quantity Calculations for Inventory Management.
- c) Total Deposits (Time and Demand Deposits)-Public Sector Banks-IBA Published Data for the Financial Years 2021 to 2025.
- d) Understanding Cash Holdings, SLR, and CRR-Guidelines on Calculation of SLR and CRR on DTL of Banks.

Annexure I

Information required to prepare Model Cost Sheets

Indian commercial banks can use cost sheets by implementing a cash management system that involves forecasting cash needs using statistical and machine learning models, optimizing cash transfers between branches and ATMs, and tracking costs related to cash (like transit, insurance, and security) to minimize idle cash balances. A model cost sheet would detail these operational expenses, along with potential savings from reducing cash transfers and improving ATM cash levels, allowing for better control over idle cash.

Key Components for a Model Cost Sheet:

To create a model cost sheet for controlling idle cash, banks need to consider the following cost categories and data points:

Cash Handling Costs:

- ✱ **Cost of Cash:** The inherent cost of maintaining cash, including the funds that could be earning interest or being invested elsewhere.
- ✱ **Cash-in-Transit (CIT) Expenses:** Costs for secure transportation of cash between the central bank, branches, and ATMs.
- ✱ **Security and Insurance Costs:** Expenses for safeguarding cash at all locations, including ATMs and branches.

Operational Costs:

- ✱ **Transfer Costs:** Expenses associated with moving cash between branches to meet demand, especially unproductive transfers.
- ✱ **Maintenance Costs:** For the ATMs and Cash Deposit Machines (CDMs).

Opportunity Costs:

- ✱ **Lost Interest:** The potential income lost by holding excess cash that could have been invested.
- ✱ **Transaction Delays:** The cost of funds tied up in cash that could have been used for profitable activities.

Implementing the Model Cost Sheet:

Forecasting Cash Demands:

- ✱ **Statistical and Machine Learning Models:** Employ models like ARIMA, Random Forest, LSTM, or GRU to accurately predict cash withdrawal demands at branches and ATMs.
- ✱ **Identify Chaos:** Analyse ATM cash behaviour to understand if “chaos” (unpredictability) is present, which can influence demand forecasting.

Optimizing Cash Logistics:

- ✱ **Centralized Co-ordination:** Implement systems where cash transfers are coordinated at a higher level to prevent unproductive movements between individual branches.
- ✱ **Transfer Optimization Models:** Use models to select which branches should receive or transfer cash, considering factors like transfer costs and expected re-transfer costs.

Cost Tracking and Analysis:

- ✱ **Data Collection:** Gather detailed data on all the cash-related costs outlined above for each branch, ATM, and CDM.
- ✱ **Comparative Analysis:** Compare the actual costs with the potential costs and savings identified through forecasting and optimization models to identify areas for improvement.

Using the Cost Sheet for Decisions:

- ✱ **Evaluate Strategies:** The cost sheet can help evaluate different cash management strategies, such as optimizing cash levels at ATMs or reducing cash transfers between branches.
- ✱ **Resource Allocation:** Guide decisions on where to allocate resources to improve cash management efficiency.



Chapter 12

Audit Costs



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Banks Conduct multiple audits, some of which overlap. With improved Technology, these can be rationalized. This chapter covers:

- ✱ **RBIA vs. CRAR-Linked Provisions.**
- ✱ **Analysis of Audit Costs as a percentage of Non-interest Expenses.**
- ✱ **Role of CMAs in Audit Management.**

Cost Strategies were developed after interacting with Audit Department Personnel.



Audit Costs

Bank Internal Audit Department conduct various Audits in Indian Commercial Banks to ensure compliance, efficiency, and risk mitigation, and they are indeed considered 'Cost Centers.' Key Audit Types include 'Risk-based Audits', 'Concurrent Audits', 'Income Leakage Audits', 'Forensic Audits', and 'Credit Audits' etc. etc. These functions are independent, impartial, and provide crucial assurance to the Board / Management and stakeholders regarding the Bank's Internal Control Systems, Processes, and Risk Management framework.

a) Audit Function in Banking Sector:

Indian Banking Sector is witnessing major changes in recent years, as a result of which new regulations are being brought into practice. With the implementation of Basel III requirements, more importance is given to Risk-Based Bank Audits. With more guidance and circulars from RBI for regulating the banking business in the country, bank's management is focused to bring about a robust framework which will identify, assess and manage the financial risks. In order to achieve this target, the Internal Audit of banks is necessary.

A 'Periodic Internal Audit' is required to monitor the bank's system of internal control and procedures. Good internal audit process helps the management in the effective discharge of its responsibilities. It gives them the assurance of the risk and operational performance of the bank.

Based on the volume and value of its transactions, every bank should conduct an internal audit to fulfil its responsibilities and to achieve its objectives.

b) Internal Audit:

✳ **Audit Plan:** Internal audit function begins with the audit plan drafted by the audit team in consultation with the management. This audit plan includes the timing and frequency of the internal audit work to be carried on and it is based on control risk assessment. Risk assessment examines all the bank's activities and internal control system which exhibits the probable degree of risk present in these activities. The audit plan must be realistic and should take into account future developments and expected innovations. Audit plan should also state the time to be assigned for

special investigation if any to be undertaken and other activities as and when required. The plan should cover the resources required for carrying out the audit activities in terms of personnel and other resources. Such an audit plan established by the internal audit team has to be approved by the bank's management.

✳ **Audit Procedures:** The objectives framed in the audit plan are achieved through a detailed audit programme which lists down the procedure to be carried out for each specific audit area. These procedures are adapted according to the risks identified in every process across the bank's operations. Based on the value and volume of the banking transactions, samples are selected in each of the core areas to be audited. Audit samples should also be selected on a random basis in certain areas, which will expose all the related risk.

Internal Audit is a Vital Function: The Internal Audit function in a Bank is vital for risk mitigation in banking operations because it provides independent assurance to management and the board that the risk management processes are effective and followed. By independently reviewing these procedures, internal audit helps ensure that risks are identified, assessed, monitored, and controlled or mitigated, preventing significant losses and protecting the bank's capital and reputation. If risks are not effectively managed and mitigated, banks are required to provide provisions to cover potential losses.

Listed below are some of the important areas to be covered in any of the bank's internal audit:

✳ **Cash Transactions:** The deposits and withdrawals made, need to be tracked. Further, surprise verification of the cash balance on a particular day needs to be initiated.

✳ **Loans:** This is the most important division in banking services. Various types of loans and cash credits are given to customers. These need to be checked for necessary documentation and approvals. Checking the loan repayment schedules and examining the reported non-performing assets is also required.

✳ **Documentation:** Checking for the KYC norms and ensuring the sufficiency of the supporting documents is important.

✳ **Charges / Costs:** Analysing if all charges for various



services rendered by the bank are collected from the customers per the head office circulars is required. If there are any revenue leakages, it should be reported.

- ★ **TDS/GST Taxes:** All the required withholdings and other tax deductions have to be executed promptly.
- ★ **Other Services:** Other banking commercial services such as swift money transfers, the line of credit followed and much more should be ensured to be in place. This has to be carried out with required approvals, documentation, etc.

Scope of Internal Audit: Generally, the scope of any Bank's Internal Audit revolves around the following:

- ✓ Evaluating the effectiveness of the internal control systems and monitor its application.
- ✓ Review the adequacy of the risk management procedures and methodologies.
- ✓ Checking the efficiency of routine operations of the bank.
- ✓ Evaluate the reliability and accuracy of the financial records and reports.
- ✓ Review the management information system and the efficiency of the electronic banking services.
- ✓ Implementation of policies and procedures and ensure its effectiveness.
- ✓ Ensure that the procedures comply with the legal and regulatory requirements.
- ✓ The undertaking of fraud investigations, if required.
- ✓ Ensuring the adequacy of procedures to safeguard the bank's assets.
- ✓ Monitoring the bank's Non-Performing Assets (NPA) and alarming the management when required.

Independent Functions of Internal Audit:

- ★ Bank's internal audit function must be independent of the other audit activities-concurrent audit and control process.
- ★ Internal audit team must be given the appropriate authority to carry out their functions with objectivity and must be free to report its findings.
- ★ Internal audit team head should have the authority to communicate findings directly to the board of directors, external auditors, audit committee, etc.
- ★ Internal audit function has to be impartial i.e. it should perform its functions free from bias and interference.

- ★ Internal audit compensation scheme must be consistent with the objectives of the audit and they should be free from any conflict of interest with that of the bank.

Types of Internal Audits:

- ★ **Risk-Based Internal Audits:** Focus on areas of higher risk to the bank to ensure proper control and mitigation.
- ★ **Concurrent Audits:** Conducted on a continuous basis to provide real-time assurance on operational and financial processes.
- ★ **Credit Audits:** Involve evaluating the quality and management of the bank's loan portfolios.
- ★ **Forensic Audits:** Investigate specific cases of suspected fraud or financial misconduct.
- ★ **Snap Audits:** Unannounced, quick checks to assess operational adherence to policies etc.

Purpose and Importance:

- ★ **Evaluate Internal Controls:** Assess the effectiveness of the bank's internal control systems and processes.
- ★ **Ensure Compliance:** Verify adherence to laws, regulations, and internal policies.
- ★ **Risk Management:** Review and improve the bank's risk management procedures and identify potential vulnerabilities.
- ★ **Operational Efficiency:** Check the efficiency of routine operations and identify areas for improvement.
- ★ **Financial Record Accuracy:** Review the reliability and accuracy of financial records and reports.
- ★ **Assurance to Stakeholders:** Provide the board of directors and other stakeholders with assurance on the quality of the bank's control systems.

Benefits of Internal Audit: Listed below are some of the benefits of having a good internal audit system in banks:

- ✓ Overall operational and control environment of the bank is improved.
- ✓ Regular internal audit system increases the accountability of the employees.



- ✓ Strong internal audit process enables early detection of fraud or probable fraud.
- ✓ Identifies redundant procedures and recommends improvement which increases the operational efficiency.
- ✓ Constant monitoring of the policies and procedures helps in reducing financial risks.
- ✓ Surprise cash verification by the internal auditors will ensure all the cash transactions are accounted for correctly.
- ✓ Ensures compliance with statutory law and regulations.
- ✓ Systematic Internal audit assures the head office that all the banking procedures and rules are adhered too.
- ✓ Good control over the bank's non-performing assets.
- ✓ Regular internal audit at banks gives better comfort and assurance to the statutory auditors too.

c) Risk-Based Internal Audit (RBIA):

A Risk-Based Internal Audit (RBIA) is an Internal Audit Methodology that focuses on Identifying, Assessing, and Controlling the most 'Significant Risks' facing a commercial bank, thereby ensuring the adequacy of internal controls, risk management, and governance systems.

RBIA shifts the focus from traditional transaction-based auditing to a strategic approach that prioritizes areas with higher inherent risks and allocates audit resources accordingly. This framework provides assurance to the Board and management on the effectiveness of risk mitigation and promotes a proactive approach to risk management, aligned with the Reserve Bank of India's (RBI) broader goal of banking sector stability.

The **Primary Goal** of Risk Based Internal Audit (RBIA) is to reduce a bank's credit and operational risks by improving internal controls, which helps to lower the bank's provisions (for expected losses) and the amount of capital required against its risk-weighted assets (as mandated by regulations like Basel for unexpected losses).

Key Concepts:

- ✱ **Credit Risk:** The risk of loss due to a borrower failing to meet their obligations.
- ✱ **Operational Risk:** The risk of loss resulting from inadequate or failed internal processes, people, and systems, or from external events.
- ✱ **Risk-Based Internal Audit (RBIA):** A framework

where internal audits focus on areas of the bank that are most susceptible to risk.

- ✱ **Provisions:** Funds set aside by a bank to cover potential losses from bad loans and other financial risks.
- ✱ **Capital to Risk Weighted Assets (CRAR):** A regulatory measure that ensures a bank holds sufficient capital to cover its risk-weighted assets, protecting against various financial risks.
- ✱ **Risk-Weighted Assets (RWA):** Assets are assigned different risk weights based on their riskiness, with riskier assets requiring more capital to be held against them.

RBIA Objectives:

- ✱ **Risk Mitigation:** By assessing and providing assurance on internal controls, RBIA helps banks identify weaknesses and potential control breakdowns that could lead to credit losses (like loan defaults) or operational failures (such as fraud or system errors).
- ✱ **Lowering Provisions:** Effective internal controls, identified and strengthened through RBIA, lead to fewer unexpected losses, which in turn allows the bank to maintain lower levels of provisions for such losses.
- ✱ **Optimizing Capital Requirements:** Mitigating risks through better internal controls reduces the overall risk profile of the bank. This translates to fewer risk-weighted assets and, therefore, lower capital requirements, as mandated by regulatory frameworks like Basel.

How RBIA Works:

- ✱ **Risk-Focused Planning:** Instead of auditing every transaction, RBIA begins with identifying the bank's significant risks (e.g., credit, market, operational) and uses this to create a risk-prioritized audit plan.
- ✱ **Integration with Risk Management Framework:** RBIA is an integral part of a bank's overall risk management framework, linking the internal audit function to the organization's strategy and objectives.
- ✱ **Assessment of Controls:** The audit assesses the effectiveness of the internal control systems in place



to manage these identified risks.

- ★ **Resource Allocation:** Audit resources are allocated based on the risk assessment, concentrating on areas that pose the greatest threat to the bank's stability.

Benefits of RBIA:

- ★ **Proactive Risk Management:** Enables banks to identify and mitigate risks before they materialize into significant losses.
- ★ **Enhanced Operational Efficiency:** Focuses audit efforts on high-risk areas, improving overall operational effectiveness.
- ★ **Regulatory Compliance:** Helps banks maintain compliance with RBI regulations, avoiding penalties and sanctions.
- ★ **Improved Governance:** Provides assurance to the Board and Senior Management on the effectiveness of internal controls and governance processes.

Risk Mitigation is a Vital Function of Current Audit System:

- ★ **Independent Oversight:** Internal audit provides an objective and independent review of the bank's operational risk management practices, which is crucial for ensuring their effectiveness.
- ★ **Assurance on Risk Management:** Internal Audit confirms whether the Bank's established risk management procedures are being correctly implemented and are achieving their intended outcomes, as stated by the RBI.
- ★ **Comprehensive Risk Coverage:** This function supports the bank's overall risk management framework, which encompasses identifying, assessing, monitoring, and controlling operational risks.
- ★ **Proactive Loss Prevention:** By identifying weaknesses in control measures, internal audit helps prevent potential operational failures, thereby minimizing the risk of financial losses.
- ★ **Regulatory Compliance:** A robust internal audit function ensures the bank adheres to regulatory requirements for risk management, which can prevent penalties and reputational damage.

Consequences of ineffective Risk Mitigation:

- ★ **Financial Losses:** Without effective risk mitigation, banks are more susceptible to losses from fraud, errors, and other operational failures, which directly impacts their profitability.
- ★ **Provisions for Risk:** To account for unavoidable risks or potential losses, banks must set aside provisions (funds) in their financial statements. Effective risk mitigation reduces the need for such provisions.
- ★ **Reputational Damage:** Significant operational risk events can severely damage a bank's reputation, eroding public trust and customer confidence.
- ★ **Regulatory Scrutiny:** Failure to adequately manage risks can lead to increased scrutiny and potential enforcement actions from regulatory bodies.

d) Purpose of CRAR and Provisions of Banking Sector:

The Capital to Risk-Weighted Assets Ratio (CRAR) measures a Bank's Financial Strength by linking its capital to its risk-weighted assets, ensuring it can absorb potential losses and protect depositors. Provisions for Credit and Operational Risk are funds set aside by banks to cover estimated losses from their lending (credit) and non-lending (operational) activities. Both are crucial regulatory tools, under guidelines like Basel accords, for maintaining banking system stability by making banks more resilient to financial shocks.

Capital to Risk-Weighted Assets Ratio (CRAR):

- ★ **Measures Financial Strength:** CRAR serves as a key indicator of a bank's overall financial health, showing its capacity to absorb potential losses.
- ★ **Protects Depositors:** By requiring banks to hold sufficient capital against their risky assets, the ratio provides a buffer to protect depositors' funds.
- ★ **Aligns Capital with Risk:** It links a bank's capital requirement directly to the riskiness of its assets. Higher-risk assets (like unsecured loans) require more capital than lower-risk assets (like mortgages).
- ★ **Ensures Regulatory Compliance:** Banks must meet minimum CRAR requirements set by regulatory bodies (like the Reserve Bank of India) to maintain



their banking license and ensure overall financial system stability.

Provisions for Credit and Operational Risks:

- ✱ **Provisions for Credit Risk:** These are funds a bank allocates to cover potential losses on its loan portfolio.
- ✱ **Purpose:** To absorb anticipated loan defaults and non-performing assets, preventing these losses from eroding the bank's capital and threatening its solvency.
- ✱ **Basis:** Banks estimate these provisions based on historical loss data, the financial health of borrowers, and the quality of collateral.
- ✱ **Provisions for Operational Risk:** These are funds set aside to cover potential losses from internal failures, such as fraud, human error, system malfunctions, or external events.
- ✱ **Purpose:** To maintain the bank's financial stability by accounting for the inherent operational risks of running a complex financial institution.
- ✱ **Basis:** These provisions are based on the bank's internal risk assessment, which includes identifying, assessing, and managing the various operational risks they are exposed to.

e) RBIA Vs. CRAR and Provisions:

A Risk-Based Internal Audit (RBIA) of a bank directly influences Capital to Risk-Weighted Assets Ratio (CRAR) and Provisions for Credit and Operational Risk by identifying and assessing the most significant risks to the bank, including credit and operational risks.

The RBIA process informs management on the effectiveness of internal controls and risk management, which in turn affects the accuracy of provisions and the overall risk profile, influencing CRAR.

Effective RBIA leads to better risk management, which should result in more accurate provisions and a healthier CRAR.

RBIA effects Provisions and CRAR:

- ✱ **Identification of High-Risk Areas:** The core of an RBIA is to focus on the most significant risks facing a bank. This includes identifying potential weaknesses in credit risk management and operational processes, which are major sources of financial loss.
- ✱ **Assessment of Controls and Processes:** The internal audit function then assesses the effectiveness of the controls and processes designed to manage these identified risks. For example, it evaluates how a bank's procedures for loan origination, monitoring, and collection are working.

Risk Weighted Assets

(₹ in Crores)

Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
01	State Bank of India	22,49,038.34	24,78,703.46	27,83,058.70	32,22,358.28	36,49,286.55
02	Punjab National Bank	6,06,584.91	6,00,821.23	6,58,981.51	7,35,434.54	8,27,667.51
03	Bank of Baroda	6,20,908.34	6,29,501.94	6,97,482.76	7,94,612.77	8,74,581.96
04	Canara Bank	5,30,011.95	5,38,282.86	5,67,763.16	6,69,256.92	7,40,389.67
05	Union Bank of India	5,51,520.67	5,45,922.81	5,78,454.82	6,64,188.12	7,03,919.88
06	Bank of India	3,01,305.00	3,16,395.00	3,54,534.00	4,16,996.00	4,51,096.00
07	Indian Bank	2,98,096.60	3,08,937.61	3,33,582.35	3,92,245.58	4,10,098.03
08	Bank of Maharashtra	83,469.36	1,12,617.60	95,833.63	1,46,180.67	1,67,528.19

Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
09	Central Bank of India	1,48,916.58	1,48,506.29	1,65,934.44	1,92,320.00	2,11,184.86
10	UCO Bank	1,02,411.67	1,04,519.05	1,10,557.73	1,23,965.13	1,47,707.34
11	Indian Overseas Bank	112 005.35	116 069.83	129980.80	1 43 979.05	16 9 083.88
12	Punjab & Sind Bank	51790.00	49380.53	55815.43	62776.74	75602 31

(Source: Annual Reports)

Tier 1 Capital (Regulatory Capital)

(₹ in Crores)

Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
01	State Bank of India	2,57,177.03	2,83,070.49	3,35,527.67	3,84,177.36	4,41,970.13
02	Punjab National Bank	69,713.36	70,457.92	83,605.67	96,885.26	1,16,234.90
03	Bank of Baroda	78,660.43	82,948.25	97,582.74	1,11,765.18	1,29,370.00
04	Canara Bank	53,436.87	64,132.57	78,236.28	93,368.06	1,06,379.25
05	Union Bank of India	57,090.50	66,588.68	80,477.89	99,621.81	1,14,335.91
06	Bank of India	36,041.55	44,047.01	51,083.94	65,334.14	73,111.78
07	Indian Bank	35,588.94	40,705.15	44,964.44	55,031.19	64,983.29
08	Bank of Maharashtra	9,160.68	11,866.61	16,043.78	20,065.07	28,235.34
09	Central Bank of India	19,096.57	17,049.44	20,099.54	23,966.45	31,101.14
10	UCO Bank	11,411.10	11,469.81	15,434.41	18,025.52	24,182.47
11	Indian Overseas Bank	14 462.20	12 428.11	16736.13	20 839.72	28 972.20
12	Punjab & Sind Bank	7243.00	7306.61	7990.22	9251.94	11189, 78

(Source: Annual Reports)

Tier 2 Capital (Regulatory Capital)

(₹ in Crores)

Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
01	State Bank of India	51,715.70	59,721.52	73,051.40	75,846.02	78,091.97
02	Punjab National Bank	17,144.55	16,652.74	18,551.14	24,520.01	20,581.01
03	Bank of Baroda	14,390.29	15,764.18	15,691.00	17,832.81	20,929.66
04	Canara Bank	16,406.64	16,083.10	16,466.36	15,598.85	14,536.05
05	Union Bank of India	12,172.01	12,692.32	12,300.56	13,066.90	12,489.05
06	Bank of India	8,948.64	8,205.57	6,643.48	8,444.16	10,265.98
07	Indian Bank	11,255.87	10,394.93	10,027.45	9,453.25	8,588.08



Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
08	Bank of Maharashtra	2,936.44	3,924.26	4,379.98	5,346.02	6,153.31
09	Central Bank of India	2,966.47	3,510.43	3,334.76	5,037.52	4,847.66
10	UCO Bank	2,659.36	2,817.97	2,894.92	3,024.15	3,133.60
11	Indian Overseas Bank	2 695.47	3 622.20	4188.83	4 034.78	4 412.00
12	Punjab & Sind Bank	1598.00	1849.13	1553.09	1519.135	1368.81

(Source: Annual Reports)

Impact on Provisions:

Credit Risk: If the RBIA finds weaknesses in credit risk management, it may highlight an underestimation of potential loan losses. This could lead to a recommendation for higher provisions to cover expected credit losses, which would reduce profitability and potentially impact CRAR. Conversely, strong risk management identified through RBIA might support more optimized provisioning. RBIA helps in identifying and assessing risks related to lending, loan portfolios, and potential defaults.

Market Risk: It focuses on risks arising from fluctuations in market prices, such as interest rate risk, by evaluating

the bank's exposure and its hedging strategies.

Operational Risk: Similarly, if an RBIA reveals significant operational risk, such as process failures, fraud, or system malfunctions, these findings will influence the need for increased operational risk provisions. This could mean setting aside more capital to cover potential operational losses. RBIA evaluates risks from internal processes, people, and systems failures, including fraud, system errors, and process inefficiencies.

Compliance Risk: RBIA also ensures the bank adheres to applicable laws, regulations, and industry codes of conduct, preventing sanctions and legal issues.

Provisions and Contingencies

(₹ in '000)

Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
01	State Bank of India	51143,68,23	36198,00,44	33480,51,25	25620,55,67	39678,53,72
02	Punjab National Bank	20137,56,01	17304,85,95	20021,55,45	16686,19,41	10200,46,84
03	Bank of Baroda	21795,08,07	16425,69,10	15503,46,89	19133,17,44	17439,11,12
04	Canara Bank	17170,06,91	17502,61,91	17166,48,32	14928,12,75	14452,66,74
05	Union Bank of India	16926,24,04	16641,11,23	17033,88,63	14562,32,43	13102,89,63
06	Bank of India	8112,29,60	6583,75,88	9369,68,08	7750,68,97	7193,08,97
07	Indian Bank	7961,90,66	8772,07,65	9988,92,02	8776,60,81	8079,91,22
08	Bank of Maharashtra	3409,83,41	3696,32,71	3497,17,54	3950,57,29	3799,66,64
09	Central Bank of India	5477,21,17	4168,37,73	5317,16,33	4828,73,78	4357,30,40
10	UCO Bank	3982,02,97	3867,67,02	2478,33,05	2922,50,17	3592,32,08
11	Indian Overseas Bank	112 005.35	4053 37 13	3843 38 07	4108 27 92	5354 06 33
12	Punjab & Sind Bank	35049329	2910359	1369098	5355170	10590913

(Source: Annual Reports)



Hence, the Function of the Internal Department transcends the mere execution of Risk-Based Internal Audits and other Audits pertaining to the Bank's Branches and Administrative Offices; it also encompasses the oversight of the Audit's Effectiveness concerning the Bank's Provisions and its subsequent influence on the Capital to Risk-Weighted Assets Ratio (CRAR) of the Bank.

Therefore, the Fundamental Aims or the Benchmark of the Bank's Internal Audit Department are to ensure a reduction in provisions associated with Various Risks and to enhance the CRAR obligations of the Bank by alleviating the diverse risks faced by the institution, such as Credit, Market, and Operational Risks, through a Risk-Based Internal Audit Framework.

Effect on CRAR:

- ✱ **Reduced Risk-Weighted Assets:** A strong RBIA that leads to better internal controls and risk mitigation can reduce the overall riskiness of a bank's asset portfolio. This can lead to lower risk-weighted assets, which, for the same amount of capital, results in a higher CRAR.
- ✱ **Higher Capital Requirements:** Conversely, a poor RBIA, or an RBIA that uncovers systemic risk issues, might lead to recommendations for increased capital. This would directly impact the CRAR calculation, as more capital is required to cover the risks.
- ✱ **Strategic Alignment:** By aligning audit efforts with the bank's overall risk framework and business objectives, the RBIA provides actionable insights. This enables management to make informed decisions about risk mitigation, capital allocation, and provisioning, ultimately strengthening the bank's financial resilience and its ability to maintain adequate capital levels.

Bench Mark for 'Audit System' of Banks

The efficacy and proficiency of **Risk-Based Internal Audit (RBIA)** alongside other internal and external auditing mechanisms are assessed via the *diminution in provisions for credit risk, market risk, operational risk, and capital adequacy requirements, specifically the Capital to Risk Assets Ratio (CRAR) applicable to Indian commercial banks.*

This serves as the Standard / Bench Mark for various internal and external audit processes conducted within Indian commercial banks. Furthermore, RBIA, other Internal Audits and External Audits is implemented across all branches of commercial banks almost annually.

f) RBIA Benefits:

Risk-Based Internal Audits (RBIA) should function and influence a bank's financial requirements. By mitigating credit, market, and operational risks, a bank can reduce its provisions and capital adequacy requirements.

RBIA's impact on bank risks and requirements: Risk mitigation through effective controls

RBIA is a forward-looking methodology that links internal auditing to an organization's overall risk management framework. It provides assurance to the board and senior management that risk management processes are operating as intended and that controls are effective in reducing risks to an acceptable level.

✱ An effective RBIA helps to:

- ✓ Identify high-risk areas in a timely manner.
- ✓ Prioritize resources to address the most significant threats to the bank's objectives.
- ✓ Proactively manage and mitigate risks before they can cause financial or reputational damage.

The link between risk mitigation and capital requirements:

- ✱ **Capital adequacy:** Banks are required to maintain a minimum Capital to Risk-weighted Assets Ratio (CRAR) to absorb potential losses. A bank's risk-weighted assets are calculated based on the perceived riskiness of its loans and investments.
 - ✱ **Provisions:** Banks must set aside provisions for potential losses, such as Expected Credit Loss (ECL), which is a framework for bad loans.
 - ✱ **Lowering risk-weights:** When a bank's risk management processes (such as those for credit, market, and operational risk) are robust and proven effective through regular RBIA, its regulatory risk profile improves. This can lead to regulators assigning lower risk weights to certain exposures.
- ✓ The Reserve Bank of India (RBI), for example, has proposed lower risk weights for specific segments like MSMEs and home loans, which is expected to reduce banks' overall capital requirements.



- ★ **Improved financial stability:** The end result of effective risk mitigation is improved financial stability. A lower-risk profile, substantiated by effective internal controls identified through RBIA, leads to lower provisions and, potentially, lower capital requirements, freeing up capital for other activities.

Summary of RBIA's benefits:

An effective RBIA reinforces a bank's internal control, risk management, and governance systems. By focusing on and mitigating the most significant risks, a bank reduces its overall risk profile. This, in turn, can lower the capital adequacy and provisioning requirements set by regulators, confirming that the user's statement correctly describes the intended benefits and logical flow of a properly

implemented RBIA program.

g) Internal Audit is a 'Cost Centre':

- ★ The Internal Audit department incurs Costs for staff salaries, training, technology, and other operational expenses.
- ★ While it doesn't directly generate revenue, it plays a 'Vital Role' in safeguarding assets, preventing losses, and reducing reputational damage, thereby supporting the Bank's overall Financial Health and Stability.

The following Table encapsulates the data pertaining to the 'Cost Incurred' by Banks in relation to the "Audit System":

Auditors' Fees and Expenses (Including Branch Auditors)

(₹ in '000)

Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
01	State Bank of India	274,18,79	270,60,67	270,79,10	298,28,96	317,38,56
02	Punjab National Bank	83,53,98	63,04,81	43,49,26	43,90,34	54,85,82
03	Bank of Baroda	81,76,41	90,62,94	83,95,58	95,94,02	105,71,02
04	Canara Bank	116,23,39	67,35,34	71,58,13	80,35,78	71,54,07
05	Union Bank of India	105,56,38	63,03,21	68,91,29	62,99,68	64,74,50
06	Bank of India	80,29,16	93,27,98	119,50,05	99,39,37	88,88,76
07	Indian Bank	63,01,86	47,37,52	52,16,17	48,70,87	49,01,05
08	Bank of Maharashtra	19,59,18	17,19,83	15,75,35	15,69,27	19,64,09
09	Central Bank of India	28,44,31	30,74,03	35,28,12	32,63,12	42,35,48
10	UCO Bank	46,74,22	37,75,30	41,83,20	46,43,85	45,60,06
11	Indian Overseas Bank	36,18,46	38,97,19	31,96,81	30,26,73	41,35,85
12	Punjab & Sind Bank	11,38,00	8,59,00	14,19,80	14,54,44	12,53,85

(Source: Annual Reports)

h) Percentage of Audit Cost in Total Non-Interest Costs of the Banks:

Closely monitoring the audit department's costs as a percentage of total non-interest expenses is a standard risk management and efficiency practice for banks. Regulators and bank management use this metric to ensure the audit

function is adequately funded and independent without becoming excessively costly.

The significance of audit department cost monitoring:

- ★ **Indicator of operational efficiency:** Audit costs, along



with other administrative overheads like salaries, IT, and legal fees, are part of a bank's total non-interest expenses. An unusually high or low ratio of audit costs to total non-interest expenses can signal underlying operational issues. A high ratio might suggest an inefficient audit process, while a low ratio could indicate that the audit function is underfunded and ineffective.

- ★ **Assessment of internal controls:** The audit department serves as a bank's "early-warning system" by identifying control lapses and operational irregularities, which helps prevent fraudulent activities. By monitoring its budget, banks ensure the internal audit system is effectively resourced to perform its critical function.
- ★ **Regulatory scrutiny:** Bank regulators review management's oversight of internal controls, including the audit function. The cost ratio is one way for regulators to assess whether a bank maintains robust risk management and sound operations. The Reserve Bank of India, for example, issues guidance on internal audit effectiveness, including the review of the system's efficiency.
- ★ **Ensuring auditor independence:** An adequately funded audit department is crucial for maintaining the auditor's independence from the bank's management. Underspending on the audit function could be a sign of improper influence or a lack of support from management, a potential red flag for regulators.
- ★ **Supporting management decisions:** Monitoring audit costs helps bank management ensure that resources are allocated effectively. High costs might lead management to re-evaluate the audit process for potential efficiencies, such as through technology implementation.

Factors influencing the audit cost percentage:

- ★ **Risk profile of the bank:** A bank that engages in more complex or risky activities, such as investment banking, may need to dedicate a larger portion of its expenses to audit and compliance functions compared to a traditional commercial bank.
- ★ **Regulatory landscape:** Banks often spend a significant portion of their operating expenses on compliance and regulatory reporting, which impacts the overall non-interest expenses. Changes in regulatory requirements

can increase the demand on the audit department and its costs.

- ★ **Level of technology adoption:** Investment in automated audit and monitoring technologies can affect the cost ratio. While initial investment may be high, it can improve long-term efficiency and reduce costs over time.
- ★ **External audit costs:** Professional fees paid to external auditors for their services are also a component of non-interest expenses and can affect the overall percentage.

How banks monitor the audit cost percentage:

Banks will typically analyse this metric as part of their broader financial and risk reporting. This involves:

- ★ **Calculating the ratio:** The audit department's total expenses are divided by the bank's total non-interest expenses to get the ratio.
- ★ **Benchmarking:** The ratio is compared against industry standards and peer banks to determine if the cost structure is reasonable.
- ★ **Trend analysis:** The ratio is tracked over time to identify any significant or concerning changes.
- ★ **Internal audits and reporting:** Regular reports are sent to senior management and the board, highlighting identified problems and confirming timely corrective action.

i) Audit Software:

Choosing the "best" audit software for a bank depends heavily on its size, specific needs, and existing technology stack. The top-tier solutions, often falling under the Governance, Risk, and Compliance (GRC) umbrella, offer extensive automation, robust reporting, and AI capabilities for comprehensive audit coverage.

Top audit software for banks

1. Audit Board:

Audit Board is a top-rated cloud-based platform for audit, risk, and compliance management, trusted by many Fortune 500 companies.

- ★ **Best for:** Comprehensive audit, risk, and compliance management.



✱ **Key features:**

- ✓ Automated workflows for planning, risk assessments, and evidence collection.
- ✓ Pre-built regulatory frameworks and customizable templates.
- ✓ Centralized platform to connect stakeholders and track issues in real-time.

✱ **Pros:** Highly scalable and noted for excellent customer support.

✱ **Cons:** Pricing is not publicly available, requiring a custom quote.

2. Workiva:

Workiva is a robust platform that combines financial reporting, audit management, and data collaboration in a single SaaS solution.

✱ **Best for:** Medium to large enterprises with complex reporting and audit needs.

✱ **Key features:**

- ✓ Connects financial data directly from leading enterprise resource planning (ERP) systems.
- ✓ Advanced AI Companion for conversational data queries and proactive risk identification.
- ✓ End-to-end versioning and a clear audit history to speed up review.

✱ **Pros:** Strong automation and excellent for financial reporting and SOX compliance.

✱ **Cons:** Can be expensive and is primarily used by larger companies.

3. Quantivate Internal Audit Software:

This solution is designed specifically for banks and financial institutions, providing a complete framework for the entire audit lifecycle.

✱ **Best for:** Banks and financial services looking for a purpose-built solution.

✱ **Key features:**

- ✓ Aligns with Institute of Internal Auditors (IIA) standards and regulatory requirements.

- ✓ Digital document repository for all audit plans, workpapers, findings, and reports.
- ✓ Centralized graphical dashboards for real-time visibility into audit activities.

✱ **Pros:** Tailored to the banking industry and highly customizable to fit existing processes.

✱ **Cons:** Less suitable for businesses outside of financial services.

4. Wolters Kluwer TeamMate+ Audit:

TeamMate is a long-standing and well-regarded internal audit management system, often used by large firms, including the “Big Four”.

✱ **Best for:** Enterprise-level audit teams needing a proven, flexible solution.

✱ **Key features:**

- ✓ Advanced electronic workpaper system for managing and tracking audits.
- ✓ Automates workflows for risk-focused planning and stakeholder engagement.
- ✓ Open ecosystem to integrate with other systems.

✱ **Pros:** Flexible and scalable to build a customized audit methodology.

✱ **Cons:** Some users report that the referencing process can be complex and time-consuming.

5. MetricStream:

As a comprehensive GRC platform, MetricStream is suitable for global enterprises that need to manage audit, risk, and compliance in one place.

✱ **Best for:** Large, global banks needing an all-in-one platform for GRC.

✱ **Key features:**

- ✓ AI-powered insights (AiSPIRE) for predictive risk identification and anomaly detection.
- ✓ Integrated audit planning, execution, and reporting.
- ✓ Tracks regulatory changes and aligns them with compliance and audit programs.



- ★ **Pros:** Scalable and offers deep AI-driven analytics for a holistic risk view.
- ★ **Cons:** Potentially complex for smaller banks and can have a steep learning curve.

Features to look for in audit software for banks:

To meet your goals of minimizing cost, speeding up audits, and generating automated reports, prioritize software with the following features:

- ★ **End-to-end automation:** The software should automate the entire audit lifecycle, from planning and scheduling to fieldwork, reporting, and issue remediation.
- ★ **Comprehensive risk management:** Look for tools that offer risk assessment, control testing, and continuous monitoring to align audits with the bank's risk profile.
- ★ **AI and data analytics:** Advanced platforms use AI to analyse large datasets, identify anomalies, detect fraud, and provide predictive insights, moving beyond manual sampling.
- ★ **Seamless integration:** The software must easily integrate with the bank's core banking systems and other financial applications to pull data automatically and maintain accuracy.
- ★ **Automated reporting and dashboards:** The ability to generate reports with minimal human intervention, including customized dashboards with real-time analytics, is crucial for executive-level oversight and regulatory reporting.
- ★ **Centralized document management:** A secure, single repository for all workpapers, evidence, and reports enhances security and collaboration while reducing paperwork.
- ★ **Customizable workflows:** The platform should be flexible enough to accommodate different types of audits (e.g., operational, concurrent, IT) and adapt to your bank's specific processes.
- ★ **Regulatory compliance:** For banks, adherence to regulations like RBI guidelines is non-negotiable. The software should include templates and features built specifically for the banking and financial services (BFSI) sector.

j) Off-Site Audits instead of On-Site Audits:

Full digitalization of the banking sector enables off-site audits, which reduce audit expenditure and burden by eliminating the need for auditors to visit branches for data and records. This digital transformation allows auditors to access information remotely, leading to significant cost savings from reduced travel, accommodation, and time spent on on-site work, benefiting both the auditors and the bank's operations.

How Digitalization Facilitates Off-Site Audits:

- ★ **Remote Access to Data:** With 100% digitalization, all banking data and records are digitized and accessible remotely, meaning auditors can review them from their own offices rather than physically visiting bank branches.
- ★ **Concurrent Audit and Statutory Audit:** This digital infrastructure applies to both concurrent audits (which provide a parallel examination of transactions) and statutory audits (which offer an independent opinion on financial statements and compliance).

Reduced Costs and Benefits:

- ★ **Eliminated Travel Costs:** Auditors no longer incur expenses for travel and accommodation to bank branches.
- ★ **Reduced Time and Effort:** The time and effort previously spent on traveling and on-site data collection can be reinvested in the audit process itself, leading to a more efficient audit.
- ★ **Less Disruption to Operations:** Fewer examiners at the bank branches reduces the burden on bank staff and minimizes disruption to their daily operations.

Examples of Reduced Expenditures:

- ★ **Concurrent Audit Costs:** Digital access allows for continuous monitoring and reviewing of transactions remotely, reducing the need for frequent physical branch visits.
- ★ **Statutory Audit Costs:** Auditors can directly access digital reports, financial statements, and compliance documents, making the evaluation process quicker and less reliant on physical presence.



k) Rationalization of Audits due to Technology Developments:

Audit areas in the banking sector are being rationalized due to technological developments, shifting the auditor's role from a transactional watchdog to a strategic advisor focused on process re-design. The proliferation of new technologies like artificial intelligence (AI), machine learning (ML), and blockchain has automated routine verification tasks, allowing auditors to focus on higher-value activities such as advanced risk assessment and providing insights to improve bank processes.

Rationalized areas of audit: Technological advances have enabled a more strategic, continuous, and risk-based approach to auditing.

- ✳ **From sample-based testing to full-population testing:** In the past, auditors relied on sampling a small percentage of transactions due to the sheer volume of data. Technology now allows for the analysis of entire datasets, providing more comprehensive insights and increasing accuracy.
 - ✳ **From reactive to real-time and continuous auditing:** Historically, audits were a periodic, post-mortem activity. Digital tools and real-time analytics now enable continuous monitoring, allowing auditors to detect anomalies and potential fraud as they happen and provide early warning signals.
 - ✳ **Expansion of focus to cybersecurity:** As banking processes become increasingly digitized, the risk of cyber threats and data breaches grows. This has expanded the audit scope to include certifying IT security, assessing system vulnerabilities, and auditing third-party vendors.
 - ✳ **Focus on the IT control environment:** Instead of just verifying transactions, auditors must now evaluate the underlying technology. This includes assessing the strength of IT general controls (ITGCs) that ensure the reliability of the bank's digital infrastructure.
- The auditor's new role in process re-design:** By automating verification tasks, technology frees up auditors to act as strategic partners to management, using their insights to recommend process improvements.
- ✳ **Identify and mitigate risk more effectively:** Using AI and ML to analyse transaction patterns, auditors can move beyond simple compliance to focus on the

overall risk profile of bank processes. For example, they can identify emerging risks or fraud patterns and suggest new controls or process changes to mitigate them.

- ✳ **Enhance efficiency by identifying bottlenecks:** By using data analytics to map and review workflows, auditors can identify inefficiencies, redundancies, and bottlenecks in processes like loan approval or customer onboarding. Their recommendations for redesigning these processes can lead to significant cost savings and better customer service.
- ✳ **Improve internal controls:** In an Enterprise Resource Planning (ERP) environment, auditors help design internal controls into the system itself, rather than reviewing them externally. This makes controls more effective, transparent, and less dependent on manual intervention.

Offer strategic insights and add value: With more time for complex analysis, auditors provide management with valuable insights based on the patterns and trends found in the data. For example, they might use transaction data to advise on a new business strategy or identify an underserved customer demographic.

I. Audit Function and Cost Control Strategies:

Cost Control Strategies:

Methodologies for Cost Control

The diverse methodologies for “Cost Control” within the Audit Systems of Banks / Financial Institutions, facilitated through Technological Advancements, are:

1. Automated Reporting.
2. Integrated Audit.
3. Merging of Various Audits.
4. Streamline Bank Audits.
5. Technology and AI Streamline in Bank Audits.
6. Automating Repetitive Audit Tasks.
7. Enhanced Data Analytics.
8. Predictive Risk Assessment.
9. Improved Compliance and Monitoring.

1. Automated Reporting:

Automated Reporting in Indian Banks ‘Minimizes Audits and Control Costs’ by enhancing accuracy, speeding up the reporting process, improving risk assessment, and automating compliance checks, leading to reduced



manual errors, faster decision-making, and significant time and cost savings for audits and ongoing operations. This technology enables real-time data analysis, automated validation, and detailed audit trails, supporting regulatory compliance and freeing auditors to focus on strategic tasks.

How Automation Reduces Audits and Costs:

- ★ **Enhanced Accuracy & Reduced Errors:** Automation minimizes human error in data entry and report generation, leading to more accurate and reliable financial data, which is crucial for audits and compliance.
- ★ **Faster Report Preparation:** Automated Tools significantly reduce the time required to prepare regulatory and internal reports, enabling timely submissions and proactive risk management.
- ★ **Real-time Monitoring & Alerts:** By processing data in real-time, automation systems can identify anomalies, potential risks, and suspicious activities instantly, allowing for immediate action and reducing the likelihood of significant issues during audits.
- ★ **Automated Compliance Checks:** Automated systems enforce compliance by embedding validation rules and workflows, ensuring that all activities adhere to regulatory requirements and providing comprehensive audit trails for transparency.
- ★ **Improved Risk Mitigation:** Automation supports better risk management by monitoring financial transactions and activities in real-time, providing alerts for potential risks, and maintaining detailed records of financial activities.
- ★ **Efficient Controls Testing:** Automation streamlines controls testing, enabling banks to test more systems and processes efficiently to assess control effectiveness, which speeds up the overall audit cycle.
- ★ **Reduced Operational Costs:** Automating routine and time-consuming tasks, such as data collection and reconciliation, lowers operational costs and allows for more efficient allocation of resources.
- ★ **Faster and Smarter Audits:** Auditors gain access to real-time data and automated insights, allowing them to focus on complex areas requiring strategic thinking rather than manual data verification.

Benefits for Banks:

- ★ **Improved Regulatory Compliance:** Automated reporting helps banks meet regulatory / policy norms more effectively by ensuring data quality and accurate, timely reporting.
- ★ **Proactive Decision-Making:** Real-time reporting and analysis enable faster decision-making and quicker course correction in response to financial data and market changes.
- ★ **Enhanced Cross-Team Collaboration:** Automation provides standardized, real-time data to all relevant teams (audit, compliance, risk), improving collaboration and coordination.
- ★ **Streamlined Audit Processes:** By automating routine tasks and providing detailed audit trails, the entire audit process becomes more efficient and less manpower-intensive.

2. Integrated Audit:

Indian Banks leverage an 'Integrated Audit' universe by 'Consolidating Various Audit Types', such as internal, external, financial audits, IT audits, and compliance audits into a single framework to streamline operations and reduce costs, especially with the implementation of new technologies. This approach enables a more holistic view of a bank's risks and controls, facilitating efficient resource allocation and a systematic, disciplined approach to risk management, control, and governance.

Key Components of an 'Integrated Audit Universe':

- ★ **Internal Audit:** A systematic examination of internal processes, risk management, and control systems to ensure efficiency and effectiveness.
- ★ **External Audit:** An independent examination, often of financial statements, by an outside agent to provide assurance on the accuracy of financial information.
- ★ **Financial Audit:** Focuses on verifying the accuracy and integrity of financial records and reports.
- ★ **IT Audit:** Evaluates the bank's technology systems, data security, and compliance with IT regulations.



- ✱ **Compliance Audit:** Assesses adherence to relevant laws, regulations, and internal policies, especially important with evolving technology and data privacy requirements.
- ✱ **Operational Audit:** Examines the efficiency and effectiveness of various operational processes within the bank.

How Technology Drives Integration:

- ✱ **Automation:** Technology automates routine audit tasks, reducing manual effort and thus costs, allowing auditors to focus on higher-risk areas.
- ✱ **Data Analytics:** Advanced data analytics tools can process large volumes of transaction data, enabling real-time monitoring of risks and controls.
- ✱ **Integrated Systems:** Banks are implementing new technologies like blockchain, artificial intelligence, and cloud computing, which requires a unified approach to auditing these systems and their associated risks.
- ✱ **Continuous Auditing:** Technological advancements facilitate more frequent or even continuous auditing, rather than periodic checks, providing timely assurance.

Benefits of an Integrated Approach for Cost Reduction:

- ✱ **Reduced Redundancy:** By combining different audit functions, banks can avoid duplicating audit efforts across departments.
- ✱ **Improved Efficiency:** A consolidated audit universe promotes the use of shared tools and methodologies, leading to more efficient audit processes.
- ✱ **Better Resource Allocation:** A comprehensive view of all audit activities allows for more strategic and cost-effective allocation of audit resources.
- ✱ **Enhanced Risk Coverage:** Technology enables auditors to cover a wider range of risks and controls more effectively, leading to better overall assurance and potentially preventing costly issues.
- ✱ **Holistic Perspective:** An integrated universe provides a single, comprehensive view of the bank's risk

landscape, facilitating more informed decision-making by management.

3. Merging of Various Audits:

'Technology' enables Indian Banks to 'Merge Various Audits' into an integrated, risk-based approach, focusing on data analytics and continuous auditing rather than transaction-level testing. This shift from separate audits like Credit, IS, and Management audits to a consolidated function reduces audit fatigue, lowers costs, and improves efficiency by automating tasks and detecting risks earlier through AI and data analytics. However, challenges include the high cost of technology, lack of expertise, and the need for standardized frameworks for effective integration.

Reasons for Merging Audits:

Reduces Audit Fatigue: A unified approach helps prevent overlap and redundancy, which can lead to audit fatigue for both the banks and the auditors.

- ✱ **Cost Minimization:** Automating data processing and analysis through technology reduces the need for extensive manual work, thus lowering overall audit costs.
- ✱ **Improved Efficiency:** Technology streamlines workflows, automates routine tasks, and accelerates data analysis, leading to faster audit cycles.
- ✱ **Enhanced Accuracy:** Automated data validation and analysis improve the accuracy of audit findings, reducing errors associated with manual processes.

Key Technologies Driving the Change:

- ✱ **AI and Data Analytics:** These tools facilitate sophisticated data analysis, identify complex trends, and provide deeper insights into risks, enhancing fraud detection and risk assessment.
- ✱ **Blockchain:** Explored for its potential to enhance compliance tracking and internal audit processes, though challenges related to cost and standardization exist.
- ✱ **Computer-Assisted Audit Tools and Techniques (CAATs):** Tools like ACL and IDEA are used to analyse large datasets in financial audits, while other CAATs, such as firewall and vulnerability assessment

tools, are used for information systems audits.

How Merging Works:

- ✱ **Risk-Based Internal Audit (RBIA):** The core of the merged approach, RBIA shifts focus from transaction testing to a risk-centric methodology, integrating financial, management, and information system risks into a single framework.
- ✱ **Integrated Audit Universe:** Establishing a comprehensive risk and audit universe that includes all business domains, processes, and functions helps in a standardized and streamlined audit workflow.
- ✱ **Continuous Auditing:** AI-driven processes enable continuous auditing, allowing for early identification of issues and risks as they emerge, rather than waiting for periodic audits.
- ✱ **Focus on Data and Processes:** Instead of separate financial and IS audits, the new approach examines the entire transaction process, including both the quantitative financial results and the qualitative aspects of the IT systems that process the data.

Challenges and Future Outlook:

- ✱ **Cost and Expertise:** The initial investment in technology and the need for specialized technical expertise to operate these systems can be a significant barrier.
- ✱ **Standardization:** A lack of standardized frameworks and protocols for new technologies can hinder adoption.
- ✱ **Regulatory and Skill Gaps:** Auditors need to acquire new knowledge and skills to effectively understand and utilize these complex systems, and regulatory guidance needs to evolve with technology.

4. Streamline Indian Bank Audits:

To 'Streamline Indian Bank Audits and Control Costs', Banks should adopt technology for real-time monitoring, implement a risk-based audit framework to focus resources on high-risk areas, strengthen internal audit functions with experienced staff and direct reporting to senior management, and utilize AI for data analysis, anomaly detection, and automated reporting. Banks must also ensure compliance with the RBI's directives, such as the

single dashboard mandate, and continuously train audit staff on new tools and processes.

Leverage Technology and AI:

- ✱ **AI and Machine Learning:** Implement AI-powered systems for data validation, anomaly detection, and automated report generation to improve efficiency and accuracy, according to ICAI.
- ✱ **Real-time Dashboards:** Utilize technology-based tools for continuous monitoring of compliance with RBI guidelines, enabling proactive risk management and avoiding non-compliance penalties, notes Aparajitha.
- ✱ **Regulatory Technology (RegTech):** Partner with RegTech providers to integrate compliance tools that offer live dashboards and real-time status updates of regulatory compliances.

Adopt a Risk-Based Audit Approach:

- ✱ **Risk-Based Internal Audits:** Focus audit efforts on areas with the highest potential for fraud or significant financial risk, ensuring efficient resource allocation.
- ✱ **Risk Management Framework:** Establish a comprehensive risk management framework that includes periodic stress testing to assess the bank's resilience and manage cyber security risks.
- ✱ **Targeted Audits:** Conduct specific audits like concurrent, credit, and forensic audits to address particular areas of concern, reducing the scope of general audits.

Strengthen Internal Audit Functions:

- ✱ **Experienced Staff:** Ensure the internal audit department is headed by a senior official and staffed with experienced officers to improve audit quality and credibility.
- ✱ **Direct Reporting:** Establish a reporting structure where the head of the inspection department reports directly to the Chairman to enhance oversight and accountability.

Internal Controls: Implement a robust system of internal controls, including regular checking of cash balances, verification of authorizations for large cash expenses, and reconciliation of bank ledgers.



Ensure Regulatory Compliance:

- ✱ **RBI Directives:** Ensure all operations and audit practices align with the latest circulars and guidelines from the Reserve Bank of India (RBI).
- ✱ **Mandatory Reporting:** Comply with RBI mandates for internal financial control reporting, such as the revised LFAR (Long Form of Audit Report) formats.
- ✱ **Statutory and Other Audits:** Conduct statutory audits, tax audits, and other required audits, ensuring compliance with relevant laws and regulations to avoid penalties.

Continuous Improvement and Training:

- ✱ **Process Analysis:** Map existing audit workflows and identify bottlenecks to pinpoint areas where processes can be optimized and improved.
- ✱ **Staff Training:** Provide continuous training to audit staff on the latest AI-assisted systems and new audit procedures to leverage new tools effectively.

5. Technology and AI Streamline in Bank Audits:

Technology and AI streamline Indian Bank Audits by “Automating Repetitive Tasks”, improving data analysis for risk detection, and enabling real-time monitoring, which significantly reduces costs, enhances efficiency, and improves audit quality. Key applications include: Automating KYC verification and transaction monitoring for compliance, using predictive analytics for risk scoring and fraud detection, extracting and reviewing large datasets for faster insights, and generating automated reports. This shift allows human auditors to focus on higher-value strategic analysis, risk assessment, and process improvements rather than data processing.

Technology and AI Streamline Audits:

- ✱ **Automation of Repetitive Tasks:** AI and automation can handle time-consuming tasks such as data extraction, document review, and initial data analysis, freeing up auditors to focus on complex judgments and strategic issues.
- ✱ **Enhanced Data Analytics and Insights:** Advanced analytics and machine learning (ML) algorithms can process vast datasets to identify anomalies, patterns, and trends, providing deeper and more accurate

insights into potential risks and areas for improvement.

- ✱ **Predictive Risk Assessment:** AI can analyse real-time and historical data to predict future risks, moving beyond traditional retrospective audits to a more proactive and preventative approach to risk management.
- ✱ **Improved Compliance and Monitoring:** AI-powered tools can automate the monitoring of transactions and KYC processes, ensure continuous compliance and reduce manual overhead associated with regulatory requirements.
- ✱ **Automated Reporting:** AI can generate detailed and timely audit reports, streamline the reporting process and provide stakeholders with actionable insights more quickly.

Impact on Different Audit Types:

- ✱ **Compliance Audits:** Automation of KYC verification and transaction monitoring helps in detecting non-compliance and financial crime more effectively, reducing the cost of manual checks.
- ✱ **Risk Management Audits:** AI’s ability to analyse large datasets helps in more accurately assessing creditworthiness, identifying fraud patterns, and predicting financial instability, leading to better risk mitigation.
- ✱ **Financial Audits:** By improving data accuracy and consistency, AI can enhance the quality of financial audits, ensuring more reliable results with fewer errors.
- ✱ **Operational Audits:** AI can identify inefficiencies and wasteful practices within operations, leading to optimized resource utilization and significant cost savings.

Cost Control Benefits:

- ✱ **Reduced Operational Costs:** Automating manual processes and eliminating inefficiencies directly targets major cost drivers, leading to lower operational costs and better budget management.
- ✱ **Increased Auditor Productivity:** Auditors can manage more clients and tasks efficiently due to AI taking over routine data-intensive tasks, reducing the cost-to-income ratio.



- ★ **Lower Risk Provisions:** Better fraud detection and improved credit assessment reduce loan defaults and associated risk provisions, thereby improving profit margins.

Future role of Auditors:

- ★ AI will supplement, not replace, auditors, allowing them to develop skills in strategic analysis, data interpretation, and providing value-added advice to clients rather than manual data processing.
- ★ This technological integration prepares auditors for future AI and analytics-driven environments, enhancing their capabilities and contributing to improved audit quality and overall compliance.

6. Automating Repetitive Audit Tasks:

Automating repetitive audit tasks in Indian banks, using tools like RPA and AI, drastically reduces audit time and errors, leading to significant cost savings and improved efficiency. By handling data entry, reconciliation, and compliance checks, automation allows auditors to focus on high-value analysis, thus streamlining various audit processes, enhancing risk management, and ensuring better compliance with regulations.

Technologies Used:

- ★ **Robotic Process Automation (RPA):** Software “bots” automate rule-based, repetitive tasks like data entry, transaction processing, and report generation, mimicking human actions but with greater speed and accuracy.
- ★ **Artificial Intelligence (AI) and Machine Learning (ML):** These technologies analyse large datasets to identify patterns, predict outcomes, and detect anomalies and potential fraud.

How Automation Streamlines Audits:

- ★ **Increased Speed:** RPA and AI tools process vast amounts of data much faster than manual methods, speeding up the entire audit process.
- ★ **Improved Accuracy:** Automating tasks reduces the likelihood of human errors in data handling and analysis, leading to more reliable audit findings.
- ★ **Enhanced Data Analysis:** Automation allows

auditors to work with larger, more consistent datasets, uncovering patterns and insights that manual methods would miss.

- ★ **Proactive Risk Management:** AI systems can analyse transaction patterns to identify potential fraud or compliance issues early, allowing for timely intervention.

Cost Control Benefits:

- ★ **Reduce Audit Costs:** Automating repetitive tasks lowers the dependence on manual manpower, resulting in significant reductions in operational costs and manpower expenses.
- ★ **Lower Cost of Errors:** By minimizing human error, banks avoid the costs associated with rectifying mistakes, rework, and potential fines or penalties.
- ★ **Optimized Resource Allocation:** Human auditors are freed from mundane tasks and can concentrate on more strategic, analytical work, leading to greater overall efficiency and value.

Specific Use Cases in Banking:

- ★ **Data Entry and Reconciliation:** Bots can automate the extraction and verification of data from invoices and other documents, and perform reconciliation of accounts.
- ★ **Compliance Checks:** Automated systems can ensure consistent adherence to regulatory frameworks and can generate reports for compliance purposes.
- ★ **Fraud Detection:** ML models analyse transaction data to detect suspicious activities and flag potentially fraudulent activities, strengthening risk management.

7. Enhanced Data Analytics:

‘Enhanced Data Analytics Minimizes Audits and Control Costs’ for Indian banks by enabling risk-focused audits, continuous monitoring, automated compliance checks, and 100% data analysis, shifting from a sample-based approach to identify anomalies and inefficiencies in near real-time. This leads to a more efficient allocation of audit resources, earlier detection of fraud and control deficiencies, and improved regulatory compliance through data-driven insights and insights into trends and patterns within the data.



Reducing Audit Scope and Costs:

- ✱ **Risk-Based Auditing:** Data analytics helps identify high-risk areas, allowing auditors to focus their limited resources on these critical zones rather than conducting broad, time-consuming checks on samples.
- ✱ **Continuous Auditing & Monitoring:** Banks can move from periodic audits to continuous auditing and monitoring, where data is analysed frequently to detect anomalies, control deficiencies, and emerging risks in near real-time, reducing the need for extensive follow-up audits.
- ✱ **Automated Processes:** By automating data collection, analysis, and control checks, banks can streamline compliance processes and reduce the manual effort and associated costs of audits.

Improving Efficiency and Effectiveness:

- ✱ **100% Transaction Analysis:** Instead of relying on samples, banks can use big data analytics to analyse every transaction, providing a comprehensive view of operations and a much higher level of assurance.
- ✱ **Anomaly Detection:** Advanced analytics can identify unusual patterns, deviations, and inconsistencies in data that may indicate fraud or control breakdowns, which would be missed in traditional audits.
- ✱ **Data Visualization:** Data visualization tools allow auditors to quickly discover relationships and trends within large datasets, providing deeper insights into systemic risks and control weaknesses.

Enhancing Control and Compliance:

- ✱ **Proactive Risk Management:** Data analytics helps banks proactively identify potential risks, detect fraud, and optimize compliance processes, minimizing financial losses and regulatory fines.
- ✱ **Dynamic Control Monitoring:** Insights from data analytics can be integrated into user dashboards, providing a dynamic and real-time view of the status of control processes and compliance efforts.
- ✱ **Strengthened KYC and AML Processes:** Data analytics provides tools to monitor activity across payment channels, identify high-risk transactions, and flag unusual behaviour, improving Know Your

Customer (KYC) and Anti-Money Laundering (AML) processes.

In summary, enhanced data analytics transforms the auditing and control environment in Indian banks by enabling a more precise, proactive, and efficient approach, ultimately minimizing the need for frequent, resource-intensive traditional audits and significantly lowering associated control costs.

8. Predictive Risk Assessment:

Predictive risk assessment leverages predictive analytics, statistical methods, and machine learning to analyse historical and current data, identify high-risk areas, and forecast future events to minimize various audit types and reduce control costs in Indian banks. By shifting from broad transaction-based audits to a targeted approach focused on identified high-risk areas, banks can improve audit efficiency, allocate resources effectively, and gain deeper insights into potential vulnerabilities, leading to better risk management and lower control expenses.

What a Predictive Risk Assessment Works in Banks:

- ✱ **Data Analysis:** Predictive analytics models use historical and real-time data to identify patterns and anomalies that indicate potential risks across different banking operations, such as credit, market, and operational risks.
- ✱ **Risk Identification & Prioritization:** The analysis highlights high-risk factors and areas with a higher likelihood of material misstatement or control failures, enabling a shift from covering all transactions to focusing on the most critical ones.
- ✱ **Informed Decision-Making:** Auditors and management gain valuable insights into potential issues, allowing for more informed decisions regarding risk mitigation strategies and audit planning.

Benefits for Banks:

- ✱ **Minimizing Audit Scope and Types:** Instead of full-scale transaction audits, banks can perform more targeted and efficient risk-based audits. This means focusing on areas flagged as high-risk by predictive models, thereby reducing the number and breadth of audits required.

- ✱ **Reducing Audit and Control Costs:** By concentrating resources on critical risk areas, banks optimize their audit spending. Predictive insights also help identify control weaknesses before they lead to significant losses, thereby lowering operational and compliance costs.
 - ✱ **Improved Audit Quality:** Data-driven insights and the accurate identification of high-risk factors enhance the effectiveness of audits, leading to higher audit quality and more robust assurance.
 - ✱ **Enhanced Risk-Based Internal Audit (RBIA):** Predictive analytics supports the RBIA framework by providing a more sophisticated and data-driven method for identifying, assessing, and prioritizing risks within a bank, which is a key requirement for internal controls.
 - ✱ **Proactive Risk Management:** The predictive capabilities allow banks to anticipate future risks and develop proactive strategies, moving beyond reactive measures to effectively safeguard assets and reputation.
- 9. Improved Compliance and Monitoring:**
- Improved Compliance and Monitoring in Indian Banks minimize various audits by implementing a strong, risk-based internal audit system that detects fraud early, enhances operational efficiency, and ensures regulatory adherence. Banks use automation tools like RPA and AI/ML to streamline compliance, provide real-time insights, and automate reporting, reducing errors and freeing up human resources for strategic tasks. This proactive approach allows for early detection of non-compliance, reducing the need for frequent, costly audits and minimizing fines.
- Key Aspects of Improved Compliance and Monitoring:**
- ✱ **Risk-Based Internal Audit (RBIA):** The RBI mandated RBIA for scheduled commercial banks to identify and mitigate risks, which helps in early detection of issues and improves the overall operational and control environment.
 - ✱ **Automation and Technology:**
 - ✓ **Robotic Process Automation (RPA):** Automates repetitive tasks like data entry and document verification, ensuring accuracy and consistency in compliance processes.
 - ✓ **AI and Machine Learning:** These technologies identify patterns and anomalies indicative of compliance risks, enabling proactive management and real-time insights.
 - ✓ **Automated Reporting:** Generates compliance reports accurately and on time, reducing the risk of fines due to late or incorrect submissions.
 - ✱ **Enhanced Internal Audit Structure:** The RBI has introduced additional best practices for internal audit teams, including greater authority, stature, independence, competence, and clear reporting lines to improve their effectiveness.
 - ✱ **Early Fraud Detection:** A strong internal audit system can identify fraudulent activities or potential fraud early, preventing larger financial losses and reducing the scope of future investigations.
 - ✱ **Operational Efficiency:** Identifying and improving redundant procedures and automating manual tasks increases efficiency and allows employees to focus on higher-value activities.
 - ✱ **Proactive Risk Mitigation:** Constant monitoring of policies and procedures helps in reducing financial risks by addressing potential issues before they escalate into significant problems.
- Benefits for Minimizing Audits and Control Costs:**
- ✱ **Reduced need for External Audits:** Effective internal controls and compliance minimize the instances and scope of mandatory external audits.
 - ✱ **Fewer fines and penalties:** Proactive compliance ensures adherence to regulatory standards, reducing the risk of costly fines for non-compliance.
 - ✱ **Lower operational overhead:** Automation and process improvements reduce the manual effort and resources required for compliance and audit activities.
 - ✱ **Improved resource allocation:** By identifying and addressing high-risk areas early, banks can allocate audit resources more effectively, focusing on critical control points.



m) Real Time Checking through IT of Banking Operations:

Information Technology (IT) provides automated checks and cross-checks during banking operations, reducing the workload for auditors and cutting costs and time. These automated controls allow bank staff to immediately identify and resolve routine discrepancies, reserving human intervention for verifying more complex issues.

How IT automates checks and cross-checks:

- ✳ **System integration:** Core Banking Solutions (CBS) and other integrated software ensure data consistency across multiple bank branches, platforms, and databases. An integrated system ensures that an update made at a branch is instantly reflected in a customer's mobile banking app, eliminating manual reconciliation.
- ✳ **Real-time monitoring:** AI and machine learning algorithms monitor transactions as they happen to detect unusual patterns, flag suspicious behaviour, and send real-time alerts. This helps identify and prevent fraudulent activity and compliance violations before they escalate.
- ✳ **Automated transaction processing:** IT automates high-volume, rule-based processes like payments and settlements. The system handles tasks like transaction routing, instruction validation, and reconciling financial records across multiple systems, reducing the chance of human error.
- ✳ **Access controls:** Automated controls ensure that only authorized personnel can access sensitive systems and data. This includes authentication, authorization, and detailed audit trails that log all user activity, providing a clear record for review.
- ✳ **Compliance checks:** Automated systems can be configured to enforce adherence to regulatory requirements, such as anti-money laundering (AML) and know-your-customer (KYC) rules. They automatically flag customers or transactions that require additional review, ensuring compliance.

Benefits for bank staff and auditors

- ✳ **Reduced human error:** Automation significantly minimizes the risk of human error associated with manual data entry, calculation, and reconciliation. Automated checks run consistently and accurately

according to pre-defined rules, creating a reliable and verifiable transaction record.

- ✳ **Greater efficiency:** By automating repetitive and mundane tasks, IT frees up employees to focus on more complex work, such as analysing results and providing strategic recommendations. This boosts productivity and accelerates banking operations.
- ✳ **Better resource allocation:** For auditors, automated reporting and continuous monitoring dramatically reduce the time and resources needed for a full audit. Auditors no longer need to conduct manual, sample-based testing to check for accuracy. Instead, they can focus their attention on high-risk areas identified by the system and investigate more complex issues.
- ✳ **Enhanced security:** Automated fraud detection and continuous monitoring provide a proactive layer of security. This helps protect the bank and its customers from cyber threats and fraudulent activities.
- ✳ **Comprehensive reporting:** IT systems generate accurate and complete audit trails and reports automatically. This ensures data integrity and provides auditors with all the necessary evidence to perform their review.

The importance of human intervention in auditing:

While IT automates routine checks, human expertise remains crucial for verifying the audit and handling non-routine situations.

- ✳ **Handling exceptions:** Automated systems can identify unusual transactions but may not fully understand the context. Human auditors are necessary to investigate and determine if an exception is an actual error, a legitimate transaction, or a potential new risk.
- ✳ **Ethical oversight:** Auditors must ensure that the algorithms used in automated systems are fair, transparent, and free from bias. This oversight ensures that the automation does not lead to discrimination in areas like loan approvals.
- ✳ **Addressing new risks:** As technology evolves, so do the threats. Human auditors are needed to assess new types of cyber risk and emerging technologies, ensuring that the bank's IT controls remain robust and effective.



★ **Strategic guidance:** The ultimate goal of auditing is to provide recommendations that help the bank improve and achieve its business goals. Human auditors use the information gathered by IT systems to provide strategic insights and guidance that automation alone cannot provide.

n) Audit Irregularities are addressed and do not recur:

Based on Reserve Bank of India (RBI) guidelines and standard best practices, Indian banks are required to implement a robust system to ensure that audit irregularities are addressed and do not recur. This moves the audit process from simply identifying problems to proactively improving controls.

Regulatory basis for follow-up on audit findings:

- ★ **Concurrent Audit System:** The RBI regards the concurrent audit as a critical “early-warning system” for banks. The bank management must pay serious attention to the process, including the follow-up and rectification of lapses and irregularities. The findings of concurrent auditors must be properly reported and followed up on by controlling offices and the bank’s internal audit department without any delay.
- ★ **RBI inspections:** During their own inspections, RBI officials require a specific comment on the status of irregularities that they have previously pointed out. This shows that they expect deficiencies to be fixed and not repeated.
- ★ **Accountability for frauds:** For frauds, the RBI requires prompt reporting to the bank’s Board of Directors. The report must note any failures by officials and consider appropriate action against those responsible.
- ★ **Compliance timelines:** Some guidelines from the Department of Financial Services suggest that audit qualifications should be rectified within 90 days and closed within 120 days.

Best practices to ensure non-recurrence:

- ★ **Root cause analysis:** Branches must go beyond just fixing the issue and identify the underlying reason for the irregularity. This prevents the problem from reoccurring elsewhere or under different circumstances.

★ **Comprehensive action plan:** Management must prepare a formal, time-bound action plan to address each observation made by the auditor. The plan should assign responsibility to specific officials for correcting the lapse.

★ **Strengthening internal controls:** Irregularities often point to a weakness in the branch’s internal controls. The management must enhance and document these controls to prevent future lapses.

★ **Training and awareness:** Staff training is crucial, especially in areas where irregularities occurred. Educating employees on proper procedures and the importance of compliance creates a culture of accountability.

★ **Senior management oversight:** Senior management, including the head of the inspection department and the Audit Committee of the Board (ACB), must actively review audit findings and follow up on the action taken. The branch manager must also provide management with a representation letter confirming that necessary actions have been taken.

★ **Continuous monitoring:** Integrating continuous monitoring, possibly with the use of automated software, helps flag real-time risks and alerts management to potential policy or regulatory violations.

★ **Robust internal audit:** A strong internal audit team, led by a senior official reporting directly to the chairman, is necessary to provide an independent and objective perspective on the effectiveness of controls.

★ **Leveraging technology:** With the implementation of Core Banking Solutions (CBS), many areas are now centralized. Banks should use technology to enhance their audit systems, including creating special teams for IT and system-based audits.

Outcome for future audits:

By following this disciplined approach, branches can resolve outstanding issues permanently. As the number of repeat findings decreases over time, auditors can focus on higher-risk areas and other aspects of the bank’s operations, such as:

- ✓ Systemic risks
- ✓ New technologies and related risks



- ✓ Credit portfolio quality
- ✓ Adherence to new RBI circulars and guidelines
- ✓ Overall management effectiveness, rather than basic compliance issues

o) Audit Policy:

To increase the efficiency, effectiveness, and reasonable cost of its audit system, a bank must develop a comprehensive, dynamic, and technology-focused audit policy. The policy should cover the full scope of a bank's operations, integrate different types of audits and leverage technology for real-time monitoring and advanced risk assessment. Key principles for an effective bank audit policy:

Risk-based internal audit (RBIA): Instead of relying on simple transaction testing, an RBIA system identifies, measures, monitors, and controls all significant risks across the bank's operations. This allows for a more strategic allocation of audit resources, focusing effort on high-risk areas.

✱ **Risk assessment matrix:** Develop a matrix to uniformly classify branches and departments into risk categories (e.g., extremely high, high, medium, low) based on factors like the volume of business, complexity of products, and past audit findings.

✱ **Dynamic audit plan:** The frequency of audits should be determined by the risk profile, with high-risk areas audited more frequently. The plan should be continuously adjusted to reflect changes in the bank's risk landscape.

Technology-driven audit functions: Integrating technology is crucial for modernizing the audit system, improving accuracy, and managing costs.

✱ **Information Systems (IS) and Cyber Security Audit:** A dedicated IS audit policy is necessary to address the risks posed by extensive technology adoption. This includes audits of the core banking system (CBS), data centers, and digital channels like internet and mobile banking.

✱ **Computer-Assisted Audit Tools (CAATs):** Utilize data analytics and cognitive technologies to analyse vast datasets and identify anomalies, inconsistencies, or patterns indicative of fraud or irregularities. This

shifts the focus from manual sample testing to comprehensive data analysis.

✱ **Automation:** Automate repetitive and monotonous audit tasks to improve efficiency and free up auditors to focus on more complex, judgment-based activities.

✱ **Real-time monitoring:** Implement continuous monitoring to provide early warning signals and enable proactive fraud prevention.

Streamlined and integrated audit types: An effective policy should create a cohesive and non-redundant system by integrating different types of audits.

✱ **Internal Audit:** The internal audit function should be independent of business operations and report directly to the Audit Committee of the Board. The policy must define the scope, covering not only financial controls but also operational efficiency and compliance.

✱ **Concurrent Audit:** Consider concurrent audit as a real-time early-warning system. It should be used at large, critical branches to ensure timely detection of irregularities. The policy should specify the selection of auditors, reporting procedures, and rectification processes.

✱ **Statutory Audit:** The policy must align with regulatory guidelines for the appointment and rotation of statutory auditors to ensure independence. It should clearly define the scope of additional certifications and reports required by regulatory bodies.

Cost management and control: Balancing effectiveness with cost-efficiency requires a strategic approach.

✱ **Resource allocation:** Allocate internal and external audit resources based on the risk profile of branches and departments, focusing more intensive audits on higher-risk areas.

✱ **In-house expertise vs. outsourcing:** Determine when to use internal audit teams for standard procedures and when to engage accredited external specialists for complex areas like network security or IT infrastructure.

✱ **Review of audit fees:** For external audits, the bank's policy should align with regulatory guidance on fees while ensuring high-quality service.



- ★ **Automation ROI:** Invest in automation technologies that yield significant long-term efficiency gains and reduce the manual effort of audit procedures.

Annual policy review mechanism: The audit policy should include a mandatory annual review to ensure it remains relevant and effective.

- ★ **Regulatory changes:** Update the policy based on changes in regulatory guidelines from authorities like the Reserve Bank of India (RBI).
- ★ **Technology developments:** Incorporate new auditing technologies, tools, and best practices, such as updates to AI-driven analytics or cloud-based platforms.
- ★ **Process improvements:** Refine audit methodologies and procedures based on feedback from auditors, management, and the Audit Committee of the Board.
- ★ **Fraud trends:** Analyse new and emerging fraud risks, especially those related to IT, and adjust audit coverage to address them.

p) Role of Cost Accountant in Audit Department of Banks:

Appointing cost accountants to a bank's audit department provides significant benefits by shifting the audit function from a traditional compliance-based role to a strategic, cost-conscious, and performance-driven one. Their specialized skills in cost management allow for more effective resource allocation and control over the audit process itself.

Enhancing audit cost management: A core function of a cost accountant is to track, analyse, and control expenses. Applied to an audit department, this expertise would allow the bank to:

- ★ **Monitor and control audit costs:** Cost accountants can help the audit department create detailed budgets and track the actual costs of audits against these projections. This would provide clarity on audit spending and help management identify and address cost overruns.
- ★ **Allocate costs more accurately:** Using techniques like Activity-Based Costing (ABC), a cost accountant can determine the true cost of auditing a specific branch, department, or product. This provides a clearer picture of profitability across the bank and can inform future

resource allocation decisions.

- ★ **Identify cost inefficiencies:** Cost accountants can analyse audit processes to pinpoint inefficiencies and recommend cost-saving measures without compromising the quality of the audit.

Optimizing audit timeliness and resource deployment: Effective cost management is directly linked to operational efficiency. Cost accountants can help improve the bank's audit process by:

- ★ **Monitoring timely completion of audits:** By tracking and analysing the costs and time spent on different audit tasks, a cost accountant can identify bottlenecks and inefficiencies that delay the process. This data can inform management and help streamline workflows.
- ★ **Improving manpower deployment:** With a clear understanding of the costs and time associated with specific audit tasks, cost accountants can contribute to more effective manpower planning. For example, they can analyse the efficiency of different teams or individual auditors to ensure the right personnel are assigned to the right branches.
- ★ **Leveraging technology:** Cost accountants can help evaluate the financial benefits of adopting new audit software or automation tools. They can perform a cost-benefit analysis to ensure that technological investments deliver a positive return and improve efficiency.

Supporting strategic decision-making: The insights provided by cost accountants extend beyond immediate cost savings and can inform broader management decisions.

- ★ **Provide data for strategic decisions:** By analysing cost performance, cost accountants can provide bank management with relevant data to make better strategic decisions. This may include decisions on resource allocation, branch network expansion, or the performance of specific product lines.
- ★ **Enhance internal reporting:** A cost accountant can provide detailed, customized reports on audit performance and costs for internal management, offering a level of detail that traditional financial accounting may not capture.
- ★ **Ensuring competitive advantage:** In an increasingly



competitive financial sector, managing operational costs is critical for a bank's success.

- ✱ **Sustain profitability:** By actively managing and controlling expenses, a bank can boost its profit margins and maintain a competitive edge.
- ✱ **Reduce audit and operational risks:** The insights gained from a cost-focused audit can highlight areas of waste and inefficiency that may signal deeper operational issues, which helps in early identification and risk mitigation.

To Sum Up:

An increase in a bank's audit costs can indeed signify lower manpower efficiency if personnel are not adhering to systems and procedures, leading to more audit findings and thus higher audit costs. Conversely, strict adherence to established processes by bank personnel would typically result in fewer issues, a smoother audit process, and lower overall audit expenses, indicating greater efficiency.

Rationale:

- ✱ **Identification of Issues:** Auditors are often tasked with identifying deviations from established rules, systems, and procedures.
- ✱ **Increased Audit Effort:** If employees are not following these protocols, the audit process needs to spend more time and effort to find these errors and gaps, increasing costs.
- ✱ **Root Cause of Inefficiency:** A lack of meticulous adherence to systems and procedures by personnel suggests a breakdown in operational efficiency and a potential lack of training or motivation, leading to increased rework and audit needs.

- ✱ **Reduced Audit Costs:** When personnel consistently follow established systems and procedures, there are fewer errors, inefficiencies, and compliance issues to uncover. This leads to a more streamlined audit, with fewer required hours and resources, thereby reducing the overall audit cost.

In Essence:

High Audit Costs can be a red flag, pointing to potential weaknesses in how staff are following the bank's internal controls and operational guidelines.

Low Audit Costs suggest that the bank's internal processes are functioning well, and staff are effectively following the required procedures.

References:

- a) Risk Weighted Assets-IBA Published Data FY 2021-2025.
 - b) Tier 1 Capital- (Regulatory Capital)-PSBs Published Data by IBA.
 - c) Tier 2 Capital- (Regulatory Capital)-IBA Published Data.
 - d) Provisions and Contingencies-PSBs Annual Reports.
 - e) Guidance Note on Risk-Based Internal Audit (RBIA) of Banks-ICMAI Publication.
 - f) Auditors' Fees and Expenses (Including Branch Auditors)-Information / Data from PSBs Annual Reports.
- (Overheads & Indirect Costs are to be Distributed to user Branches / Departments based on Logical Cost Drivers)

Annexure I

Information required to prepare Model Cost Sheets

(₹ in '000)

Elements of Cost	Types of Audits					
	Risk Focused Internal Audit	Concurrent Audit	FEMA Audit	Forensic Audit	Credit Audit	Others (Please Specify)
Manpower / Employees Cost (Auditors, Officers / Employees in Audit Department)						
Other Costs like:						
Rent for Office Premises						
Electricity / AC Costs						
Stationery Consumed						
Computers / Tabs / Technology-Depreciation						
Travelling Costs (Mobile Duty Auditors)						
Lodging Costs for Mobile Duty Auditors (Stay during Audits)						
Laptops Cost to provide to the Auditors etc. etc.						
Other Costs (If Any)						
Total Cost						
No. of Working Days Spent						
Per Day 'Audit Cost'						
According to the duration of time allocated by the auditors (pertaining to each category of audit) at the branch level, the 'Audit Cost' shall be allocated or apportioned by the Audit Department to the respective Bank Branches and Administrative Offices. The Types of Audits conducted at Administrative Offices, such as the Management Audit or Expenditure Audit, among others.						

Steps to Calculate 'Audit Cost per Branch':

- ✱ **Total Audit Cost:** Sum up all the costs incurred by the Internal Audit Department for the audit period.
- ✱ **Develop an Allocation Methodology:** Design a formula or a set of rules that assigns proportions of the total cost to different branches.
- ✱ **Factor-Based Distribution:** Use the established factors (risk, size, complexity, and time) to assign weightages to each branch.

Calculate Branch-Specific Costs:

- ✓ Direct Costs (If any): Allocate costs directly related to a specific branch, such as travel and accommodation for the audit team at that branch.
- ✓ Indirect Costs: Allocate shared costs (like salaries of the audit department, software, and administrative overhead) proportionally based on the factors above.
- ✱ **Review and Refine:** Regularly review the methodology to ensure its accuracy and fairness.



Allocation of Expenditures Associated with the Audit Department

“Overheads and Indirect Costs” are distributed to user Branches / Departments based on Logical Cost Drivers. This process is known as “Apportionment or Re-apportionment” in Cost Accounting, where common costs that cannot be directly traced to a specific department are allocated using a suitable basis to ensure fair distribution.

To arrive at the ‘Audit Cost’ of each Bank Branch, the Bank’s Internal Audit Department allocates the ‘Total Incurred Audit Costs’ to Each Branch by using a formula that considers the:

- Branch’s Size.
- Risk Profile.
- Volume of Transactions.
- Complexity of Operations.
- Number of audits conducted and
- “Actual Time Spent” by the Auditors etc.

A proportional distribution based on these factors ensures a fair and accurate allocation of the shared audit expenses.

Key Factors in ‘Cost Allocation’:

- ✓ **Branch Size and Risk Profile:** Larger branches or those with higher-risk activities (like significant lending or complex financial products) will typically incur higher audit costs and thus receive a larger share of the appropriated expenses.
- ✓ **Volume and Complexity of Transactions:** Branches handling a high volume and diverse range of transactions will require more audit resources, leading to a higher allocation.

- ✓ **Audit Effort and Time Spent:** A significant factor is the direct time the audit team spends at each specific branch during the audit process. This effort is a primary driver of the cost incurred for that branch.
- ✓ **Type of Audit Conducted:** Different types of audits (such as risk-based, operational, or financial audits) have varying costs. The cost of the specific audits performed at each branch is factored into its allocation.
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Chapter 13

Income Leakage Audit



Contents:

<i>1. Introduction.</i>	<i>6. Automated 'Income Leakage Report' to be generated by the System:</i>
<i>2. Details of Revenue / Income Leakage Audit (Present System).</i>	<i>7. To Sum Up.</i>
<i>3. Rationalized the CBS System.</i>	<i>Model Income Leakage Statement.</i>
<i>4. Automated and Standardize Key Financial Processes</i>	<i>References.</i>
<i>5. 'Revenue Leakage' Statements are to be Generated by CBS.</i>	

Banks can replace manual Income Leakage Audits with automated, AI-driven Checks. This Chapter explains:

- ★ Strengthening CBS for Automated Revenue Checks.***
- ★ Designing Automated Daily "Income Leakage Reports".***

This is based on Discussions with Bank Officers handling CBS and Revenue Audits.

Income Leakage Audit

(Automated Income Leakage Report)

An income leakage audit for Indian banks involves scrutinizing a bank's processes and systems to find and prevent revenue loss, often through incorrect charges or missed income opportunities. Auditors verify that all expected fees and interest are collected, interest rates are correctly applied in the core banking system (CBS), and that parameters and charges are updated with proper authorization. This type of audit can be a part of a 'concurrent, statutory, or internal audits' and is crucial for maintaining the bank's financial stability by safeguarding its revenue streams.

Key Aspects of an Income Leakage Audit:

- ✱ **System Parameter Verification:** Auditors check for any unauthorized changes to critical system parameters for interest rates, fees, and charges.
- ✱ **Interest Rate Accuracy:** They verify that interest is calculated correctly by manually testing a sample of transactions and comparing it with the bank's rate circulars.
- ✱ **Charge and Fee Compliance:** The audit ensures all applicable service charges (like cheque return charges, account maintenance fees, ATM usage charges, SMS charges, etc.) are applied according to the bank's policies.
- ✱ **Process Monitoring:** Auditors review the process for changing rates and other parameters in the CBS and the documented procedures for concessions.
- ✱ **Audit Trail Review:** A careful review of the audit trail within the system is conducted to identify suspicious activities or unauthorized entries.
- ✱ **MIS Generation:** Auditors analyse management information system (MIS) reports to identify any gaps in charge collection or interest computations.
- ✱ **Reversal of Charges/Interest:** They verify that reversals of charges or interest are authorized and not abusive, ensuring the appropriate authority sanctions them.

Documents and Data Used in the Audit:

- ✱ **Loan Balance File:** A file containing all sanctioned facilities like Overdraft, Cash Credit, and Term Loans.
- ✱ **Master Circulars:** Official circulars for loans sanctioned by the branch and the bank's Master Circular on Inspection and Audit.
- ✱ **SMA and NPA Lists:** Lists of Special Mention Accounts (SMA) and Non-Performing Assets (NPA) accounts.
- ✱ **Previous Year's Leakage Reports:** Reports from prior audits to identify recurring issues.

Purpose and Importance:

- ✱ **Detecting Fraud and Malpractice:** The audit aims to detect any unauthorized practices that result in financial losses.
- ✱ **Protecting Financial Stability:** By identifying and plugging leaks, the audit helps maintain the bank's financial stability and protects the interests of depositors and shareholders.
- ✱ **Ensuring Regulatory Compliance:** It ensures that the bank's operations adhere to the guidelines set by the Reserve Bank of India (RBI).
- ✱ **Enhancing Internal Controls:** It strengthens internal controls by identifying weaknesses in processes and systems, thereby reducing the gap between a transaction occurring and its examination.

Besides internal audit and short inspections, there should be a regular system of revenue audit of the large branches. The reasons of leakage of income unearthed during such audit should be examined in-depth and action taken against the officials responsible for the lapses.

a) Details of Revenue / Income Leakage Audit (Present System):

'Revenue Leakage' is the one of the critical components of the Bank Audit. In some banks, it is conducted separately while some consider it as a part of Concurrent Audit or



Statutory Audit or Internal Audit. Before commencing the audit, we should obtain the following documents from the respective (Bank Branch) business unit preferably on the e-mail.

Last year Revenue Leakage Report; (if any):

- ✓ Loan Balance File (it includes all facilities sanctioned by branch such as Overdraft, Cash Credit, Term Loans etc.);
- ✓ Master Circular for applicable loans sanctioned by branch;
- ✓ List of SMA & NPA Accounts of branch and Recoveries made during audit period against them.

Following are the important areas which should be covered for successfully completing Revenue Leakage Audit of the Bank Branch:

1. Interest Earned on Advances. Interest is the major source of revenue for the branches. Generally, following things are to be considered for checking Interest Income of the banks:

- ✓ Sanction Letter for checking the applicable rate of interest on the loan;
- ✓ Whether Interest is charged in accordance with relevant circular or scheme of the bank;
- ✓ Check Interest on NPA Advances is recognized only on the cash basis;
- ✓ Check the interest rate variation report generated from the CBS. This report normally shows the interest rate that are different from the interest rate given for the scheme;

2. Processing / Renewal charges:

i. Processing Fee: Processing fee is generally charged by the branch on fresh advances sanctioned during the audit period. In order to find leakage in the processing fees we have to go through the respective loan circular and sanction letter as well. Verify that charges mentioned in Sanction Letter are debited to borrower's account accordingly. In some banks processing charges are charged on the basis of the rating of the borrower. These charges are recovered at the time of initial sanction. Nowadays, Processing Fee is charged automatically by CBS but still there are high chances where Processing Fee is not charged due to technical glitches in CBS. For some banks & NBFC(s) especially MFI(s), processing fee is major source of revenue as they are charging very high processing fees.

ii. Renewal / Review Charges: Cash Credit/OD limits and term loans should be renewed/review every year as per the Banking regulations. So, we have to verify that in every CC/OD/Term loan Account, Renewal Charges are debited or not. These are calculated on the basis of the service charges circular of the respective bank.

iii. Facility Fees Applicable to NBG (National Banking Group) Accounts only on Fund Based (+) Non-Fund Based limits (excluding Term Loans).

iv. Inspection charges. Inspection Charges are charged on different types of advances such as term loans, CC, Overdrafts etc. These are levied because branch is required to inspect different types of securities mortgaged or hypothecated to the bank such as stock and current assets, (generally CC and OD limits) and property in term loans, overdraft limits. Branch officials should carry out inspection of borrower's site, stock and other current assets depend on the sanction letter, on the basis of limit of advance it is done Monthly/Quarterly/Half Yearly or Yearly. Inspections are also conducted pre or post the sanction of the limit. We have to check that whether charges have been debited according to the terms mentioned in the sanction letter and as per the circular prevailing at the particular time in the bank. In some banks if facility fee is charged in that case inspection charges are waived off.

v. Documentation Charges: Documentation charges are debited in relation to drafting or modification of standard documents like registered mortgage, equitable mortgage, hypothecation documents for current and non-current assets.

vi. Commitment Charges: Commitment charges are levied where the borrower has not utilized the sanctioned limit to a specific limit. For example, in some banks if borrower does not utilize at least 50% of the limit sanctioned in that case bank recover the charges from the borrower for non-utilization of the limit which are known as commitment charges. Since the amount is not utilized by the borrower, bank can't earn interest upon un-utilized portion and bank has its opportunity cost. Generally, it has been seen that branches for achieving their targets sanctions higher limits than needed to the borrower. Here, we should be more specified as CBS are currently not able to deduct them automatically in most of the banks.

vii. Locker Rent: In some branch's locker facility is provided and for which a fee is charged. We need to verify Locker Rent received from customers of a particular period with occupancy of lockers during the said period.

viii. Penal Interest: Penal Interest is charged on account



of non-submission or delay in submission of stock statements, non-compliance of the terms of sanction, incomplete documentation, non-renewal of facilities after due date (non-submission of renewal data including Audited balance sheet), etc. For example, penal charge is to be levied in case of delay in submission of stock statement, here important thing to check is the physical stock statement because to avoid charges in the account officials of the branch updates the date of latest stock statement without receiving the same in physical.

These were the major cases where revenue leakage is generally identified. But the list of cases where revenue leakage can exist is not exhaustive. The following are also needed to be verified for the purpose of revenue audits:

- ✓ Cheque book / Cheque return Charges.
- ✓ Minimum Balance Charges Not maintained.
- ✓ Credit Information Report charges etc.,

b) Rationalized the CBS System:

A technologically advanced Core Banking System (CBS) minimizes income leakage in Indian banks by automating functions and standardizing processes. By encoding specific business rules for transactions, interest, fees, and collateral, a CBS reduces manual intervention and creates a centralized, accurate system for recording financial events. This also significantly cuts down on audit time by creating a single, verifiable source of truth.

Prevention of income leakage through CBS mapping:

- ✱ **Deposits and advances:** By mapping product-specific rules into the CBS, banks ensure accurate calculation and application of interest and charges. This prevents errors that can lead to lost revenue.
- ✱ **Product code-based interest rates:** A CBS automatically applies the correct, pre-configured interest rate for different deposit products (e.g., savings, fixed deposits) and loan products. This eliminates the risk of human error or oversight in interest calculation.
- ✱ **Automated fee calculation:** Fees and charges for banking services are automatically calculated and debited based on the product code and customer profile. This ensures consistent application of fees and prevents revenue loss from undercharging or forgetting to charge.

✱ **Risk-based pricing:** For advances, a CBS can automatically link the loan's interest rate and fees to the customer's credit score or risk rating. This standardized, automated process ensures appropriate pricing and prevents leakage from unstandardized pricing.

✱ **Remittances:** Automation in remittances standardizes charges and enhances security, which reduces human intervention and potential for fraud.

✱ **Amount-based pricing:** The CBS automatically applies the correct fees for NEFT, RTGS, and other remittance services based on the transaction amount. This eliminates manual calculation errors and ensures standardized fees across all branches.

✱ **Automated transaction processing:** By automating fund transfers, the system reduces reliance on manual data entry, thereby preventing errors that can lead to unbilled or incorrectly processed transactions.

Lockers: Integrating locker management into the CBS automates rent collection and eliminates the manual tracking of payments.

✱ **Size-based rent:** The system automatically debits the correct rent from the customer's account based on the locker's size and associated rent schedule. This prevents revenue loss from incorrect billing or failed collection.

✱ **Rent schedule automation:** The CBS ensures that rent is charged on the specified due dates without manual follow-up, flagging overdue accounts automatically.

Bank guarantees: A CBS automates the calculation of commissions and management of collateral, which protects the bank's income and security.

✱ **Amount and type-based commission:** Commissions are automatically calculated based on the guarantee amount and type. This ensures that the bank's fee is accurately charged and collected.

✱ **Collateral and security tracking:** The system maps and tracks the collateral offered for bank guarantees. For partial security, the system records and monitors the value of the collateral against the guarantee amount, automatically calculating any additional cash margin required.



How CBS minimizes intervention and audit time:

Reduced human intervention:

- ✱ **Workflow automation:** A CBS automates many manual, repetitive tasks, such as interest calculations and fee applications. This reduces human error and the need for manual oversight.
- ✱ **Maker and checker controls:** Transactions in a CBS are processed with a “maker-checker” system, ensuring that at least two officials approve a transaction. Any overrides to the standard process are logged in an exception report, ensuring accountability.
- ✱ **Centralized, real-time data:** With a centralized database, all branches have access to real-time, accurate information. This eliminates the delays and errors that come from relying on branch-specific data and manual record-keeping.

Reduced audit time:

- ✱ **Real-time reporting and analytics:** The centralized data in a CBS allows for the generation of real-time reports and management information system (MIS) data. This gives auditors an immediate, comprehensive view of the bank’s financial health, rather than waiting for information to be compiled manually.
- ✱ **Automated regulatory compliance:** A CBS includes built-in modules for managing regulatory requirements and reporting. Automated compliance checks and alerts help ensure that the bank follows all guidelines, reducing the time auditors spend verifying adherence to regulations.
- ✱ **Enhanced data analysis:** Automated data analytics tools within the CBS allow auditors to review entire datasets, instead of relying on sampling. This capability speeds up the identification of anomalies, discrepancies, and trends, making audits faster and more effective.

Automated and Standardize Key Financial Processes

With advanced Core Banking Systems (CBS), banks can automate and standardize key financial processes, drastically reducing the potential for human error and income leakage. By hard-coding interest rates, fees, and charges directly into the system, Indian banks can minimize manual intervention and the time and resources spent on audits.

Prevention of income leakage through CBS automation:

A modern CBS is a centralized, real-time platform that integrates banking functions across all channels and branches. By automating the calculations and applications of charges and rates, it prevents income leakage, which often arises from manual errors or inconsistencies.

Specific ways that CBS technology prevents leakage include:

- **Deposits and advances:** The system automatically applies the correct interest rate based on the product code for savings accounts, fixed deposits, and loans. Any manual error in applying an incorrect rate or calculation is prevented by the predefined system logic.
- **Remittances:** The CBS automates the application of fees for remittances based on the amount and transaction type. This ensures that the correct, pre-defined fee structure is always applied, eliminating manual undercharging.
- **Locker rentals:** Rent is automatically charged based on the size of the locker and any applicable concessions or penalties. This eliminates the need for manual tracking and billing, ensuring all revenue is collected.
- **Bank guarantees:** A modern CBS can map the fees for bank guarantees based on the amount, type, and security provided (100% vs. partial). The system can track and automate the enforcement of all terms and conditions of the guarantee.

Reduction of human intervention and audit time:

By centralizing all data and automating rule-based processes, a CBS significantly minimizes the need for human oversight and manual reconciliation, leading to several operational improvements.

- **Minimized human intervention:** Automated processes eliminate repetitive manual tasks like data entry, calculation, and document processing. This allows bank staff to focus on high-value, strategic activities while reducing the opportunity for manual errors and oversight.
- **Reduced audit time and scope:** A CBS provides a comprehensive, centralized, and real-time audit trail for all transactions and system activities. This makes it possible for auditors to:
- **Focus on exceptions:** Instead of manually verifying a large volume of transactions, auditors can generate automated exception reports to focus specifically on flagged items that deviate from standard procedures.
- **Automate compliance checks:** Compliance requirements, such as Know Your Customer (KYC) and Anti-Money Laundering (AML), can be built directly into the system, allowing for automated real-time monitoring and reporting.
- **Improve report accuracy:** All system-generated reports, including financial statements and regulatory filings, are based on a centralized, single source of truth, increasing their reliability and reducing verification time.



c) 'Revenue Leakage' Statements are to be Generated by CBS:

Technology, specifically the Core Banking System (CBS) and integrated solutions, can be used to automatically generate income leakage model sheets and reports for deposits, advances, banking operations, remittances, and service charges. This approach minimizes manual intervention, reduces audit expenditures, and allows branch officials to rectify issues in real-time, thereby increasing revenue.

Key technological capabilities for automated income leakage detection:

- ★ **Centralized data aggregation:** A CBS collects data from all bank branches and departments in real-time, providing a unified source of truth. This centralized data is essential for cross-referencing and identifying inconsistencies across the different functional areas.
- ★ **Artificial intelligence (AI) and machine learning (ML):** AI and ML models can be trained to analyse vast amounts of transaction data to detect anomalies and patterns that indicate revenue leakage. These systems are more efficient and accurate than manual reviews and can learn to identify new fraud patterns over time.
- ★ **Robotic Process Automation (RPA):** RPA uses software bots to automate repetitive, rule-based tasks that are prone to human error. This can include validating processing fees, cross-checking data, and generating reports, all without manual intervention.
- ★ **Automated reconciliation:** This technology automatically matches financial transactions with bank records and regulatory requirements. It can instantly flag discrepancies in areas like payment gateways, invoices, and refunds, which are common sources of leakage.
- ★ **Role-based access control:** Limiting the scope of changes that operating staff can make to revenue-generating transactions and master data is critical for preventing leakage. The system should automatically populate these values based on set rules.

Automated model sheets for key banking areas:

Deposits area:

- ★ **Leakage points:** Incorrect calculation of interest payments, failure to charge for non-maintenance of

minimum balance, or missed charges for excessive transactions.

- ★ **Automated sheet:** A report generated daily compares the system-calculated interest payable for all savings and term deposits against the actual amounts booked. Any discrepancies are flagged for immediate review.
- ★ **Technology in action:** AI analyses transaction patterns to ensure minimum balance penalties are correctly applied. The CBS automatically enforces all scheduled charges and fees.

Advances area:

- ★ **Leakage points:** Undercharging of processing fees, interest rate discrepancies, missed penal interest, or inefficient contract management.
- ★ **Automated sheet:** A report compares the sanctioned loan amount and terms against the fees and interest applied in the customer's account. It flags any variance from the bank's standard policy or the loan's sanction letter.
- ★ **Technology in action:** The CBS automatically calculates and posts processing fees and interest based on the loan's original sanction letter. AI and ML algorithms can be used to monitor for anomalies in interest calculations.

Banking operations area:

- ★ **Leakage points:** Errors in account reconciliation, failures to charge for services rendered, or mistakes in cash management.
- ★ **Automated sheet:** An "Exception-Based Report" highlights discrepancies between the expected daily income from various services and the income actually captured. It can flag instances of missing charges or mismatched entries.
- ★ **Technology in action:** Automated reconciliation software continuously matches transactions with service codes to ensure all charges are applied. This reduces manual intervention and improves financial accuracy.

Remittances area:

- ★ **Leakage points:** Under-recovery of service charges



on funds transfers, exchange rate manipulation, or missing commission fees.

- ✱ **Automated sheet:** A report generates a daily summary of all remittances, cross-referencing the transaction details with the applicable service charge schedule and currency exchange rates.
- ✱ **Technology in action:** The system enforces all remittance service charges and commissions according to pre-set parameters. Any manual overrides are logged and flagged for review to prevent unauthorized changes.

Service charges area:

- ✱ **Leakage points:** Failure to levy charges for specific services like demand drafts, check book issuance, or non-financial services.
- ✱ **Automated sheet:** The system generates a report listing all services provided where a charge was applicable but was not levied or was levied incorrectly.
- ✱ **Technology in action:** The CBS is configured to automatically post charges for every chargeable service at the time of the transaction. AI-powered analytics can monitor for trends of unbilled services.

Benefits of this technology-driven approach:

- ✱ **Proactive issue resolution:** Branch officials can act on daily, automated reports to rectify leakage issues in near real-time, preventing financial loss from accumulating over time.
- ✱ **Reduced audit dependency:** Since the system identifies and flags potential revenue leakage, banks become less reliant on costly and time-consuming manual audits. This allows auditors to focus on more complex risk management.
- ✱ **Elimination of human error:** By automating revenue-generating transactions, the risk of clerical mistakes, negligence, or deliberate fraud is significantly reduced.
- ✱ **Increased accountability:** Automated tracking of all transactions and any manual intervention creates a transparent audit trail, increasing staff accountability.
- ✱ **Enhanced revenue:** The immediate detection and correction of income leakage directly translate to

higher profitability for the bank.

Automated 'Income Leakage Report' to be generated by the System:

To minimize revenue leakage, banks should standardize and automate all income-related areas within their Core Banking System (CBS) to eliminate human intervention. For the limited areas that still require discretion, the CBS should automatically generate a model audit report. This allows auditors to focus their time on discretionary and high-risk activities rather than on routine, system-driven transactions.

Steps for automating and standardizing income areas:

Analyse and standardize income components:

- ✱ **Create a centralized policy:** Standardize all income categories and their related policies across the bank's entire network. This includes fees, commissions, interest calculations, and charges.
- ✱ **Establish a single "source of truth":** Consolidate all income-related master data, such as pricing tables, commission rules, and service charge schedules, within the central CBS database.
- ✱ **Parameterize variables:** Hard-code all variables and conditions for income calculation into the system parameters. For instance, the system should automatically apply standard pricing for products based on predefined rules, eliminating manual rate adjustments.

Automate income calculation and posting:

- ✱ **Build-in rules:** Integrate the standardized income policies and parameters directly into the CBS. The system should be programmed to automatically calculate and post income entries for every transaction or event, such as a loan disbursement or a service request.
- ✱ **Use real-time processing:** Ensure the CBS records and processes all transactions and fees in real time. A centralized, real-time database eliminates the discrepancies and potential for manipulation that can arise from localized, batch-based processing.
- ✱ **Remove manual overrides:** Restrict or remove bank employee access to manual override functions for



standard income calculations. The system should block any manual alteration of automated income fields to prevent unauthorized adjustments and potential fraud.

Implement automated audits for discretionary areas:

- ✱ **Identify areas of discretion:** Work with IT and internal audit teams to identify the limited areas where human judgment is still necessary, such as waivers, exceptional pricing, or manual adjustments due to unique customer circumstances.
- ✱ **Create a “Model Audit Report”:** The CBS should be configured to automatically generate a detailed report for all transactions involving these discretionary areas. This report should document:
 - ✓ The transaction details.
 - ✓ The employee who initiated the discretionary action.
 - ✓ The justification provided for the action.
 - ✓ The specific parameters that were altered.
- ✱ **Trigger an automatic workflow:** When a discretionary action occurs, the system should automatically trigger an alert or a workflow process. This will notify the appropriate audit or compliance officer that a transaction needs review, ensuring a timely and targeted audit.

The Role of IT and Auditors:

Information Technology (IT) support:

- ✱ **Build a robust system:** IT’s core responsibility is to design, implement, and maintain a CBS that can support a high level of automation and data centralization.
- ✱ **Control user access:** Implement a strong access control matrix within the CBS. Only authorized personnel should have access to the system, with permissions limited to their specific roles.
- ✱ **Enhance security:** Employ advanced security measures, such as encryption and multi-factor authentication, to protect the integrity of financial

data and secure the system from cyber threats.

- ✱ **Provide automated reports:** The IT department must ensure the CBS can generate the necessary reports, including the Model Audit Report for discretionary items and custom queries for auditors.

Auditors:

- ✱ **Focus on high-risk areas:** By automating routine checks, the audit team can shift its focus to analysing the “Model Audit Reports” for exceptions, anomalies, and discretionary actions. This risk-based approach makes auditing more efficient and effective.
- ✱ **Use system-generated reports:** Auditors can rely on the data integrity of the CBS and utilize system-generated reports and queries (e.g., using SQL) to review transactions and check for inconsistencies.
- ✱ **Analyse trends:** Instead of testing individual transactions, auditors can perform high-level analysis to identify trends in discretionary actions, such as frequent waivers by a specific employee or branch. This helps uncover systemic issues.
- ✱ **Reduce reliance on manual checks:** With a properly implemented system, auditors can significantly reduce the amount of time spent on manual transaction testing and verification, which is inefficient in a CBS environment.

To Sum Up:

Failure to recover income from customers due to operational issues, like poor knowledge or processes, is a form of income leakage, which is a type of operational risk in Indian banks. This situation highlights a dual problem: a process or systems failure (operational risk) and a related lack of training or skills (people risk).

Income leakage is a specific example of operational risk, which is the risk of loss resulting from inadequate or failed internal processes, people, systems, or external events. When employees lack the necessary knowledge or skills to correctly bill customers, process transactions, or follow up on payments, it leads to revenue loss. The failure to recover income is not just an operational risk, but also directly points to a failure in the “people” component of operational risk management, which includes issues like inadequate training and human error. A bank might lose income because a new employee doesn’t know the



correct fee structure for a service, or because a system for tracking and collecting fees is faulty, leading to missed or incorrect charges.

– ICMAI Publication-2021.

b) Sources of Income to Banks – PSB Data Analysis.

References:

a) Guidance Note on Risk Based Internal Audit of Banks



Annexure I

Model Income Leakage Statement

A bank's income leakage statement model should analyse potential revenue loss by comparing expected income from all operations, including deposits, advances, remittances, lockers, cheque collection, bank guarantees, ATM charges, and processing fees, with actual income. This involves creating a framework for each revenue stream to identify discrepancies, such as uncharged fees, under-pricing, or unrecovered costs, and using this to enhance financial accuracy and efficiency.

Model Income Leakage Statement Framework:

Deposits:

Expected Income:

- ✓ Interest income based on account balances and prevailing rates.
- ✓ Fees for various services like NEFT/RTGS, SMS alerts, and account maintenance.

Leakage Checks:

- ✓ Verify that all charges are correctly levied and collected as per the bank's policy and the customer's service agreement.
- ✓ Identify any discrepancies in interest calculations or fee structures

Advances (Loans & Overdrafts):

Expected Income:

- ✓ Interest on loans, overdrafts, and other credit facilities.
- ✓ Processing fees, inspection fees, and other charges as per the sanction letter.

Leakage Checks:

- ✓ Confirm that interest is calculated on the correct outstanding amount and at the approved rate.
- ✓ Ensure all applicable charges (e.g., inspection fees, processing charges) have been correctly applied and collected.
- ✓ Verify that the drawing power of accounts is calculated precisely and a margin is maintained according to the sanction letter.

Remittances & Cheque Collections:

Expected Income:

- ✓ Commission and charges for remittances (e.g., NEFT, RTGS, demand drafts).
- ✓ Collection fees on cheques.

Leakage Checks:

- ✓ Verify that the correct commission/charges are applied for all transactions.
- ✓ Check for any uncollected charges on returned or clearing cheques.
- ✓ Reconcile remittance income with SWIFT and other transaction records.

Bank Guarantee:

Expected Income:

- ✓ Commission earned for issuing bank guarantees.
- ✓ Processing charges.

Leakage Checks:

- ✓ Ensure all fees for issuing and renewing guarantees are collected as per guidelines.
- ✓ Reconcile the commission earned with the number and value of active guarantees.

Lockers:

Expected Income:

- ✓ Locker rental fees.

Leakage Checks:

- ✓ Verify that all lockers are correctly billed for the annual rental fee.
- ✓ Confirm that any penalties for late payment are applied as per policy.

Cheque Returns/Dishonour:

Expected Income:

- ✓ Penalties and charges levied on customers for returning cheques.



Leakage Checks:

- ✓ Verify that all charges for dishonoured cheques (e.g., return charges, postage) are correctly calculated and levied.
- ✓ Ensure all charges are recovered from the account holder or appropriately accounted for.

ATM Charges:

Expected Income:

- ✓ Charges for using other bank's ATMs, cash withdrawal charges, etc.

Leakage Checks:

- ✓ Verify that charges are correctly applied for each transaction according to the customer's account type and bank policy.
- ✓ Ensure all inter-bank charges are reconciled.

Processing Charges:

Expected Income:

- ✓ One-time fees for account opening, loan processing, and other services.

Leakage Checks:

- ✓ Confirm that processing fees are applied at the time of account opening or service initiation and are collected promptly.

How to Use the Model:

Establish a Baseline: Determine the expected income for each category based on transaction volumes, rates, and product offerings.

Perform Regular Audits: Conduct internal audits to compare actual vs. expected income.

Analyse Variances: Investigate any significant differences to pinpoint the cause of leakage.

Implement Corrective Actions: Make necessary adjustments to systems or processes to prevent future leakage.

Use Technology: Employ banking software and analytics tools to automate monitoring and reporting for all revenue streams.



Chapter 14

Selling of Third Party Products Costs



Contents:

1. *Introduction.*
2. *Business Performance of PSBs as on 31.03.2025 (Deposits).*
3. *Bancassurance.*
4. *Business Performance of PSBs as on 31.03.2025 (Advances).*
5. *Business Model.*
6. *Business Performance of PSBs as on 31.03.2025 (Net Profit of the Public Sector Banks).*
7. *Total Business of 12 Public Sector Banks.*
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14. *Total Business, Employee Business & Gross Income per Branch as on 31.03.2025.*
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16. *Salaries & Rent, Electricity and Taxes as on 31.03.2025.*
17. *Payments to and Provisions for Employees*
18. *Rent, Taxes and Lighting.*
19. *5% of Average Time Cost (Staff Cost and Over-heads).*
20. *Cost-Benefit-Analysis of Selling Third party Products (Assumption: 5% Time spent on Cross Selling Business).*
21. *Benefits of 'Pure Banking Business'.*
22. *To Sum Up.*
- Cost Benefit Analysis (CBA)-Annexure I.*
- Model Cost Sheets to Arrive CBA-Annexure II.*
- Role of CMA-Annexure III.*
- References.*

Selling Third-party Products is Profitable only when Commission Income Exceeds Operational Costs. This Chapter discusses:

- ✱ *Commission Analysis of the Banks.*
- ✱ *Detailed CBAs of Third-party Product Selling.*
- ✱ *Benefits of focusing on pure banking business.*

Insights were developed using Time-and-Motion Studies and Secondary Data.

Selling of Third Party Products Costs

Pure Banking: Banking in India, Accepting Deposits for the purpose of Lending. In the past, banks were not allowed to do anything that does not come under the ambit of banking department. **Purity was maintained.**

For Indian banks, “covering” third-party products like insurance, mutual funds, and DEMAT accounts with their liability products means cross-selling or bundling these offerings to customers who already hold savings, current, or term deposit accounts. The bank acts as an agent, earning fee-based income by leveraging its large customer base and branch network to distribute products from other companies.

It is referred to as “bancassurance” when applied to insurance products. However, regulatory bodies like the Reserve Bank of India (RBI), IRDAI and the Securities and Exchange Board of India (SEBI) have issued strict guidelines to prevent mis-selling and protect customers.

The process works: The bank’s branches act as a distribution channel for third-party financial products using an agency or referral model.

- ✱ **Product tie-ups:** A bank enters into a partnership with a third-party product provider, such as an insurance company or an asset management company (AMC).
- ✱ **Referral or sales:** When a customer opens a new liability account (savings, current, or term deposit), the bank’s relationship managers or branch staff will offer third-party products, like an insurance policy or a mutual fund investment plan, alongside the primary account.
- ✱ **Commission-based income:** The bank earns a commission or fee for each third-party product sold through its network. This generates additional revenue for the bank without requiring it to use its own capital.

Reasons for banks to adopt this strategy:

- ✱ **Revenue diversification:** Banks can grow their non-interest income and reduce their reliance on traditional lending and deposit-taking activities.
- ✱ **Maximizing customer base:** By cross-selling, banks leverage their existing customers to increase sales

volume for both their own and third-party products.

- ✱ **Expanded product range:** Offering a wide array of financial products allows banks to act as a one-stop shop, enhancing customer loyalty and meeting a broader range of financial needs.
- ✱ **Financial inclusion:** Banks can use this model to promote savings and investments among customers in smaller towns and rural areas who may not have access to these products otherwise.

Benefits and Risks for Customers:

Benefits:

- ✱ **Convenience:** Customers can access multiple financial products in one place, streamlining their financial management.
- ✱ **Financial planning:** A bank representative may provide guidance and advice on different investment and insurance options, which can be helpful for new or inexperienced investors.

Risks:

- ✱ **Mis-selling:** The primary risk is that bank employees may aggressively push products to meet sales targets, sometimes selling products that are unsuitable for a customer’s needs or risk tolerance.
- ✱ **Lack of expertise:** Branch staff, who are not specialists in investments or insurance, may not fully understand the complexities and risks of third-party products.
- ✱ **Bundling pressure:** Customers have reported being pressured to purchase a third-party product to be eligible for a core banking service, such as a loan or a new account. This is illegal.
- ✱ **Regulatory oversight:** Regulatory bodies have taken several steps to curb malpractices and ensure fair business practices.

RBI, IRDAI and SEBI regulations:

- ✱ **Curbing mis-selling:** Both the RBI and SEBI have implemented strict guidelines to stop the mis-selling of products. This includes ensuring full transparency



and due diligence.

- ✳ **Explicit consent:** For digital banking channels, the RBI has mandated that customers must provide explicit, recorded consent for any third-party product or service.
- ✳ **Restrictions on digital displays:** The RBI has proposed new directions that would bar banks from displaying third-party products on their digital platforms to prevent undue promotion.

- ✳ **Ban on certain bundles:** In 2022, SEBI banned mutual funds from bundling schemes with insurance products, and in 2025, it proposed to reintroduce bundling with simpler term life insurance for financial inclusion.
- ✳ **Audit checks:** The RBI has recommended that cross-selling activities be subjected to regular audits to prevent mis-selling and ensure adherence to guidelines.

Business Performance of PSBs as on 31.03.2025

Deposits:

(Rupees in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	36,81,277	40,51,534	44,23,778	49,16,077	53,82,190
Punjab National Bank	11,06,332	11,46,218	12,81,163	13,69,713	15,66,623
Bank of Baroda	9,66,997	10,45,939	12,03,688	13,26,958	14,72,035
Canara Bank	10,10,875	10,86,409	11,79,219	13,12,367	14,56,883
Union Bank of India	9,23,805	10,32,393	11,17,716	12,21,528	13,09,750
Bank of India	6,27,114	6,27,986	6,69,586	7,37,920	8,16,541
Indian Bank	5,38,071	5,93,618	6,21,166	6,88,000	7,37,154
Bank of Maharashtra	1,74,006	2,02,294	2,34,083	2,70,747	3,07,143
Central Bank of India	3,29,973	3,42,692	3,59,296	3,85,011	4,12,697
UCO Bank	2,05,919	2,24,073	2,49,338	2,63,130	2,93,542
Indian Overseas Bank	2,40,288	2,62,159	2,60,883	2,85,905	3,11,939
Punjab & Sind Bank	96,108	1,02,137	1,09,665	1,19,410	1,29,774

(Source: IBA Data)

a) Bancassurance:

In India, the practice of banks offering third-party insurance products to customers is known as “bancassurance,” a common business model for cross-selling financial products. Through corporate agency agreements, banks partner with insurance companies to distribute policies to their loan customers and other account holders.

Bancassurance works with Asset Products:

- ✳ **For banks:** Bancassurance allows banks to earn additional, non-interest revenue through commissions from each policy sold. It also allows them to deepen relationships with customers and position themselves as a one-stop shop for financial products.

- ✳ **For insurance companies:** Insurers gain access to a bank’s vast customer network and distribution infrastructure without having to expand their own physical presence. This lowers their sales costs and helps them reach customers in semi-urban and rural areas.

- ✳ **For customers:** For borrowers, buying insurance through the bank provides the convenience of handling both a loan and an insurance policy at the same place. It can also provide a safety net for loan repayments in case of unforeseen circumstances.

Insurance Products Bundled with Loans: Indian banks bundle various general insurance products with their asset products, such as working capital and term loans, including:

✱ **Motor insurance:** For loans on vehicles.

✱ **Fire insurance:** To protect business assets or properties mortgaged against term loans.

✱ **Accidental insurance:** To provide financial support in the event of the borrower's death or disability.

✱ **Health insurance:** To cover medical emergencies that could affect a borrower's finances.

✱ **Loan protection plans:** Specifically designed to cover the outstanding loan amount in case of a specified event like the borrower's death or disability.

Customer Rights and Regulatory Oversight: While bundling insurance with a loan can be convenient, Indian banking regulations clearly protect consumer rights from coercive practices.

✱ **Insurance is not mandatory:** The Reserve Bank of India (RBI) and the Insurance Regulatory and Development Authority of India (IRDAI) have mandated that no bank can force a customer to buy an insurance policy to get a loan sanctioned.

✱ **Right to choose:** A customer has the right to purchase an insurance policy from any provider they choose, not just the one the bank is partnered with.

✱ **Beware of mis-selling:** Instances of banks mis-selling insurance have been reported. Customers must exercise due diligence to ensure the policy aligns with their financial goals and not just the bank's sales targets.

✱ **New Regulations proposed:** IRDAI has considered overhauling the bancassurance model to address issues of mis-selling. One proposal suggests replacing sales commissions with a fixed transaction fee to remove the incentive for pushing specific high-premium products.

Offered Insurance with a Loan: If Banks are offered an insurance policy along with a loan, keep these points in mind:

- ✓ Check if it is optional. Ask if the loan approval is dependent on buying the insurance.
- ✓ Compare policies. Research and compare the coverage and premiums of similar policies from other providers.
- ✓ Review the fine print. Carefully read the policy terms, conditions, and the claim process.
- ✓ Determine if the policy genuinely meets Bank requirements or if Bank already have sufficient coverage.

Business Performance of PSBs as on 31.03.2025

Advances:

(Rupees in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	24,49,498	27,33,967	31,99,269	37,03,971	41,63,312
Punjab National Bank	6,74,230	7,28,186	8,30,834	9,34,431	10,77,475
Bank of Baroda	7,06,301	7,77,155	9,40,988	10,65,782	12,09,558
Canara Bank	6,39,049	7,03,602	8,30,673	9,31,613	10,49,155
Union Bank of India	5,90,983	6,61,005	7,61,845	8,70,776	9,53,513
Bank of India	3,65,687	4,20,842	4,85,900	5,63,145	6,49,657
Indian Bank	3,62,669	3,89,186	4,49,297	5,14,889	5,71,071
Bank of Maharashtra	1,02,405	1,31,170	1,71,221	2,00,240	2,36,084
Central Bank of India	1,56,579	1,68,174	2,02,984	2,43,406	2,82,420
UCO Bank	1,11,355	1,22,784	1,55,870	1,82,022	2,15,135
Indian Overseas Bank	1,27,721	1,44,244	1,78,053	2,13,319	2,45,555
Punjab & Sind Bank	60,942	63,627	76,819	82,736	97,300

(Source: IBA Data)



b) Business Model:

The key reasons banks use cross-selling to improve their business model. By selling third-party products, banks can increase their bottom line, maximize the use of existing resources, and position themselves as comprehensive financial supermarkets for their customers.

Cross-selling Boosts the Bank's Bottom Line:

- ✳ **Generates fee-based income:** When a bank sells a third-party product like mutual funds or insurance, it earns a commission or a fee from the third-party company. This is a source of non-interest income that diversifies the bank's revenue streams and is not dependent on interest rates.
- ✳ **Increases revenue per customer:** The cost of acquiring a new customer is significantly higher than selling to an existing one. By cross-selling, banks increase the total revenue they generate from their existing customer base without the need for additional marketing and acquisition spending.
- ✳ **Improves customer retention:** A customer who uses multiple products and services from a single bank is less likely to switch to a competitor. Cross-selling encourages deeper relationships and enhances customer loyalty, thereby increasing the customer's lifetime value to the bank.

Cross-selling Optimizes Manpower and Infrastructure:

- ✳ **Leverages existing resources:** Banks already have significant fixed costs in their branch network, manpower, and technology platforms, such as core banking systems and mobile apps. By training their existing staff and using their current infrastructure to sell third-party products, banks can maximize the productivity of these fixed assets without a major increase in operating costs.
- ✳ **Maximizes distribution channels:** Cross-selling utilizes the bank's extensive distribution network, from physical branches to digital platforms like mobile apps, to reach a large and established customer base. This creates a powerful and efficient sales engine.

Cross-selling creates a "Financial Supermarket":

- ✳ **Becomes a one-stop shop:** Offering a wide array of financial products, both the bank's own and third-party options like mutual funds, insurance, and brokerage services, positions the bank as a single destination for all of a customer's financial needs.
- ✳ **Deepens customer relationships:** By providing a broad suite of products, the bank becomes a comprehensive financial partner rather than just a provider of transactional services. This helps banks build stronger relationships with customers and gain a clearer view of their financial health, which in turn enables more personalized service.

Business Performance of PSBs as on 31.03.2025

Net Profit of the Public Sector Banks:

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	20,410	31,676	50,232	61,077	70,901
Punjab National Bank	2,022	3,457	2,507	8,245	16,630
Bank of Baroda	829	7,272	14,110	17,789	19,581
Canara Bank	2,558	5,678	10,604	14,554	17,027
Union Bank of India	2,907	5,232	8,433	13,648	17,987
Bank of India	2,160	3,405	4,023	6,318	9,219
Indian Bank	3,005	3,945	5,282	8,063	10,918
Bank of Maharashtra	550	1,152	2,601	4,055	5,520
Central Bank of India	(887)	1,045	1,582	2,549	3,785

Name of the PSB	2021	2022	2023	2024	2025
UCO Bank	167	930	1,862	1,654	2,445
Indian Overseas Bank	831	1,710	2,099	2,656	3,335
Punjab & Sind Bank	(2,732)	1,039	1,313	595	1,016

(Source: IBA Data)

Total Business of 12 Public Sector Banks

(₹ in Crores)

Name of the PSB	Deposits	Advances	Total Business	Profit
State Bank of India	53,82,190	41,63,312	95,45,502	70,901
Punjab National Bank	15,66,623	10,77,475	26,44,098	16,630
Bank of Baroda	14,72,035	12,09,558	26,81,593	19,581
Canara Bank	14,56,883	10,49,155	25,06,038	17,027
Union Bank of India	13,09,750	9,53,513	22,63,263	17,987
Bank of India	8,16,541	6,49,657	14,66,198	9,219
Indian Bank	7,37,154	5,71,071	13,08,225	10,918
Bank of Maharashtra	3,07,143	2,36,084	5,43,227	5,520
Central Bank of India	4,12,697	2,82,420	6,95,117	3,785
UCO Bank	2,93,542	2,15,135	5,08,677	2,445
Indian Overseas Bank	3,11,939	2,45,555	5,57,494	3,335
Punjab & Sind Bank	1,29,774	97,300	2,27,074	1,016

(Source: IBA Data)

Analysis: Profits earned by the Public Sector Banks are not commensurate with the level of business they are handling. Top 5 Banks Deposits and Advances are mentioned above and the percentage of Net Profit earned / Loss by Top Five Banks on Total Business is as follows:

Net Result on Total Business as on 31.03.2025

Bank	% of Profit in 'Total Business'
State Bank of India	0.74%
Punjab National Bank	0.63%
Bank of Baroda	0.73%
Canara Bank	0.68%
Union Bank of India	0.79%
Bank of India	0.63%
Indian Bank	0.83%
Bank of Maharashtra	1.02%
Central Bank of India	0.54%
UCO Bank	0.48%
Indian Overseas Bank	0.60%
Punjab & Sind Bank	0.45%



Thus, it shows that TOP Five Commercial Banks 'Net Earnings % of Total Business is below 1%' for the financial year ending 31.03.2025.

Branch Network, Employees and Customers as on 31.03.2025

Bank	Domestic Branches	Foreign Branches	Number of Employees	Customers (₹ in Crores)
State Bank of India	22,937	244	2,35,773	52.00
Punjab National Bank	10,189	2	1,02,349	18.80
Bank of Baroda	8,424	91	75,008	14.00
Canara Bank	9,849	4	81,260	11.76
Union Bank of India	8,621	3	73,945	6.70
Bank of India	5,306	22	50,564	9.50
Indian Bank	5,901	2	40,071	10.00
Bank of Maharashtra	2,641	-	14,591	3.00
Central Bank of India	4,552	-	33,081	7.97
UCO Bank	3,302	2	21,049	~5.00
Indian Overseas Bank	3,269	4	21,475	4.10
Punjab & Sind Bank	1,817	-	10,229	~2.00

(Source: Different Web-sites)

Analysis: Network of Branches, Employees and Customers of the Public Sector Banks are on increasing trend year-on-year basis. Still Public Sector Banks are facing problems like mounting NPAs, Low Spreads, Low Profits, Low Capital Adequacy Ratios etc. Average Number of Customer per Branch and Average Staff Members per Branch of TOP five Public Sector Banks are as follows:

Average Number of Customers and Staff "Per Branch" as on 31.03.2025

Name of the Bank	Number of Customers	Staff
State Bank of India	22,671	10
Punjab National Bank	18,451	10
Bank of Baroda	16,619	9
Canara Bank	11,940	8
Union Bank of India	7,772	9
Bank of India	17,904	10
Indian Bank	16,946	7
Bank of Maharashtra	11,359	6
Central Bank of India	17,509	7
UCO Bank	15,142	6
Indian Overseas Bank	12,542	7
Punjab & Sind Bank	11,007	6

Analysis: The above data reveals that Average Staff Members per Branch is more or less equal with the level customer's base of bank branches. Number of Branches and Staff are TWO vital Input elements in mobilizing Business i.e., Deposits and Advances by the Banks. Optimum utilization of these TWO resources in Banking Industry results to increase both TOP Line (Business) and Bottom Line (Profit) of the Balance Sheet of the Banks. Volumes of transactions

routed through alternate delivery channels are on increasing trend (Year-on-Year basis). This results in decrease transaction costs in the Banking Industry and also optimum utilization of Information Technology. Dependence on 'Bank Branches' is gradually reducing and customers are accessing the Bank Branches to avail limited services.

Gross Income, Commission & Cross Selling Commission as on 31.03.2025

(Rupees in Crores)

Bank	Gross Income	Commission	Cross Selling Commission
State Bank of India	5,24,172	30,919	2,356
Punjab National Bank	1,38,070	4,574	480
Bank of Baroda	1,38,089	3,566	180
Canara Bank	1,42,208	2,052	557
Union Bank of India	1,27,539	2708	532
Bank of India	79,820	1995	281
Indian Bank	71,226	1066	180
Bank of Maharashtra	28,402	1741	51
Central Bank of India	39,520	2180	144
UCO Bank	29,474	266	62
Indian Overseas Bank	33,676	1502	36
Punjab & Sind Bank	13,049	135	27

Analysis: Gross Income from Banking Operations of Banks contains Interest Income, Exchange on Remittances & Foreign Exchange Transactions and Commission on various services lent by the Bank Branches and Discount Income on Trade Bills. Percentage of Commission on Gross Income and percentage of Cross Selling Income in Gross Income mentioned below:

Percentage of Total Commission & Cross Selling Commission in Gross Income

As on 31.03.2025

Bank	% of Cross Selling Commission in Gross Income	% of Commission in Gross Income	% of Cross Selling Income in Total Commission
State Bank of India	0.45%	5.90%	7.62%
Punjab National Bank	0.35%	3.31%	10.49%
Bank of Baroda	0.13%	2.58%	5.05%
Canara Bank	0.39%	1.44%	27.14%
Union Bank of India	0.42%	2.12%	19.65%
Bank of India	0.35%	2.50%	14.09%
Indian Bank	0.25%	1.50%	16.89%
Bank of Maharashtra	0.18%	6.13%	2.93%
Central Bank of India	0.36%	5.52%	6.61%
UCO Bank	0.21%	0.90%	23.31%
Indian Overseas Bank	0.11%	4.46%	2.40%
Punjab & Sind Bank	0.21%	1.03%	20.00%

TOP 5 Banks, percentage of commission in total income is more in Bank of Maharashtra 6.13% and State Bank of



India i.e., 5.93%, whereas it less in Canara Bank i.e., 1.44%. Cross Selling Commission is less than the 1% of 'Gross Income' in all Banks. Banks are deploying manpower, time and bank's infrastructure on Cross Selling Business and Commission earned by them through selling of Third-Party Products is not matching with the time and cost spent by them.

Total Business, Employee Business & Gross Income per Branch as on 31.03.2025

(Rupees in Crores)

Bank	Per Branch Total Business	Per Employee Business	Per Branch Gross Income
State Bank of India	416.16	37.37	22.85
Punjab National Bank	259.51	26.86	13.55
Bank of Baroda	318.33	34.33	16.39
Canara Bank	254.45	29.30	14.44
Union Bank of India	262.53	31.00	14.79
Bank of India	276.33	29.19	15.04
Indian Bank	221.70	32.42	12.07
Bank of Maharashtra	205.69	37.44	10.75
Central Bank of India	152.71	21.24	8.68
UCO Bank	154.05	24.35	8.93
Indian Overseas Bank	170.54	26.80	10.30
Punjab & Sind Bank	124.97	25.71	7.18

Analysis: Highest per Branch Business, Employee Business and Branch Gross Income among TOP Five Banks is State Bank of India and least in Canara Bank.

Commission, Cross Selling Commission Analysis as on 31.03.2025

Bank	Per Branch Commission (₹ in Crores)	Per Branch Cross Selling Income (₹ in Crores)	Per Branch % of 'Cross Selling Income' in Gross Income	% of 'Cross Selling Income' in Total Commission
State Bank of India	1.35	0.10	0.44	7.62
Punjab National Bank	0.45	0.05	0.37	10.49
Bank of Baroda	0.42	0.02	0.12	5.05
Canara Bank	0.21	0.06	0.42	27.14
Union Bank of India	0.31	0.06	0.41	19.65
Bank of India	0.38	0.05	0.33	14.09
Indian Bank	0.18	0.03	0.25	16.89
Bank of Maharashtra	0.66	0.02	0.19	2.93
Central Bank of India	0.48	0.03	0.35	6.61
UCO Bank	0.08	0.02	0.22	23.31
Indian Overseas Bank	0.46	0.01	0.10	2.40
Punjab & Sind Bank	0.07	0.01	0.14	20.00

Analysis: Per Branch Commission earned is highest in State Bank of India and least in Canara Bank. Per Branch

Cross Selling Income is highest in State Bank of India and least in Bank of Baroda. Percentage of Cross Selling Income in Total Income is highest in State Bank of India and least in Bank of Baroda and Bank of India. Percentage of Cross Selling income in Total Commission is highest in Canara Bank and least in Bank of Baroda. (Top Five Banks)

State Bank of India per Branch Commission per annum is ₹ 1.35 Cr. and least amount of ₹ 0.21 Cr. per annum in Canara Bank. Branches should give more focus on Commission Income from the existing customers by offering various Banking related services including up-selling products of the bank. Cross Selling Income per branch per annum is in the range of ₹10 Lacs. to ₹1 Lacs.

Salaries & Rent, Electricity and Taxes as on 31.03.2025

(Payments to and Provisions for Employees)

(₹ in '000)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	50936,00,01	57561,98,54	57291,84,28	78336,98,41	64352,24,48
Punjab National Bank	12175,73,58	11841,00,68	14810,00,57	18486,31,04	21357,72,09
Bank of Baroda	11445,53,03	11978,84,28	13352,65,59	15816,00,19	16607,63,87
Canara Bank	1268,95,94	12703,64,08	13743,82,98	16434,18,14	17856,08,70
Union Bank of India	9283,61,17	10114,60,61	12389,70,58	14377,17,89	14667,64,21
Bank of India	6472,99,00	7055,52,91	8391,83,50	9188,47,22	10299,60,25
Indian Bank	6378,23,81	6695,70,68	7527,22,77	9264,58,80	9883,97,94
Bank of Maharashtra	2255,21,04	2070,58,93	2058,27,89	2837,79,78	3441,77,35
Central Bank of India	4141,30,63	4471,90,52	5603,96,53	6312,14,87	7218,56,70
UCO Bank	3442,65,10	3314,31,05	3872,74,21	4886,66,56	5453,10,54
Indian Overseas Bank	3702,78,44	3485,76,54	4099,05,11	6140,12,56	4666,39,60
Punjab & Sind Bank	1688,06,59	1453,38,58	1544,42,06	1944,20,27	20,88,48,41

(Source: IBA Data)

(Rent, Taxes and Lighting)

(₹ in '000)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	5253,17,14	5362,15,52	5702,00,53	6081,83,48	6283,36,09
Punjab National Bank	1294,88,88	1286,25,07	1317,88,96	1325,76,52	1391,73,78
Bank of Baroda	1505,92,01	1472,69,66	1568,36,89	1658,74,23	1819,39,22
Canara Bank	1120,14,79	1126,62,63	1108,91,83	1173,55,16	1084,84,88
Union Bank of India	1103,80,72	1070,67,32	1067,74,13	1090,25,46	1180,00,83
Bank of India	75,18,229	78,68,853	853,57,70	924,25,71	990,07,45
Indian Bank	602,83,47	613,74,14	620,98,45	635,64,07	674,34,25
Bank of Maharashtra	218,23,32	228,08,53	248,22,82	280,41,93	326,51,12
Central Bank of India	494,08,07	481,75,19	527,07,66	595,67,28	671,10,27



Name of the PSB	2021	2022	2023	2024	2025
UCO Bank	256,77,43	267,52,62	293,91,46	332,18,16	434,92,41
Indian Overseas Bank	417,64,42	445,39,59	492,71,53	528,16,92	558,84,23
Punjab & Sind Bank	139,69,01	145,97,62	136,72,62	139,23,76	146,90,47

(Source: Annual Reports)

Analysis: Staff Salaries and overheads are the major expenditure after ‘Cost of Deposits’ in Banking Industry. When Staff is focusing on selling of multiple products i.e., ‘Third party products’ and ‘Bank own products’, Cost-Benefit-Analysis of Third-Party Products are to be analysed by the Banks to arrive ‘Economic Viability’ of ‘Cross Selling Business’.

Staff Salaries and Rent, Electricity & Taxes of Public Sector Banks for the financial years ending 2021 to 2025 furnished above. If we take 5% Average time staff spent on ‘Third Party Products’ out of total time available by the Bank Branches, then the cost incurred by Banks are as follows:

5% of Average Time Cost (Staff Cost and Overheads)

(Rupees in Crores)

Bank	5% of Staff Costs	5% of Overheads	Total
State Bank of India	3218	314	3532
Punjab National Bank	1068	70	1138
Bank of Baroda	830	91	921
Canara Bank	893	54	947
Union Bank of India	733	59	792
Bank of India	515	50	565
Indian Bank	494	34	528
Bank of Maharashtra	172	16	188
Central Bank of India	361	34	395
UCO Bank	273	22	294
Indian Overseas Bank	233	28	261
Punjab & Sind Bank	104	7	112

Analysis: Staff involved in selling process of “Third Party Products” / Cross Selling Products are Frontline Staff, Fixed Deposit Section, Savings Bank Deposits Opening counters, Advances Sections like Retail Segment and MSME Segments etc. Branch Managers and Divisional Managers have to spend more time on selling of ‘Third Party Products’. Some of the staff are not involved in this process like subordinates etc. Hence, if we take only 5% cost of manpower and overheads. Total Cost of 5% time spent by the Branches in State Bank of India is ₹ 3,532/- Crores, whereas in other Banks in the range of ₹ 112/- Crores to ₹ 1,138/- Crores.

Cost–Benefit–Analysis of Selling Third party Products

(Assumption: 5% Time spent on Cross Selling Business)

(Rupees in Crores)

Bank	5% Time Total Cost (Staff Cost + Overheads)	Commission on Third Party Products
State Bank of India	3532	2,356
Punjab National Bank	1138	480
Bank of Baroda	921	180
Canara Bank	947	557
Union Bank of India	792	532
Bank of India	565	281
Indian Bank	528	180
Bank of Maharashtra	188	51
Central Bank of India	395	144
UCO Bank	294	62
Indian Overseas Bank	261	36
Punjab & Sind Bank	112	27

Analysis: Comparing 5% of Time spent on “Third Party Products” in Bank Branches and Commission received by the Bank (through cross selling business) per annum, Costs incurred by the Bank is more than the revenue generated through Cross Selling Business. In all most all TOP five banks, the commission earned is less than the cost of time spent and overheads incurred by the bank on Cross Selling Business.

c) Benefits of ‘Pure Banking Business’:

- Focused Approach:** If staff focus on Bank Products, it results to increase Business levels of both Deposits, Advances and other services. Thereby it fulfills the Government of India objectives like “Financial Inclusion”. Banks’ financial key ratios will improve if they use ‘Pure Banking’ business strategy. Specialization leads to ‘Higher Productivity’ and efficiency levels e.g. rise in per employee business, lower operational costs leading to higher profits. It encourages to mobilize additional capital from prospective investors.
- Quality of Credit:** Post sanction follow-up of advances is an important process in Credit Management Function of the Banks to arrest the advance accounts turn into NPAs. Credit process is having sub-processes like Pre-sanction, Sanction and Post-sanction. If staff of ‘Credit Wing’ involve in selling process of ‘Third Party Products’, then the Quality of Credit will affect badly as the disposable time will reduce. Thereby it leads to ‘Credit Risk’ of the bank and it attracts additional Provisions and Capital Adequacy Issues etc.

- Minimization of Assets Liabilities Management (ALM) Mismatch:** Some of the Third-party products are basically investments products like Mutual Funds and Life Insurance Endowment policies etc. On account of these products, customers are forced to withdraw funds from Banks from their Savings Bank and Fixed Deposits. Thereby problem of Asset Liabilities Management may arise. Once ALM problem arises, then banks have to borrow funds from various sources like call money market, inter bank borrowings etc. to overcome the liquidity problems.
- Avoid Incremental Loss instead of Incremental Benefit:** The time, efforts and manpower cost incurred by the Banks in selling Third Party products are not ‘commensurate’ with costs incurred and efforts made staff. Thereby the benefit derived to the banks are minimal and no value addition to the Banks’ Financial Statements. If Banks focus on ‘Core Activity i.e., Mobilization of Deposits and Lending Activity, the benefits to be accrued by Banks is much more than selling of Third-Party Products.
- Minimization of Complaints:** The first contact point of the customer in case of adverse Claims settlement



in insurance products and also when decrease in Net Asset Value (NAV) in Mutual Fund Products is 'Bank Branch', who sold the Third-Party Products. Thereby it is an interruption and inconvenience to the Bank Branches Staff who is having partial information to clarify their doubts and they have to spend more time to redress their grievances by contacting the concerned Third-Party Products Companies.

- f. **Retention of Customers:** Study the Financial Strength and Operational Issues of 'Third Party Product Companies' by the Banks gives leverage to take decision i.e., "to sell or not to sell the third-party products" instead of focusing on the characters of Third-Party Products and its commission. If financial strength is weak, it effects on the performance of the products to be sold by Bank branches to their customers. Thereby it leads to complaints from the customers and it leads customer attrition i.e., moving to other banks. Now, some of the banks adopted strategy of 'Pure Banking', and disappointed customers will shift to these Banks. Acquisition Cost of New Customers is higher than retention of existing Customers.
- g. **Marketing of Tailor-made Bank Products:** Banks are developing number of Deposits and Advance Products from time to time. These products died during 'Growth Stage' of Product Life Cycle. This is due to less marketing efforts made and time devoted by Bank's Staff for own products. Banks are spending huge amount for the development of new products and advertisement costs etc. Once the developed products are failed at initial stage of product life cycle, then it is a huge loss to the banks. If banks are spending more time on marketing of their own products, early death of new products can be stopped thereby business levels will increase substantially.
- h. **Focus on Up-selling:** Devote more time towards Up-selling (i.e., Selling of their Own Products) by the Banks results a win-win situation for both existing customers and also to the Bank. Thereby retention of the customers is easy to the Banks and it also minimizes the cost of operations of the bank.
- i. **Minimize the Productivity Losses:** Banks are giving budgets for both own products and Third-party products to the Branch Heads. Targets of Multiple products (Own- and Third-Party Products) is difficult to assess the skill sets of the operating staff. Appraising productivity and performance levels of the officials

is not practicable as selling of third-party products are linking to different financial requirements and income levels of the Bank Customers. Core activity performance appraisal is always measurable and it gives realistic picture to determine the skill sets of the bank officials. Multiple products demotivate the officials and it leads to productivity losses and higher attrition rate.

- j. **Publicity / Advertisement:** Multiple products advertisements both in Bank premises and print media etc. creates confusion among the customers and it deteriorates Bank Branches "Ambience". Bank own products and third-party products distinction is also missing in most of the depositors' / borrowers' mind. This is particularly happening in Semi-urban, Rural areas of the Banks. At these places most of the customers are not having good knowledge / awareness on difference between a Bank Fixed Deposit Products vs. Mutual Funds. They are completely believing on the advice of bank staff and accordingly they are investing their 'Hard Earned Money' in Third party products. At the time of maturity period of Third-party products, if market conditions are not good, Net Asset Value (NAV) will decrease, thereby customers getting loss and demotivated customer resulting in bad propaganda on Bank Branch.

To Sum Up:

"One foot cannot stand on Two Boats" in Chinese, is a colloquial derogatory phrase. It means that someone cannot make up his or her mind between two choices, but usually does them half-heartedly. The phrase is often employed in banking business. Upselling gives more benefits than the business strategy of upselling and cross selling simultaneously. Upselling enhances customer experience with the Bank, improves customer base, encourages customer to use multiple products, prevent switching to competitor banks, assist in developing new products, value propositions through constant engagement, enjoy customer life time value (customer longevity) and reduces the acquiring cost etc. To get these full benefits, banks have to be more focused on upselling business. Thereby it is WIN-WIN situation both to the Bank and its Customers. Selling of Government of India schemes like Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) Pradhan Mantri Suraksha Bima Yojana (PMSBY) etc. are not to be treated as Cross Selling Products and the purpose of introduction of these products by Government of India is to provide Social Security to all Indians.



To conclude, focus on “Pure Banking” is need of hour in the banking industry as banks are facing problems like increase in Non-performing Assets, decrease in profits and some banks are loss making, lower Capital Adequacy Ratios, Asset Liabilities mismatch, lower growth rate in deposits etc. To overcome these challenges “Pure Banking” is best Strategy to improve the financial strength of the Banks.

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c. Gross Income, Commission & Cross Selling Commission
as on 31.03.2025-PSB Annual Reports.

d. Cost Benefit Analysis (CBA)-Theory ICMAI Study
Material.



Annexure I

Cost Benefit Analysis (CBA)

A cost-benefit analysis (CBA) is crucial for Indian banks to assess the profitability of selling third-party products by comparing the costs of manpower, infrastructure, and overheads against the commission earned. It is vital to ensure this analysis is thorough and that the focus on core banking activities like credit quality, NPA recovery, and upselling to their own customers remains undistracted, which could otherwise dilute the bank's core operations.

Cost-benefit analysis for Third-party Product Sales:

- ✱ **Quantify costs:** Tally the total monetary costs associated with selling third-party products, including salaries and overheads for the manpower involved, infrastructure, and administrative expenses.
- ✱ **Quantify benefits:** Calculate the total monetary benefits, which in this case would primarily be the commissions earned from selling third-party products.

Perform the analysis: Compare the total costs to the total benefits. A common method is to divide the total benefits by the total costs. A ratio greater than 1 suggests the benefits outweigh the costs.

- ✱ **Incorporate other factors:** While the financial aspect is key, consider the intangible factors like brand

reputation and customer satisfaction, which can be subjective but are still important for a comprehensive view.

- ✱ **Risks of focusing on third-party products:** Diluted core business: A heavy emphasis on selling third-party products can divert attention from core banking activities.
- ✱ **Reduced credit quality and recovery:** The focus on cross-selling can distract from essential tasks like credit quality assessment and the recovery of non-performing assets (NPAs).
- ✱ **Distracted upselling:** The time and effort spent on third-party products could come at the expense of upselling the bank's own products to its existing customers.

A robust CBA will help banks determine if the revenue generated from third-party products is truly profitable after accounting for all associated expenses, while also ensuring that the bank doesn't compromise its core functions like maintaining asset quality and focusing on its own product offerings. This balance is key to sustainable, long-term profitability.

Annexure II

Model Cost Sheets to Arrive CBA

To conduct a Cost-Benefit Analysis (CBA) or calculate the surplus for an Indian bank branch selling third-party products, a model cost sheet is required to track all associated revenues and costs. The analysis helps assess the profitability of this fee-based business.

The calculation is relatively straightforward:

Surplus = Total Revenue – Total Cost.

A detailed cost sheet model, including specific revenue and cost components, is outlined below. The values for a real-world analysis will depend on the bank, specific branch, and the products sold.

Model Cost Sheet for a Bank Branch:

This model can be adapted for a specific bank branch by inserting the actual data for each category.

Particulars	Amount (in ₹)	Remarks
A. Revenue (Income)		(Branch-level revenue from selling third-party products)
1. Life Insurance Commission		Commission rates in India can be high, especially on first-year premiums (e.g., up to 40% or more on regular premium plans). Include renewal commissions (e.g., 5%) for existing policies.
2. General Insurance Commission		Commission rates vary but are typically lower than life insurance. Include commissions for products like motor, health, and fire insurance.
3. Mutual Fund Commission		Includes both upfront commissions on new sales and trail commissions, which are recurring fees based on the total asset value managed. Trail commissions are paid as long as the customer remains invested.
4. Demat Account/Trading Revenue		Account opening fees, annual maintenance charges (AMC), and brokerage fees on trading activity. Some banks offer nil AMCs for certain customer segments.
5. Credit Card Commission		Commission per new card issued and potential fees on card usage.
6. Other Third-Party Product Income		Includes revenue from selling other products, such as National Pension System (NPS), Atal Pension Yojana (APY), and government schemes like PMJJBY.
Total Revenue (A)		Sum of all third-party product revenue streams
B. Direct Costs		(Costs directly attributable to selling third-party products)
1. Staff Incentives and Overtime		Performance-linked variable payments or sales incentives for branch staff involved in selling.
2. Sales and Marketing Costs		Costs for in-branch promotional materials, brochures, and targeted marketing campaigns for these products.
3. Training and Certification Costs		Costs associated with mandatory staff training and certifications required to sell third-party products.
4. Software and IT Expenses		Any specific software or technology costs for managing third-party product sales.
Total Direct Costs (B)		Sum of all direct costs



C. Indirect Costs (Allocated)		(Proportion of branch's shared costs allocated to third-party sales)
1. Employee Salary Allocation		A portion of the fixed salaries of employees (e.g., relationship managers) who spend a fraction of their time selling these products.
2. Occupancy Costs Allocation		An allocation of branch rent, utilities, and maintenance based on the space and time dedicated to third-party sales.
3. Administrative Costs Allocation		A portion of branch administrative overhead, including back-office support for processing applications.
4. Regulatory and Compliance Costs		Cost of ensuring adherence to the policies set by the bank, RBI, IRDAI, and SEBI.
Total Indirect Costs (C)		Sum of all allocated indirect costs
D. Overhead Costs		(General costs associated with running the branch)
1. General Administrative Expenses		Unallocated overhead costs.
Total Overhead Costs (D)		Sum of all overhead costs
E. Total Costs (B+C+D)		Sum of all costs associated with third-party product sales
F. Net Surplus (A-E)		Total Revenue minus Total Costs

Considerations for the cost-benefit analysis: When performing the CBA, several non-financial factors should also be

considered to get a complete picture of the value created.

- ✓ **Customer stickiness:** Selling a range of products can increase customer loyalty and engagement with the bank, improving retention.
- ✓ **Operational risk:** The risk of mis-selling, regulatory non-compliance, and reputational damage can result in penalties and loss of customer trust.
- ✓ **Customer intelligence:** Data from cross-selling activities provides valuable insights into customer finances and behaviour, allowing for more targeted offerings.
- ✓ **Competition and market position:** An extensive

product portfolio can give the bank a competitive edge over rivals.

- ✓ **Diversification of revenue:** Fee-based income from third-party products is non-interest income and reduces the bank's dependence on traditional lending and deposit-taking activities.
- ✓ **Infrastructure leverage:** Banks can utilize their existing branch network and customer base to sell products without the high costs of building a new distribution channel.
- ✓ **Economies of scale:** High-volume sales can reduce the per-unit cost of distribution and increase profitability.



Annexure III

Role of CMA

The role of a Cost and Management Accountant (CMA) is crucial for analysing the cost-benefit of selling third-party products and assessing the related commission revenue. By providing detailed, data-driven insights, CMAs help businesses make informed strategic decisions to maximize profitability and operational efficiency.

Analyzing the costs and benefits:

To determine if selling a third-party product is profitable, a CMA performs a comprehensive cost-benefit analysis (CBA) that includes all relevant factors.

Cost Analysis:

Direct costs: These are the costs that are directly tied to the sale of the third-party product. Examples include:

- ✓ Sales commissions paid to internal employees.
- ✓ Any specific marketing or advertising dedicated to the third-party product.
- ✓ Costs for training the sales team on the new product.
- ✓ Licensing fees or other direct costs paid to the third party

Indirect costs: These are the overhead costs of doing business that can be allocated to the third-party product. They are often more difficult to quantify and include:

- ✓ *Opportunity cost:* The potential revenue lost from focusing on selling a third-party product instead of the company's own products.
- ✓ *Administrative and support costs:* A portion of office rent, utilities, and administrative salaries to cover the increased workload.
- ✓ *Infrastructure costs:* Costs associated with using existing sales channels, IT systems, or customer relationship management (CRM) software for a new product

Intangible costs: These are costs that can negatively impact the brand and are challenging to quantify. Examples include:

- ✓ *Brand reputation:* The potential for customer dissatisfaction if the third-party product is of poor quality.
- ✓ *Management time:* The time and resources spent on managing the third-party relationship.

Benefit analysis:

- ✓ *Commission revenue:* The most obvious benefit is the commission earned on each sale of the third-party product. The CMA ensures the revenue is accurately recorded using the accrual method, recognizing income when it is earned, not necessarily when the cash is received.
- ✓ *Market expansion:* Selling third-party products can help a business enter new markets or attract a different customer segment.
- ✓ *Customer retention:* Offering a wider range of products can increase customer loyalty and prevent customers from seeking similar products from competitors.
- ✓ *Enhanced reputation:* Partnering with a reputable third party can bolster the company's brand image and trustworthiness.

Strategic recommendations: Based on the cost-benefit analysis, a CMA provides strategic recommendations to management.

- ✓ *Profitability analysis:* CMAs provide detailed reports on the profitability of each product line, including the third-party products. This helps management decide which products to focus on or whether to continue a partnership.
- ✓ *Pricing strategies:* The accountant provides data to help set the right selling price for the third-party products, ensuring sufficient profit margins while remaining competitive.
- ✓ *Performance measurement:* Using metrics and variance analysis, CMAs compare actual performance against budgeted targets for the third-party product sales. This helps identify and address performance gaps.

Identifying risks: By analysing the third-party product line, a CMA can identify risks such as reliance on a single vendor or exposure to market volatility.

CMA as a strategic partner:

Today's CMAs do much more than crunch numbers; they are strategic partners who help businesses achieve long-term financial stability and competitive advantage. For third-party products, they provide a holistic financial perspective that considers operational efficiency, risk management, and overall corporate strategy.



Chapter 15

Is ATM Cost Effective?



Contents:

1. Introduction.	<i>Cost Statement of Automated Teller Machine and Teller in Rural Areas-I.</i>
2. Technology and its Implications.	<i>Cost Statement of Automated Teller Machine and Teller-II.</i>
3. Shifting ATMs to 'Rural Areas'.	<i>Comparative Cost Statement of Automated Teller Machine and Teller.</i>
4. ATM-Cost Control Device to the Commercial Banks (Upto Introduction of UPI).	<i>Model Cost Sheet.</i>
5. Cutting Cost is One Way of Improving Returns	<i>Robo-Advisors.</i>
6. ATM to UPI.	<i>Integrating Robo-Advisory Services into Commercial Bank ATMs</i>
7. ATM is a Cost Effective in Rural Banking for Payments of KCC and SHG Transactions.	<i>KCC Linked to ATMs in Rural Areas.</i>
8. Optimum Utilization of ATMs.	<i>Relocation of ATMs to Rural Areas.</i>
9. Two Options to Indian Banks.	
10. To Sum Up.	

With Digital Payments Rising, ATM Usage, especially in Urban Areas has reduced. This Chapter explains:

- ✱ **Why shifting ATMs to Rural Areas Yields Better Results.**
- ✱ **Role of ATMs in KCC/SHG Payments.**
- ✱ **Future possibility of "Robo-Advisory ATMs"**

Cost Sheets were prepared using Inputs from ATM Replenishment Officials of Banks.



Is ATM Cost Effective?

Today, the overall economic conditions remain challenging. The need of the hour is to focus on the '**Basics of Business**'. We need to focus managing cost efficiencies and on increasing profits.

As '**Fortune Magazine**' rightly pointed out, we have learnt from the dot com bust that:

"If it does not make cents, it does not make sense"

The term 'Cost Benefit Analysis' is used frequently in business planning and decision support activities. However, the term itself has no precise definition beyond the implication that both positive and negative impacts are going to be summarized and compared. The term also has no universally agreed spelling. It is written as 'cost benefit', 'cost/benefit', or 'cost-benefit', for instance.

Because the term "Cost Benefit Analysis" does not refer to any specific approach or methodology, the business person who is asked to produce one should take care to find out what is expected or needed. The term covers several varieties of business case analysis, such as:

- ➔ Return on Investment (RoI Analysis).
- ➔ Financial Justification.
- ➔ Cost of Ownership Analysis.

All of these approaches to Cost-Benefit-Analysis attempt to predict the financial impacts and other business consequences of an action. All these approaches have the same structural and procedural requirements for building a strong, successful business case. They differ primarily in terms of:

- ➔ How they define "Cost" and "Benefit" in practical.
- ➔ Which Cost and Benefits are included for Analysis.
- ➔ Which Financial metrics are important for decision makers and planners.

a) Technology and its Implications:

Bill Gates is said to have remarked in 1994 that banks were "**Dinosaurs**".

- a. Since then, it is more and more believed that advances in technology will lead to the demise of banks, at least in the form, as we know them today. The threat is real. But then there are opportunities created by technologies too. And these opportunities can be capitalised by banks, financial services companies as also by retail organisations. All over the world, bank's traditional business of taking advances and lending out the proceeds is in terminal decline. This

is being referred to as disintermediation. In America, banks and thrifts, building societies now have less than 28% of the financial services market. This is half of what they had 20 Years Ago.

- b. All the rich countries, even Japan is starting to deregulate savings products. Similar forces are at work on Banks' Assets. The spread of information technology and the dramatic advances in financial theory have made it cheaper for big companies to raise money in the capital markets than from banks. Investors on the other hand, are finding new places to invest their cash. For example, mutual funds are spreading all over the world. All these changes, coupled with lower interest rates, have resulted in reduced margins. Regional Banks in America today have margins of Less Than 3% points compared to over 5.5% points in 1970s.

If economies do not grow very fast and Banks' share of financial intermediation is shrinking i.e., their lending is not growing, banks are confronted with the problem of how to make money. "**Cutting Cost is One Way of Improving Returns**". This can be achieved through:

- ✓ Merger of Banks and / or
- ✓ Quick use of Information Technology (IT)-With Latest Developments in IT.

The merger of Chase Manhattan, Chemical Bank, Manufacturer Handover have resulted in Savings of \$ 2.5 Billion a Year. The number of Banks in America has fallen from 14,500 in the mid-1980s to less than 6,000.

This is clearly to achieve '**Cutting of Costs**'.

"Reduction of Cost is Profit"

The Banks have a Cost element in every risk it undertakes. These can be broadly classified as:

- ✓ Controllable Costs and
- ✓ Non-Controllable Costs.
- ✓ Controllable Costs can further be subdivided into:
- ✓ Visible.
- ✓ Invisible and Futuristic Costs.

Non-controllable Costs comprise of Rent, Salary / Wage Bills and Taxes etc.



The importance of **Operating Cost** in the present banking environment can be gauged from the following statement in the Monetary and Credit Policy announced by the RBI from time to time.

“Another Factor affecting the Interest Rate Structure in India is the High Level of Non-interest Operating Expenses of Public Sector Banks. These work out to 2.5% to 3.5% per cent of Total Assets. The High transaction Costs which generally reflect high costs, combined with relatively high levels of Non-Performing Assets (NPAs), further constrain the manoeuvrability in respect of lending rates.”

The Operating Cost as Ratio of Total Assets is otherwise referred to as ‘Intermediation Cost’.

Profit and thereby Profitability, the ability to generate

Profit, can be increased by two ways viz.,

- ✓ Increasing the Income on one hand and
- ✓ Decreasing the expenses on the other.

One of the crucial factors in maintaining profitability of a bank is its ability to control cost of operations. The cost to income ratio should be kept at minimum possible levels reducing overheads on an on-going basis but without adversely affecting the quality of services. Closing down of loss-making rural branches, reducing staff costs through adaptation of technology and improving their productivity etc., goes a long way in cutting overheads in this inflationary environment. Optimum use of Modern IT Tools / Adoption of AI, FinTech, Central Processing Centres helps in COST CUTTING efforts of Banks.

Shifting ATMs to ‘Rural Areas’

Major public sector banks in India are indeed shifting their strategy to move ATMs from urban and metro centers to rural and semi-urban areas. This shift is a direct result of the dramatic rise in digital transactions, particularly through the Unified Payments Interface (UPI), and the high operational costs of maintaining underutilized ATMs in cities.

Reasons for shifting ATMs from urban to rural areas:

- *Dominance of digital payments in cities:* With the widespread adoption of UPI, QR code-based payments, mobile banking, and internet banking, cash transactions in urban areas have significantly declined. In contrast, cash remains the dominant medium of exchange in many semi-urban and rural parts of the country.
- *High operational costs in urban centers:* Operating ATMs in metropolitan cities is expensive for banks. Expenses include high rent, electricity, maintenance, and the costs associated with cash handling and logistics. With low customer footfall, many urban ATMs are no longer profitable.
- *Need for financial inclusion in rural areas:* A majority of India’s population resides in rural regions where access to banking infrastructure is limited. Moving ATMs to these areas can improve financial inclusion by providing a reliable and accessible channel for cash withdrawals and other banking services.
- *Efficiency and cost management:* Rationalizing the number and location of ATMs by moving them from low-profit urban locations to high-demand rural ones helps banks properly utilize their ATM network and control operating expenses.

Alternative and complementary solutions: While shifting traditional ATMs is one part of the strategy, banks are also leveraging newer technology to increase access to financial services in rural areas.

- *Micro ATMs:* Banks are increasingly deploying low-cost, portable micro-ATMs. These handheld devices are operated by business correspondents (BCs) at local shops, allowing customers to withdraw cash, check balances, and get mini-statements. Micro-ATMs cut infrastructure and staffing costs while bringing banking services closer to the community.
- *UPI-based cash withdrawals:* The National Payments Corporation of India (NPCI) is expanding UPI-based cash withdrawals. This allows customers to withdraw cash from a business correspondent’s outlet by scanning a QR code with any UPI app, offering a cardless alternative to traditional ATMs.
- *Solar-powered ATMs:* Some companies are innovating with solar-powered ATMs, which provide a reliable and eco-friendly power source for ATMs in remote areas with unreliable electricity grids. This further reduces operational costs and expands market reach.

Potential challenges and considerations:

- *Digital divide:* Despite the push for digital adoption, a significant portion of the rural population may lack the digital literacy or infrastructure to fully rely on UPI. Cash transactions will remain a necessity for the foreseeable future.
- *Security concerns:* Relocating ATMs to rural areas presents security challenges related to cash replenishment and protection against theft.
- *Maintenance and connectivity:* Maintaining a consistent cash supply and ensuring reliable network connectivity for ATMs in remote regions can be difficult.



b) ATM-Cost Control Device to the Commercial Banks (Upto Introduction of UPI):

Costing has become an area of crucial significance as never before in today's fast changing banking scenario. The key developments, which have resulted into providing a place of eminence for this discipline, are as under:

1. RBI's licensing policy has resulted in encroachment

FinTechs in old bastions of Public Sector Banks (PSBs). This has resulted into significantly bringing down market share percentage of PSBs.

2. Deregulation of interest rates and services charges for remittances. This has necessitated efficient operating system in banks to work under thinner margins in a buyer's market.

Cutting Cost is One Way of Improving Returns

This can be achieved through:

- Merger of Banks and / or
- Use of Modern Information Technology (IT) Tools.

3. Impact of globalisation witnessed in the form of new products / re-engineering in processes as a result of progressive integration of Indian Economy with World Economy.

rendered PSBs Services become obsolete in the coming years. The mammoth manpower of PSBs has become their drawbacks symbolised as a significant cost centre.

4. Electronic Banking is spreading upto Semi-Urban Areas of PSBs (Slowly penetrating in Rural Areas), since the Hi-Tech superiority of FinTechs, has

5. Strategic alliances through mergers, of late, to strengthen product delivery system has further sharpened competition in Banking Sector.

Right Time to 'Shift Low Hits ATMs' of Tier-I, II and III Areas to Rural Areas (Cash Withdrawals and Kisan Credit Card Withdrawals)

ATM to UPI

Cash withdrawals from ATMs in Tier I, II, and III places are decreasing in India due to the rise of digital payment methods like UPI, mobile banking, and QR code payments. This trend is supported by data showing a decline in the overall number of ATMs and a significant year-over-year increase in UPI transaction volume.

Factors driving the decrease in ATM withdrawals:

- *Growth of UPI and digital payments:* The number of UPI transactions has seen a substantial increase, with 18.39 billion transactions in June 2025 alone, a 32% increase from the previous year.
- *Increased adoption in all tiers:* Digital payment habits, including UPI, are becoming prevalent across all city tiers, including Tier III cities, which report high daily digital payment usage.
- *ATM count decline:* The total number of ATMs in India has decreased. In September 2024, the number stood at 255,078, down from 257,940 a year earlier.
- *Cost-effectiveness of digital transactions:* The cost and complexity of setting up and maintaining ATMs can make them less profitable compared to low-cost digital payment systems, especially with low transaction volume.
- *Rise of alternative cash withdrawal methods:* The government is planning to expand UPI-based cash withdrawals to more than 2 million business correspondents (BCs) nationwide, allowing users to withdraw cash via QR codes without a card, particularly benefiting those in remote areas.

The future of cash and digital payments:

While UPI and digital payments are growing rapidly, they are currently acting as complementary channels to ATMs, especially for small to medium cash needs.

The decline in ATMs is also partly due to bank consolidation.

In the long term, with increased trust and infrastructure upgrades, UPI could become the "New ATM" for many users, offering a seamless cash withdrawal experience.

c) ATM is a Cost Effective in Rural Banking for Payments of KCC and SHG Transactions:

Indian commercial banks are transitioning towards technology-driven banking, with alternative delivery channels

becoming increasingly important to enhance customer service, add value, and effectively reduce transaction costs in rural areas. These areas primarily involve payments related to agriculture and self-help groups, where banks have a significant presence. This shift will also ease the workload on physical branches.

Many ATMs have already been installed by commercial banks across the country, and their popularity among customers in metropolitan, urban, and city locations is well established. However, with the rapid adoption of UPI payments, ATM usage in these areas has declined. Therefore, it is now timely to relocate underutilized ATMs from these centers to rural branches, where transactions like Kisan Credit Card (KCC) payments are more frequent.

Although ATMs offer substantial benefits, their costs remain high despite reductions. Electronic devices typically incur annual maintenance costs of 8 to 12% of their capital cost. Additionally, banks must bear expenses for retail outlet rent, ambiance, security personnel, and other related costs.

d) Optimum Utilization of ATMs:

The shift of underutilized urban ATMs to rural areas is

a sound strategy for improving financial inclusion and optimizing asset use, allowing banks to tap into new customer bases like Kisan Credit Card (KCC) holders and Self-help groups (SHGs). However, as noted, this move presents significant challenges related to infrastructure and security that require specific strategic responses from banks.

Benefits and Opportunities:

- ✓ **Optimum Utilisation:** Relocating idle urban ATMs to underserved rural areas increases their transaction volume and utility, improving overall network efficiency.
- ✓ **Increased Financial Inclusion:** ATMs provide 24/7 access to cash and basic banking services in areas with few physical branches, bringing more unbanked individuals into the formal financial system.
- ✓ **Support for Government Schemes:** Villagers who are part of SHGs or have KCCs can easily access funds and manage their accounts, supporting the success of these key financial inclusion programs.
- ✓ **Catalyst for Digitalization:** Exposure to ATM technology can increase financial literacy and encourage the adoption of other digital banking services over time.

Constraints and Strategies to Overcome Them:

Constraint/Challenge	Description	Strategies to Overcome
Bandwidth/Connectivity	Rural areas often suffer from poor or inconsistent internet and mobile network connectivity, disrupting digital services and ATM operations.	Utilize VSAT (Very Small Aperture Terminal) connectivity: This offers secure and reliable satellite-based communication, independent of terrestrial network infrastructure. Employ "micro-ATMs" and agent banking: These lightweight, often mobile, solutions can operate effectively with lower bandwidth or even offline for certain functions, with data syncing later.
Power Supply	Unreliable or non-existent electricity grids in remote areas hinder consistent ATM functionality.	Implement solar power solutions: Using solar panels with battery backups ensures uninterrupted operation, reduces reliance on expensive diesel generators, and is an eco-friendly option.
Physical Security	Rural ATMs may be more vulnerable to physical attacks (theft of the entire machine, brute force) due to isolation and lack of security guards.	Enhance physical hardening: Bolt machines securely to the ground and use robust, reinforced cabinetry. Install comprehensive surveillance: Implement 24/7 e-surveillance with IoT-based cameras, motion sensors, and a centralized monitoring team that can issue real-time alerts or warnings via two-way communication.



Constraint/Challenge	Description	Strategies to Overcome
Logical/Cyber Security	ATMs are susceptible to malware, card skimming, and data breaches.	Adopt multi-layered security: Use robust endpoint protection software, hard disk encryption, and secure firewall connections. Regular maintenance and updates: Ensure continuous software monitoring, timely patch management, and installation of anti-skimming devices.
Financial Literacy	A lack of awareness about banking services and security best practices can lead to underutilization or vulnerability to fraud.	Conduct educational campaigns: Run targeted financial literacy programs in local languages to build trust and educate villagers on safe ATM usage, the benefits of formal banking, and how to spot fraud.
Operational Costs	High maintenance and logistical expenses in dispersed rural areas can affect viability.	Outsource ATM management (ATM-as-a-Service): Partnering with specialized third-party providers can convert capital expenditures into predictable operational expenses and leverage expert management to ensure cost efficiency and compliance.

By proactively addressing these challenges with formulated strategies, banks can successfully shift their focus to rural markets, ensuring both business viability and a significant positive impact on financial inclusion in India.

While many public sector banks have widely deployed open ATMs, it is necessary to carefully assess their economic viability due to the decline in cash transactions and the rise of UPI payments. Experience shows that some ATMs receive fewer than 200 transactions, yielding minimal benefits for both banks and customers. In comparison, the average ATM usage in Europe is about 3,300 withdrawals per machine per month, with Sweden reporting an exceptionally high average of 10,156 withdrawals per ATM monthly. Given India's higher population density, ATM usage should ideally be higher, making this a crucial factor in developing a profitable ATM strategy. This can be achieved by relocating low-usage ATMs from metropolitan and urban areas to rural locations.

With increasing pressure on profit margins, banks must implement cost-cutting measures wherever possible. While reducing staff costs is limited for various reasons, banks can focus on trimming expenses related to stationery, printing, rent, telephone, electricity, and other overheads. Under constant pressure to reduce costs, banks should also reevaluate all overheads, including those related to support services that are not part of their core business. Such cost analyses may encourage greater reliance on ATMs, which are considered an effective cost-control strategy, especially in rural areas.

The reason banks introduced ATMs in the 1970s, telephone banking in the 1980s, and now Internet Banking, Mobile Banking, QR Codes, and UPI was to offer their services more cost-effectively than traditional branch networks, which involve expensive staff.

Initially, banks pursued aggressive ATM expansion plans, especially off-site locations (away from branches), to reach more customers at a LOWER COST. They also strategically placed ATMs in major corporate offices and employee housing areas not just targeting salary accounts but also aiming to capture a share of corporate business. This approach provided several advantages:

- ✓ Reduces overhead expenses.
- ✓ Minimizes the use of costly materials like cheque leaves.
- ✓ Increases profitability by lowering the cost per transaction, which is crucial in a highly competitive market.
- ✓ As the number of ATM cards and transactions grows, transaction costs will significantly decrease.
- ✓ Allows banks to advertise their products on ATM screens, promoting loans, insurance, credit cards, and more.
- ✓ Generates additional revenue through services like ticket sales, bill payments, and income tax collections.

Currently, some banks offer only cash withdrawal services at ATMs. Banks should promptly expand these services to include cash deposits, cheque book issuance, drafts, stop payment instructions for cheques, fund transfers between branches of the same bank, and other facilities already available at ATMs. Implementing these services will optimize ATM usage and further reduce the cost per transaction.

Today's ATM
Multi Lingual
Web Enabled
Bill Payment
Mobile Recharge
Ticketing (Railways)
Third Party Advertisement
Fund Transfer

The Future ATM
Personalization
Campaign Management
Biometrics
Biometrics
Ticketing (Airlines)
Wireless
Shared Network Model

Two Options to Indian Banks

Based on the decline of urban ATM usage in India due to digital payments like UPI, banks are exploring two key strategies to optimize their existing ATM infrastructure: introducing new, non-cash functionalities and shifting ATMs to underserved rural areas.

Strategy 1: Introduce new ATM functionalities: To increase the relevance of ATMs in urban centers, banks are turning them into multifunctional service terminals. Innovations focus on enhancing security, convenience, and expanding service offerings.

- *Cardless cash withdrawal via UPI:* Users can scan a dynamic QR code on the ATM screen with a UPI app to withdraw cash, eliminating the need for a physical card and reducing the risk of card skimming.
- *Cash and cheque deposits:* Cash recyclers can be used for both withdrawals and deposits. This reduces foot traffic inside bank branches and offers 24/7 service availability.
- *Bill payments and recharges:* ATMs can be equipped to handle utility bill payments, mobile recharges, and other routine transactions, making them a one-stop-shop for basic financial services.
- *Biometric authentication:* Fingerprint and iris scanning can add a layer of security, making transactions safer and more accessible for those who have difficulty remembering PINs.
- *Cross-selling opportunities:* Banks can use smart screens to display personalized offers for products like loans and insurance, creating an additional revenue stream.
- *Advertising platforms:* Digital display panels can be leveraged as advertising space, generating revenue from third-party ads.

Strategy 2: Shift ATMs to Rural Areas: Relocating ATMs to rural areas addresses the persistent high demand for cash in these regions and supports broader financial inclusion goals.

Address high rural cash usage: Despite the rise of digital payments, a significant portion of India's population in rural and semi-urban areas still prefers or relies on cash for daily transactions.

- *Expand market reach and financial inclusion:* Deploying ATMs in underserved areas provides access to formal banking services, helping to bring more of the population into the financial ecosystem.
- *Lower operational costs:* Operating costs for ATMs are often lower in semi-urban and rural areas, making deployment more economically viable for banks compared to maintaining idle machines in high-cost urban locations.
- *Facilitate government schemes:* ATMs can act as a crucial channel for the direct disbursement of government subsidies, pensions, and benefits to rural populations.
- *Deploy cost-effective solutions:* For areas with unreliable electricity, banks can deploy solar-powered ATMs, which are eco-friendly, cost-effective in the long run, and ensure uninterrupted service.

Micro-ATMs: A complementary solution for rural areas: In addition to shifting traditional ATMs, banks and fintech companies are deploying micro-ATMs in rural areas.

- *Agent-based transactions:* Micro-ATMs, often based on Aadhaar-enabled Payment Systems (AePS), allow local merchants or banking correspondents to facilitate cash withdrawals, deposits, and other services using biometric authentication.
- *Low-cost setup:* The low investment and running costs of micro-ATMs make them an economically attractive alternative for reaching remote regions where traditional ATMs are not feasible.
- *Increased accessibility:* By leveraging existing retail outlets, micro-ATMs bring banking services directly to people's doorsteps, saving rural residents significant time and travel expenses.
- *Broader financial offerings:* Modern micro-ATMs can offer a wider range of services, including nano-loans and savings schemes, helping to expand access to credit and investment opportunities in rural communities.



To Sum Up:

The success of cost of reduction through the ATM depends on many factors:

- ✓ Right location of the ATMs.
- ✓ Optimum population of ATMs at each centre.
- ✓ Provision of maximum functionalities / facilities at the ATMs.
- ✓ Customer Education.
- ✓ Making the Customer habitual of using ATMs.

Involvement, preparedness and willingness of staff at all levels to make the program a success particularly in Rural Areas as penetration completed in Metro, Cities, Urban and Semi-Urban.

The above analysis is in courage the installation of ATMs but to drive home the point that the staff and the customer should be educated to popularise the use of ATMs in Rural Areas. Any new idea is greeted with resistance world over and ATM in Rural Areas is no different in this regard. It is reported that even in USA, the ATMs in the initial stages were an unwelcome curiosity other than cities. There is thus a dire need to increase the usage of ATM by proper education of staff and customers.

The average cost of installing an ATM is ₹ 12,00,000/- and a recurring Cost of ₹ 12,000/- per month. For an ATM to be viable, it is estimated that a minimum of 300 to 400 transactions should take place at the ATM per day because ATMs maintenance is expensive.

The Cost of Teller transaction presently ranges between ₹ 30/- to ₹ 60/-, while a transaction on an ATM that does about 200 transactions per day costs ₹ 15 - ₹ 20. The cost of an ATM transaction could fall to even ₹ 15/- if the number of transactions were higher.

To ward-off the problem of poor hits and to make the investment viable, banks enter into shared network

agreement. Under this, an agreed fee should be paid for the transactions of the customers performed in another bank's ATM. For example, a Cash withdrawal of one bank done in another bank's ATM attracts a fee of ₹ 10/- to be paid to the ATM owing bank. In this way, banks recover the capital cost of ATMs. The small banks like RRBs that cannot afford huge capital investment can work out this kind of agreement. This would be mutually beneficial both for small and big banks. While big banks can benefit from their strength of resources, small banks need not omit their capital to upgrade their technology.

All business has common interest and competitive interests. On the operational side, banks co-operate wherever transaction costs can be reduced by such co-operation. The concept of open-architecture, which requires co-operation between competing organisations. Where the cost involved in setting up an ATM in Rural Areas is high or where there is inadequate business or multiple entities, banks have co-operated. Apart from areas of co-operation such as the above, banks naturally competitors in the same business and tend to compete hard for business and profits.

Today, the overall economic conditions remain challenging. The need of the hour is to focus on the BASICS OF BUSINESS. We need to focus on managing cost efficiencies and on increasing profits. As FORTUNE MAGAZINE rightly pointed out, we have learnt from the dot com bust that: "If it does not make cents, it does not make sense".

References:

- a) Is ATM is Cost Effective? – IBA Bulletin July, 2005.
- b) Cost Sheet – ICAI Literature on Cost Sheet Preparation.
- c) Robo Advisors – Study Material of ICAI, FinTech Course.
- d) KCC Linked to ATMs in Rural Areas-IBA Bulletin, April, 2004.

Annexure I

Cost Statement of Automated Teller Machine and Teller in Rural Areas-I

(Note: With Hypothetical Figures)

Sl. No.	Type of Cost		Total Cost	Cost Per Month
01	Fixed Cost: ATM Cost (including GST) Average Life-10 Years Method of Depreciation (Straight Line Method @ 10% p.a. Depreciation per month = ₹ 67,000 / 12 Months)	67,000	6,70,000	5,583
02	Cost of Construction of ATM Room (Civil Works & Electrical Installation)-Average Life - 10 Years Depreciation @ 10% p.a.-Straight Line Method Depreciation per month = (₹ 25,000/12 Months)	25,000	2,50,000	2,083
03	Cost of Air-Conditioner, UPS, Fixtures & Furniture, Telephone and its installation Cost Depreciation @ 10% p.a. - Straight Line Method Depreciation per month = (₹ 30,000 / 12 Months)	30,000	3,00,000	2,500
04	Rent payable per month for ATM Room (if it hired outside the branch premises i.e., off-site (The rent depends upon the Location, City etc., ₹ 2,500/- p.m. to ₹ 8,000/- p.m. (Average ₹ 5,000/- p.m.)			5,000

Cont. of the table on page 341



05	Annual Maintenance Cost @ 8% per annum on Original Cost of ATM (₹ 6,70,000 x 8%). Per month Annual Maintenance = (₹ 53,600 / 12 Months) Insurance Premium per annum: Standard and Fire Policy - ₹ 95/- per lakh. It Covers: Fire and Standard. All types of fire, natural calamities, malicious damages, riots and strike, terrorism, earth quake, landslide, subsidence & aircraft damages. Burglary and housing breaking - ₹ 1,050 per lakh - 5% service charges extra. For Bankers 5% discount facility available. It covers burglary, theft and house breaking of ATM Risks. (₹ 95 + ₹ 1,050) x ₹ 6.7 Lakhs. Per month insurance charges (₹ 7,700 / 12 Months)	53,600		4,467
07	Cost of Dish and its peripherals & installation cost (In Rural Areas) Average Life - 10 Years Depreciation - 10% p.a. - Straight Line Method. Depreciation per month (₹ 21,000 / 12 Months)	2,10,000	21,000	1,750
08	Outsource of Watch & Ward for 24 Hours & Cleaning and maintenance of ATM Room - per month.			10,000
09	Supervising Staff Average time spend for ATM Cash replenishment etc.-2 Hours per day. (In Rural Areas Outsourcing Cash Replenishment is not available). Average Salary and allowance per supervising official is ₹ 300 x 2 Hours x 30 Days			18,000
10	Interest on Investment (i.e., ATM Project Cost ₹ 15,00,000/- @ 5% interest on diminishing balance method)	75,000		6,250
Fixed Cost per Month				56,272

Annexure II

Cost Statement of Automated Teller Machine and Teller-II

(Note: With Hypothetical Figures)

Automated Teller Machine:

Sl. No.	Type of Cost	Total Cost	Cost Per Month
	Variable Cost:		
01	Electricity Charges per month.		2,500
02	VCR Tape and Other Equipment Charges p.m. – Old System.		600
03	Paper rolls (Both for transaction slips + Cash Journal) on an average per month.		2,750
04	Printer Ribbon Cost		2,500
	Total Variable Cost – Per month		8,350
	Total Fixed Cost – Per Month		56,272
	Total Cost Per Month		64,622
	No. of Hits per month on an Average = 200 per day x 20 Days		16.16
(Average-after deducting the shut-down period of ATM), Net Working Problems / Failures, Maintenance of ATM, Out of Cash in ATM in particulars i.e., after continuous holidays, Replenishment period of Cash in ATM. Technical Problems etc. = 4,000 Hits per month Per Hit Transaction Cost (₹ 64,577 / 4,000)			
Note:			
A	ATM Card / PIN Mails process charges, VSAT / SWITCH / Net Working Communication Charges are not taken for arriving the per transaction Cost.		
B	No. of Hits per day taken as 200 and average number of days taken per month as 20 days (after taking into account Peak & Non-peak levels as well as shutdown etc., Total Number of Hits per month on as an average 4,000).		
C	ATM / Card / PIN Mailers Processing (Including Postage) per account holder ₹ 65.00 (This is one time Cost).		



Annexure III

Comparative Cost Statement of Automated Teller Machine and Teller

(Note: With Hypothetical Figures)

Sl. No.	Type of Cost	Total Cost	Cost Per Month
	Variable Cost:		
01	Average Monthly Salary (including perks, medical benefits, LFC, Welfare Cost of different leaves such as PL, CL, Sick Leave etc.		36,000
02	Officers required for Supervising the various activities of Teller such Cash Withdrawal Deposit from Currency Chest, Various type of Transactions, Checking etc. (2 Hours a day for 2 Officers @ ₹ 600/- per day for 2 officers x 30 days)		18,000
03	Cost of Teller counter, furniture, electricity, stationery (Receipts & Payment Vouchers, Day Books, Balancing Books, Interest Application & Internal House-keeping Maintenance etc.) per month		6,000
	Total Cost per Month – Per Teller		60,000
04	Average number of instruments per day handled by teller (Peak and Non-peak level = 100) for 20 Days = 2,000 Vouchers per month.		₹ 30



Annexure IV Model Cost Sheet

(Data required to Arrive the “Cost-Benefit Analysis” of an Automated Teller Machine)

Name of the Company (Vendor of ATM) :

Functionalities of ATM :

ATM Price : Actual Price ₹:
: GST ₹:
: Customs Duty (If Any) ₹:

Depreciation (Per Annum) : % of Amount of Depreciation ₹ / p.a.
: Expected Life of ATM --- (Years).
: Method of Depreciation.

Annual Maintenance Cost, Name of the Company & AMC-Terms and Conditions of the Contract:

Average Monthly Recurring Costs other than the Annual Maintenance Cost:

Insurance Premium, Total Risk Amount, Risks Covered & Name of the Insurance Company:

Construction Cost of ATM Room (Civil Works):

Rent payable per month for ATM Premises (Off-site ATMs):

Electricity & AC Installations Cost:

Electricity Installations Cost, Life % of Depreciation and Depreciation Amount:

Electricity Charges per month (for AC, ATM and Electricity Installation etc.):

AC Machinery Cost, Life of A/C Machinery, Depreciation % and Depreciation Amount and Method of Depreciation:

VCR Tape Cost (If Recording Facility is available-Old System ATMs):

VCR Tape – (Replacement period-If Recording Facility is available-Old System ATMs):

Camera Cost (If not included in ATM System). Its life & %of depreciation:

Communication Charges (Networking charges like SWITCH / VSAT etc.):

Paper Roll Cost per Bundle (To generate transaction Slips etc. & No. of slips generated per bundle + Cash Journal transaction paper per bundle cost & No. of Journals generated per bundle and suppliers its supplier service)

No. of personnel required to service the ATM like Officers, System Officer etc., hours spend per day on ATM and their Salaries & Allowances per Hour).

Average Hits per day No: Amount: :

Cash replenishment periodicity:



Capacity of Cash Bins, its denominations and Total Amounts:

Average Number of Hits:

Peak Level:

Off-Peak Level:

Problems:

Banker's Point of View:

Technical:

General:

Customer's Point of View:

Technical:

General:

Net working failure per month:

ATM shutdowns per month and Shutdown cost:

SWITCH / VASAT etc. Services Cost per month (if any):

Dish Antenna Installation Cost & Peripherals Cost, % of Depreciation and its life etc.,

ATM Card / PIN Mailers processing charges per customer (In Some Banks):

Duplicate ATM Card processing Charges per Customer:

Computer Consumables like printed Ribbon cost etc.,

Watch & Ward Salaries & Allowances (No. of Watchmen required):

Maintenance Cost of ATM room per month:

UPS Cost (Exclusively for ATM):

Annual Maintenance Cost (for UPS):

Capital Expenditure Cost (i.e., Discounted Value):

Any other Costs (Please Specify):

Annexure V

Robo-Advisors

Robo-advisors are in demand among small investors in India due to a search for alternative investments is accurate. A combination of factors, including the shortcomings of traditional financial services, the rise of digital technology, and a younger, more financially aware population, is driving this trend.

Factors driving the demand for Robo-advisors:

Accessibility and low cost: Traditional wealth management has historically catered to high-net-worth individuals, leaving smaller investors underserved due to high fees and minimum investment requirements. Robo-advisors offer a low-cost, accessible entry point for new and smaller investors.

Digital literacy and convenience: With increasing smartphone and internet penetration, many Indians, particularly the younger population, are comfortable managing their finances through mobile apps. Robo-advisors offer a convenient, 24/7 service that aligns with this digital-first mindset.

Dissatisfaction with traditional options: As highlighted in the prompt, bank customers are seeking alternatives to traditional fixed deposits due to lower inflation-adjusted returns. Robo-advisors provide access to market-linked products like mutual funds, which have the potential for higher returns.

Objectivity and transparency: Robo-advisors use algorithms to provide unbiased recommendations based on a user's goals and risk tolerance. This removes human bias and potential conflicts of interest, building greater trust with users.

Diversification and personalization: The automated platforms use AI and machine learning to build diversified portfolios tailored to an individual investor's profile. They also offer goal-based investing

and automatic rebalancing, services that were once limited to wealthier clients.

Popular alternative investment opportunities: To meet the rising demand for alternative investments, fintechs and robo-advisors offer platforms that help small investors explore options beyond traditional bank deposits.

Mutual funds: Automated investment in mutual funds, particularly through Systematic Investment Plans (SIPs), is a major focus for many Indian robo-advisory platforms.

Exchange-Traded Funds (ETFs): While more common in the US, some platforms are beginning to incorporate ETFs into their automated portfolios.

Gold and precious metals: Many fintechs offer digital gold and gold ETFs, providing an easier way to invest in precious metals as a hedge against inflation.

Peer-to-Peer (P2P) lending: For investors seeking higher fixed-income returns than bank deposits, P2P lending platforms provide access to loans that bypass traditional financial institutions.

Corporate bonds: Investment in corporate bonds is another option offered by some platforms as a fixed-income alternative.

Challenges and the evolving landscape:

While demand is growing, the robo-advisory market in India also faces challenges. Many platforms are adopting hybrid models that combine automated advice with access to human advisors to build trust and provide emotional reassurance during volatile market periods. As the market matures, platforms are also focusing on financial literacy to help new investors navigate their options.



Annexure VI

Integrating Robo-Advisory Services into Commercial Bank ATMs

The concept of integrating robo-advisory services into commercial bank ATMs for small investors in India is compelling, aligning with key market trends but also presenting significant challenges. The increasing popularity of robo-advisors and the shift towards digital payments like UPI provide a unique opportunity to repurpose the extensive ATM network.

Strategic Rationale:

Robo-advisors for financial inclusion: The rise of Robo-advisors in India is democratizing financial planning by offering low-cost, algorithm-driven investment advice, which was traditionally limited to high-net-worth individuals.

Integrating this into ATMs could bring wealth management to a vast and underserved population in Tier 2, Tier 3, and rural markets, where banks are already focused on financial inclusion.

Adapting the ATM network: As UPI adoption has surged (85% of digital transactions in India in June 2025), ATM cash withdrawals are declining, forcing banks to re-evaluate their physical infrastructure. Upgrading existing ATMs into advanced self-service platforms, or “SuperATMs,” that offer more than just cash services is a logical next step to generate new revenue streams.

Generating additional revenue: By introducing new functionalities like robo-advisory, banks can justify charging fees, either through a subscription model or

on a per-transaction basis. This could offset the rising operational costs of maintaining ATM networks.

Proposed service model: An ATM-based robo-advisory service could operate as a hybrid model, combining automated advice with the physical assurance of the bank’s network.

KYC and initial profiling: A customer would use their bank-linked debit card and biometric authentication (like fingerprints or facial recognition, as per advanced ATM capabilities) to securely access the service. An on-screen questionnaire would capture financial goals, risk tolerance, and investment horizon.

Algorithm-driven recommendations: Based on the user’s profile, the robo-advisor would suggest suitable investment options, such as low-cost index funds, mutual funds, or government schemes.

Transaction and execution: The customer could initiate a Systematic Investment Plan (SIP) or a one-time investment directly from the ATM, debiting their bank account. This provides a secure and automated way to start investing.

Financial literacy: ATMs could offer simple, on-screen financial literacy modules or infographics to help build trust and educate new investors. Many fintechs already include educational content to address India’s lower financial literacy.

Feasibility and challenges:

Aspect	Feasibility	Challenges
Market Potential	High: India’s large, tech-savvy, and digitally adopting population, combined with low financial literacy and a growing middle class, presents a vast market for accessible, low-cost wealth management.	Customer Trust: Many investors, especially those new to investing, prefer human interaction. Banks would need to invest in a strong customer education and support system.
Technology	High: The foundation for such a system already exists. ATMs can be upgraded, and technologies like AI, machine learning, and biometric authentication are readily available. UPI functionality is already being integrated into cash deposits and withdrawals.	Legacy Systems: Integrating modern wealthtech with banks’ legacy IT infrastructure can be complex and costly. There are also high costs associated with hardware upgrades and maintenance.

Aspect	Feasibility	Challenges
Regulation	Moderate: The Securities and Exchange Board of India (SEBI) requires robo-advisors to be registered investment advisors. Banks would need to navigate the separate regulatory jurisdictions of SEBI and the Reserve Bank of India (RBI), which can be complex for integrated products.	Regulatory Compliance: Overlapping and evolving regulatory requirements can create compliance hurdles and increase costs, particularly for hybrid services involving both lending and advisory.
Cost and Revenue	Moderate: Banks could leverage their existing ATM network, a cost-effective alternative to replacing or abandoning infrastructure. New fee structures would generate revenue to cover upgrade and operational costs.	Initial Investment: The cost of upgrading a vast network of ATMs and integrating new, secure software can be substantial. The UPI ATM platform, for example, represents a significant investment by companies like Hitachi.
Competition	Moderate: While commercial banks have an extensive physical network, they face stiff competition from agile fintech startups and traditional wealth managers who are already offering established, user-friendly digital platforms.	Customer Acquisition: Convincing small investors to switch from familiar apps like Zerodha or Paytm Money to an ATM-based service will be a significant challenge, especially for a new kind of offering.

While repurposing bank ATMs to offer Robo-advisory services to small investors is an innovative initiative / functionality with high potential for financial inclusion and revenue generation, its success depends on overcoming technological, regulatory, and customer trust hurdles. A hybrid “phygital” model, which blends the physical accessibility of the ATM with the digital convenience of Robo-advisors, is a promising path forward, though it will require a careful, phased strategy to ensure profitability and successful customer adoption.



Annexure VII

KCC Linked to ATMs in Rural Areas

The strategy of relocating underutilized urban ATMs to rural areas to serve Kisan Credit Card (KCC) holders is a viable concept for banks. Industry experts and analysts have noted that urban ATM usage has declined due to digital payments, leading banks to consider relocating these machines to semi-urban and rural areas. This shift can improve financial inclusion and optimize banks' resources, but it also presents specific challenges.

Potential Benefits:

Optimal asset utilization: Banks can repurpose their underused urban ATMs by moving them to rural areas. This increases the machine's profitability and extends banking infrastructure without significant new investment.

Enhanced financial inclusion: Deploying more ATMs in rural areas provides greater access to banking services for farmers and KCC holders who previously had to travel long distances for cash.

Empowering KCC holders: The KCC is a revolving cash credit facility, and ATMs give farmers flexible, 24/7 access to their sanctioned credit limits. In addition to withdrawals, modern cash-recycling ATMs could enable deposits, further streamlining financial transactions for farmers.

Reinforcing a cash-based economy: While digital payments grow, cash remains dominant in semi-urban and rural areas. An expanded ATM network directly supports this cash-led economy.

Increased financial literacy: Greater exposure to ATMs can help rural populations become more comfortable with formal banking technology and digital transactions, addressing a common financial literacy gap.

Implementation challenges:

Infrastructure limitations: Rural areas often face issues with reliable electricity and internet connectivity, which are essential for ATM operation. Inconsistent power can lead to machine downtime and poor service.

Security risks: Compared to urban areas, rural locations can have higher security vulnerabilities. This increases

the risk of theft and fraud, necessitating additional security measures and costs.

Cash management: Ensuring adequate cash replenishment and collection is more logistically complex and expensive in remote, rural areas. This can impact the machine's reliability and operational costs.

User hesitancy: Studies have shown that many KCC holders, especially those who are illiterate, are hesitant to use ATMs due to a lack of familiarity and fear of fraud. A 2017 NABARD study found that only one-third of farmers issued a RuPay card for KCC used it at an ATM.

Profitability of traditional ATMs: Even in rural areas, maintaining traditional ATMs with limited footfalls may not be profitable. This concern is driving interest in more cost-effective options like micro-ATMs.

Strategic alternatives: Micro-ATMs: A key innovation in addressing rural financial access is the micro-ATM. These portable, handheld devices offer a more cost-effective and flexible solution than relocating traditional, full-sized ATMs.

How micro-ATMs work: Micro-ATMs are operated by local business correspondents (BCs) at common locations like kirana stores. Transactions are performed via a handheld device, often using biometric authentication for security.

Key advantages:

Lower costs: They have significantly lower setup and maintenance costs than conventional ATMs.

Improved accessibility: They bring banking services directly to the village, eliminating the need for farmers to travel.

Overcoming infrastructure issues: They have lower power consumption and can operate on mobile network coverage, reducing dependence on stable electricity.

Higher adoption: They rely on human assistance from a trusted BC, which can help build trust and overcome initial user reluctance.



Relocating underutilized urban ATMs to rural areas is a sound strategy that could boost financial inclusion and optimize bank resources. However, to maximize the benefits, banks must address the operational and security challenges associated with remote deployments. A complementary strategy would be to leverage micro-

ATMs and business correspondents, which are often better suited for the unique infrastructure and social dynamics of rural areas. A hybrid model, combining high-capacity cash-recycling ATMs in regional hubs with a network of micro-ATMs in smaller villages, could provide the most robust and sustainable solution for serving KCC holders.



Schedule VII

Relocation of ATMs to Rural Areas

The strategic relocation of underutilized urban ATMs to rural areas is a sound approach to achieve optimum utilization and boost financial inclusion. This initiative empowers local communities, including Kisan Credit Card (KCC) holders and Self-Help Group (SHG) members, but requires banks to implement specific strategies to overcome challenges such as limited bandwidth and security concerns.

Benefits of Rural ATM Expansion:

Optimum Utilization: Urban ATMs are often underused due to high UPI/QR code usage, whereas rural areas have a significant unbanked or underbanked population that still relies heavily on cash, ensuring higher and more cost-effective usage for the relocated machines.

Financial Inclusion and Digital Penetration: Providing easy access to banking services, including cash withdrawals and deposits, brings rural residents into the economic mainstream. This increases comfort and familiarity with automated banking technology, paving the way for broader digital literacy and the adoption of other financial products.

Empowerment of KCC and SHG Holders: KCC holders and SHG members, who may lack easy access to physical bank branches, can use nearby ATMs for convenient access to credit and manage savings/loan disbursements. This supports their economic activities and reduces the time and cost associated with traveling to distant branches.

Economic Lubricant: 24/7 access to cash facilitates local trade and consumption, acting as an economic lubricant in the rural economy.

Strategies to Overcome Constraints and Challenges:

Banks need to formulate targeted strategies to address specific rural constraints:

Challenge	Strategy / Solution
Bandwidth/Network Connectivity	Deploy robust, flexible connectivity solutions: Utilize technologies like Secure Software-Defined Wide Area Network (SD-WAN) or hybrid options (e.g., satellite, multiple cellular providers, or even solar power in certain pockets) to ensure consistent network uptime. This can be supplemented with offline transaction capabilities for basic services during connectivity loss.
Physical Security	Enhance physical security measures: Bolt machines to the ground, use high-definition CCTV cameras with real-time analytics, deploy security guards, and use cash-degradation systems (e.g., ink-staining) to deter physical attacks and theft.
Cyber Security	Implement layered security protocols: Use strong encryption for all data in transit, deploy firewalls and endpoint protection software, and ensure regular software updates and patch management. Centralized monitoring systems can detect and respond to suspicious activities immediately.
Low Awareness	Conduct customer education and awareness campaigns: Inform local populations about the benefits and safe use of ATMs (e.g., keeping PINs secret, checking for skimmers). Simple, user-friendly interfaces, perhaps with local language support, can also build trust.
Operational Costs	Explore cost-effective models: Utilize <i>Micro-ATMs</i> (handheld devices operated by local correspondents) which have lower infrastructure and operational costs compared to traditional ATMs. This approach leverages existing local infrastructure like <i>kirana</i> stores or Common Service Centres.
Power Supply	Ensure reliable power sources: In areas with unreliable electricity, banks can invest in backup power solutions or renewable energy sources, such as solar power, to ensure continuous operation.



Chapter 16

Linking of KCC Product to ATM

(Product Development)



Contents:

<i>1. Introduction.</i>	<i>6. Benefits to Agriculturists.</i>
<i>2. Linkage of Kisan Credit Card to Automated Teller Machines.</i>	<i>7. Advantages to Commercial Banks.</i>
<i>3. PURA</i>	<i>8. Extracts of Interim Finance Budget 2004-2005.</i>
<i>4. Benefits of Technology to Agriculturists.</i>	<i>9. To Sum Up.</i>
<i>5. Linking of KCC to Automated Teller Machine (ATM).</i>	<i>Linking Kisan Credit Cards (KCC to ATMs.</i>
	<i>References.</i>

Linking Kisan Credit Cards to ATMs in rural areas improves financial inclusion and reduces branch pressure. The chapter covers:

- * The PURA Concept (Providing Urban Amenities in Rural Areas).***
- * Benefits of ATM-linked KCC Withdrawals.***

Inputs were obtained from Rural Banking and Agriculture Development Branches of Banks.

Linking of KCC Product to ATM (Product Development)

Upgradation of ‘Kisan Credit Card-KCC’ would attract more farmers to Commercial Banks’ fold which is a ‘Good Business Strategy’ and also Cost Control Strategy.

In the context of ever-increasing competition, commercial banks have introduced several new deposit and advance products. While some products have become very popular, some other products have not picked up. This highlights

the need for obtaining feedback from the users (customers) of the products through periodical research. This must lead to refinement / improvement of the product or withdrawal as the case may be. Unless the products meet the needs of users, it cannot survive in the present-day competitive market. In this context, “Market Research” by the Commercial Banks plays a vital role. It is suggested that product research and development teams may be formed by the Commercial Banks with CMAs who are experts in arriving the Costs-Benefit-Analysis of New Products / Process Re-engineering of the existing Bank Products.

Linkage of Kisan Credit Card to Automated Teller Machines

Allowing Agriculturists to transact their Kisan Credit Card (KCC) revolving credit through ATMs for working capital can significantly reduce branch rushes during peak agricultural seasons (Kharif and Rabi), leading to substantial cost savings for rural bank branches. This is because ATMs allow for self-service transactions, such as cash withdrawals, which can handle a large volume of customer needs and decentralize operations from the main branch.

Benefits of using ATMs for KCC transactions:

- *Reduced branch congestion:* With the ability to use ATMs for cash withdrawals, farmers will not need to crowd the branch during critical periods like the kharif and rabi seasons.
- *Increased convenience for farmers:* Farmers can access their funds 24/7 from a wider network of ATMs, providing greater flexibility and convenience.
- *Operational cost savings for banks:* A reduction in the number of customers visiting the branch for basic transactions like withdrawals can lead to lower operational costs for the bank in terms of staff time and branch management, especially in rural locations.
- *Enhanced efficiency:* By moving routine transactions to ATMs, bank staff can focus on more complex tasks, improving the overall efficiency of the branch.
- *Integration with digital payments:* KCCs are already being converted into smart cards or debit cards that are compatible with ATMs, POS terminals, and mobile handsets, making this transition feasible.

How it works:

- *ATM withdrawals:* The primary way this would work is through ATM cash withdrawals using the KCC-issued smart/debit card. This allows farmers to withdraw cash for their immediate working capital needs without visiting the branch.
- *POS transactions:* Farmers can also use the card at Point of Sale (POS) terminals at agricultural input dealers to purchase seeds, fertilizers, and other inputs directly, which is part of the working capital.
- *Digital platforms:* Future integration could also include mobile banking and other digital platforms for a wider range of KCC-related transactions.

Kisan Credit Card (KCC) was introduced by all commercial banks to provide hassle free and “**Revolving Credit**” to Agriculturists. The scheme also provides for consumption needs of the Agriculturists apart from agriculture production needs. The scheme provides flexibility and convenience to agriculturists thereby meeting their needs in time. It is an innovative product designed by the Government of India (GoI) with consultation with RBI / NABARD.

This product has been suitably improved from time to time based on the feedback received from the ultimate users.

The facility of issue of cheque books to KCC borrowers is one of the important improvements. This is in recognition of the growing needs and expectations of agriculturists who are keeping pace with the changing times.

In fact, KCC has helped in empowering agriculture farmers and instilling a sense of self-confidence and self-esteem. However, in view of the growing awareness of Technology among agriculturists, the product needs further improvement by making it a technology driven product.



PURA

“Our strategy for the social and economic transformation of India would be a strong focus on providing urban amenities in Rural Areas in a most creative and cost-effective manner. This is the strongest challenge before the country. Providing Urban Amenities in Rural Areas (PURA) rests on four types of connectivity’s – Physical, Electronic, Economic and Spiritual” he said.

-Past President of India Late Shri Abdul Kalam-Vision.

Keeping this in view, the utility of Kisan Credit Cards (KCCs) from the point of view of both the KCC holders and the commercial banks have been examined through interaction with agriculturists / branch managers of agriculture-oriented branches / credit officers of the commercial banks. The conclusion is that the product needs further improvement by making it technology driven. The states in India like Punjab, Tamil Nadu, Karnataka, Telangana, Andhra Pradesh and other states are the leading in the country in agricultural production. These states are also ahead in information technology, as a result of which, even remote villages are provided access to the world-wide communication network.

A point of relevant in this regard is that DWACRA beneficiaries are marketing their products through internet. All this has created awareness of technology by agriculturists / artisans in rural and semi-urban areas. Keeping this in view, there is a need to introduce technology driven products for agriculturists also. As far as technology products are concerned, so far Commercial Banks are focusing only on Metros / Urban centres. There is a need for extending this facility to selected Rural / Semi-urban centres with high agriculture business potential.

a) Benefits of Technology to Agriculturists:

The world today is witnessing rapid and revolutionary developments in technology. Another important advantage of the present-day technology, information technology in particular, is that it can be used by even a layman.

An example is the use of Internet by SSC failed girls belonging to Self-Help Groups (SHGs) in Pondicherry. It is said that M/s M.S Swaminathan Institution (A Non-Governmental Organization) in Pondicherry has trained semi-literates i.e., those who have studied upto matriculation, to download vital information relating to agriculture and allied activities from internet and sell the same to agriculturists at a nominal cost. Thus, to use technology one need not be highly educated. In view of the privatization of infrastructure facilities, such as roads, and telecommunication, even remote rural areas are now provided communication network with the rest

of the world. Hence, the benefits of the communication explosion must be made available to agriculturists.

b) Linking of KCC to Automated Teller Machine (ATM):

✓ **ATM facility to operate KCC in Rural Areas:** As on date, the commercial bank users in semi-urban, urban and metros are using the ATMs for overdraft facilities / credit cards etc. ATM are also installed by Banks in rural areas; these ATMs are used by the Rural Customers for withdrawal of Savings Bank Accounts widely. This is due to general perception of Commercial Banks that ATMs are needed for literate and customers in semi-urban, urban and metro areas only for advance products. However, the fact is that today even the agriculturists, more particularly rich farmers, require instant cash not only to meet the cost of agriculture operations but also to purchase at urban centres agriculture inputs such as fertilizers, seeds, pesticides and also incidental expenses incurred in connection with marketing of their agriculture produce. If agriculturist borrowers are provided access to networked ATMs, this need can be met effectively.

✓ **Kisan Credit Card can be upgraded as ‘ATM Kisan Card / High Tech KCC’:** Since KCC is like an overdraft subject to predetermined drawing power, agriculture borrowers will find it convenient to draw the amount upto the drawing power. At present the current account overdraft borrowers are allowed to access the ATM subject to their drawing power. Commercial Banks, by extending the same facility to KCC holders, will incur no additional cost.

✓ **Extension of ATM facility to KCC holders at centres where ATMs are already installed:** To begin with, at centres where ATMs are already installed, the facility can be extended to the KCC holders of agriculture intensive branches / specialized branches / Agriculture oriented branches of commercial banks functioning at such centres. Subsequently, the facility can be extended to other centres having good agriculture business potential and agriculture processing zones



(As identified by the Ministry Commerce, GoI). Extension of ATM facility to KCC holders at these centres involves no extra cost. Besides, it ensures optimum utilisation of existing ATMs.

✓ **Installation / Shifting of ATMs at centres where sizeable agriculture business potential is available:**

There are several branches of commercial banks, which handle high profit-agriculture business, and with large concentration of agriculturists. This will help is not only providing a value-added product to KCC holders but also in widening the high value agriculturist-customer base. Besides this, as some of the commercial banks proposes to install a greater number of ATMs, the target can be easily meet.

c) Benefits to Agriculturists:

The following additional benefits will accrue to the agriculture borrowers:

- ✓ Instant cash facility round the clock will enable farmers to meet their cash needs. At present, whenever an agriculturist wants draw cash, he has to travel all the way from the village to the branch during specific business hours thereby resulting in wastage of time and affecting agricultural productivity. This can be avoided if ATM facility is made available to Agriculturists.
- ✓ ATM facility helps in empowering farmers by boosting their self-esteem and using technology for increased production. Introducing technology through “KCC ATM Card” will instil in them interest in other technology products like Internet, which in turn, will help them to keep pace with latest developments in agricultural operations, use of inputs, pest control measures, market information, etc. Ultimately, this will lead to increase agricultural production and profits to agriculturists.
- ✓ Whenever an agriculturist wants to purchase seeds, fertilizers etc., he has to visit nearby urban areas for quality inputs, which may not be available in rural areas. For this purpose, he has to carry cash along with him at enormous risk and travel to these areas. Besides, as he may not be aware of the actual costs of inputs, he has to carry amounts more than his requirement. If ATM facility is extended to him, while the risk carrying huge cash can be avoided, he need not carry with him cash more than required. This will also enable him to save interest on his balances

in his account.

- ✓ KCC holders can be purchase of their choice, both agriculture inputs and others (consumption needs).
- ✓ Cards such as debit Card, Credit Card and Smart Card are backed by technology intervention. But Kisan Credit Card, with similar attributes, is used manually by the cardholders. Hence, KCC needs to be upgraded into ATM Kisan Card.
- ✓ Kisan Credit Card, if backed by technology will serve as, value addition to agriculturists who constitute large chunk of commercial banks customer base.
- ✓ If Agriculturist borrowers are provided access to ATMs, they would feel enlightened / honoured.

d) Advantages to Commercial Banks:

- ✓ Extending ATM facility to agriculturists-borrowers at centres where ATMs are already installed ensures optimum utilization thereby reducing fixed costs per transaction.
- ✓ Operational costs such as “printing expenses” with regard to cheque books / withdrawal forms, renewal forms for disbursement of KCC funds to the Agriculturists, and routine work such posting in CBS, checking of day books by the Branch Staff for the payments made at the Branches, can be reduced.
- ✓ Effective publicity of commercial banks’ deposits / advances products in “Regional Language” can be ensured through display in ATMs.
- ✓ Agriculturist Customers will be satisfied with banks’ value-added services, which will help in retention of high value agriculturist customers.
- ✓ Heavy Crowds of agriculture clientele at Commercial Banks branches / agriculture-intensive branches during Kharif / Rabi seasons and consequent delays in disbursals can be reduced.
- ✓ As per KPMG Committee recommendations, large untapped potential exists in Rural / Semi-urban centres. This potential can be tapped by not only extensive financing of Agriculture but also by providing value added Technology driven products.
- ✓ With the opening of Agriculture to contract farming,



agriculture finance is going to be high-profit business and an area stiff competition. To face this challenge, commercial banks need to introduce customer oriented and technology driven products.

- ✓ As commercial banks are encouraging profitable and high yield agriculture advances, value-added products such as “ATM Kisan Card” will enable them to enlarge the base of high value agriculture advances.
- ✓ Since some of the commercial banks have aims to modernize their rural branches like establishment of Central Processing Centres for Agriculture Loans for clusters of Branches, introduction of such products from now onwards will serve as launching pad for future Technology adoption in Rural Areas.
- ✓ Extending technology driven products such as “ATM Kisan Card” will boost the image of the commercial banks committed to development of banking finance

in Rural Areas.

- ✓ This will also be in consonance with market philosophy of introducing more customer-friendly products.
- ✓ Since 65% of Commercial Banks’ branches in rural / semi-urban areas and large proportion of population stays in these areas, it will be fair to extend technology-oriented products in these areas and also to brought the Agriculturists into the fold of Digitalization.
- ✓ Introduction of such upgraded products will also help the commercial banks in increasing the priority sector lending and technology-driven products can be extended to other segments of the priority sector.
- ✓ Upgrading Kisan Credit Card as “ATM Kisan Card” involves no additional cost to the Commercial Banks since the existing ATMs can be used for ATM Kisan Cards.

Extracts of Interim Finance Budget 2004-2005

“I expect all eligible farmers to be in receipt of their Kisan Credit Cards (KCC) by March 31, 2004. The extend the benefit of technological developments in the banking industry to rural India, the existing Kisan Credit Card will hereafter be modified, upon individual request, for use on ATM Machines, wherever such facility exists”.

Extract from the Interim Budget for the Fiscal Year 2004-05 presented by Shri Late Jaswant Singh, Finance Minister to Parliament on 3rd February, 2004.

To Sum Up:

In view of the advantages as detailed above, the existing Kisan Credit Card may be upgraded to “ATM Kisan Card” and introduced in phased manner at all agriculture intensive branches of commercial banks. If the KCC is upgraded, more farmers, could be attracted to commercial banks’ fold which is a “Good Business Strategy” and also Cost Control Strategy to the Commercial Banks.

References:

1. ATM Vs. KCC-IBA Journal, April-2004.
2. Providing Urban Amenities in Rural Areas-Late Shri Abdul Kalam-Vision.

Annexure I

Linking Kisan Credit Cards (KCC) to ATMs

Linking Kisan Credit Cards (KCC) to ATMs would allow farmers to use a wider range of technology, like UPI, to access their funds digitally, reducing the need for in-person bank visits. This would benefit both farmers and banks by increasing convenience and efficiency for farmers while decreasing the burden on bank branches.

Benefits for farmers:

- ✓ **Convenience:** Farmers can access funds for their KCC accounts through ATMs and potentially UPI, which is more comfortable and convenient than visiting a bank branch, especially in rural areas where UPI is becoming widely used.
- ✓ **Flexibility:** They can withdraw funds or make payments at their convenience without having to travel to a bank branch for simple transactions.
- ✓ **Reduced Time and Effort:** Eliminates the need for long queues and the time spent traveling to and from the bank.

Benefits for banks:

- ✓ **Reduced Footfalls:** Decreases the number of customers visiting bank branches, which can reduce

operational costs and allow staff to focus on more complex services.

- ✓ **Increased Digital Transactions:** Encourages the use of digital channels like UPI and ATMs, aligning with government initiatives for digital India.
- ✓ **Improved Efficiency:** Frees up bank branch resources to handle more complex financial activities.

Challenges and considerations:

- ✓ **Infrastructure:** This change requires robust ATM infrastructure in rural areas, which may still be a challenge in some regions.
- ✓ **Digital Literacy:** While UPI is gaining traction, some rural populations, especially women and the elderly, may still need support to build confidence and awareness around digital payments.
- ✓ **Security:** Banks will need to ensure robust security measures are in place to prevent fraud in digital transactions involving KCC accounts.
- ✓ **Connectivity:** Reliable internet and power supply are crucial for the success of digital transactions in rural areas.



Chapter 17

Call Centre Costs



Contents:

1. <i>Introduction.</i> 2. <i>Benefits for Banks and Customers.</i> 3. <i>How to Control the Costs of Call Centres?</i> 4. <i>Role of Cost Accountants to Control the Call Centre Costs.</i> 5. <i>Performance Appraisal System of Call Centres in Banks.</i> 6. <i>Chatbots are Self-Delivery Channel with low Cost of Operations.</i> 7. <i>Chatbots Versus Call Centers.</i> 8. <i>Chatbots a Cost Control IT Tool to provide Customer Service Desk in Banks.</i> 9. <i>Chatbots in Banking Sector is a 'Cost Control Tool'.</i>	10. <i>Call Centre Vs. Chatbots.</i> 11. <i>Chatbot in Banking Sector.</i> 12. <i>AI Chatbots example in Different Sectors.</i> 13. <i>AI Chatbots Substitute to 'Customer Call Centre Services'.</i> 14. <i>Implementation Tips.</i> 15. <i>Integration of Chatbots.</i> 16. <i>To Sum Up.</i> <i>Cost-Benefit-Analysis of Call Centers and Chatbots in Indian Banks-Annexure I.</i> <i>Audit Parameters of Call Centres of Banks-Annexure II.</i> <i>References.</i>

Digital channels and chatbots significantly reduce call centre expenses. This chapter includes:

- ✱ *How CMAs can help manage Call Centre Costs.*
- ✱ *Cost Comparison of Call Centres vs. Chatbots.*

Developed with insights from Bank IT Teams and Secondary Data.



Call Centre Cost

Banking call centers serve as an alternative channel to physical branches, providing information and addressing customer inquiries over the phone. This reduces customer foot traffic in branches, contributing to a more efficient and cost-effective service model for banks.

How bank call centers reduce footfall: The primary mechanism by which call centers reduce in-person visits is by offering convenient, remote alternatives for common banking tasks. This includes services like:

★ **Account information:** Customers can get real-time updates on account balances and transaction histories

without having to visit a branch.

★ **Transaction support:** The call center can help customers with various transactions, such as fund transfers and bill payments.

★ **Card services:** Call center agents can assist with credit or debit card activation, blocking a lost or stolen card, and reporting fraudulent activities.

★ **Dispute resolution:** Customers can lodge complaints or report issues, which the call center staff can track and help resolve remotely.

Benefits for Banks and Customers:

Benefit	How it Works
Increased efficiency and cost savings for banks	By handling routine inquiries over the phone, call centers free up branch staff to focus on more complex transactions and sales opportunities. This reduces overhead costs associated with operating large branch networks.
Greater customer convenience	Customers can access banking services 24/7, 365 days a year, from anywhere. Many call centers also offer multilingual support to assist customers from diverse backgrounds.
Improved customer satisfaction	Call centers can offer instant and personalized assistance, providing a faster resolution to queries. This is particularly important for high-stakes “moment-of-truth” issues like reporting a stolen credit card, where the quality of service can make or break customer loyalty.
Enhanced omnichannel banking	For complex issues that began online or over the phone, a seamless omnichannel strategy ensures that if a customer eventually visits a branch, the staff will have a record of their history. This avoids having the customer repeat information and builds trust.
Proactive customer engagement	Banks can use call centers for outbound services, such as fraud alerts, follow-ups on transactions, and promotional campaigns for new products. By anticipating customer needs, banks can address potential issues before they cause frustration, further reducing the need for customers to call in or visit a branch.

a) How to Control the Costs of Call Centres?

Indian banks can control call center costs by implementing technological solutions like AI chatbots and IVR systems for self-service, optimizing workforce management for efficient staffing, adopting a customer-centric approach to improve first call resolution (FCR), and considering outsourcing for non-core functions. By focusing on these strategies, banks can improve operational efficiency, reduce agent workload, and ultimately lower overall call

center expenses.

Implement Automation & Technology:

★ **AI-Powered Chatbots and Virtual Agents:** These can handle routine and repetitive customer inquiries, freeing up human agents to focus on more complex issues and reducing the need for a larger workforce.

★ **Interactive Voice Response (IVR) Systems:** IVRs

can automate interactions for common requests, allow for customer self-service, and provide access to information outside business hours, improving efficiency and reducing operational costs.

- ★ **Predictive Analytics:** AI and analytics can help banks forecast call volumes and optimize staffing levels, ensuring the right number of agents are available and reducing costs associated with overstaffing or understaffing.

Optimize Workforce Management:

- ★ **Effective Workforce Management (WFM):** Implement robust WFM strategies for forecasting call volumes, scheduling agents, and making real-time adjustments to ensure adequate staffing, which boosts efficiency and lowers costs.
- ★ **Agent Retention:** Invest in training, fair compensation, and a positive work environment to retain skilled agents, as high turnover leads to significant recruitment and training costs.
- ★ **Empower Agents:** Provide agents with the tools and authority to resolve issues during the first call, which improves customer satisfaction and reduces the need for follow-up calls.

Enhance Customer-Centric Operations:

- ★ **Boost First Call Resolution (FCR):** A higher FCR rate means customers get their issues resolved in a single interaction, reducing repeat calls and overall operational expenses.
- ★ **Quality Assurance and Coaching:** Implement strong quality assurance processes and provide regular agent coaching to improve service quality and agent performance.

Consider Outsourcing:

- ★ **Outsource Non-Core Tasks:** Delegating non-essential call center functions to specialized outsourcing partners can reduce operational costs, provide access to expert resources, and allow the bank to focus on its core competencies.

b) Role of Cost Accountants to Control the Call Centre Costs:

A cost accountant controls call center costs in a bank by analysing Employee, technology, and facility expenses to identify inefficiencies and areas for reduction. Key measures include implementing performance-based metrics, optimizing staffing levels, adopting cloud-based technologies to reduce IT costs, streamlining call routing, implementing value engineering to eliminate waste, and using cost accounting standards for accurate tracking and reporting to guide management decisions.

Key Areas of Cost Control: Employee Costs:

- ★ **Workforce Management:** Ensure the right number of agents are available at peak times to minimize idle time and overtime, according to Call Criteria.
- ★ **Agent Performance:** Track key performance indicators (KPIs) like average handling time and first-call resolution to identify high-performing and underperforming agents and implement training.
- ★ **Automation:** Utilize automated call routing and self-service options for common inquiries to reduce the need for agents and lower employee costs.

Technology & IT Expenses:

- ★ **Cloud-Based Solutions:** Transition to cloud platforms to reduce IT infrastructure and maintenance costs, leveraging pay-as-you-go pricing models.
- ★ **Software Optimization:** Regularly assess and optimize software licenses, ensuring they are used efficiently to avoid unnecessary expenses.
- ★ **Total Quality Management (TQM):** Analyse the cost-of-service failures and customer complaints to identify and fix root causes, improving service quality and reducing repeat calls and associated costs.

Facilities & Infrastructure:

- ★ **Space Optimization:** Evaluate the physical space to ensure it's used efficiently and consider remote or hybrid work models to reduce facility overhead.
- ★ **Energy & Utilities:** Implement energy-saving measures and monitor utility consumption to reduce operating costs.



Operational Efficiency:

- ★ **Value Engineering & Lean Accounting:** Apply techniques like value engineering to identify and eliminate non-value-added activities within call center operations.

Streamlined Call Routing: Implement effective call distribution systems to route calls to the most appropriate agents, improving efficiency and customer satisfaction.

Measures to Take:

- ★ **Cost Allocation & Reporting:** Classify and allocate costs to relevant cost pools and cost centers for accurate tracking and reporting, notes the ICAI.
- ★ **Performance Monitoring:** Regularly compare actual costs against budgets and standard costs to identify budget variances and take corrective actions.
- ★ **Data Analysis:** Use cost data for financial analysis to generate profitability reports, understand service line profitability, and inform pricing strategies.
- ★ **Cost-Volume-Profit (CVP) Analysis:** Analyse the relationship between costs, volume, and profits to understand the impact of changes in call volume on profitability.

C) Performance Appraisal System of Call Centres in Banks:

To quantify performance appraisals for Indian bank call centers, banks should establish clear Key Performance Indicators (KPIs) for call center agents and compare their performance against these predefined targets. Key quantifiable metrics include Average Handling Time (AHT) (time spent on calls), First Call Resolution (FCR) rate (percentage of inquiries resolved on the first contact), and Customer Satisfaction Scores (CSAT), all of which should be tracked over time to measure improvements in efficiency and service.

- ★ **Key Performance Indicators (KPIs):** Establish quantifiable metrics to monitor different aspects of performance.
- ★ **Average Handling Time (AHT):** Measures the average time it takes an agent to handle a customer call, reflecting efficiency and resource utilization.
- ★ **First Call Resolution (FCR) Rate:** The percentage

of customer issues resolved during the first contact, indicating productivity and convenience for the customer.

- ★ **Customer Satisfaction Scores (CSAT):** Measures customer feedback on the quality of service received, which is a critical indicator of overall performance.
 - ★ **Adherence to Schedule:** The ability of agents to follow their assigned work schedule, which impacts staffing and call wait times.
 - ★ **Accuracy of Information:** The percentage of calls where the agent provides correct and complete information to the customer.
 - ★ **Performance Appraisal Process:** Follow a systematic process for evaluating performance. Set Performance Standards: Define clear, measurable, achievable, relevant, and time-bound (SMART) goals for agents.
 - ★ **Communicate Standards:** Ensure that all agents understand their targets and expectations.
 - ★ **Collect Performance Data:** Use call center software and other tools to collect data on the established KPIs.
 - ★ **Compare Actual Performance to Standards:** Measure how actual agent performance compares against the set targets.
 - ★ **Discuss the Appraisal:** Review the collected data with the agent, highlighting strengths and areas for improvement.
 - ★ **Take Corrective Action:** Provide coaching and training to address performance gaps.
- Methods for Quantifying:** Use quantitative methods to assign scores and ratings.
- ★ **Weighted Scoring:** Assign different weights to various KPIs based on their importance and then calculate a weighted average score for the employee.
 - ★ **Management by Objectives (MBO):** A system where employees and supervisors collaboratively set short-term, action-oriented goals that are reviewed at the end of a period.
 - ★ **360-Degree Feedback:** Gather performance information not only from supervisors but also



from peers, subordinates, and customers to get a comprehensive view of an employee's performance.

Considerations for Indian Banks:

- ★ **RBI Guidelines:** Ensure that performance appraisal systems align with the guidelines and regulations set by the Reserve Bank of India (RBI).
- ★ **Frequency:** Conduct appraisals regularly, such as twice a year, and consider increasing the frequency of evaluation for better results.
- ★ **Link to Rewards:** Connect the performance appraisal outcomes to financial and non-financial rewards to motivate employees.
- ★ **Alignment with Organizational Goals:** Ensure individual and call center goals are aligned with the overall organizational goals and strategic objectives of the bank.

d) Chatbots are Self-Delivery Channel with low Cost of Operations:

Customers are more likely to use chatbots instead of call centers for banking queries if the chatbots offer significant improvements in service quality, convenience, and accessibility. By providing instant, 24/7 self-service for common queries in regional languages, banks can reduce customer wait times and eliminate costs associated with traditional call centers.

Benefits of chatbots for bank customers:

No waiting in queues:

- ★ **Instantaneous service:** Unlike call centers with long hold times, chatbots can handle multiple inquiries simultaneously and provide immediate responses to common questions about account balances, transaction history, or branch hours.
- ★ **Convenience:** Customers can resolve their banking issues at any time and from any location, without being restricted to traditional business hours. This 24/7 availability is a major advantage for modern banking customers who expect instant service.

No cost incurred:

- ★ **Reduced operational costs:** By automating answers

to frequent questions, banks significantly lower their customer support costs, which can allow them to offer more free services to customers.

- ★ **Zero phone charges:** Customers can avoid potential long-distance or toll charges associated with traditional call center interactions by using chatbots on mobile apps or websites.

Standardized, customer-oriented, and regional language support:

- ★ **Consistent information:** Chatbots provide standardized and accurate answers based on the bank's knowledge base, ensuring every customer receives the same correct information, unlike human agents who may be prone to error or inconsistency.
- ★ **Personalization:** AI-powered chatbots can use data and machine learning to offer personalized financial insights and recommendations based on a customer's spending habits or financial goals.

- ★ **Regional language support:** Multilingual chatbots address communication barriers, especially in countries with high linguistic diversity, allowing customers to interact with the bank in their preferred regional language. This makes financial services more accessible and inclusive.

24/7 self-service channel:

- ★ **Around-the-clock access:** Chatbots enable customers to access banking services at their convenience, even outside of regular business hours. This is crucial for urgent queries like reporting a lost card or fraud, which require immediate attention.
- ★ **Improved efficiency:** By automating routine queries, chatbots free up human agents to focus on more complex, high-value tasks that require empathy and human judgment. This also leads to better and quicker service when a customer does need to speak with a human agent.
- ★ **Empowered self-service:** Chatbots empower customers by putting them in control of their interactions. They can get answers to common questions and perform basic transactions like checking balances or transferring funds on their own.



Chatbots Versus Call Centers:

Features	Chatbot	Call Center
Availability	Available 24/7.	Limited by business hours.
Speed	Instant response for most queries.	Subject to long wait times and queue lengths.
Cost to Customer	Often free via apps. Or websites.	May incur phone charges.
Language Support	Can be programmed for multiple languages and regional dialects.	Requires hiring dedicated, multilingual staff.
Handling simple queries	Excels at Standard, repetitive questions.	Inefficient for high volume of routine queries.
Handling Complex Queries	Limited, often requires escalation to a human.	Better equipped for sensitive and complex issues.
Personalization	Delivers tailored recommendations based on data.	Often lacks the data integration for personalized advice.
Security	Requires robust encryption and authentication protocols.	Human agents handle sensitive information, which can have security risks.

While chatbots are highly efficient for common queries, they cannot completely replace human agents. A hybrid approach, where complex or emotionally charged issues are seamlessly handed over to a human agent, often works best.

e) Chatbots a Cost Control IT Tool to provide Customer Service Desk in Banks:

As Banking Chatbots become progressively prevalent within the Technological frameworks of financial institutions, more defined expectations regarding their functionalities have been articulated. It is an exhilarating phenomenon when Medium Size Banks experience rapid growth; however, the process of scaling a Call Center

can prove to be a financially burdensome endeavour. The implementation of an 'AI Chatbot' may serve as a Viable Solution to mitigate the challenges associated with scaling, in a manner that is both Cost-effective and Beneficial to an exceptional Customer Experience.

Essential considerations for 'Medium Size Banks' aiming to expand their customer service workforce encompass customer expectations alongside the financial implications of such expansion. A comparative analysis of brands reveals that 90% of American consumers incorporate customer service into their decision-making criteria. An unsatisfactory customer experience has resulted in 78% of consumers abandoning a purchase, while 48% have opted to switch brands in pursuit of superior support.

Chatbots in Banking Sector is a 'Cost Control Tool'

AI chatbots are transforming customer service in the banking sector, offering a self-service option that reduces reliance on traditional call centers. They leverage AI technologies like natural language processing (NLP) and machine learning (ML) to understand customer inquiries and provide immediate, relevant responses across various platforms like messaging apps, websites, and mobile apps.

Benefits of chatbots in banking:

- **24/7 Availability:** Unlike human agents, chatbots are available round-the-clock, providing instant support and answering customer queries at any time.
- **Faster Issue Resolution:** Chatbots handle routine banking inquiries such as balance checks, transaction histories, and FAQs, significantly reducing response times and wait times for customers. They can also escalate complex issues to human agents when needed.
- **Personalized Experience:** AI chatbots analyse customer data and spending habits to offer tailored recommendations, financial advice, and proactive alerts.
- **Reduced Operational Costs:** By automating repetitive tasks, chatbots help banks save on staffing and operational expenses, freeing up human agents to focus on more complex tasks.
- **Enhanced Fraud Detection and Security:** Chatbots monitor transactions in real time, identify suspicious activity, and alert customers and the bank, helping to prevent fraudulent transactions and enhance overall security.
- **Improved Efficiency and Productivity:** Chatbots automate tasks like account management, loan applications, bill payments, and provide employees with quick access to information, boosting overall efficiency for both customers and bank staff.

Uses in Banking: Chatbots are utilized in various banking functions, including:

- ≈ Customer Support & FAQs.
 - ≈ Fraud Detection & Prevention.
 - ≈ Loan & Credit Applications.
 - ≈ Personalized Financial Advice
 - ≈ Account Management & Transactions.
 - ≈ Generating Lead Notifications & Alerts.
 - ≈ Feedback & Surveys.
 - ≈ Exchange Rate Information.
 - ≈ Examples of banking chatbots.
- *Erica (Bank of America):* A voice and text-enabled AI assistant that helps customers with various banking tasks and financial advice.
 - *Ally Assist (Ally Bank):* A personal digital assistant that monitors accounts, pays bills, tracks transactions, and provides financial advice.
 - *Amy (HSBC):* A virtual assistant that handles daily financial needs like showing transaction history and answering common questions.
 - *Ceba (Commonwealth Bank):* Makes funds transfers, bill payments, and offers advice on savings and investments.
 - *Eno (Capital One):* Checks bills, tracks spending, pays for expenses, and has a fraud detection system.
 - *Eva (HDFC Bank) & Yono (SBI):* Provide 24/7 customer support for queries, transactions, and product information.

Consumer expectations have reached unprecedented levels, necessitating Prompt, Efficient, and Seamless 24/7 support across a multitude of Devices, Channels, and Touchpoints.

1. Call Centre Vs. Chatbots:

➡ **Money Talks:** In the United Kingdom, the average remuneration for a customer service call center representative stands at £19,275. The cost of workstations varies between £2,487 and £15,984, contingent upon geographical location and the nature of the business, whereas the average expenditure on hardware and software per agent is approximately £2,115. Additionally, it may become imperative to expand office space to accommodate the influx of new personnel. The processes of recruiting and training staff can also be both time-intensive and financially demanding. Call center representatives are required to be well-versed in company policies and procedures, product offerings, customer requirements, legal considerations, and customer service best practices.

One strategic approach that Banks may consider to optimize their call center expenditures is the adoption of an 'AI Chatbot' as an alternative to augmenting the number of human customer service representatives. Chatbots present a commendable scalability solution, as they possess the capacity to manage a substantial volume of inquiries at a significantly lower cost than their human counterparts. They are available around the clock and effectively minimize customer wait times, even during peak periods.

➡ **Time:** The average duration of hold time in a call

center is approximately 13 minutes. For the majority of consumers, this is deemed unacceptable. Research indicates that 32.3% of callers assert that they should never be required to wait on hold, while 27.6% indicate a willingness to wait for a maximum of one minute. Furthermore, 30.2% state that they would tolerate a wait of one to five minutes. Extended wait times can engender customer frustration and dissatisfaction, which may ultimately jeopardize both reputation and financial performance.

Collectively, chatbots have the potential to decrease customer service costs by as much as 30% by addressing up to 80% of routine inquiries.

➡ **Flying High:** In light of these considerable challenges, 80% of Medium-sized Banks are contemplating the deployment of AI chatbots. To manage routine inquiries such as frequently asked questions, chatbots can autonomously respond to user inquiries utilizing pre-formulated responses. This capability enables businesses to conserve time and resources while enhancing customer response times. This is of paramount importance, as 82% of consumers anticipate an immediate reply to inquiries related to Sales or Marketing.

➡ **Personality and Personalisation:** The personality of a company brand may serve as a pivotal differentiator within the competitive landscape of business. The



advantageous aspect is that it is feasible to imbue an AI Chatbot with a distinctive personality that authentically embodies the Brand's Voice and Identity. An effective chatbot should feature a customizable interface, thereby allowing alignment with the aesthetic and experiential attributes of the Brand. This approach guarantees a consistent user experience while reinforcing the overall Brand Image.

➡ **Every Language:** Advanced AI Chatbots, such as those developed by some reputed IT Companies, can deliver support in Multiple Languages, which proves particularly advantageous for businesses aspiring to broaden their customer base on a Global Scale and penetrate New Markets. A prime example is a Tourism Company, as the intrinsic nature of their operations is Global; consequently, their Chatbot can effectively address the needs of Tourists from various countries Traveling to a wide array of International Destinations.

➡ **Data Driven:** A Medium Size Digital Banks can deploy AI chatbots to scrutinize patterns and trends within customer feedback, thereby identifying potential areas for enhancement in their product offerings and services. Additionally, they can mitigate the volume of inquiries directed to Digital Banking call centres by furnishing customers with real-time updates concerning their queries, tracking of transactions, and addressing product-related questions.

➡ **Research Findings:** According to research conducted by 'Juniper Networks', it is projected that Business Enterprises across diverse sectors will collectively save in excess of \$8 billion annually through the integration of Chatbots within their Call Centres.

➡ **Service Announcements:** An AI-driven Chatbot is capable of transmitting broadcast messages to users who have consented to receive updates from the Business Organizations including Banks. This functionality can be utilized to inform users regarding Novel Products, Promotional Offers, and events, thereby conserving the Time and effort of Sales and Customer Support call center personnel, enhancing overall Productivity, Diminishing Wait Times, and elevating Customer Satisfaction. Additionally, it can assume certain responsibilities Typically held by Sales Contact Center representatives by engaging in Selling, cross-selling, and Upselling activities. For instance, the Coca-Cola Chatbot provides Personalized Product recommendations, grants access to promotional deals, and even facilitates the Direct Ordering of Coca-Cola

Products through the Chatbot Interface.

2. Chatbot in Banking Sector:

Banking Sector aspire for their bots to exhibit attributes of approachability, proficiency, adaptability, and security in order to facilitate informed, human-like interactions across a multitude of channels.

➡ **Familiar:** The significance of personalization is paramount in augmenting chatbot interactions. Through the incorporation of user-specific data, bots are capable of customizing dialogues to align with the preferences and historical context of each user. This could entail referencing recent transactions, account balances, or prior interactions to enhance the relevance of conversations. Moreover, the integration of humor and empathy serves to infuse a human element into communications, fostering a deeper sense of connection among customers.

➡ **Transactional:** The functionalities typically encompassed by these systems include fundamental operations such as balance inquiries, fund transfers, bill payments, and transaction reviews. Users ought to have the capability to initiate these interactions effortlessly through natural language commands or guided prompts embedded within the chat interface. Advanced bots are equipped to facilitate more intricate transactions, such as establishing recurring payments, executing wire transfers, or applying for loans and credit cards.

➡ **On-brand:** Upon the deployment of the chatbot, it is imperative to delineate explicit guidelines pertaining to the bot's linguistic style, tone, and visual representation. Whether the objective is to project professionalism, trustworthiness, or amicability, the bot must embody the institution's intended personality traits. Routine audits are essential in monitoring compliance with these standards, thereby ensuring uniformity across all communication channels.

➡ **Safe:** It is of utmost importance that financial institutions implement comprehensive security protocols within their chatbot technology, given that these entities are frequent targets of cyberattacks. Extensive authentication mechanisms must be established to validate users' identities prior to granting access to account information. Furthermore, the bot should adhere to industry-standard encryption protocols to safeguard customer data transmitted between the user's device and the banking infrastructure.



- ➡ **Multichannel:** To effectively engage customers in their preferred environments, it is essential to analyse collected insights to ascertain their specific locations. Prominent channels for deployment encompass messaging platforms such as Facebook Messenger, WhatsApp, and Slack, in addition to voice assistants like Amazon Alexa and Google Assistant. Maintaining consistency across all platforms is crucial to ensuring a cohesive user experience and reinforcing the institution's brand identity. A Customer Relationship Management (CRM) system, commonly referred to by its acronym, can assist in consolidating all communication into a singular, centralized repository.
- ➡ **Connected to various departments:** Initiate the process by discerning the essential departments with which your chatbot must engage, including but not limited to customer service, account management, loan processing, or fraud detection. Collaborate extensively with the IT department to establish robust Application Programming Interface (API) connections that facilitate the retrieval of pertinent information across all domains. Such integration empowers the chatbot to provide precise responses to inquiries, irrespective of the department in question.
- ➡ **Integrated with Existing Software:** Engage in collaborative efforts with IT teams and software vendors to comprehend the compatibility requirements and technical specifications pertinent to your existing systems. By utilizing their recommendations, select integration methodologies that are congruent with your current infrastructure and security protocols. This strategic approach can ensure that the chatbot is capable of extracting data from existing systems and transmitting valuable analytics back to them. It is imperative to factor in scalability to accommodate future software enhancements and expansions.
- ➡ **Gather Analytic Data:** The information amassed from chatbot interactions yields significant insights into user preferences, frequently asked questions, and customer pain points, thereby enabling financial institutions to customize their services to more effectively address customer requirements. Through the analysis of these interactions, organizations can more accurately discern trends, thereby equipping them to anticipate user inquiries and proactively mitigate potential challenges. Moreover, this data can be leveraged to evaluate the chatbot's performance, specifically in terms of its efficacy in diminishing support costs, augmenting customer engagement, or driving sales.
- ➡ **Learn from each Interaction:** By employing methodologies such as Natural Language Processing (NLP) and sentiment analysis, chatbots can progressively enhance their understanding of user context over time. With each interaction, these bots accumulate valuable insights regarding customer preferences, inquiries, and conversational dynamics, which can subsequently be utilized to refine their algorithms and decision-making frameworks. Reinforcement learning can further facilitate the capacity of chatbots to adapt and enhance their performance in response to customer feedback.
- ➡ **Useful:** It is vital to continuously train your bot to adeptly address a variety of user inquiries concerning banking services, policies, and procedures. This may involve equipping the bot with access to an up-to-date knowledge base that includes frequently asked questions (FAQs) and pertinent financial regulations. Additionally, it is advantageous to empower the chatbot with real-time access to account information, thereby promoting personalized responses to more specific user inquiries.

3. AI Chatbots examples in Different Sectors:

‘AI Chatbots’ in Travel Destinations:

Furthermore, these Chatbots possess the capability to suggest travel destinations and facilitate the Booking of ancillary travel services such as accommodations and vehicle rentals. In instances where a customer poses a question that pertains specifically to their unique travel circumstances and lies beyond the Chatbot's functionality, the system is programmed to transfer the customer to a human representative. An illustrative example of this might include inquiries about around-the-world tickets encompassing numerous routes and stopover options, along with varying baggage allowances contingent upon the country, in conjunction with specific dietary restrictions.

Correspondingly, the chatbot is equipped to perform Sentiment Analysis, thereby discerning when the Customer's Tone has escalated to a State of Agitation. Through these mechanisms, Chatbots enhance Operational Efficiency, Diminish Expenditures, and elevate the Customer Experience.

Chatbots are also capable of being Trained to Identify specific keywords or phrases and to generate responses that are Tailored accordingly. They can leverage Rich Text Capabilities and facilitate the incorporation of Images,



Videos, and Interactive Menus. Such functionalities engender a personalized experience for the Customer, which can subsequently enhance Customer Satisfaction and foster loyalty.

‘AI Chatbots’ in Telecommunications:

In a scenario where a Customer of a Telecommunications Company raises concerns regarding diminished internet speeds or subpar call quality, the chatbot can proffer bespoke solutions predicated upon the Customer’s Account Information. This may include offering a complimentary upgrade from their existing plan or dispatching a technician to the customer’s location within a short timeframe. This individualized approach significantly amplifies Customer Satisfaction. Research indicates that 75% of customers exhibit a greater propensity to purchase from a company that acknowledges them by name, recommends products based on previous purchases, or possesses knowledge of their purchase history.

Chatbots in Airline Companies:

An Airline Corporation may implement Artificial Intelligence-powered Chatbots to manage inquiries related to Flights, including but not limited to Flight Status, Baggage Allowances, and Alterations to Reservations.

‘AI Chatbots’ in Hospital Sector:

Chatbots can be seamlessly integrated with a variety of Application Programming Interfaces (APIs) to facilitate the automation of tasks such as Scheduling Appointments in accordance with organizational availability and consumer preferences, processing monetary transactions, and retrieving relevant information. They possess the capability to disseminate reminders and notifications to clients prior to their scheduled appointments, thereby optimizing call center efficiency and mitigating the incidence of missed appointments, alongside reducing customer attrition.

AI Chatbots Substitute to ‘Customer Call Centre Services’

(An Alternate Delivery Channel)

The implementation of chatbots in Indian Commercial Banks is transforming customer service, enhancing efficiency and engagement, but not immediately replacing human agents.

Key Benefits:

- *24/7 Availability and Instant Responses:* Chatbots provide round-the-clock support, addressing routine queries like account balances, transaction history, and loan eligibility instantly.
- *Cost Efficiency:* Automating routine tasks with chatbots significantly reduces the need for extensive human intervention, leading to lower operational costs. Some estimates suggest a potential 30-45% reduction in operating expenses.
- *Enhanced Customer Experience and Personalization:* Leveraging AI, chatbots analyse customer data and offer tailored recommendations, improving customer satisfaction and loyalty.
- *Operational Efficiency:* Chatbots automate repetitive tasks, allowing human agents to focus on complex issues and increasing overall productivity.
- *Improved Fraud Detection and Security:* AI-driven chatbots monitor transactions in real-time, flag suspicious activities, and alert customers, helping prevent fraud and enhance security.
- *Streamlined Processes:* Chatbots assist with tasks like verifying customer identity, updating KYC information, and processing loan or credit card requests.

Current Adoption and Use Cases:

- ✓ As of 2025, 48% of Indian banks have deployed conversational AI in some form.
- ✓ Examples include SBI’s “SIA” and HDFC Bank’s “Eva” for query resolution and personalized services.
- ✓ ICICI Bank uses an AI engine for understanding and solving customer issues, providing instant replies.

Collaboration with Human Agents:

- While chatbots handle routine tasks, human agents remain essential for complex, sensitive, or emotionally charged customer interactions.
- Chatbots are designed to seamlessly transfer conversations to human agents when complex issues arise, providing the human agent with the context of the previous interaction.
- The future of banking customer service in India is likely to involve a collaboration between AI and human agents.

Challenges:

- *Data Privacy and Compliance:* Adhering to RBI guidelines and data protection laws like the DPDP, 2023 is crucial when dealing with sensitive financial data.
- *Integration Costs:* Implementing AI solutions requires significant investment in infrastructure and training.
- *Customer Trust:* Over-reliance on chatbots may frustrate customers who prefer human interaction.
- *Algorithmic Transparency and Bias:* Banks need to ensure they can explain how AI chatbot decisions are made and actively mitigate algorithmic bias to ensure fair outcomes.
- *Integration Complexity:* Integrating new AI solutions with existing legacy banking systems can be a primary challenge.

4. Implementation Tips:

Identify the primary purpose and objectives of the chatbot. In the scenarios delineated above, a medium-sized Bank necessitates a Chatbot dedicated to customer service and sales support. Its primary objective is to enable the scalability of its call center in tandem with business growth. It seeks to minimize call waiting times and enhance the customer experience. Additionally, it aims to alleviate the workload of call center personnel, allowing them to focus on more complex inquiries, increase the resolution rate of customer service calls, and provide round-the-clock support. The investment in the chatbot should also yield reductions in operational expenditures (OPEX) and capital expenditures (CAPEX), thereby enhancing return on investment (ROI). When strategically developed in this manner, chatbots can effectively manage approximately 68.9% of customer inquiries from initiation to resolution.

Create workflows and protocols. Consult with team members to identify which tasks would be straightforward for customers to accomplish via the Chatbot and request a detailed step-by-step guide for each task. Document any deficiencies or areas where enhancements are necessary. Prioritize the issues and tasks that generate the highest volume of inquiries. Develop workflows and protocols that delineate when the chatbot should escalate a case to a human customer service representative or sales agent. Ensure that the chatbot conveys all pertinent details and data from the customer interaction to a human agent and the customer relationship management (CRM) system.

5. Integration of Chatbots:

Through the Integration of Chatbots into their Digital Platforms or messaging Applications, Enterprises such as Private Dental Practices, Medical Clinics, Hair Salons, and Physiotherapy Centers can empower customers to engage in Self-service while efficiently managing appointment scheduling at a considerable Volume and Pace.

☀ Ensure access to essential platform functionalities. When evaluating chatbot features for customer service applications, it is imperative to select an artificial intelligence chatbot endowed with Natural Language Processing (NLP) and machine learning capabilities, enabling it to learn and improve with each interaction. Sentiment analysis capabilities would also prove beneficial. If the business operates on an international scale, the inclusion of multi-lingual options should be a critical consideration. It is essential to select a chatbot that integrates effectively with CRM and other operational systems.

● Instruct the automated conversational agent to proficiently manage complex inquiries that encompass multiple workflows. This may involve the process of item returns alongside the acquisition of refunds. The conversational agent should possess the capability to guide the consumer through the completion of the return documentation and the generation of shipping labels, subsequently inquiring whether the consumer prefers a refund or a credit to their account, and facilitate the necessary procedural steps.

Consider a comprehensive Omnichannel approach. Research indicates that organizations can sustain approximately 89% of their customer base by implementing an omnichannel strategy; thus, it is imperative to select a chatbot that is capable of being deployed across various platforms, such as WhatsApp, Messenger, websites, and applications.

To Sum Up:

Today, breakthrough innovations reshape how financial institutions serve customers. These emerging technologies promise to transform simple query-response systems into intelligent financial advisors that understand context, anticipate needs, and deliver personalized experiences at scale. Now there's no need in expensive call centers with lengthy hold times. AI chatbots for banking can handle a



significant portion of inquiries, from basic account balance checks to resolving simple issues. This not only frees up human representatives for more complex concerns but also reduces overall help costs for banks.

References:

a. Cost Management in the Banking Industry-The Management Accountant-January, 2021.

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c. AI Chatbots Substitute to 'Customer Call Centre Services'-(An Alternate Delivery Channel)-Octal IT Solutions.

Annexure I

Cost-Benefit-Analysis of Call Centers and Chatbots in Indian Banks

A cost-benefit analysis (CBA) comparing call centers and chatbots in the Indian banking sector requires a comprehensive approach that assesses quantifiable financial metrics alongside qualitative factors unique to the Indian market. The optimal solution is not a simple choice between one or the other, but rather a hybrid model that leverages the strengths of both.

Cost-benefit analysis framework:

1. Calculate the costs: This step requires banks to establish a clear baseline of current expenses for their traditional call center operations.

Call center costs:

- ✱ **Infrastructure and overhead:** Rent, utilities, and technology for the physical call center.
- ✱ **Personnel costs:** Salaries, benefits, and training for a large team of human agents.
- ✱ **Operational costs:** Telephony systems, call routing software, and quality assurance programs.
- ✱ **Scaling costs:** Costs associated with adding staff and infrastructure during peak demand periods.

Chatbot costs:

Development and implementation: Significant initial investment for platform licensing, programming, and integration with existing banking systems (e.g., CRM).

- ✱ **Integration costs:** Expenses to connect the chatbot with a bank's core banking, CRM, and other customer data systems.
- ✱ **Maintenance and optimization:** Ongoing costs for regular updates, performance monitoring, and retraining the AI to improve accuracy.
- ✱ **Data costs:** Data preparation and ensuring compliance with Indian data privacy laws.

2. Quantify the benefits: This involves measuring the tangible and intangible benefits of both a call center and a chatbot.

Call center benefits:

- ✱ **Complex query resolution:** Human agents are superior

at handling complex, sensitive, or emotional issues that require critical thinking and empathy.

- ✱ **Customer trust and loyalty:** Human interaction builds trust, which is crucial for high-stakes banking issues like loan applications, fraud resolution, and financial planning.
- ✱ **Cross-selling opportunities:** A skilled agent can identify and act on cross-selling or upselling opportunities more effectively during a personalized conversation.

Chatbot benefits:

- ✱ **Operational savings:** Chatbots can significantly lower operational expenses by automating routine queries, allowing banks to reduce the size of their human agent workforce. Some reports project savings of up to 30%.
- ✱ **24/7 availability:** Chatbots provide instant customer support around the clock, improving convenience and accessibility for customers across different time zones.
- ✱ **Enhanced scalability:** Chatbots can handle a large volume of simultaneous queries without increasing staffing costs, making them ideal for high-traffic periods.
- ✱ **Faster resolution times:** Chatbots offer immediate responses, eliminating the long wait times often associated with call centers.
- ✱ **Data insights:** Chatbots can analyse customer interactions to provide valuable data on preferences, behaviour, and common issues, which can inform marketing and strategy.

3. Analyse the challenges and risks: A thorough CBA must also account for potential drawbacks and risks associated with each model, which are especially relevant in the Indian context.

Call center challenges:

- ✱ **High operational costs:** Manpower, infrastructure, and training make call centers an expensive model to run and scale.



✱ **Long wait times:** High call volumes can lead to frustrating wait times, negatively impacting customer satisfaction.

✱ **Inconsistent service:** The quality of service can vary between human agents, leading to inconsistency in responses.

✱ **Language barriers:** While agents often speak multiple languages, Indian banks must serve a linguistically diverse population, which can present a challenge for scaling support.

Chatbot challenges: Limited emotional intelligence: Chatbots struggle with emotional cues, tone, and sarcasm, which can lead to customer frustration during sensitive interactions.

✱ **Failure with complex queries:** If a chatbot cannot resolve a complex or unusual issue, it can fail to provide a seamless handover to a human, forcing the customer to repeat information.

✱ **Misinterpretation of language:** While AI is advancing, chatbots can still misinterpret queries due to regional dialects, slang, and spelling errors, especially in a multilingual country like India.

✱ **Data privacy concerns:** Handling sensitive financial data via AI raises significant concerns about compliance with Indian data protection laws and maintaining customer trust.

✱ **High initial investment:** The upfront cost of developing a custom, sophisticated chatbot can be significant.

A phased approach for Indian banks: Instead of a complete switch, Indian banks should implement a hybrid model in phases to maximize benefits while managing risk.

Phase 1: Implement a basic chatbot for high-frequency, low-complexity queries.

✿ Focus: Tasks like checking account balances, providing OTPs, tracking transactions, and answering basic FAQs.

✿ KPIs: Track call deflection rates, average handling time for automated tasks, and customer satisfaction scores for simple queries.

✿ Outcome: Reduce operational costs by freeing up human agents for more complex issues, providing immediate support, and analysing initial customer data.

Phase 2: Integrate the chatbot with core banking systems.

✿ Focus: Enhance capabilities to securely assist with sensitive tasks such as password resets and account activation.

✿ KPIs: Monitor the success rate of automated sensitive tasks, escalation rates, and security compliance metrics.

✿ Outcome: Increase operational efficiency and empower customers with self-service options, but with tight security controls.

Phase 3: Introduce a seamless human-handover process.

✿ Focus: Ensure a smooth transition from the chatbot to a human agent, with the agent receiving full context of the conversation.

✿ KPIs: Track customer satisfaction for escalated cases, time taken for handover, and the number of times customers had to repeat information.

✿ Outcome: Improve customer experience by combining the speed of the chatbot with the empathy of a human agent.

Phase 4: Enhance AI capabilities with advanced features.

✿ Focus: Deploy sentiment analysis to detect customer frustration, add multi-language support for regional customers, and offer personalized product recommendations.

✿ KPIs: Measure customer satisfaction with multi-language support and monitor the impact of personalized recommendations on cross-selling revenue.

✿ Outcome: Deepen customer engagement and provide a more localized, empathetic experience, which is crucial for retaining a diverse Indian customer base.

Annexure II

Audit Parameters of Call Centres of Banks

An audit of an Indian commercial bank's call center involves a multi-faceted assessment covering compliance, information technology, operational efficiency, and customer experience. Key parameters are guided by regulations from the Reserve Bank of India (RBI) and other statutory provisions.

Compliance parameters:

- ✱ **RBI and regulatory adherence:** Review and test adherence to all applicable statutory provisions, rules, and regulations set by the Reserve Bank of India (RBI).
- ✱ **Customer privacy and data protection:** Ensure the call center safeguards customer information and adheres to relevant data protection laws, such as encrypting data during storage and transfer.
- ✱ **Payment Card Industry Data Security Standard (PCI-DSS):** Verify that the call center prevents the recording of sensitive payment data like CVV numbers and secures cardholder data during transactions.
- ✱ **Telemarketing guidelines:**
 - ❁ Confirm compliance with Department of Telecommunications (DoT) and Telecom Regulatory Authority of India (TRAI) regulations regarding telemarketing calls.
 - ❁ Verify adherence to the National Do Not Call (NDNC) Registry and Unsolicited Commercial Communication (UCC) regulations.
- ✱ **Call recording and consent:** Assess whether proper consent procedures are followed for recording calls and that recordings are stored securely, with restricted access.
- ✱ **Remote work policy:** If applicable, audit remote agents' workspaces to ensure a secure and private environment for maintaining customer confidentiality.

Information technology (IT) and security parameters:

- ✱ **IT infrastructure and network security:** Assess the network's security, including firewalls and access

controls, to prevent unauthorized access to the system and data.

- ✱ **Vulnerability and penetration testing:** Conduct regular vulnerability assessments and penetration tests (VAPT) on all critical IT assets connected to the call center to identify and rectify security loopholes.
- ✱ **Data security and encryption:** Evaluate whether sensitive information, including customer data, is encrypted, both when at rest (storage) and in transit (transmission).
- ✱ **System and access controls:** Review user access controls and permissions to ensure that employees can only access the data and systems necessary for their roles.
- ✱ **Audit logs:** Check the maintenance, monitoring, and analysis of audit logs to identify potential security incidents or breaches.
- ✱ **Data backup and restoration:** Test the call center's data backup and restoration procedures to ensure business continuity in case of data loss.

Operational efficiency parameters:

- ✱ **Agent performance metrics:** Evaluate key performance indicators (KPIs) such as:
 - ❁ First Call Resolution (FCR)
 - ❁ Average Handling Time (AHT)
 - ❁ Call adherence and schedule management
- ✱ **Quality assurance (QA):** Review the call monitoring and quality assurance process using structured scorecards to assess call quality, script adherence, and problem-solving effectiveness.
- ✱ **Agent training:** Assess the effectiveness of training programs covering product knowledge, communication skills, system usage, and compliance protocols.
- ✱ **Issue resolution:** Audit the process for handling customer complaints, including issue logging, escalation procedures, and resolution tracking.



- ✱ **Resource management:** Evaluate the call center's staffing levels, scheduling efficiency, and ability to handle call volume fluctuations.

Customer experience parameters:

- ✱ **Customer Satisfaction (CSAT):** Analyse customer feedback and satisfaction scores obtained through post-call surveys.
- ✱ **Net Promoter Score (NPS):** Review NPS data to

measure customer loyalty and their likelihood to recommend the bank's services.

- ✱ **Call audits and soft skills:** Assess the agent's soft skills during calls, such as empathy, communication clarity, and professionalism.
- ✱ **Complaint analysis:** Review recorded complaints to identify recurring issues, analyse root causes, and implement corrective measures.



Chapter 18

Advertisement Costs



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Banks can Optimize Advertising Costs using Data-driven Decision-making. This Chapter explains:

- ✱ *Co-lending Models and Shared Marketing.*
- ✱ *Comparison of Direct Selling Agents Costs vs. Advertisement Costs.*
- ✱ *Role of CMAs in Analysing Advertisement ROI.*

Information was Collected from Secondary Sources and Bank Annual Reports.

Advertisement Costs

Advertisement Costs

Indian banks can control advertising costs by shifting from traditional channels to digital marketing, leveraging data analytics for targeted campaigns, collaborating with other banks or FinTech's for co-branded promotions, adopting a customer-centric digital approach, and optimizing advertisements spend by tracking key performance indicators (KPIs) and ROI to ensure campaigns are effective and budget-friendly.

Operating Expenses: Advertisement and Publicity (12 Public Sector Banks for the FY 2021 to 2025)

(₹ in Thousands)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	238,41,25	316,15,73	323,38,66	532,32,39	509,20,24
Punjab National Bank	55,79,10	83,75,31	98,19,68	93,49,05	123,81,43
Bank of Baroda	87,08,56	175,47,46	193,31,36	178,58,36	226,13,84
Canara Bank	42,13,58	81,03,69	129,17,39	134,86,36	143,49,21
Union Bank of India	31,15,24	61,37,43	117,04,45	142,16,51	123,84,12
Bank of India	7,54,39	16,60,03	28,05,29	41,01,56	39,55,23
Indian Bank	13,55,22	21,71,34	27,72,03	30,62,68	44,20,07
Bank of Maharashtra	39,28,74	29,84,02	33,39,66	33,57,14	48,39,78
Central Bank of India	4,78,64	13,17,95	17,40,27	24,84,46	38,92,37
UCO Bank	4,11,24	6,31,52	8,63,94	9,22,33	13,98,68
Indian Overseas Bank	33,97	42,02	1,40,17	5,08,06	10,42,05
Punjab & Sind Bank	2,71,79	3,87,16	7,61,81	7,43,42	11,46,28

(Source: Annual Reports)

Data-Driven Marketing Strategies:

- ✳ **Targeted Campaigns:** Banks can use data analytics to understand customer behaviour and needs, allowing for the creation of highly targeted and personalized marketing campaigns that resonate with specific segments, thereby improving ROI.
- ✳ **Customer Segmentation:** Analysing customer data helps identify high-value segments, enabling banks to allocate their advertising budget more effectively and avoid wasteful spending on broad, untargeted campaigns.

Collaborative and Integrated Approaches:

- ✳ **Co-Branding and Partnerships:** Banks can collaborate with other banks, FinTech's, or relevant partners to share advertising costs and reach a wider audience through joint campaigns.
- ✳ **Omnichannel Strategy:** Employing a mix of online

and offline channels in an omnichannel strategy can help banks maximize their advertising efforts and ensure a consistent brand message across all customer touchpoints.

Cost Optimization and Measurement:

- ✳ **Return on Investment (ROI) Tracking:** Banks must closely monitor the performance of their advertising campaigns by tracking key metrics and calculating the ROI to identify which channels and messages are most effective.
- ✳ **Lean Marketing Principles:** Adopting lean accounting principles can help banks reduce waste and improve efficiency in their marketing processes, focusing on delivering value with minimal resources.

Customer-Centric Approach:

- ✳ **Digital Experiences:** With a growing expectation for high-quality digital experiences, banks should



focus on delivering excellent online and mobile banking services, which can be a more cost-effective way to attract and retain customers than traditional advertising.

- ✳ **Informative Content:** Investing in content marketing, such as blogs and educational resources, can attract customers by providing valuable information, which is often a more sustainable approach than relying solely on paid advertisements.

Digital Transformation & Technology Adoption:

- ✳ **Automated Workflows:** Implementing automation in marketing workflows can drive efficiency and productivity, minimizing manual efforts and associated costs.

a) Digital Transformation and Technology:

Indian banks control advertisement costs by using digital transformation and technology adoption to enable data-driven marketing, and automation, which reduce the need for broad, expensive ad buys. Technologies like AI-powered analytics help identify effective channels, while chatbots and mobile banking apps reduce costs by handling customer service digitally. By shifting from traditional outreach to more efficient digital channels, banks can lower operational expenses and improve the cost-effectiveness of their marketing efforts, leading to better profitability and enhanced customer reach.

Digital Transformation-Advertisement Costs:

- ✳ **Data-Driven Marketing & Targeted Campaigns:** Banks can leverage data analytics to understand customer behaviour and preferences more deeply. This allows them to create highly targeted for specific customer segments, moving away from traditional broad-reach advertising that can be inefficient.
- ✳ **Automation of Customer Service:** AI-powered chatbots and automated digital platforms can handle customer inquiries and provide information, reducing the need for large customer support teams and freeing up resources that were previously used for extensive advertising campaigns.
- ✳ **Personalized Customer Experiences:** Digital transformation helps banks offer personalized experiences through mobile banking apps and online portals. This level of customization can

increase customer engagement and loyalty, achieving marketing goals more efficiently than general advertisements.

- ✳ **Shift to Digital Channels:** The increasing adoption of digital payment systems like UPI and the proliferation of mobile banking apps shift customer interaction to digital channels, allowing banks to communicate with customers through these cost-effective platforms rather than more expensive traditional advertising methods.

- ✳ **Enhanced Efficiency:** By streamlining internal processes and replacing older systems with more efficient technologies, banks can lower overall operating expenses. This increased cost-effectiveness can free up budget that was previously allocated to more traditional and less measurable advertising efforts.

- ✳ **Improved Analytics for ROI:** Technology enables banks to track the return on investment (ROI) of their marketing campaigns more accurately. This data allows them to allocate their advertising budget more effectively to the channels and campaigns that generate the best results, reducing wastage on ineffective ads.

b) Customer Segmentation:

Indian banks can control advertising costs by employing data-driven marketing strategies such as customer segmentation, predictive analytics for prospect identification, performance tracking and attribution models, and dynamic budget allocation. These strategies help banks target the 'right audiences' on the most effective channels, optimize campaign spend in real-time, and accurately measure ROI, ultimately leading to improved customer relationships and enhanced profitability.

'Customer Segmentation' and Targeting for Cost Control:

- ✳ **Deep Customer Understanding:** Utilize data to segment customers based on demographics, behaviour, and needs to identify the most valuable prospects.
- ✳ **Personalized Messaging:** Develop tailored advertisements and offers that resonate with specific segments, improving campaign relevance and reducing wasted spend.
- ✳ **Channel Optimization:** Analyse which channels (e.g.,



social media, email, rate comparison websites) are most effective for reaching specific customer segments and allocate budgets accordingly.

Predictive Analytics & Prospect Identification:

- ★ **Identify High-Potential Leads:** Employ predictive modelling to identify potential customers who are most likely to convert, focusing marketing efforts on those with the highest conversion potential.
- ★ **Lead Nurturing:** Use marketing automation to nurture prospects who are not yet ready to commit, keeping your bank top-of-mind without immediate ad spend.

Performance Tracking and Attribution:

- ★ **Real-time Monitoring:** Track campaign performance in real-time to identify what is working and what isn't.
- ★ **Accurate Attribution Models:** Implement sophisticated models to understand which marketing efforts are truly driving desired results, allowing for informed budget allocation and optimization.
- ★ **ROI Measurement:** Clearly measure the return on investment for various campaigns to justify continued spending and identify areas for improvement.

Dynamic Budget Allocation and Optimization:

- ★ **Flexible Budgeting:** Use real-time data to dynamically adjust advertising budgets, shifting funds to campaigns and channels that are performing best.
- ★ **A/B Testing:** Continuously test different ad creatives, messaging, and targeting strategies to identify the most cost-effective approaches.

Leveraging Technology:

- ★ **Marketing Automation:** Utilize tools for automated email campaigns, lead nurturing, and social media posting to improve efficiency and consistency.
- ★ **Data Analytics Platforms:** Implement platforms that centralize data and provide advanced analytics to facilitate data-driven decision-making.

By integrating these data-driven approaches, Indian banks can move away from broad, costly campaigns toward highly targeted, efficient marketing efforts, leading to better

customer acquisition, improved customer relationships, and a stronger bottom line.

c) Collaborative Approach:

Indian banks can control advertisement costs by adopting collaborative approaches, such as joint campaigns and resource sharing, and integrated approaches like data-driven strategies, customer segmentation, and cross-functional marketing teams. By sharing the expenses of large campaigns, banks can reduce individual costs, while integrating data analysis into marketing helps to target the right audience, minimize wasted spending, and optimize overall marketing efforts for better ROI.

Joint Campaigns:

- ★ Banks can collaborate on large-scale awareness campaigns for common products (e.g., digital banking adoption, financial literacy), sharing the costs and benefits, thereby reducing individual advertising expenditure.

Resource and Technology Sharing:

- ★ Banks can jointly invest in and share expensive advertising technologies or platforms, reducing the entry barrier and ongoing costs associated with high-tech marketing tools.
- ★ Industry-Wide Initiatives like Partnering with industry bodies or other banks on specific campaigns can provide a broader reach at a lower per-bank cost, especially for public awareness initiatives.

Integrated Approaches:

- ★ **Data-Driven Marketing:** Implementing advanced analytics to understand customer behaviour, preferences, and lifecycle stages allows for more precise targeting. This ensures that advertising budgets are spent on the channels and messages most likely to convert, reducing waste on non-responsive segments.
- ★ **Customer Segmentation and Personalization:** Instead of broad, expensive campaigns, banks can use data to segment customers and create personalized marketing messages. This improves relevance and effectiveness, leading to higher ROI on advertising spend.
- ★ **Cross-Functional Marketing Teams:** Integrating marketing with product development, IT, and



customer service departments ensures that advertising aligns with product offerings and customer needs. This holistic approach prevents fragmented messaging and ensures that campaigns are relevant and impactful, reducing the need for corrective or redundant advertising.

- ★ **Digital Transformation and Automation:** Utilizing digital marketing channels and marketing automation tools can significantly lower costs compared to

traditional advertising. AI and automated platforms can help streamline campaign management, content creation, and performance tracking, increasing efficiency.

- ★ **Performance-Based Advertising:** Shifting from upfront ad buys to performance-based models where payment is linked to desired outcomes (e.g., customer acquisition, leads) can make advertising spend more predictable and cost-effective.

Co-Lending Model: Marketing Costs

Co-lending reduces the marketing costs for commercial banks in India by allowing them to leverage the wider customer outreach and customer acquisition capabilities of NBFCs and FinTech firms. This collaborative model means banks can access new, often underserved, customer segments without incurring the high upfront costs associated with traditional customer acquisition and marketing efforts, making it a more cost-effective way to expand their reach.

How Co-Lending Lowers Marketing Costs for Banks?

- **Shared Customer Outreach:** NBFCs and FinTechs often have established networks and better reach, especially in rural or underserved areas. By partnering, banks can tap into these existing customer bases, effectively extending their market presence without the need for significant marketing investments.
- **Reduced Customer Acquisition Costs:** The digital platforms and customer acquisition models of FinTechs significantly reduce the cost of bringing new customers into the fold. Banks benefit from these reduced customer acquisition costs, which they can then share with their partners.
- **Access to Niche Segments:** Co-lending allows banks to serve specific segments, such as MSMEs or individuals with limited credit history, which might be difficult and expensive to reach through traditional methods. The partners' specialized knowledge and customer base in these segments reduce the bank's need for targeted marketing to these groups.
- **Leveraging Existing Platforms:** Digital platforms used in co-lending models offer a streamlined process for customer engagement, from loan origination to servicing. This integration reduces manual efforts and operational costs, which can be seen as an indirect reduction in marketing and operational overheads.

d) Customer Centric Approach:

Indian banks can control advertisement costs by focusing on a customer-centric approach through personalized digital experiences, data-driven marketing, and leveraging customer referrals. By understanding customer needs and providing tailored services, banks can improve customer loyalty and retention, leading to more efficient acquisition and reducing the need for costly broad-stroke advertising campaigns. Implementing real-time budget allocation based on channel performance and using educational content can further optimize ad spend and reduce customer acquisition costs.

Personalization and Data Analytics:

- ★ **Personalized Offers:** Tailor product recommendations and offers based on individual customer data and needs, increasing relevance and reducing wasted ad spend on irrelevant offers.

- ★ **Data-Driven Targeting:** Use analytics to identify high-value customer segments and target them with personalized digital ads and social media campaigns, ensuring marketing efforts reach the most receptive audience.

Customer Relationships and Referrals:

- ★ **Build Strong Relationships:** Focus on deeper connections by providing excellent customer service and consistent, valuable communication, which fosters loyalty and brand trust, reducing the churn that drives up acquisition costs.
- ★ **Leverage Referrals:** Implement referral programs to incentivize existing, satisfied customers to bring in new clients, which is a cost-effective acquisition channel.

Digital and Content Strategies:

- ✱ **Optimize Digital Channels:** Monitor the cost per acquisition (CAC) for different digital channels in real-time and shift budgets to the most efficient ones to maximize return on investment.
- ✱ **Educational Content:** Engage potential customers by providing valuable educational content, positioning the bank as a trusted financial partner and attracting customers organically rather than through expensive ads.

Real-time Optimization:

- ✱ **Track and Adapt:** Use dashboards to track CAC by channel and adjust campaigns in real-time to shift spending from high-cost to low-cost tactics, improving efficiency.
- ✱ **Scale What Works:** Start with a few customer-centric strategies, measure their impact on acquisition cost, and then scale the most effective ones to drive long-term savings and growth.

e) 'Direct Selling Agents-DSA' Costs Vs. Advertisement Costs:

Indian banks can control advertising costs by periodically comparing the marketing expenses of Direct Selling Agents (DSAs) against their total advertisement expenses, ensuring that DSA-generated sales are cost-effective compared to broader ad campaigns. This strategic comparison helps evaluate DSA performance, justify their commissions, and optimize overall marketing spend by identifying inefficient channels and focusing resources on high-performing strategies.

Key Aspects of the Comparison:

- ✱ **DSA Costs vs. Advertisement Costs:** This comparison involves analysing DSA commissions and other direct selling-related expenses against the costs incurred for traditional advertising and publicity.
- ✱ **Performance Evaluation:** Banks can use this data to assess the effectiveness of their DSA network, ensuring that the commissions paid are justified by the business they generate.
- ✱ **Cost Control:** Regular comparison helps in controlling advertisement costs by identifying areas where

spending might be inefficient, allowing for better allocation of resources.

- ✱ **Strategic Decision-Making:** The insights gained can inform decisions about the scale of DSA engagement, the appropriate commission structures, and the balance between direct sales and mass advertising.

Why this Comparison is Crucial?

- ✱ **ROI of DSAs:** Banks need to ensure a positive return on investment (ROI) from their DSA partnerships. Comparing DSA costs to advertising costs helps determine if DSAs are a more efficient way to acquire customers than other marketing methods.
- ✱ **Budget Optimization:** By understanding the unit economics of both DSA sales and traditional ads, banks can optimize their marketing budgets for maximum impact.
- ✱ **Accountability and Performance Monitoring:** Regular reviews of DSA performance allow banks to hold their agents accountable for achieving business targets and to adjust engagement strategies as needed.

f) Advertisements through 'Alternate Delivery Channels'-In House Channels:

For Indian banks, displaying advertisements on ATM screens, Cash Deposit Machines (CDMs), through their internet and mobile banking platforms, and using print media are effective strategies to reach customers, with digital channels offering targeted advertising opportunities to reduce costs. ATMs and CDMs provide a captive audience for on-screen ads and receipt couponing, while internet and mobile platforms allow for personalized promotions and broad accessibility.

Digital Channels:

- ✱ **ATM Screens:** The screens at ATMs are considered highly effective, as customers cannot ignore advertisements displayed during transaction processes. This allows for 24/7 brand promotion.
- ✱ **CDM Screens:** Similar to ATMs, CDM screens offer a prime opportunity to display advertisements and promote banking products or offers to customers.
- ✱ **Internet Banking & Mobile Banking:** These platforms offer a broad reach, allowing banks to promote services



and products digitally. They provide convenient access for customers to manage finances, making it an effective channel for targeted advertising.

Print Media:

- ✳ **ATM Receipts:** Printing logos or special offers on the back of ATM receipts is a form of “back of receipt” advertising, enabling promotions of specific businesses and limited-time deals.
- ✳ **Bank Branches:** Display boards and screens within bank branches can showcase promotions and information.

Benefits of these Channels:

- ✳ **Targeted Reach:** Digital platforms like mobile and internet banking allow for targeted advertising, ensuring messages reach the right customers more efficiently.
- ✳ **Cost-Effectiveness:** By leveraging digital and in-house channels, banks can reduce advertising costs compared to traditional mass media, while still reaching a significant customer base.
- ✳ **Customer Engagement:** ATMs and CDMs provide a moment of engagement with customers during transactions, making them receptive to advertisements.

g) SMS / Emails of Bank Transactions along with ‘Product Advertisements’:

Banks are using transaction-based SMS and emails to advertise products like deposits and advances to their customers. This strategy effectively targets existing customers with relevant offers, reducing overall advertisement costs by leveraging existing communication channels for direct, personalized marketing campaigns. This approach enhances customer engagement by delivering timely information about promotions and services directly to their mobile phones or inboxes, while also providing a cost-effective way for banks to market their products.

Benefits for Banks:

- ✳ **Cost-Effective:** Banks can acquire customers for new products with lower advertising expenditure by integrating marketing into routine customer communications.

- ✳ **Targeted Marketing:** Messages can be tailored to specific customer segments, such as high-value customers or those who have shown interest in a particular product, making ads more relevant and effective.

- ✳ **Increased Reach:** SMS and email have a high response rate and are highly effective in reaching customers, opening up opportunities for banks to engage with them directly.

- ✳ **Customer Engagement:** This method strengthens customer relationships by providing personalized and timely offers directly through channels they use daily, which can increase loyalty.

Examples of Bank Product Advertising:

- ✳ **Deposit & Advance Promotions:** Banks can send messages promoting new high-yield savings accounts, special fixed deposit rates, or loan products to customers based on their account history or profile.
- ✳ **Exclusive Offers:** Customers can receive exclusive promotional content for financial products or services, such as credit card deals, investment opportunities, or rewards programs.

Considerations for Banks:

- ✳ **Consent:** Banks must obtain clear consent from customers before sending promotional text messages to comply with regulations.
- ✳ **Opt-Out Options:** Messages should include clear opt-out instructions, allowing customers to manage their communication preferences.
- ✳ **Balance:** A balance between transactional alerts and promotional messages is crucial to avoid overwhelming customers and maintain a positive customer experience.
- ✳ **Regulatory Compliance:** Banks must adhere to strict regulations regarding marketing and privacy when sending SMS or emails.

h) Print Media Vs. Digital Media:

Banks should select their advertisement channels based on their target customer segments, and with India’s growing young population favouring social media, traditional print



media offers minimal value to this demographic, making digital platforms essential for bank advertising success.

Social media is Key for Reaching Young Indians:

- ★ **Demographic Alignment:** India has a vast youth population that relies heavily on mobile phones and social media platforms for information and engagement.
- ★ **Digital Consumption:** Younger consumers are more digitally native and spend significant time on social media, making these platforms a direct route to their attention.
- ★ **Targeted Reach:** Social media platforms allow banks to display targeted advertisements to specific demographic groups, ensuring their message reaches relevant potential customers.
- ★ **Brand Building:** Consistent exposure to brand messages on social media helps build awareness and familiarity with the bank's offerings among the target audience.
- ★ **Engagement:** Social media fosters a two-way communication channel, allowing banks to engage with customers and build relationships effectively.

Print Media is Less Effective:

- ★ **Minimal Reach:** The younger generation consumes less traditional print media, leading to minimal value and a low return on investment for banks advertising in newspapers and magazines to this demographic.
- ★ **Shifting Habits:** Consumer behaviour has changed significantly, with digital platforms replacing older media forms for information consumption and entertainment.

Importance of Customer Segmentation:

- ★ **Effective Resource Allocation:** By segmenting their audience and understanding their media habits, banks can allocate their advertising budget more efficiently and effectively, ensuring their message reaches the most receptive audience.
- ★ **Tailored Messaging:** Choosing the right channel allows banks to deliver a message that resonates with the preferences and behaviours of their target

demographic, rather than using a one-size-fits-all approach.

While print media still has a place for certain demographics, banks must prioritize social media to effectively connect with India's growing young population and achieve their advertising goals.

i) Gated Communities:

Advertising in gated communities does offer potential benefits for commercial banks, such as high-quality exposure to a targeted, affluent customer base and the ability to create brand awareness through consistent messaging across multiple platforms within the community, leading to a positive return on investment. While the cost-effectiveness of gated community advertising is a key advantage, its success depends on selecting the right community, the specific marketing objectives, and an integrated approach that includes a mix of digital and physical tactics.

Cost-Effective Targeting:

- ★ **High-Affinity Audience:** Gated communities often house a demographic with higher-than-average income and purchasing power, representing a valuable target market for many banking products and services.
- ★ **Focused Reach:** Advertising within these communities allows banks to direct their marketing efforts specifically at residents, potentially reducing wasted advertising spend compared to broader campaigns.

Enhanced Brand Awareness:

- ★ **Increased Recall:** Consistent exposure to advertisements in high-traffic areas within a gated community, such as clubhouses, lifts, and open spaces, can significantly increase brand recall among residents.
- ★ **Brand Image Building:** Repeated exposure to the same creative elements across different channels within the community helps build a strong and consistent brand image.

Strategic Advantages for Banks:

- ★ **Integrated Campaigns:** By using a mix of digital displays (DOOH) and other marketing tactics within the community, banks can create integrated campaigns



that deliver consistent messages, reinforcing the brand and reducing creative costs.

- ★ **Incentives for Residents:** Exclusive offers, discounts, or product launches tailored to residents of a gated community can generate significant interest and engagement, foster goodwill and driving customer loyalty.
- ★ **Measurable ROI:** Banks can leverage digital marketing tools to monitor the success and return on investment of their campaigns, allowing for more effective future campaign planning.

Considerations for Implementation:

- ★ **Community Selection:** The effectiveness of this strategy depends on choosing the right gated community that aligns with the bank's target customer profile.
- ★ **Digital and Physical Integration:** A combination of digital signage and other physical presence within the community, such as flyers or events, can create a more impactful and memorable campaign.

j) Rural Areas:

Traditional Media like 'Puppet Shows' and 'Burrakatha', Short Films can be very effective for banking product dissemination in rural areas due to their cultural resonance and high reach, especially where electronic media penetration is low. However, the notion that they are better than electronic media is debatable, as modern approaches such as radio, short films on mobile phones, and even agent-led banking (like BANKIT agents) offer broader and more consistent communication. A balanced approach combining traditional and new media often yields the best results.

Why Traditional Media Works?

- ★ **Cultural Relevance:** Traditional performances are deeply ingrained in the cultural fabric of rural communities, fostering trust and making messages more persuasive.

- ★ **High Engagement:** These methods capture attention effectively in a way that often surpasses the passive consumption of modern media, leading to better retention of information.

- ★ **Reach in Low-Penetration Areas:** In villages where access to TV and internet is limited, traditional media provides a vital channel to connect with the population.

Electronic Media is Also Important:

- ★ **Growing Reach:** While penetration is still incomplete, the expansion of electronic media, particularly mobile phones, offers increasing potential for reaching rural populations.
- ★ **Diverse Content:** Electronic media allows for a wider variety of content formats, including informative videos and interactive platforms, to explain complex financial products.
- ★ **Agent-Led Banking:** Platforms like BANKIT and similar models leverage local agents to bridge the gap between modern financial services and the rural population.

Combined Strategy is Best:

- ★ **Synergistic Effect:** Banks often find success by integrating traditional media with electronic tools to create a comprehensive marketing campaign.
- ★ **Flexibility:** A hybrid approach allows for different strategies based on the specific rural community and product.
- ★ **Building Trust:** Both traditional performances and local agents work to build trust, a critical component for financial literacy and the adoption of banking products in rural areas.

Therefore, while traditional media remains a powerful tool, it is not necessarily the sole best method. An integrated strategy that incorporates both traditional and electronic approaches, tailored to the specific context, is most likely to be successful in disseminating banking products to rural populations.

FM Radio: Cheapest & Cost-Effective in Semi-Urban/Rural Areas

Using FM Radio for bank product advertising is a cost-effective and effective channel, particularly in semi-urban and rural areas due to its wide reach, ability to build brand awareness, and ability to target specific demographics with targeted ads. In these areas, where internet penetration might be lower, radio remains a dominant medium, making it an ideal tool for banks to promote their services and products to a broad audience.

Benefits of FM Radio Advertising for Banks:

- *Cost-Effectiveness:* Radio advertising offers a lower cost per contact compared to many other media, making it an economical choice for banks targeting specific geographic areas.
- *Wide Reach:* FM radio stations have a broad listener base, which is crucial for reaching a large audience in semi-urban and rural settings.
- *Selective Targeting:* Radio allows for targeting specific demographics and local communities by choosing the right stations and time slots.
- *Brand Awareness:* Consistent exposure through radio ads helps to build and maintain brand awareness for banks among potential customers in these regions.
- *"Anywhere, Anytime" Medium:* Listeners can tune in while working, driving, or at home, allowing for constant and consistent brand reinforcement.
- *Local Relevance:* Radio advertising can be tailored to local needs, events, and languages, increasing its relevance and effectiveness in different communities.
- *Complementary to Other Media:* Radio ads can work in conjunction with other marketing channels to create a more comprehensive campaign.

k) Advertisement Expenditure is Not a Routine Expenditure-It is a Purpose Oriented:

Banks should not incur advertisement costs routinely without demonstrating value addition like increased business, customer base, or profits is a valid financial and strategic principle. This approach aligns with basic business rationality, where expenditures must generate a return on investment, preventing waste on activities that do not contribute to the bank's growth or profitability. Effective bank advertising should focus on offering a unique selling proposition (USP) and highlighting benefits to customers, rather than just promoting products, to ensure a positive impact on the bank's performance.

Why this is a Correct Approach?

- ★ **Economic Rationality:** Businesses, including banks, are expected to make decisions that maximize their profits and shareholder value. Advertising expenses are investments, and like any investment, they should ideally yield tangible benefits.
- ★ **Value-Driven Decisions:** Focusing on value addition ensures that advertising campaigns are not just a cost but a strategic tool for achieving specific goals.

★ **Measuring ROI:** A value-based approach necessitates measuring the return on investment (ROI) for advertising. This allows for better allocation of resources to the most effective campaigns.

★ **Competitive Advantage:** Differentiating a bank through unique selling propositions in advertising can create a competitive edge.

Ensure value addition in bank advertising:

★ **Define Clear Objectives:** Banks should set specific, measurable goals for their advertising campaigns, such as increasing market share, attracting a specific customer segment, or launching a new product.

★ **Targeted Campaigns:** Instead of broad, routine campaigns, advertising should target specific customer groups with tailored messages that resonate with their needs and preferences.

Focus on Benefits, Not Just Products: Highlight the advantages and solutions banks offer to customers, rather than just listing products and services.

★ **Leverage Digital Analytics:** Use digital advertising



platforms that provide detailed analytics to track performance, measure ROI, and make data-driven adjustments to campaigns.

- ★ **Integrated Marketing:** Integrate advertising with other marketing strategies, such as content marketing and relationship-building activities, to create a holistic approach to customer engagement.

I) Advertisement Research & Policy Design:

There is significant potential to reduce banking sector advertisement costs through strategic media selection and comprehensive advertising policies, leading to cost savings and improved bank benefits. Banks can achieve this by leveraging advanced research to understand customer behaviour and market trends, especially through digital and social media, to allocate ad spend more efficiently. Developing specific advertising policies that emphasize unique selling propositions (USPs), focusing on product benefits rather than just features, and aligning marketing with overall business goals also contribute to greater effectiveness and cost control.

Strategies for Cost Control:

Data-Driven Media Selection:

- ★ **Digital and Social Media Analytics:** Banks can mine social media and online forums for rich customer data to understand sentiment, trends, and preferences, enabling them to select media channels that yield better ROI.
- ★ **AI-Powered Insights:** Artificial intelligence can analyse vast amounts of online data to identify optimal posting times, compelling subject lines, and content likely to engage customers, leading to more efficient campaigns.

Strategic Advertising Policies:

- ★ **Focus on Unique Selling Propositions (USPs):** Instead of simply promoting products, policies should emphasize what makes the bank unique and the specific benefits customers receive, making advertisements more convincing and effective.
- ★ **Benefit-Oriented Advertising:** Directing campaigns to highlight the tangible benefits and value for customers, rather than just showcasing product features, can improve campaign performance and customer acquisition.

Embracing Digital Transformation:

- ★ **Digital Marketing Investment:** Investing in digital technologies and platforms allows for more targeted and trackable advertising, reducing wastage on ineffective channels.
- ★ **Enhanced Efficiency:** Digital transformation can increase operational efficiency and improve data collection, allowing banks to monitor campaign performance in real-time and make necessary adjustments to reduce costs.

Benefits for Banks:

- ★ **Improved ROI:** By targeting the right audiences on the right platforms, banks can achieve better engagement and higher conversion rates, leading to a more effective use of their marketing budgets.
- ★ **Stronger Brand Image:** A well-defined advertising policy that focuses on customer benefits and unique value can build a stronger, more trusted brand image among stakeholders.
- ★ **Increased Growth:** Effective marketing strategies, informed by data and aligned with business objectives, can drive faster growth in loans, customer acquisition, and overall revenue for the bank.

Advertisements Vs. Customer Service at the Branch:

Advertisements and customer service are directly interrelated. The effectiveness of advertisements depends on good customer service, as negative experiences can undermine positive marketing messages, leading to wasted advertising costs. Conversely, positive customer service reinforces brand messages, attracting and retaining customers, while poor service can damage a bank's reputation and negate its advertising investments.

Why they are interrelated:

- ★ **Customer Value and Satisfaction:** Marketing's core purpose is to attract new customers by promising superior value and to retain existing ones by delivering satisfaction. Poor customer service fails to deliver this satisfaction.
- ★ **Brand Reputation:** A bank's reputation is built not only through its advertising but also through the actual experience customers have at its branches.



Poor service erodes this reputation.

- ★ **Customer Loyalty:** Positive customer service fosters loyalty, turning customers into brand advocates. In contrast, bad service can turn customers away permanently.
- ★ **ROI of Advertising:** Advertising costs are a waste if the customer experience at the branch does not align with the promises made in the advertisements.
- ★ **Consistency is Key:** For advertising to be successful, the customer service experience must be consistent with the message conveyed in the advertisement.

Advertising aims to create a positive perception of a bank's services and products. However, if the service received at the bank's branches is poor, customers' actual experiences will contradict the advertised messages, leading to disappointment, a damaged brand image, and a poor return on advertising investment. Therefore, effective marketing requires strong customer service to fulfil the promises made in advertisements and ensure a positive overall customer experience.

n) Cost Control Strategies:

Techniques, Methods, Strategies & Examples Indian banks can control advertisement costs by adopting a strategic approach that involves cost optimization and rigorous measurement. This includes leveraging digital marketing and automation to improve efficiency, implementing data-driven analytics to track campaign performance, personalizing customer engagement through segmentation, and optimizing vendor relationships and waste reduction across all operational expenditures related to marketing.

- ★ **Digital Transformation & Automation:** Invest in digital platforms to automate marketing processes, manage campaigns efficiently, and reduce manual intervention, which can lead to significant cost savings.
- ★ **Data-Driven Marketing:** Utilize customer segmentation and personalization tools to create targeted marketing campaigns, ensuring that marketing spend is directed towards the most relevant audience.
- ★ **Vendor Management:** Optimize relationships with advertising agencies and other vendors to negotiate better rates and ensure cost-effective service delivery.
- ★ **Process Optimization:** Streamline marketing

workflows to identify and eliminate inefficiencies, reducing operational costs associated with advertising.

Waste Reduction: Implement measures to reduce waste in all marketing activities, such as optimizing media buying and minimizing unnecessary print or physical advertising.

Measurement and Analytics:

- ★ **Track 'Key Performance Indicators' (KPIs):** Define and consistently monitor key performance indicators (KPIs) for all advertising campaigns, such as cost per acquisition (CPA), return on ad spend (ROAS), and customer lifetime value (CLTV).
- ★ **A/B Testing:** Conduct A/B tests on different marketing messages, creatives, and channels to identify the most effective and cost-efficient approaches.
- ★ **ROI Analysis:** Regularly analyse the return on investment (ROI) for different marketing initiatives to reallocate budgets to high-performing campaigns and discontinue low-performing ones.
- ★ **Customer Lifetime Value (CLTV) Tracking:** Measure the CLTV generated from different customer segments acquired through various campaigns to understand which efforts bring the most valuable long-term customers.

Implementation in Indian Banks:

Leverage Customer Data: Indian banks can use analytics to understand customer behaviour and preferences, allowing for hyper-targeted campaigns and more efficient use of marketing budgets.

Focus on Digital Channels: A greater emphasis on digital marketing channels, which offer better tracking and measurement capabilities, can help control costs compared to traditional media.

Invest in Marketing Technology: Implement marketing automation tools and advanced analytics platforms to enhance campaign effectiveness and gain better insights into cost drivers.

Align Marketing with Business Goals: Ensure that all marketing efforts are aligned with the bank's broader financial goals and that costs are managed to improve the overall cost-to-income ratio.



o) Cost-Benefit Analysis of Advertisement Costs:

To effectively implement advertising strategies, banks must perform a Cost-Benefit Analysis (CBA) by comparing the expenditure on various media against business targets, identifying the value added by each advertising channel to determine ROI and optimize marketing investments. This involves defining specific goals for each campaign, tracking costs for different media (digital, print, TV), and evaluating the resulting business outcomes like customer acquisition, product sales, and overall brand value to ensure advertising contributes to the bank's strategic objectives.

Define Business Targets & Key Performance Indicators (KPIs):

- ✳ **Set Clear Goals:** Establish measurable objectives for each advertising campaign, such as increasing the number of new account openings, boosting loan applications, or improving brand awareness in specific segments.
- ✳ **Define Metrics:** For each target, define specific Key Performance Indicators (KPIs) to measure success, such as cost per lead, customer acquisition cost (CAC), and return on ad spend (ROAS).

Track Costs by Advertisement Medium:

- ✳ **Categorize Expenses:** Systematically track all costs associated with different media channels, including:
- ✳ **Digital Media:** Costs for online ads (PPC, display, social media), search engine optimization (SEO), and content marketing.
- ✳ **Traditional Media:** Expenses for print ads (newspapers, magazines), television, radio, and outdoor advertising (billboards).
- ✳ **Other Costs:** Allocate budget for creative production, agency fees, market research, and campaign management tools.

Evaluate Media Performance Against Targets:

- ✳ **Measure Outcomes:** For each medium, measure its effectiveness in achieving the defined business targets.

For example:

- ✳ **Digital:** Track website traffic, lead generation, conversion rates, and app downloads.
- ✳ **Traditional:** Monitor brand mentions, website traffic

spikes after ad campaigns, and survey data on brand recall.

- ✳ **Attribute Results:** Use attribution modelling to understand how different touchpoints in the customer journey contribute to conversions and sales.

Conduct the Cost-Benefit Analysis:

- ✳ **Calculate ROI:** For each media channel, calculate the return on investment (ROI) by comparing the benefits (revenue generated, customer value) to the costs.
- ✳ **Assess Value Addition:** Determine the value added by each media type, not just in terms of direct sales, but also in terms of building long-term customer relationships, enhancing brand equity, and fostering customer loyalty.

Optimize and Refine Advertising Spend:

- ✳ **Identify High-Performing Channels:** Allocate more budget to media channels that deliver the highest ROI and contribute significantly to business targets.
- ✳ **Improve Low-Performing Channels:** Analyse why certain media are underperforming and implement changes to improve their effectiveness or reallocate the budget to more promising channels.
- ✳ **Regularly Review & Adjust:** Advertising and market conditions are dynamic. Banks should continuously monitor their advertising performance and adjust their strategies to stay aligned with evolving business objectives and customer behaviour.

p) Auditing of Advertisement Costs:

Banks should conduct regular audits of advertising costs to ensure that advertising agencies fulfil the terms of their agreements and prevent misutilization of funds. This practice, guided by internal controls and regulatory frameworks like the General Financial Rules (GFRs), helps verify proper allocation of ad spend, adherence to agreed-upon services, and promotes transparency, accountability, and better value for money in bank marketing.

Key Aspects of Advertising Cost Audits:

- ✳ **Verification of Services:** The audit should compare the services provided by the agency against the agreed terms in the contract or Memorandum of Understanding



(MoU), confirming that the advertisements were executed as planned.

- ★ **Prevention of Misutilization:** By scrutinizing expenditures and verifying the deliverables, such audits help identify instances where funds might be wasted on unfulfilled or substandard services.
- ★ **Cost Savings:** A thorough audit can reveal inefficiencies or unauthorized spending, leading to potential cost savings for the bank and ensuring that marketing investments are effective and justifiable.
- ★ **Regulatory Compliance:** Banks, as financial institutions, are subject to various financial rules and guidelines, including those related to procurement and public spending. Auditing advertising costs ensures compliance with these regulations.

Enhancing Transparency and Governance: Implementing a robust audit process for advertising expenses strengthens financial discipline and demonstrates good governance, a core aspect of banking operations.

How to Implement an Advertising Cost Audit:

- ★ **Clear Agreements:** Ensure that all advertising agency contracts and MoUs clearly define the scope of work, deliverables, timelines, and payment terms.
- ★ **Internal Audit Procedures:** Develop and implement a clear internal audit plan specifically for advertising expenditure, focusing on key areas of risk.
- ★ **Performance Monitoring:** Track the delivery of advertised campaigns and compare them against the agreed-upon metrics and reports from the agency.
- ★ **Independent Review:** Conduct periodic checks by an internal audit team or even external auditors to provide an unbiased assessment of advertising spend and agency performance.
- ★ **Corrective Actions:** If the audit uncovers non-compliance or misutilization of funds, take prompt action to correct the issues and implement stronger controls for the future.

q) Advertisement Costs Vs. Business Growth Ratio:

The Advertisement Costs vs. Business Growth Ratio is a crucial parameter for evaluating a bank's advertising

effectiveness because it measures how much sales growth is generated relative to advertising investment. A lower ratio indicates that a bank is getting more business (e.g., new accounts, loans, or increased deposits) for its advertising expenditure, demonstrating that the campaigns are efficient and successful in driving growth.

How the Ratio Works:

- ★ **Purpose:** To determine how effectively advertising resources translate into tangible business results, such as increased sales or customer acquisition.
- ★ **Calculation:** The ratio is calculated by dividing the total advertising costs by the resulting business growth (sales revenue or new business generated).

Interpretation:

- ★ **Low Ratio:** Suggests that advertising efforts are efficient and a high volume of business is being generated for the amount spent.
- ★ **High Ratio:** Indicates potential inefficiencies, meaning more money is being spent on advertising than is being returned in terms of business growth.

Why it's Important for Banks?

- ★ **Resource Allocation:** Helps banks decide where to allocate their marketing budget for the greatest return.
- ★ **Campaign Optimization:** Provides insights into which advertising campaigns are successful and which need adjustment to improve performance.
- ★ **ROI Measurement:** Demonstrates the return on investment (ROI) of specific marketing efforts, allowing for informed future strategic planning.
- ★ **Strategic Planning:** Understanding this ratio helps banks refine their marketing strategies to better resonate with their target audience and achieve their goals.

r) Role of 'Cost Accountant' in Controlling Advertisement Costs of the Banks:

A cost accountant controls bank advertisement costs by analysing expenditures, budgeting for campaigns, tracking performance, identifying cost variances, and providing data-driven insights for management to optimize spending and improve return on investment. They use



cost-benefit analysis to ensure ads are efficient and provide actionable recommendations to reduce waste and increase profitability.

Roles in Controlling Advertisement Costs:

- ✱ **Budgeting and Forecasting:** Cost accountants help create advertising budgets by forecasting potential costs and revenue, ensuring alignment with the bank's overall financial goals.
- ✱ **Cost Analysis and Tracking:** They monitor all expenses related to advertising campaigns, including media placement, agency fees, and production costs, to understand where money is being spent.
- ✱ **Performance Monitoring and Variance Analysis:** By comparing actual advertising spending against the budget, the cost accountant identifies discrepancies (variances) and investigates the reasons behind them. This allows for timely corrective actions to prevent overspending.
- ✱ **Return on Investment (ROI) Analysis:** The cost accountant analyses the effectiveness of advertising campaigns by linking costs to the results generated, such as new customers or increased product usage, to determine the ROI.
- ✱ **Cost-Benefit Analysis:** They conduct detailed analyses of different advertising options to compare costs with their potential benefits, helping management decide which strategies are most cost-effective.
- ✱ **Process Improvement:** Cost accountants identify inefficiencies in the advertising process and suggest changes to procedures that can help streamline operations and reduce costs without compromising results.
- ✱ **Decision Support:** They provide management with comprehensive reports and data-driven insights to support informed decision-making regarding advertising strategies and resource allocation.

Cost Accountant's Role:

- ✱ **Budget:** Work with marketing to create a budget for the advertising campaign.
- ✱ **Track:** Monitor the spending on ads across different channels (digital, print, TV).

- ✱ **Analyse:** After the campaign, compare the actual spend to the budget, identify any budget overruns, and determine why they occurred.

- ✱ **Report:** Provide a report to management showing the campaign's effectiveness (e.g., how many new accounts were opened) and the cost per new account, helping them decide on future advertising investments.

To Sum Up:

It's crucial for Indian banks to control advertisement costs as excessive spending directly erodes profits and indirectly raises prices for customers. High advertising expenses reduce the bank's overall profitability, and to maintain financial stability, these costs are often passed on to customers through higher fees or interest rates on products, impacting affordability.

Banks absolutely should conduct regular cost-benefit analyses (CBA) on their advertisement channels to evaluate the impact and cost advantages of different advertising methods. This strategic practice allows banks to optimize resource allocation, identify cost-effective strategies, remain competitive, and make informed decisions about their marketing investments. By analysing both direct and indirect costs and benefits, banks can determine which advertising channels yield the greatest return, ensuring their marketing budget is used efficiently and effectively to meet business goals.

- ✱ **Strategic Decision-Making:** CBA provides a quantitative basis for making informed decisions about where to invest marketing funds, helping to maximize profits and achieve strategic goals.
- ✱ **Competitive Advantage:** By constantly analysing and comparing advertising channels, banks can identify innovative and successful approaches, staying ahead of competitors.
- ✱ **Resource Optimization:** CBA helps in allocating limited resources to the most impactful and cost-effective channels, avoiding investments in projects that may not provide sufficient returns.
- ✱ **Impact Measurement:** Regular analysis allows banks to understand the real-world impact of their advertising efforts, not just the monetary costs, providing a more comprehensive view of performance.
- ✱ **Quantifiable Benefits:** These include increased



customer acquisition, higher sales, improved brand recall, and greater market share.

- ★ **Non-Monetizable Benefits:** Consider intangible benefits such as enhanced brand perception, improved customer loyalty, and positive public relations.
- ★ **Direct Costs:** These are expenses directly related to the advertising campaign, such as media buy, creative production, and agency fees.
- ★ **Indirect Costs:** These can include the costs of managing campaigns, potential loss of customer data privacy, and negative brand impacts if a campaign is poorly executed.
- ★ **Evaluation Tools:** Using tools like the Cost-Benefit Ratio ($\text{PV of Benefits} / \text{PV of Costs}$) and Net Present Value ($\text{PV of Benefits} - \text{PV of Costs}$) can help determine financial feasibility.

Advertising costs are an operational expense that, like any other, reduces the net profit of the bank. Excessive spending, without a corresponding increase in revenue, directly impacts the bottom line. While advertising aims to highlight a product's value, poorly executed or overly expensive marketing campaigns can fail to attract new customers or build brand loyalty, leading to wasted resources. To compensate for reduced profit margins due to high ad spending, banks may increase the prices of their products and services, such as higher account maintenance fees, loan interest rates, or other charges. Banks are expected to operate profitably, and this

requires stringent cost management, including tracking and optimizing advertising expenditure.

Banks can define Clear Objectives to Establish what success looks like for each advertising campaign. Identify the Channels and list all advertising channels being used (e.g., digital ads, traditional media, social media, direct mail). Collect Data both quantitative data (costs, sales figures, leads) and qualitative information (customer feedback, brand perception) for each channel. Use CBA to calculate the ratio of benefits to costs for each channel. Conduct these analyses at regular intervals to adapt to changing market dynamics and ensure continuous improvement of marketing strategies.

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Annexure-I Model Advertisement Cost Sheet:

(₹ in '000)

Type of Advertisement	Cost Incurred			Impact Analysis	Customer Feed Back / Rating
	2023	2024	2025		
Social Media Marketing					
Online Advertising					
Email Marketing					
Content Marketing / SEO					
Non-Digital Media					
Broadcast Media					
Print Advertising					
Outdoor (Out-of-Home) Advertising					
Direct Mail					
Speciality Media etc.					

Note: Banks in India must follow regulations and guidelines from statutory authorities like the Reserve Bank of India (RBI) and the Advertising Standards Council of India (ASCI) when giving advertisements to ensure they are honest, transparent, and adhere to ethical advertising practices, according to Prasar Bharati and www.ascionline.in. Banks need to be truthful in their financial product advertisements, avoid misleading claims, and comply with customer service guidelines on fees and charges set by the RBI. Principles focus on ensuring all advertisements are truthful, transparent, and fair, especially when advertising financial products of Banks.

Public Relations Department Comments:

- Which types of advertisements should be discontinued?
- Which new media channels should be introduced?
- Budget allocated versus actual expenses, including reasons for any discrepancies.

Comments from the Chief Cost Accountant / Cost and Management Accountant:

Reasons for the year-on-year increase in advertising costs.

Whether the increased costs provide 'added value or benefits' to the bank.

Reasons for the 'variance' between budgeted and actual advertising expenses.

Analysis of Impact of Advertisement Costs on Business Growth.

Actions to be taken by the Public Relations Department.

Suggestions / Strategies for reducing advertising costs while maintaining coverage of bank product advertisements in both existing and new market segments or customer groups.

Annexure-II

Impact Analysis of Bank Advertisements:

To assess bank advertisement effectiveness on sales, create impact analysis sheets that track metrics like new account openings, product uptake, and website traffic before and after campaigns, and use customer surveys to measure awareness, recall, and brand perception. These sheets should correlate advertising expenditure with financial performance indicators, such as revenue and profitability, to determine the return on investment (ROI) and the impact of marketing efforts on overall sales growth.

Components of an Impact Analysis Sheet: A comprehensive impact analysis sheet should include the following sections:

1. Campaign Details:

Campaign Name: A unique identifier for the advertising campaign.

Objective: The specific goal of the advertisement (e.g., increase loans, attract new depositors).

Target Audience: The demographic or customer segment the campaign aims to reach.

Channels: Media used for advertising (e.g., TV, radio, digital platforms, social media).

Budget: Total advertising spends for the campaign.

Duration: Start and end dates of the campaign.

2. Pre-Campaign Metrics:

Baseline Sales Data: Key sales figures (e.g., number of accounts opened, loan applications, new customer acquisition) before the campaign begins.

Customer Awareness: Results from customer surveys measuring brand recognition and knowledge of products before the campaign.

Website/App Traffic: Pre-campaign visitor numbers.

3. During-Campaign Metrics

Sales Performance: Track sales activity during the campaign period.

Customer Feedback: Monitor comments and engagement on social media.

Website/App Analytics: Track user interactions and conversions.

4. Post-Campaign Metrics:

Sales Performance: Compare post-campaign sales data to the baseline, looking for increases in sales and revenue.

New Customer Acquisition: Number of new customers acquired specifically linked to the campaign.

Product/Service Uptake: Track the adoption rate of promoted products and services.

Brand Perception: Conduct post-campaign surveys to assess changes in brand awareness, attitude, and loyalty.

Website/App Traffic: Measure any increase in visitors, leads, or conversions after the campaign.

5. Correlation and ROI Analysis

Correlation with Sales: Analyse if there's a positive correlation between advertising spend and sales growth.

Return on Investment (ROI): Calculate the profit or revenue generated from the campaign relative to its cost to determine its financial effectiveness.

Attribution: Try to attribute specific sales increases to the advertising campaign to understand its direct impact.

6. Customer Survey Questions (Examples)

a) "Where did you first learn about our new product/service?"

b) "Do you recall seeing advertisements for [Bank Name] recently?"

c) "How did our advertisements influence your decision to use [Bank Name]'s services?"

d) "Have you used any of the products advertised in the last month?"

By using this structured approach, banks can effectively evaluate the impact of their advertising campaigns on customer behaviour and sales performance.



Chapter 19

Outsourcing Costs



Contents:

1. <i>Introduction.</i> 2. <i>Creation of ‘Outsourcing Subsidiaries’.</i> 3. <i>Outsourcing Policy.</i> 4. <i>Vendor Selection.</i> 5. <i>Thorough Risk Assessments before outsourcing banking functions.</i> 6. <i>Scope of Outsourcing.</i> 7. <i>Thorough ‘Due Diligence’ while Outsource IT Functions.</i> 8. <i>Control Costs through Outsourcing of Technology Areas to reduce CAPEX Costs.</i> 9. <i>‘Control Risk’ of Outsourcing Activities.</i> 10. <i>Audit of Outsourcing Activities.</i> 11. <i>Insist ‘Bank Guarantees’ from Vendors</i>	<i>(Outsourcing Agencies).</i> 12. <i>Cost-Benefit Analysis (CBA) of Outsourcing Functions / Activities.</i> 13. <i>Criteria for Selection of Vendors or Outsourcing Agencies.</i> 14. <i>Role of Cost Accountants in arriving Cost-Benefit Analysis of Outsourcing Functions in Banks.</i> 15. <i>To Sum Up.</i> <i>Outsourcing Department.</i> <i>Model Cost Sheets for Outsourcing Banking Operations (In-house Vs. Outsource).</i> <i>Audit of Outsourcing Activities of the Bank through ‘Cost Audit’.</i> <i>Customer Service Vs. Outsourcing.</i> <i>References.</i>

Outsourcing requires careful Cost-Benefit Analysis and also to Avoid Risks. The Chapter discusses:

- ✱ ***Creation of Outsourcing Subsidiaries.***
- ✱ ***CBA of Outsourced Functions.***
- ✱ ***A dedicated Outsourcing Department.***

Ideas were derived from discussions with Bank Officials about existing Outsourcing Challenges.

Outsourcing Costs

As banks in India increase their outsourcing of noncore activities like marketing, recovery, and IT services such as cloud computing, balancing the cost benefits with the associated risks is crucial. The Reserve Bank of India (RBI) has issued detailed guidelines to ensure that banks maintain sound risk management and due diligence practices while outsourcing.

The balance between cost advantages and risk management:

Cost advantages:

- ✱ **Reduced operating costs:** Outsourcing non-core activities helps banks lower operational costs associated with staffing, training, and maintaining in-house infrastructure.
- ✱ **Access to expertise and technology:** Service providers often possess specialized skills and advanced technology, particularly in rapidly evolving areas like AI, data analytics, and cloud computing. This allows banks to modernize their services without large capital expenditures.
- ✱ **Enhanced focus on core business:** By entrusting routine and non-core tasks to external specialists, banks can reallocate internal resources to focus on critical, revenue-generating activities like strategic planning and managing customer relationships.
- ✱ **Improved scalability and efficiency:** Outsourcing provides flexibility, allowing banks to scale operations up or down quickly in response to market demands and staffing shortages.
- ✱ **Risk management and due diligence:** To counter the risks that accompany outsourcing, the RBI requires banks to establish robust frameworks for due diligence, risk management, and oversight. These must be balanced against the cost benefits to protect customers and maintain the bank's integrity.

Risks associated with outsourcing:

- ✱ **Data security and confidentiality:** Sharing sensitive customer data with a third party introduces a significant risk of data breaches, theft, or misuse, which can lead to financial losses and reputational damage.

✱ **Loss of control:** Outsourcing cedes some level of direct control over daily operations and processes to a third party. If not properly managed, this can result in inconsistent service quality, delays, and poor customer experiences.

✱ **Reputational risk:** The actions and failures of a service provider directly reflect on the bank. Poor service, unethical recovery practices, or a data breach can severely damage the bank's brand image and erode customer trust.

✱ **Compliance and legal risks:** The bank remains responsible for regulatory compliance, even for outsourced activities. Any failure by the vendor to adhere to legal and regulatory requirements, such as data privacy laws or fair recovery practices, can lead to fines and legal action against the bank.

✱ **Vendor and concentration risk:** Over-reliance on a single service provider creates a concentration risk. The failure or liquidation of a key vendor could significantly disrupt the bank's operations and create systemic risks for the entire banking industry.

✱ **Exit strategy risk:** Without a proper exit strategy, it can be prohibitively expensive and difficult for a bank to terminate an outsourcing arrangement and bring the activity in-house or find an alternative vendor.

Key measures to balance costs and risks:

- ✱ **Board-approved policies:** Banks must have a comprehensive, board-approved outsourcing policy that defines which activities can be outsourced, the selection criteria for vendors, and the framework for managing risks.
- ✱ **Rigorous due diligence:** Before engaging a service provider, banks must conduct a thorough, risk-based due diligence assessment. This involves evaluating the vendor's financial health, experience, reputation, security controls, business continuity plans, and compliance track record.
- ✱ **Strong contractual agreements:** Outsourcing contracts must clearly define the scope of activities, service and performance standards (SLAs), monitoring protocols,



access and audit rights for the bank and RBI, and liability in case of a breach. Confidentiality clauses must extend beyond the termination of the contract.

★ **Continuous monitoring and oversight:** The bank's management is responsible for continuously monitoring the vendor's performance, security practices, and compliance with the contract. The RBI mandates regular audits of outsourced activities, particularly for material arrangements.

★ **Data protection and controls:** Banks must ensure that vendors protect the security and confidentiality of customer information, allowing data access only on a "need-to-know" basis. In IT outsourcing, data sharing must occur through secure, encrypted channels.

★ **Incident reporting and response:** Vendors must report cyber incidents and other service disruptions to the bank without delay, so the bank can notify the RBI within the stipulated timeframe.

★ **Ethical practices for recovery:** When outsourcing recovery, banks must ensure that agents are properly trained and adhere to a strict code of conduct. The RBI prohibits harassment, intimidation, and threatening practices by recovery agents.

★ **Prohibiting core function outsourcing:** The RBI prohibits the outsourcing of core management functions like internal audit, compliance, and decision-making for loan sanctions.

Creation of 'Outsourcing Subsidiaries'

Indian banks create 'Outsourcing Subsidiaries' to gain greater control, reduce costs, and maintain quality for outsourcing activities, ultimately leading to improved efficiency, scalability, better focus on core competencies, enhanced customer service, and strategic flexibility. This approach allows banks to effectively manage risks and costs associated with outsourcing while capitalizing on specialized expertise and achieving operational goals.

Cost Control and Operational Benefits:

- **Reduced Operational Costs:** By setting up a subsidiary, banks can eliminate the costs of hiring, training, and maintaining a large in-house workforce for outsourced functions, leveraging specialized skills and economies of scale.
- **Predictable Future Costs:** Creating a subsidiary allows for more accurate projection and control over future outsourcing costs compared to relying on external third-party providers.
- **Improved Resource Allocation:** Banks can more effectively allocate internal resources and capital towards core banking activities like customer acquisition, risk management, and strategic planning.

Enhanced Control and Quality:

- **Greater Control Over Activities:** A subsidiary offers direct oversight and control over the outsourced processes, which is crucial for maintaining quality standards and data security that can be lost with external vendors.
- **Risk Mitigation:** Banks can better manage operational and security risks by having direct control over a subsidiary rather than a completely separate, external entity.
- **Standardized Quality:** Creating a dedicated subsidiary allows for the implementation of the bank's own standards for processes and customer service, ensuring consistency and quality in outsourced functions.

Strategic and Business Advantages:

- **Focus on Core Competencies:** Freeing up management and staff from non-core activities allows the bank to concentrate on its core business, innovation, and strategic growth.
- **Scalability and Flexibility:** The subsidiary can be scaled up or down to meet fluctuating demands for services, providing flexibility that is vital in the dynamic banking environment.
- **Access to Specialist Expertise:** A subsidiary can be structured to attract and retain specialized talent and expertise in areas like digital services or data analytics that might be difficult to access through standard outsourcing.



a) Outsourcing Policy:

Banks are mandated to develop an Outsourcing Policy that aligns with the regulatory guidelines, such as those from the Reserve Bank of India (RBI), to ensure proper management of outsourced activities and associated risks. This policy should define what activities can be outsourced, establish clear responsibilities, outline the process for selecting vendors, and implement robust risk management and monitoring systems to protect internal controls, business conduct, reputation, and customer information.

Key Aspects of an Outsourcing Policy:

- ✳ **Risk Management:** Banks must identify and mitigate the various risks associated with outsourcing, including strategic, operational, legal, and reputational risks.
- ✳ **Vendor Selection and Monitoring:** The policy should include a comprehensive methodology for selecting and monitoring service providers, with clear criteria and processes.
- ✳ **Materiality and Control:** Banks must assess the materiality of outsourced activities to ensure they do not compromise the bank's internal control systems or business conduct.
- ✳ **Customer Rights:** The policy must ensure that outsourcing arrangements do not diminish the bank's ability to fulfil its obligations to customers or affect their right to grievance redressal.
- ✳ **Regulatory Oversight:** The policy should allow for the bank's and the regulator's right to inspect service providers and their records.
- ✳ **Prohibited Outsourcing:** Certain core management functions, such as internal audit, compliance, and crucial decision-making functions like sanctioning loans, are generally prohibited from being outsourced.
- ✳ **Administrative Framework:** The bank needs a suitable administrative framework, including senior management involvement and a Board-approved policy, to oversee outsourcing arrangements.
- ✳ **Contingency and Exit Plans:** The policy should include contingency plans and realistic exit strategies for outsourced activities.

- ✳ **Confidentiality:** The policy must address the protection of customer information and confidentiality in the hands of the service provider.

Regulatory Guidelines:

- ✳ **RBI Guidelines:** The Reserve Bank of India issues comprehensive guidelines for managing risks in outsourcing of financial services by banks.
- ✳ **Board Approval:** The outsourcing policy must be approved by the bank's Board of Directors.
- ✳ **Regular Reviews:** Outsourcing strategies and arrangements must be reviewed periodically to ensure their continued relevance, safety, and soundness.
- ✳ **Grievance Redressal:** The bank's grievance redressal mechanism should not be compromised by outsourcing.

b) Vendor Selection:

To control outsourcing costs in Indian banks, focus on strategic vendor selection through rigorous due diligence, clear Service Level Agreements (SLAs) that define costs, regular cost audits, and proactive monitoring to ensure compliance and identify cost-saving opportunities. Leverage digitalization and automation to optimize workflows and reduce reliance on manual outsourcing, ensuring that outsourcing decisions align with the bank's core competencies and strategic goals. Also, establish robust internal governance, including an Outsourcing Committee, to oversee risks and continuously improve the effectiveness of outsourcing arrangements.

Strategic Planning & Vendor Management:

- ✳ **Rigorous Due Diligence:** Conduct thorough evaluation of potential service providers to ensure they meet performance standards, possess financial stability, and align with the bank's ethical and legal requirements.
- ✳ **Clear Contractual Agreements:** Ensure all contracts include detailed Service Level Agreements (SLAs), performance standards, and clear clauses for cost control, dispute resolution, and termination.
- ✳ **Focus on Core Competencies:** Outsource only non-core activities to allow the bank to focus internal resources on strategic functions, innovation, and



managing core banking operations.

- ★ **Continuous Monitoring & Audits:** Implement a system for ongoing monitoring and regular cost audits of outsourced activities to track performance, ensure vendor accountability, and identify any deviations from cost-saving goals.

Leveraging Technology:

- ★ **Digitalization and Automation:** Invest in digital technologies to automate workflows and optimize processes, which can significantly reduce the need for outsourcing non-core functions and control costs.

BaaS and Embedded Finance: Explore Banking as a Service (BaaS) and embedded finance to integrate services more efficiently, potentially reducing the need for certain types of outsourcing.

Risk Management and Internal Controls:

- ★ **Establish an Outsourcing Committee:** Form a dedicated committee responsible for overseeing all outsourcing activities, ensuring policies are followed, and managing risks and costs associated with these arrangements.
- ★ **Business Continuity Planning:** Ensure that outsourced providers have robust business continuity plans and that these are regularly tested, including joint testing exercises with the bank, to prevent costly disruptions.
- ★ **Centralized Database:** Maintain a centralized database of all outsourcing arrangements to track costs, monitor risks, and provide regular updates to the bank's board.
- ★ **Independent Audit and Review:** Undertake periodic reviews and independent audits of outsourcing arrangements to ensure compliance with policies and to identify opportunities for further cost reduction or process improvement.

c) Thorough Risk Assessments before outsourcing banking functions:

Failing to conduct thorough risk assessments before outsourcing banking functions can lead to financial losses, operational disruptions, customer dissatisfaction, regulatory non-compliance, and increased costs rather than savings. A strong risk assessment framework is essential to identify and mitigate potential issues such as service

failures, data breaches, vendor instability, and the loss of control over critical processes, ensuring that outsourcing aligns with regulatory requirements and protects the bank's financial health and reputation.

Potential Risks of Inadequate Outsourcing Risk Assessment:

- ★ **Operational Disruptions:** A third-party vendor's technical failures or financial instability can directly impact the bank's ability to provide services, leading to unplanned downtime.
- ★ **Financial Losses:** Poor vendor performance or contract breaches can result in unexpected financial losses for the bank.
- ★ **Customer Dissatisfaction:** Poor service quality from an outsourcing partner can lead to negative customer experiences and damage the bank's reputation.
- ★ **Data Security Breaches:** Outsourcing can create vulnerabilities if the vendor has inadequate security measures, exposing sensitive customer or bank data to risk.
- ★ **Regulatory Non-Compliance:** Banks have a responsibility to ensure that outsourced functions do not reduce regulatory protection for customers or serve as a way to avoid compliance with regulations.
- ★ **Increased Costs:** Instead of reducing costs, poor outsourcing decisions, unexpected technical issues, or the need to fix vendor-related problems can ultimately increase expenses.
- ★ **Loss of Control:** Banks may become overly dependent on outsourcing partners, losing control over critical functions and failing to meet service level agreements.

Key Aspects of a Strong Risk Assessment for Bank Outsourcing:

- ★ **Identification of Risks:** Banks must identify potential risks, including operational, financial, reputational, and compliance risks associated with the specific function being outsourced.
- ★ **Vendor Due Diligence:** A thorough assessment of the vendor's financial stability, technical capabilities, security protocols, and compliance record is crucial.



- ✱ **Contractual Agreements:** Contracts must clearly define service levels, responsibilities, audit rights for the bank and regulators, and protocols for handling data and records.
- ✱ **Monitoring and Oversight:** The bank must establish robust mechanisms for monitoring the vendor's performance, ensuring ongoing compliance, and managing any emerging risks.
- ✱ **Business Continuity Planning:** Plans must be in place to address potential service disruptions, including contingency plans for when a vendor fails to deliver.
- ✱ **Regulatory Compliance:** The risk assessment process must ensure that outsourcing arrangements comply with all relevant legal and regulatory requirements.

d) Scope of Outsourcing:

To reduce outsourcing costs in Indian banks, focus on strategic planning by clearly defining the scope of outsourced functions, strengthening vendor management through consolidation, rigorous due diligence, and performance monitoring, and leveraging technology and automation to optimize processes and gain visibility into spend. Vendor consolidation, negotiating bulk deals, and establishing long-term relationships can lower prices. Implementing robust performance scorecards, setting clear KPIs, and conducting regular audits ensures vendors meet expectations and identifies opportunities for cost savings.

Strategic Planning:

- ✱ **Define Critical vs. Non-Critical Functions:** Determine which services are non-core and can be outsourced to reduce costs, focusing on areas like data center management, software support, and ATM networks.
- ✱ **Align with Business Goals:** Ensure that outsourcing decisions directly support the bank's strategic objectives and contribute to value creation, rather than just cost reduction.
- ✱ **Robust Outsourcing Policies:** Develop comprehensive policies and procedures for managing outsourcing, aligned with Reserve Bank of India (RBI) directives, to ensure consistency and compliance.

Vendor Management:

- ✱ **Consolidate Vendors:** Reduce the number of vendors

to negotiate bulk deals and gain leverage, which lowers costs and simplifies administrative burdens.

- ✱ **Thorough Due Diligence:** Conduct in-depth assessments of potential and existing vendors to ensure they have the capability to meet contractual obligations and manage risks effectively.
- ✱ **Supplier Performance Management:** Establish Key Performance Indicators (KPIs) and performance scorecards to continuously monitor vendor performance, identifying areas for improvement and potential replacement.
- ✱ **Long-Term Relationships:** Foster strong, trust-based partnerships with key suppliers through regular communication and transparent negotiations to secure better terms and pricing.
- ✱ **Exit Strategies and Contingency Planning:** Include clearly defined exit clauses in contracts and develop contingency plans to manage potential vendor unreliability or service disruption.

Technology and Automation:

- ✱ **Automate Workflows:** Invest in digital technologies to automate and optimize various workflows, reducing manual effort and identifying cost-saving opportunities.
- ✱ **Guided Buying Technology:** Implement guided buying platforms and automated channels to ensure compliance with policies and budgets without adding extra effort for the procurement team.
- ✱ **Spend Management Platforms:** Utilize technology to gain real-time visibility into third-party spending, enabling proactive control and intervention by budget holders.

Cost Control and Optimization:

- ✱ **Volume-Based Discounts:** Negotiate discounts for larger orders or long-term agreements, consolidating purchases across departments to increase volume.
- ✱ **Category Management:** Empower central procurement teams to drive cross-organizational savings strategies and gain control over centralized third-party spending.
- ✱ **Regular Audits and Reviews:** Conduct regular internal



and external audits of outsourcing arrangements to assess risk management practices and ensure compliance.

✱ **Right-Sizing Contracts:** Focus on “right-sizing” contracts to optimize costs, rather than solely on risk management, to ensure they align with value-creation activities.

Thorough ‘Due Diligence’ while Outsource IT Functions

Thorough due diligence is essential before Indian banks outsource IT functions to mitigate increased risks. The Reserve Bank of India (RBI)’s Master Directions for Outsourcing of IT Services mandate a risk-based due diligence process for banks (Regulated Entities or REs) to evaluate a service provider’s capabilities. This includes assessing qualitative, quantitative, financial, operational, and legal factors, as well as their business reputation and information/cybersecurity risk management, to prevent financial loss and reputational damage.

Why Due Diligence is Crucial:

- **Risk Management:** Outsourcing transfers operational, legal, reputational, and compliance risks to the bank, making it vital to assess the provider’s ability to handle these risks effectively.
- **Regulatory Compliance:** The RBI’s 2023 Master Directions emphasize the need for comprehensive due diligence to ensure that outsourced IT services align with regulatory requirements and to avoid penalties.
- **Operational Integrity:** Inadequate due diligence can lead to a service provider’s failure to provide services, leading to potential operational disruptions, data breaches, and financial losses.
- **Reputational Damage:** A service provider’s security breach or failure to comply with regulations can severely damage a bank’s reputation, which is difficult and costly to recover.

Key Aspects of Due Diligence:

- **Service Provider Assessment:** Evaluate the provider’s capabilities, financial stability, business reputation, and experience.
- **Risk Assessment:** Conduct thorough information and cybersecurity risk assessments.
- **Legal and Compliance:** Ensure the provider can meet legal and regulatory obligations.
- **Operational and Financial Soundness:** Review the provider’s operational infrastructure and financial health.
- **Market Feedback:** Supplement internal assessments with independent reviews and market feedback, where possible.
- **Contractual Control:** The outsourcing agreement should allow the bank to retain adequate control and the right to intervene when necessary.

Consequences of Insufficient Due Diligence:

- **Financial Losses:** Service provider failures or breaches can result in direct financial losses for the bank.
- **Reputational Harm:** Negative publicity from security incidents or service failures can damage customer trust and the bank’s brand.
- **Legal and Regulatory Penalties:** Banks may face punitive actions from regulators if their outsourced services lead to non-compliance or security lapses.
- **Loss of Control:** Without proper oversight and due diligence, banks can lose control over critical IT functions and data.

e) Control Costs through Outsourcing of Technology Areas to reduce CAPEX Costs:

Indian banks can control technology costs to reduce outsourcing expenses by investing in digital transformation, cloud computing, and AI-driven automation to handle routine tasks and improve operational efficiency, thereby minimizing the need for outsourcing non-core functions

like data entry and customer service. Adopting Open Banking APIs allows for efficient data sharing, while Data Analytics provides insights to optimize processes and reduce costs. Additionally, leveraging virtual collaboration tools can cut travel expenses associated with managing outsourcing relationships.



Invest in Digital Transformation & Automation

- ✳ **Automate Core Processes:** Implement AI and robotic process automation (RPA) to automate basic, repetitive tasks in customer service and back-office operations. This reduces the need for manual intervention, lowering the scope for outsourcing such functions.
- ✳ **Enhance Customer Experience:** Digital platforms and mobile banking solutions can reduce reliance on physical branches, leading to cost savings that might otherwise be incurred through outsourcing related to branch operations.
- ✳ **Productivity Gains:** Automation of data entry, reconciliation, and other administrative tasks frees up employees to focus on higher-value, complex projects, improving overall efficiency and potentially reducing headcount needs in outsourced departments.

Leverage Cloud Computing and APIs:

- ✳ **Scalable Cloud Infrastructure:** Utilize cloud services for flexible, scalable computing resources, avoiding large upfront infrastructure investments and reducing the need to outsource infrastructure management.
- ✳ **Open Banking & FinTech Partnerships:** Integrate Open Banking APIs to facilitate seamless data sharing and compliance processes. Partnering with FinTech companies for innovative solutions can provide cutting-edge technology without significant internal investment, further reducing costs.

Utilize Data Analytics:

- ✳ **Informed Decision-Making:** Employ data analytics to gain insights into operations, identify inefficiencies, and make data-driven decisions.
- ✳ **Cost Optimization:** Data analytics helps optimize processes and improve demand forecasting, enabling banks to allocate resources more effectively and reduce waste, minimizing the need for outsourced services to manage these functions.

Implement Technology for Collaboration:

- ✳ **Virtual Collaboration Tools:** Use virtual meeting and collaboration tools to facilitate communication and project management, reducing costs associated with travel to and from outsourcing partners.

Strategic Outsourcing Governance:

- ✳ **Assess Internal Capabilities:** Carefully assess a bank's readiness to manage outsourced relationships, ensuring they have the right processes, skills, and tools in place.
- ✳ **Strong Due Diligence:** Conduct thorough due diligence on potential outsourcing partners and establish clear service level agreements (SLAs) to ensure their capability and compliance.
- ✳ **Shift from Direct Control to Governance:** The key is to shift the focus from direct control to effective governance and collaboration with the outsourcing provider.

f) 'Control Risk' of Outsourcing Activities:

To reduce costs in a bank's risk management and internal controls by reducing outsourcing, Indian banks should implement strategic outsourcing reviews to identify non-core functions suitable for bringing in-house, adopt technology solutions to automate controls, foster an effective risk-aware internal culture, and ensure robust risk-based internal audit to identify inefficiencies in existing processes. Banks must also adhere to the Reserve Bank of India's (RBI) outsourcing guidelines, which emphasize rigorous evaluation and oversight of outsourced activities to balance cost savings with maintaining financial stability and compliance.

Strategic & Operational Actions:

- ✳ **Review Outsourcing Contracts and Identify Non-Core Activities:** Regularly assess existing outsourcing arrangements to determine if any functions can be brought back in-house, especially those that are not critical to the bank's core business.
- ✳ **Invest in Technology and Automation:** Leverage technological solutions like Robotic Process Automation (RPA) and AI to automate routine control activities, reducing the need for manual intervention and outsourcing.
- ✳ **Develop In-House Expertise:** Build internal capabilities in key risk management areas to reduce reliance on external vendors for specialized tasks and increase control over quality and cost.
- ✳ **Implement Risk-Based Internal Audit:** Shift from a routine audit approach to a risk-based audit that



focuses on critical risks, ensuring that internal controls are efficient and cost-effective.

Policy & Governance Actions:

- ✱ **Strengthen Board Oversight and Policies:** Ensure the board of directors approves sound and prudent outsourcing policies, and that regular reviews of these policies are conducted to ensure effectiveness and compliance with RBI guidelines.
- ✱ **Establish Clear Risk Assessment Frameworks:** Implement a robust framework for evaluating the risks associated with new and existing outsourcing activities to identify which activities genuinely require external support.
- ✱ **Promote a Strong Risk Culture:** Foster an organizational culture where risk management is everyone's responsibility, leading to greater proactive risk identification and mitigation without relying heavily on outsourced units.

Continuous Improvement:

- ✱ **Monitor Material Outsourcing Risks:** Establish procedures for timely communication of material outsourcing risks to the board and management, allowing for proactive adjustments to strategies and controls.
- ✱ **Conduct Periodic Reviews and Contingency Planning:** Perform regular reviews of outsourcing arrangements and test contingency plans to ensure resilience against potential disruptions, reducing the risk of costly failures.
- ✱ **Collaborate with Regulators:** Stay informed about the Reserve Bank of India (RBI) guidelines and directions on managing risks from outsourcing to ensure that cost-reduction strategies align with regulatory requirements.

g) Audit of Outsourcing Activities:

Banks must conduct regular audits of their outsourced activities and provide oversight to determine if the activities should continue, be stopped, or if the outsourcing objectives have been met, ensuring the bank retains ultimate responsibility and control over the outsourced functions. These audits should cover aspects like business continuity, risk management, and cost-effectiveness,

with findings reported to the bank's board of directors for informed decisions.

Why Regular Audits are Necessary?

- ✱ **Risk Management:** Banks must evaluate and guard against strategic, reputational, and compliance risks that may arise from outsourcing.
- ✱ **Service Provider Performance:** Audits help ensure that service providers are performing as expected and meeting service level agreements.
- ✱ **Business Continuity:** Regular checks ensure that the service provider maintains a strong framework for business continuity and recovery procedures, which is crucial for uninterrupted bank operations.
- ✱ **Objective Achievement:** Audits are a key mechanism for determining if the pre-determined objectives for outsourcing, such as cost reduction or service quality enhancement, have been met.

Key Aspects to Audit:

- ✱ **Performance:** Assessing whether the outsourced activity is being performed efficiently and effectively by the service provider.
- ✱ **Compliance:** Verifying that the service provider adheres to all relevant regulations and the bank's policies.
- ✱ **Cost-Effectiveness:** Evaluating if outsourcing is providing the expected cost savings or value for the bank.
- ✱ **Control & Intervention:** Ensuring the bank retains adequate control over the outsourced activity and has the right to intervene when necessary.
- ✱ **Business Continuity Preparedness:** Confirming that service providers have effective business continuity plans in place and are ready to manage disruptions.

Bank's Ultimate Responsibility:

- ✱ **Accountability:** Even after outsourcing, the bank's board and management remain ultimately responsible for the outsourced activity and the actions of its service providers.



- ✳ **Decision-Making:** The bank must use audit findings to make informed decisions about whether to continue, modify, or terminate the outsourcing arrangement.

h) Insist ‘Bank Guarantees’ from Vendors (Outsourcing Agencies):

A bank is to obtain a Bank Guarantee (BG) from a vendor or outsourcing agency as a form of security to ensure their performance and protect against their deviation from contractual obligations, allowing the bank to recover any financial losses or claims arising from such a default. The BG serves as a financial commitment from the bank to pay the beneficiary (e.g., the bank’s client) if the customer (the vendor or agency) fails to meet the contract’s terms.

Rationale:

- ✳ **Bank Guarantee as a Safety Net:** A BG is a financial instrument that provides assurance to a beneficiary against the potential non-performance or default of the bank’s customer.
- ✳ **Protects Against Deviation:** If a vendor or outsourcing agency fails to fulfil their obligations as per the contract, the beneficiary can make a claim to the issuing bank.
- ✳ **Claim Recovery:** The bank, having issued the guarantee, then pays the beneficiary, thereby recovering the claim on behalf of its customer.
- ✳ **Purpose in Outsourcing:** In the context of outsourcing, a bank may require a BG from an external agency to mitigate risks associated with the third-party provider failing to deliver on their contracted services.
- ✳ **Bank’s Role:** The bank acts as the guarantor, promising to make a payment to the beneficiary if the vendor defaults on the terms of the agreement.

i) Cost-Benefit Analysis (CBA) of Outsourcing Functions / Activities:

Indian banks determine whether to outsource functions by performing a Cost-Benefit Analysis (CBA) that weighs cost savings, efficiency gains, and focus on core business against risks like data security, regulatory non-compliance, and loss of control. A comprehensive analysis considers operational costs, scalability, the criticality of the activity, potential impacts on earnings and risk profiles, and the bank’s overall strategy before deciding between in-house

execution or engaging a third-party vendor.

Factors to Consider:

Costs:

- ✳ **In-house:** Costs include recruitment, training, salaries, and benefits for new employees, as well as ongoing infrastructure and operational expenses.
- ✳ **Outsource:** Costs include vendor fees, contract management, and potential costs for quality control and service level management.

Efficiency and Expertise:

- ✳ **In-house:** Builds internal expertise and knowledge over time, but can be inefficient for specialized or non-core functions that require significant investment in infrastructure and training.
- ✳ **Outsource:** Access to specialized skills and advanced technology at potentially lower rates, leading to improved efficiency, especially for functions that require high volumes of processing.

Scalability:

- ✳ **In-house:** Scaling up or down can be slow and expensive due to the need to hire or lay off permanent staff.
- ✳ **Outsource:** Outsourcing provides flexibility to scale operations up or down quickly to meet fluctuating demands.

Focus on Core Competencies:

- ✳ **In-house:** Banks must manage a broader range of tasks, potentially diverting resources from their primary objectives.
- ✳ **Outsource:** Allows banks to concentrate on their core business activities and strategic initiatives, leading to greater value creation.

Risk and Control:

- ✳ **In-house:** Provides complete control over operations and data, but requires significant investment in managing risks.



- ★ **Outsource:** Introduces risks related to data security, privacy, regulatory compliance, and the vendor's performance. Banks must have robust policies and due diligence processes to manage these risks.

Regulatory Compliance:

- ★ **In-house:** The bank remains directly accountable for compliance with regulatory requirements, including capital adequacy, financial reporting, and corporate governance.
- ★ **Outsource:** Banks must ensure that the third-party vendor adheres to all relevant regulations and that the outsourcing arrangement does not compromise the bank's compliance obligations.

The Decision-Making Process:

- ★ **Activity Assessment:** Determine the criticality and complexity of the banking function.
- ★ **Cost Analysis:** Quantify the total costs associated with both in-house execution and outsourcing for the specific function.
- ★ **Risk Assessment:** Evaluate the potential risks, including operational, financial, and data security risks, associated with each option.
- ★ **Strategic Alignment:** Consider how the decision aligns with the bank's overall strategic objectives and long-term goals.
- ★ **Vendor Due Diligence:** For outsourcing, thoroughly vet potential vendors for their expertise, reliability, and compliance capabilities.

j) Criteria for Selection of Vendors or Outsourcing Agencies:

Banks do not always select the lowest bid in outsourcing tenders because factors like service quality, a provider's market reputation, and their industry expertise are crucial for a successful partnership, even if it means a higher upfront cost. While the overall cost of an outsourced function should ultimately be lower than an in-house operation, achieving this requires a balanced consideration of these other non-cost factors to ensure long-term efficiency and avoid risks associated with poor-performing vendors.

Why Not Always the Lowest Bid?

- ★ **Quality of Service:** Outsourcing critical functions like customer service or loan processing requires a provider that can meet high standards of quality, which may not be guaranteed by the cheapest option.
- ★ **Market Reputation & Expertise:** A well-regarded outsourcing partner with a proven track record in the banking sector brings valuable industry-specific knowledge and established processes.
- ★ **Risk Mitigation:** Choosing a reputable provider with strong risk management practices can prevent issues like data breaches, service disruptions, or non-compliance that could arise from a less experienced vendor.
- ★ **Long-Term Cost-Effectiveness:** While the goal is to reduce costs, a slightly higher investment in a superior provider can be more cost-effective in the long run by avoiding penalties, customer complaints, and remediation efforts.
- ★ **Strategic Alignment:** Banks need partners that offer flexibility, scalability, and a commitment to the partnership, ensuring alignment with the bank's broader strategic goals.
- ★ **The Goal:** Lower Total Cost of Outsourcing: The ultimate aim of outsourcing is to achieve a lower total cost than keeping the function in-house. This is a cumulative benefit that includes:
 - ★ **Reduced operational expenses:** Lower manpower costs, technology investment, and infrastructure requirements.
 - ★ **Increased efficiency:** Third-party providers often focus solely on the task, leading to greater efficiency and faster turnaround times.
 - ★ **Focus on core competencies:** By outsourcing non-core functions, banks can reallocate internal resources to their primary activities and strategic initiatives.

k) Role of Cost Accountants in arriving Cost-Benefit Analysis of Outsourcing Functions in Banks:

Cost Accountants and Cost and Management Accountants (CMAs) are the right officials in Indian commercial banks to conduct Cost-Benefit Analyses (CBAs) for outsourcing decisions. Their core expertise involves analysing costs,



improving operational efficiency, and making data-driven financial decisions, making them crucial for evaluating the financial implications of outsourcing versus in-house operations.

Why Cost Accountants/CMAs are Ideal for CBA in Banking?

- ✱ **Cost Analysis:** They specialize in understanding and managing a company's cost structure, identifying cost-saving opportunities, and providing insights to improve financial efficiency.
- ✱ **Financial Analysis:** They are skilled at processing and interpreting financial data to support strategic decision-making, which is essential for weighing the benefits against the costs of outsourcing.
- ✱ **Operational Efficiency:** Their role includes monitoring expenses, developing cost-control systems, and implementing measures to save money, directly applicable to decisions about internal vs. external service provision.
- ✱ **Forecasting and Budgeting:** CMAs excel at creating financial plans and forecasts, allowing banks to accurately predict the financial outcomes of various outsourcing scenarios.
- ✱ **Strategic Planning:** They provide data-driven insights and assist with strategic planning, helping banks to make well-informed decisions that align with their overall financial goals.

In the context of outsourcing, a bank's Cost Accountant or CMA would perform a CBA by:

- ✱ Quantifying the costs associated with outsourcing, such as vendor fees and transition costs.
- ✱ Estimating the potential savings from outsourcing, such as reduced manpower or infrastructure costs.
- ✱ Analysing the qualitative benefits, like access to specialized expertise or increased flexibility.
- ✱ Weighing these factors to determine if outsourcing a banking function or activity is more cost-effective and beneficial than maintaining it in-house.

To Sum Up:

Indian banks require a more cautious approach to outsourcing, carefully balancing cost benefits against significant risks like data security breaches, service

disruptions, reputational damage, regulatory non-compliance, and operational failures. A robust outsourcing policy approved by the board, including thorough due diligence, risk assessment, clear contract terms, and ongoing monitoring, is crucial for managing these risks effectively. Banks must accept ultimate responsibility for outsourced activities and ensure that customer data, security, and service quality are never compromised.

Key Risks of Outsourcing:

- ✱ **Strategic Risk:** The service provider's operations might not align with the bank's overall strategic goals.
 - ✱ **Reputation Risk:** Poor service or unethical practices by the outsourced provider can damage the bank's image.
 - ✱ **Compliance and Legal Risk:** The provider's failure to comply with regulatory requirements can result in penalties for the bank.
 - ✱ **Operational Risk:** This includes issues like technology failure, fraud, errors, and the provider's inadequate financial capacity to fulfil obligations.
 - ✱ **Data Security and Privacy Risk:** Outsourcing can expose sensitive customer data to breaches and unauthorized access, leading to financial and reputational harm.
 - ✱ **Concentration and Systemic Risk:** Over-reliance on a single service provider or a provider serving many banks can create systemic risks.
 - ✱ **Exit Strategy Risk:** Difficulty in ending the outsourcing contract due to over-reliance or prohibitive costs can hinder a bank's ability to bring the function back in-house.
- ### Balancing Risk and Cost:
- ✱ **Comprehensive Policies:** Banks must establish a comprehensive outsourcing policy, approved by the board, outlining selection criteria for activities and providers, delegation of authority, and monitoring systems.
 - ✱ **Due Diligence:** A detailed and rigorous due diligence process is necessary to select appropriate and reliable service providers.



- ★ **Clear Contracts:** Outsourcing agreements should clearly define the scope of work, audit rights, governing law, and clauses for the safe handling and destruction of data.
- ★ **Ongoing Monitoring:** Regular reviews of the service provider's operations, security practices, and compliance are essential.
- ★ **Customer Focus:** Banks must ensure the security and confidentiality of customer information remains paramount and is maintained even when outsourced.
- ★ **Ultimate Responsibility:** Even when outsourcing, the bank remains responsible for ensuring services meet customer expectations and regulatory standards.

Hence, more cautious approach is necessary for Indian banks outsourcing functions, as emphasized by regulators like the Reserve Bank of India (RBI), to manage significant strategic, operational, reputational, and compliance risks. Banks must maintain strong oversight, implement robust

risk management and governance structures, ensure service providers meet high standards, and avoid outsourcing core banking and critical decision-making functions to safeguard customer data, market reputation, and regulatory obligations.

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Annexure I

Outsourcing Department

Appointing qualified CMAs (Cost Management Accountants) as department heads for outsourcing activities would provide substantial benefits to banks. CMAs have the necessary expertise in cost-benefit analysis, strategic financial management, and risk assessment to make informed decisions about outsourcing versus in-house operations.

- ✱ **The CMA advantage for outsourcing decisions:** A CMA's skillset is uniquely suited to guide a bank's outsourcing strategy due to the following core competencies:
- ✱ **Strategic cost management:** CMAs specialize in reducing costs and optimizing resource allocation, giving them the perfect foundation to evaluate the financial feasibility of outsourcing. They can help the bank accurately compare the long-term costs of maintaining an in-house team against the rates, potential risks, and quality offered by a third-party vendor.
- ✱ **Cost-benefit analysis:** Beyond simple costs, CMAs are trained to conduct thorough cost-benefit analyses that factor in both financial and non-financial considerations. This allows them to weigh the cost savings of outsourcing against other benefits like access to specialized expertise, increased efficiency, and innovation.
- ✱ **Risk management:** Outsourcing introduces operational, reputational, and compliance risks that must be carefully managed. CMAs are skilled in identifying and mitigating these risks, ensuring that any external partnership aligns with the bank's risk framework and regulatory requirements.
- ✱ **Data-driven decision-making:** By leveraging financial modelling and data analytics, a CMA can provide a

clear, evidence-based roadmap for high-risk financial decisions like outsourcing. They can forecast the financial impact of different scenarios and ensure the bank allocates its resources effectively.

- ✱ **Performance management:** A CMA would establish and monitor key performance indicators (KPIs) to ensure outsourced functions meet quality and efficiency standards. Their focus is on the performance of the business as a whole, helping to ensure the outsourcing strategy is successful and provides a strong return on investment.
- ✱ **Current trends and regulatory context:** The banking industry is already experiencing a growing demand for CMAs in strategic financial roles.
- ✱ **Increasing outsourcing:** Outsourcing in the financial sector is on the rise, with more banks using external providers for critical functions like IT support, loan processing, and customer service. This increases the need for specialized management to ensure proper vendor selection, compliance, and risk management.
- ✱ **Regulatory emphasis:** Regulatory bodies like the Reserve Bank of India (RBI) have issued extensive guidelines for managing the risks associated with outsourcing financial services. Having a CMA lead this area would help banks navigate complex compliance frameworks and ensure their outsourcing policies adhere to all relevant regulations.
- ✱ **Strategic value:** The Institute of Cost Accountants of India (ICMAI) highlights the value of CMAs beyond traditional accounting, emphasizing their role as strategic business partners who can improve a firm's long-term financial stability. This aligns perfectly with the need for a strategic, forward-looking approach to a bank's outsourcing activities.

Annexure-II

Model Cost Sheets for Outsourcing Banking Operations

(In-house Vs. Outsource)

Indian banks to decide on outsourcing banking operations, here is a model cost sheet for comparing in-house versus outsourced functions. This cost-benefit framework includes a quantitative analysis of direct and indirect costs, along with a qualitative assessment of non-monetary factors like efficiency and strategic focus.

Model cost sheet for outsourcing decision:

Instructions for use:

- ★ **Define the scope:** Specify the exact banking process to be analysed, for example, loan processing, contact

center management, or ATM services.

- ★ **Estimate timeframes:** Fill in the costs for both columns, detailing the financial impact over a specific period (e.g., 1–3 years) to account for transition and startup costs.
- ★ **Include all costs:** Account for both visible and hidden costs. This is crucial for an accurate comparison.
- ★ **Analyse beyond cost:** Evaluate qualitative factors that influence long-term strategy and risk.

Quantitative analysis: Comparative cost sheet:

Cost Category	In-house Cost Components	Outsourced Cost Components
Direct Manpower Costs.	- Salaries and wages: Personnel dedicated to the function. - Employee benefits: Health insurance, provident fund, bonuses, etc. - Recruitment and training: Costs of hiring and training new staff.	- Vendor fees: All-inclusive service fees paid to the outsourcing partner. - Performance-based payments: Incentives for meeting specific SLAs (Service Level Agreements).
Infrastructure and technology costs	- Facilities: Allocated office space, rent, utilities. - Hardware/Software: Computers, servers, network equipment, and licensing fees. - Maintenance: Ongoing maintenance and upgrade costs for equipment and software.	- Infrastructure access: Often included in vendor fees; potential costs for specific hardware or software access. - Data integration: Costs associated with integrating the bank's systems with the vendor's.
Operational and administrative overheads	- Management time: Cost of internal managers overseeing the in-house team. - Administrative support: Costs related to HR, payroll, and other support functions. - Audit and compliance: Costs for ensuring regulatory compliance internally.	- Vendor management: Cost of bank personnel managing the outsourcing relationship. - Travel/Communication: Expenses for meetings and coordination with the vendor. - Regulatory compliance costs: Costs related to due diligence and monitoring the vendor as per RBI guidelines.
Transition and exit costs	- Not applicable-	- Transition costs: Costs for setup, data migration, and knowledge transfer during the initial phase. - Exit costs: Potential penalties or costs associated with terminating the contract early.



Cost Category	In-house Cost Components	Outsourced Cost Components
Hidden or indirect costs	- Employee turnover: Costs of replacing departing staff. - Risk costs: Uninsured losses from operational errors. - Opportunity cost: The cost of lost focus on core banking functions.	- Communication costs: Time and effort spent resolving miscommunications or performance issues. - Data breach liability: Potential costs from security breaches at the vendor's end. - Quality control: Costs for dedicated bank staff to monitor the vendor's quality.
Net cost/savings over period	- Sum of all in-house costs	- Sum of all outsourced costs

Cost calculation formula: To determine the cost-effectiveness, calculate the difference between the total in-house costs and the total outsourced costs over the defined period.

$$\text{Total Net Savings (or Cost)} = \sum (\text{Total In-house Cost} - \text{Total Outsourced Cost})$$

This calculation should include the present value of future costs for an accurate, time-adjusted comparison.

Qualitative analysis: Strategic and risk factors: Beyond the cost sheet, Indian banks must evaluate several non-monetary factors as per Reserve Bank of India (RBI) guidelines.

Factor	In-house	Outsource
Core Competency Focus	May divert internal resources and management focus from core banking activities.	Allows the bank to focus on core functions like product development and brand building.
Control and Oversight	Provides direct and complete control over the process, data, and staff.	Requires strong vendor management and continuous monitoring to ensure standards and mitigate risks.
Access to Expertise	Limited to the skills and technology available internally; may be costly to acquire specialized expertise.	Provides access to specialized skills and advanced technology from the outsourcing partner.
Scalability and Flexibility	Scaling up or down operations can be slow, costly, and resource-intensive.	Offers greater flexibility to scale operations up or down quickly based on business needs.
Data Confidentiality	Higher direct control over customer and sensitive data, but internal security risks must be managed.	Requires robust contractual clauses and due diligence to ensure the vendor maintains data security and confidentiality.
Operational Risk	All operational risks are borne internally.	Requires the bank to manage third-party risk, including vendor failure, security breaches, and quality lapses.
Reputation and Brand	The bank has direct control over customer experience and can protect its brand reputation.	Any failure by the service provider can have a direct negative impact on the bank's brand value and reputation.
Innovation	May be limited by internal investment and expertise	Can provide access to cutting-edge technology and innovation leveraged by the outsourcing partner.



Decision-making framework: After completing the cost sheets and qualitative analysis, Indian banks can follow these steps:

Calculate the Total Cost of Ownership (TCO) for both the in-house and outsourced options.

Assign weights to qualitative factors based on the bank's strategic priorities and risk appetite. For example, if data security is paramount, it should be weighted heavily.

Evaluate proposals from multiple vendors using the cost sheet as a benchmark.

Use a decision matrix to combine the quantitative (TCO) and weighted qualitative scores to arrive at a final recommendation.

Develop a risk mitigation strategy, including robust contractual agreements and exit plans, particularly if opting to outsource.



Annexure III

Audit of Outsourcing Activities of the Bank through ‘Cost Audit’

In India, banks widely use outsourcing agencies for their operations, and strict vigilance is required to ensure a cost advantage is realized. Engage specialized cost auditors, like Cost and Management Accountants (CMAs), to verify the cost-effectiveness of these outsourced activities is well-founded. As CMAs have the necessary skills in cost management and auditing to determine if outsourcing truly provides a financial benefit to the bank.

The need for vigilant cost verification in bank outsourcing: While outsourcing non-core functions like credit card processing, ATM management, and back-office activities can offer banks significant benefits, it also presents risks.

Potential benefits of outsourcing:

Cost reduction: Outsourcing can reduce operational costs by eliminating the need for banks to hire and train in-house staff for specialized, non-core functions.

Access to expertise: Third-party providers offer specialized skills, technology, and industry knowledge that may not be available internally.

Enhanced focus: It allows banks to concentrate on their core banking activities and strategic initiatives, which can boost efficiency and growth.

Scalability: Banks can adjust their outsourced resources based on market demands, providing flexibility and better resource allocation.

The importance of vigilance: Despite the potential benefits, if not properly managed, outsourcing can lead to unforeseen expenses and risks. For instance, a bank could end up paying more for an outsourced service due to poor contract management, or the service provider might be less efficient than an in-house team would be. The Reserve Bank of India (RBI) mandates that banks have a robust risk management framework for outsourcing to ensure it doesn't weaken their internal controls or reputation.

Cost and Management Accountants (CMAs) are suitable as cost auditors: CMAs are financial experts with specialized training in cost control, performance measurement, and strategic management. Their skill set is directly relevant to assessing the cost-effectiveness of outsourcing arrangements.

Cost-benefit analysis: CMAs can perform a comprehensive cost-benefit analysis of outsourcing agreements. They evaluate all expenses, direct costs like service fees and indirect costs such as implementation and transition expenses, against the realized savings and efficiency gains.

Operational efficiency assessment: Beyond verifying cost data, CMAs can assess the operational efficiency of the outsourced process. They are trained to identify inefficiencies and suggest improvements in production processes, which can further reduce costs.

Performance monitoring: CMAs have the skills to establish and monitor performance metrics to track the return on investment (ROI) of outsourcing over time. This helps ensure the arrangement continues to meet the bank's financial and strategic goals.

Verification of cost records: A key objective of a cost audit is to examine cost accounts for accuracy and to ensure they conform to cost accounting principles. CMAs are experts at this verification process, which is essential for transparent financial reporting related to outsourcing.

Integration of CMAs into the banking audit framework: Introducing CMAs as dedicated cost auditors would enhance the existing audit processes.

CMAs could be integrated: Enhanced reporting: Audit committees and the board of directors could receive specialized reports from CMAs detailing the financial viability and cost efficiency of major outsourcing arrangements.

Annual compliance review: Similar to the annual compliance certificate that internal auditors submit to the RBI, CMAs could provide an annual assessment specifically focused on the cost aspects of outsourcing.

Strengthened due diligence: The initial due diligence on prospective service providers, which already includes evaluating factors like financial soundness and costs, could be conducted with the specialized oversight of a CMA.

Concurrent audit: The Institute of Cost Accountants of



India (ICMAI) has already noted that CMAs have the competency for concurrent audits in banks, which are conducted on an ongoing basis. This provides a

direct avenue for implementing regular cost audits of outsourced activities.



Annexure IV Customer Service Vs. Outsourcing

To protect the primary objective of customer service while outsourcing operations, banks must implement a comprehensive and proactive oversight framework, adhering to both their own policies and regulatory guidelines. The bank remains ultimately responsible for all outsourced activities, and a third-party vendor's poor service or misconduct can damage the bank's reputation and customer trust.

Oversight and risk management:

- ✱ **Ultimate responsibility:** Banks must retain ultimate control and responsibility for all outsourced functions. Outsourcing does not diminish a bank's obligations to its customers or its regulators.
- ✱ **Due diligence:** Before contracting, the bank must conduct thorough due diligence on potential service providers, assessing their financial strength, reputation, data security, and control environments. The review should ensure the provider can deliver services that meet or exceed the bank's standards.
- ✱ **Robust policies:** A comprehensive outsourcing policy, approved by the bank's board, should define:
 - ❖ Which activities can and cannot be outsourced.
 - ❖ Criteria for selecting service providers and defining "material" or high-risk outsourcing arrangements.
 - ❖ Clear delegation of authority for managing the outsourcing relationship.
- ✱ **Vendor monitoring:** Continuous and vigilant monitoring is crucial. This includes regular performance reviews, audits, and periodic assessments of the vendor's financial and operational condition. Banks should track key metrics like turnaround times, error rates, and customer satisfaction scores.
- ✱ **Performance metrics:** Set up Key Performance Indicators (KPIs) and Service Level Agreements (SLAs) that are tied directly to customer service quality. Monitoring these ensures the service provider is meeting agreed-upon performance and quality standards.

- ✱ **Risk evaluation:** The bank must continuously evaluate the key risks associated with outsourcing, which include reputational risk from poor service, compliance risk from failure to follow regulations, and operational risk from technological or human error.

Contractual agreements: Enforceable contracts: Outsourcing agreements must be flexible enough to allow the bank to maintain control and intervene when necessary to meet legal obligations. This includes clauses allowing for access to the service provider's books and records.

- ✱ **Confidentiality:** The contract must stipulate that the service provider will maintain the confidentiality of customer information even after the contract ends. For providers handling data for multiple banks, there must be strict safeguards to prevent commingling of sensitive information.
- ✱ **Audit rights:** The bank must retain the right to audit the service provider, both with its internal auditors and with external agents. The contract should also recognize the right of banking regulators to inspect the service provider.
- ✱ **Remedial actions:** The agreement should define remedial actions and penalties for failing to meet performance standards, security requirements, or confidentiality rules.
- ✱ **Business continuity:** For critical functions, the contract should require the vendor to have a robust business continuity and disaster recovery plan. Both parties should conduct periodic joint testing and recovery exercises.
- ✱ **Exit strategy:** Agreements should include a clear and viable exit strategy that allows the bank to terminate the contract and transition the activity back in-house or to another provider without disrupting business operations.

Customer experience and feedback:

- ✱ **Robust grievance redressal:** Banks must have a clear and easily accessible grievance redressal mechanism for customers, and the outsourcing arrangement should



not compromise this process. Customer complaints related to outsourced activities must be reviewed by the bank's internal committees.

- ★ **Customer awareness:** In cases where customers must interact with a third-party agent, product literature should state that the bank may use external agents. However, outsourced staff should be trained to operate as if they are direct employees of the bank.
- ★ **Omnichannel experience:** To meet modern customer expectations, banks must create a seamless and consistent experience across all channels, including

in-person branches, mobile apps, websites, and outsourced call centers. Using technology like AI-powered chatbots for routine tasks allows human agents to focus on more complex, empathetic interactions.

- ★ **Feedback loop:** Actively soliciting and acting on customer feedback is essential. Regular surveys and feedback forms provide valuable insight into satisfaction levels and highlight areas needing improvement.



Chapter 20

Training Costs



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Training is essential but can be made Cost-effective through Digital Methods. This Chapter covers:

- ✱ **Training Need Analysis (TNA)**
- ✱ **Visiting faculty/On-the-Job Training (OJT)**
- ✱ **In-house vs. Outsourced Training Programs.**

Based on discussions with Bank Training Staff.



Training Costs

Controlling training costs in Indian commercial banks involves optimizing digital learning platforms, outsourcing specialized training, focusing on internal skill development, and leveraging cost-effective, on-demand training solutions to ensure efficient and budget-friendly development of employees' skills.

Strategic Approaches to Cost Control:

- ✳ **Embrace Digital Learning:** Invest in and utilize digital platforms for training delivery to reduce travel costs and offer flexible, on-demand learning experiences.
- ✳ **Leverage On-Demand and Microlearning:** Provide short, focused learning modules that employees can access as needed, reducing the need for lengthy, expensive traditional training sessions.
- ✳ **Strategic Outsourcing:** Partner with external vendors for highly specialized training that would be too costly or inefficient to develop in-house.
- ✳ **Internal Skill Development & Train-the-Trainer Programs:** Develop internal expertise and train existing staff to become trainers, fostering a cost-effective knowledge-sharing environment.
- ✳ **Focus on Essential Skills:** Prioritize training that directly addresses immediate skill gaps and supports strategic objectives, ensuring a high return on investment for training programs.
- ✳ **Data-Driven Training Needs Analysis:** Use analytics to identify specific training needs and measure the effectiveness of training programs, allowing for better allocation of resources.
- ✳ **Collaborate on Training Initiatives:** Share best practices and resources with other banks or industry bodies to pool costs and leverage collective expertise for training programs.
- ✳ **Incentivize Learning:** Motivate employees to engage with cost-effective learning options through recognition or reward systems, fostering a culture of continuous learning.

By implementing these strategies, Indian commercial banks can manage their training expenditures effectively

while simultaneously enhancing the skills and capabilities of their workforce.

a) Digital Learning:

Indian commercial banks control costs by embracing digital learning and technologies like Artificial Intelligence (AI), blockchain, and big data analytics to automate processes, reduce operational expenses, and enhance efficiency. By shifting from traditional models to digital platforms, banks can lower infrastructure and manpower costs, streamline customer service, enable 24/7 access to banking services, and foster a more agile and cost-effective organizational structure, ultimately leading to greater profitability and enhanced customer satisfaction.

Key Strategies for Cost Control Through Digital Learning:

- ✳ **Automation of Repetitive Tasks:** Digital transformation allows for the automation of manual and repetitive processes, freeing up employees for more strategic work and reducing manpower costs.
- ✳ **Streamlining Operations:** Digital technologies streamline banking operations, making processes more efficient and reducing the time and resources required for tasks such as account management, bill payments, and fund transfers.
- ✳ **Reducing Physical Infrastructure:** With digital banking, banks can reduce their reliance on extensive physical branches and paper-based documentation, which lowers real estate, maintenance, and administrative expenses.
- ✳ **Enhanced Employee Digital Literacy:** Comprehensive training programs and upskilling initiatives are crucial to equip employees with the digital skills necessary to adapt to new technologies like AI and blockchain, creating a more efficient and flexible workforce.
- ✳ **Improved Resource Allocation:** Digital tools and analytics allow banks to better understand their operations and allocate resources more efficiently, leading to cost savings across various departments.
- ✳ **Cost-Effective Service Delivery:** Digital platforms offer more cost-effective solutions for delivering financial services, allowing banks to pass on some



of these savings to customers through competitive rates and fees.

How Digitalization Leads to Cost Savings?

- ✱ **Lower Operating Costs:** By replacing legacy systems with more streamlined digital technologies, banks can significantly reduce their overall operating expenses.
- ✱ **Increased Efficiency:** A digital-first approach boosts operational efficiency, enabling banks to handle more transactions and serve more customers with fewer resources.
- ✱ **Customer Cost Savings:** Customers benefit from digital banking through time and cost savings, as they can conduct transactions 24/7 from any location, avoiding the need to visit physical branches.
- ✱ **Sustainable Growth:** The cost savings and operational efficiencies achieved through digital transformation contribute to the bank's financial performance and enable sustainable growth.

b) Micro Learning:

Indian commercial banks can control training costs by using on-demand microlearning, which provides bite-sized, accessible, and personalized training content to employees, enhancing retention, reducing time away from work, and lowering development costs for materials. This modular approach facilitates cost-effective and timely updates for rapidly changing banking regulations and skills, leading to improved employee performance and compliance.

How On-Demand Microlearning Works:

- ✱ **Modular Content:** Microlearning breaks down complex topics into short, focused modules, often around 3-5 minutes, each addressing a single learning objective.
- ✱ **Accessibility:** Employees can access these modules

on various devices, such as mobile phones, at any time and place that is convenient for them.

- ✱ **Personalization:** Microlearning platforms can deliver personalized training content, tailoring the learning experience to individual employee needs and skill gaps.
- ✱ **Flexibility:** It minimizes disruption to daily work by allowing employees to learn in short bursts, fitting training into their schedules without needing extended periods away from their duties.

Benefits for Indian Commercial Banks:

- ✱ **Cost-Effectiveness:** By focusing on short, targeted content, banks reduce the need for extensive training videos, expensive external designers, or large-scale physical training sessions.
- ✱ **Enhanced Retention:** The bite-sized format improves knowledge retention and helps employees retain information more effectively.
- ✱ **Increased Efficiency:** Training becomes more efficient, saving employees time and allowing them to acquire necessary skills without significant disruption to their daily tasks.
- ✱ **Skill Development:** Microlearning helps in building specific banking and finance knowledge, addressing skill gaps in areas like compliance and customer service.
- ✱ **Faster Updates:** The modular nature allows for quick updates to training materials, ensuring that content remains relevant to evolving banking regulations and market needs.
- ✱ **Improved Compliance:** By delivering knowledge in manageable chunks, microlearning helps in reinforcing compliance requirements and motivating employees to act accordingly.

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Introduction of Apprenticeship System

Initiating short-duration training for Indian Commercial Bank Apprentices can indeed lower manpower costs by making them more efficient, and it can also boost productivity by improving their skills and understanding of banking operations. This approach ensures apprentices acquire job-relevant knowledge quickly, reducing the need for more extensive, expensive training and fostering a skilled workforce ready to contribute to the bank's goals.

Reduced Manpower Costs:

- *Faster Onboarding:* Short-duration training provides apprentices with the essential skills and knowledge needed for their roles, enabling them to become productive members of the workforce sooner.
- *Efficient Resource Utilization:* By focusing on job-specific training, banks can avoid wasting resources on lengthy, generic programs.
- *Lower Operational Expenses:* A quicker path to productivity means fewer overall expenses associated with employee training and development.

Increased Productivity Levels:

- *Improved Skill Sets:* Training directly enhances an apprentice's learning and understanding, leading to improved job performance and higher overall productivity.
- *Enhanced Employee Engagement:* When employees feel supported and have opportunities to learn, it can boost morale and self-confidence, contributing to higher productivity.
- *Adaptability to Digitalization:* As digital transactions and technology in banking grow, training apprentices in these areas ensures they are equipped to handle evolving demands and optimize the bank's technological investments.
- *Reduced Errors:* Systematic training helps prevent employees from learning through trial and error, which can be costly and inefficient.

c) Strategic Outsourcing:

Indian commercial banks control training costs by strategically outsourcing non-core functions, such as specific back-office operations, IT support, and even certain aspects of HR or marketing, to specialist providers. This allows banks to access specialized expertise, achieve economies of scale, and leverage cost-effective technology, like cloud services, freeing internal resources to focus on core banking activities. However, banks must manage significant risks, including reputational and operational risks, by ensuring that outsourcing complies with Reserve Bank of India (RBI) guidelines, maintaining strong oversight, and establishing clear risk management frameworks and exit strategies.

Strategic Outsourcing for Cost Control:

- ★ *Focus on Core Competencies:* By delegating non-core activities, banks can dedicate internal resources and expertise to strategic planning and customer-centric activities, thereby improving overall efficiency and competitiveness.
- ★ *Access to Specialist Expertise:* Outsourcing to providers who specialize in certain functions allows banks to gain access to world-class expertise and

technology that might be too expensive or difficult to develop internally.

- ★ *Leveraging Economies of Scale:* Third-party providers can achieve economies of scale in specific areas, such as document or data processing, passing on cost savings to the banks.
- ★ *Cost-Effective Technology Adoption:* Banks can use outsourcing to adopt advanced, scalable, and pay-as-you-go cloud-based solutions, which reduces upfront IT deployment costs and maintenance expenses.

Examples of Outsourced Activities:

- ★ *Back-office Operations:* Processing applications (like loans and credit cards), data processing, and other back-office activities are commonly outsourced.
- ★ *IT Services:* Outsourcing IT systems, maintenance, and cloud services is a significant trend, helping to lower costs and improve agility.
- ★ *HR and Marketing:* Some banks outsource aspects of human resources and marketing functions to external specialists.



Key Considerations and Risks:

- ✱ **Regulatory Compliance:** Banks must ensure their outsourcing arrangements comply with RBI guidelines, which emphasize risk management and oversight.
- ✱ **Risk Management Framework:** A comprehensive framework is crucial for evaluating the risks associated with outsourcing, including operational, strategic, reputational, legal, and compliance risks.
- ✱ **Due Diligence:** Banks must perform thorough due diligence on potential service providers to ensure they can meet performance and security standards.
- ✱ **Oversight and Monitoring:** Banks need to establish robust monitoring systems to oversee the performance and activities of outsourced service providers.
- ✱ **Exit Strategy:** Having a well-defined exit strategy is vital to manage risks when ending an outsourcing arrangement.

d) Train the Trainer:

Indian commercial banks control training costs by establishing in-house training centers and implementing Train-the-Trainer (T-T) programs to develop skilled internal trainers, who then train other employees. These programs, supported by technological investments and methods like e-learning and workshops, aim to develop employees' skills, improve performance, and reduce the reliance on expensive external trainers and external training programs. T-T programs focus on faculty development to create effective internal trainers, thereby managing costs while meeting the growing need for skilled manpower and specialized banking knowledge.

Key Components of Internal Skill Development Programs:

- ✱ **Internal Training Centers:** Banks establish dedicated training centers and institutes to cater to the training needs of their workforce.
- ✱ **Technology Integration:** Banks invest in technology and e-learning platforms to deliver training, which helps in cost-effective knowledge dissemination and keeps employees updated with new trends.
- ✱ **Skill-Based Training:** Training programs are designed to develop both foundational and advanced skills, such

as problem-solving, leadership, customer service, financial concepts, and sales skills, to enhance employee performance and efficiency.

- ✱ **Competency-Based Training:** Training is often structured around identified skill gaps, ensuring that programs directly address the competencies needed for specific functions and improve operational excellence.

The Train-the-Trainer (T-T) Program:

- ✱ **Objective:** To cultivate a cadre of internal trainers who are proficient in imparting knowledge and skills to other employees.
- ✱ **Faculty Development:** T-T courses focus on developing the training skills of internal faculty, including presentation skills, class management, creativity, and conceptualization abilities.
- ✱ **Impact:** By developing their own trainers, banks reduce their expenditure on external consultants and training agencies, leading to significant cost savings.

How T-T Programs Control Costs:

- ✱ **Reduced External Dependence:** Internal trainers reduce the need to hire external experts and pay for external training programs, which can be expensive.
- ✱ **Scalability:** A pool of internal trainers allows banks to scale their training efforts to onboard large numbers of new recruits or reorient existing personnel for new roles more efficiently.
- ✱ **Tailored Content:** Internal trainers can develop and deliver training content that is specifically relevant to the bank's vision, mission, and operational environment.
- ✱ **Long-Term Investment:** Instead of one-off external programs, building internal training capacity is seen as a long-term investment in human capital, improving overall organizational performance and efficiency.

Benefits for Banks:

- ✱ **Enhanced Employee Skills:** Employees gain new skills and knowledge, leading to improved job performance and career growth.
- ✱ **Increased Operational Efficiency:** Well-trained staff



are more efficient in handling customer service and managing operations.

- ✳ **Better Talent Retention:** Investing in employees' development fosters a sense of commitment and can lead to better retention rates.
- ✳ **Adaptability to Industry Changes:** Training helps the banking workforce adapt to evolving technologies, new services, and regulatory reforms.

e) Training Needs Assessments:

To control training costs, Indian commercial banks are shifting to a needs-based approach, focusing training on essential skills identified through Training Needs Assessments (TNAs) to address skill gaps and improve performance. They are leveraging digital learning platforms and technologies like AI and automation for more efficient and cost-effective training delivery. Key areas of focus include digital literacy, cybersecurity skills, data analysis, customer service, and strategic decision-making, allowing employees to handle complex tasks while reducing training expenses.

Key Strategies for Cost-Effective Training:

Targeted Skill Development via TNAs:

- ✳ **Conduct TNAs:** Banks perform Training Needs Assessments to identify the specific skills employees need to develop to close performance gaps, rather than conducting generic training programs.
- ✳ **Focus on Essential Skills:** This allows banks to prioritize training in core areas like digital banking operations, data analytics, cybersecurity, and customer relationship management.

Leveraging Technology for Efficiency:

- ✳ **Digital Learning Platforms:** Online courses and workshops reduce the need for physical infrastructure and travel, thereby cutting costs associated with traditional training methods.
- ✳ **AI and Automation:** Artificial intelligence can streamline the learning process by providing personalized content, automating routine training tasks, and accelerating knowledge transfer, leading to a more skilled workforce and lower costs.

Developing a Future-Ready Workforce:

- ✳ **Digital Transformation:** Banks are investing in training that helps employees adapt to digital platforms and new technologies, ensuring they can perform effectively in a digitally driven environment.
- ✳ **Strategic and Analytical Skills:** Focusing on problem-solving, strategic decision-making, and advanced data analysis empowers employees to handle complex challenges and contribute to the bank's long-term goals, improving overall performance.
- ✳ **Customer-Centric Skills:** Training employees in customer service, compassion, and reassurance is crucial for maintaining customer loyalty, which can reduce the cost of customer acquisition and retention.

Evaluating and Optimizing Training ROI:

- ✳ **Beyond Level 1 & 2:** While many organizations focus on training reactions and learning outcomes, banks are increasingly looking to measure training's impact on business results (Level 4) and return on investment (ROI) to justify training expenditures.
- ✳ By implementing these strategies, Indian commercial banks can ensure their training investments are focused, efficient, and aligned with business objectives, leading to a skilled workforce and controlled training costs.

f) Training Needs Analysis:

To control training costs in Indian commercial banks using data-driven training needs analysis (TNA), banks should align training goals with strategic objectives, collect data on skill gaps, analyse performance metrics, identify the most critical skill deficits, and then design and deliver targeted training programs that address these gaps efficiently, thereby reducing wasted resources on unnecessary or ineffective training.

Define Strategic Goals:

- ✳ Start by clearly defining the bank's overarching strategic objectives and identifying the roles and responsibilities of employees within those goals.
- ✳ Determine how the bank's performance is expected to change or improve, which will then dictate the necessary employee skills.

Data Collection and Analysis:

- ★ **Gather performance data:** Collect data on employee performance, project success rates, and customer service feedback.
- ★ **Identify skill gaps:** Use data to pinpoint specific areas where employees lack the necessary knowledge, skills, and abilities (KSAs) to meet performance requirements.
- ★ **Analyse reasons for gaps:** Determine the underlying reasons for these identified gaps to ensure the training addresses the root cause.

Cost Analysis:

- ★ **Conduct a cost analysis:** Evaluate the costs associated with current training initiatives and compare them to the potential costs of not addressing skill gaps, such as increased errors or decreased efficiency.

Skill-Based Training Design:

- ★ **Identify essential skills:** Based on the data, pinpoint the specific skills and competencies that are most critical for achieving the bank's goals.
- ★ **Select candidates and content:** Choose the employees who will benefit most from the training and select the most relevant and effective training content.
- ★ **Focus on cost-effective solutions:** Consider more efficient training methods like on-demand mobile training or online modules, which can be more cost-effective than traditional classroom training.

Implementation and Evaluation:

- ★ **Design and deliver programs:** Develop and implement training programs that are specifically designed to close the identified skill gaps.
- ★ **Review and refine:** After delivery, review the effectiveness of the training and refine future programs based on the results to ensure continuous improvement and cost control.

By employing this data-driven approach, Indian commercial banks can ensure that their training investments are focused, effective, and directly contribute to their strategic objectives, ultimately controlling costs

by avoiding unnecessary expenditures on training that doesn't align with real needs.

g) Collaborations:

Indian commercial banks control training costs through collaborations, by leveraging shared resources, establishing joint training programs with institutions like IIBF and IIMs, utilizing online platforms for wider reach, and establishing internal training infrastructure like SBI's Apex Training Institutes and State Bank Institutes of Learning and Development (SBILDs) to develop in-house expertise and reduce reliance on external vendors. This collaborative approach optimizes training expenditures while enhancing employee skills and knowledge, particularly in areas like digital transformation and leadership.

Collaborative Training Models:

- ★ **Joint Programs:** Banks collaborate with institutions such as the Indian Institute of Banking & Finance (IIBF), IIMs (IIM-A, IIM Indore), XLRI, ASCI, and JBIMS to conduct specialized training programs, sharing the costs and resources.
- ★ **Industry-Wide Platforms:** The Reserve Bank of India (RBI) has facilitated the creation of specialized institutions like the National Institute of Bank Management (NIBM) and the College of Agricultural Banking (CAB), which serve multiple banks and provide training to the entire financial sector.
- ★ **Online and Hybrid Models:** Many banks and institutions now conduct programs through online modes, allowing for cost-effective and wider dissemination of training, as seen with NABARD's SOFTCOB initiative.

Internal Optimization Strategies:

- ★ **In-House Apex Institutes:** Major banks like State Bank of India (SBI) have established in-house training infrastructure, including Apex Training Institutes (ATIs) and regional State Bank Institutes of Learning and Development (SBILDs). These ATIs design and deliver training for the bank's own needs and for external clients, acting as a cost-effective internal resource and developing in-house faculty.
- ★ **Shared Training Infrastructure:** Banks utilize the collective capacity and infrastructure of these internal training centers to train a large number of employees



annually, leading to significant cost savings compared to sourcing all training externally.

Focus Areas for Cost-Efficient Training:

- ★ **Digital Transformation:** Banks provide digital transformation training to their IT officers, ensuring employees are equipped with skills needed for the evolving digital landscape.
- ★ **Leadership Development:** Collaboration with external bodies and internal academies helps deliver leadership programs more efficiently for senior-level officers.
- ★ **Skill Gap & Competence Building:** These initiatives focus on closing knowledge and skill gaps and developing employees' skills and attitudes, improving overall performance and reducing the cost of errors.

By adopting these collaborative and internal optimization strategies, Indian commercial banks can collectively manage and reduce their overall training costs while ensuring that their workforce receives the necessary skills and knowledge to remain competitive and effective.

h) Incentivized Learning Programs:

Indian banks control training costs by using incentivized learning programs, which often include mandated certifications in critical areas like risk management and treasury operations. Banks offer cash incentives and reimburse course fees for employees who achieve these certifications. This approach promotes a skilled workforce, improves performance, and fosters lifelong learning, thereby optimizing training expenditures by ensuring that training investment directly contributes to employee development and bank goals.

Key Elements of Incentivized Learning:

- ★ **Mandatory Certifications:** Banks define specific certifications in specialized areas and make them mandatory for certain roles, such as risk management or credit management.
- ★ **Financial Incentives:** Employees who successfully complete these certifications receive financial rewards, such as cash incentives.
- ★ **Reimbursement of Costs:** Banks typically provide reimbursement for the fees associated with the training programs and courses.

- ★ **Career Progression:** Successful completion of these certifications can lead to improved career prospects or continued placement in specialized roles, while failure to obtain certifications may result in reassignment.

How It Controls Costs?

- ★ **Targeted Skill Development:** Incentive programs focus on developing skills crucial for the bank's operations, ensuring that training investments are directed toward areas of strategic importance.
- ★ **Increased Efficiency:** A better-skilled workforce can perform tasks more quickly and accurately, leading to improved overall efficiency and productivity.
- ★ **Reduced Turnover and Error:** By investing in skill development and providing incentives, banks can improve employee morale and loyalty, potentially reducing employee turnover and the associated costs.
- ★ **Alignment with Bank Goals:** The incentive schemes are often tied to the bank's strategic goals, ensuring that employee training aligns with organizational objectives and contributes to overall business performance.

Example: A major bank might implement an incentive scheme where officers are required to obtain a certification in treasury operations. They could be offered a cash incentive and reimbursement for course fees upon successful completion. This incentivizes officers to gain new skills, which can reduce the bank's long-term training costs by ensuring a skilled workforce and minimizing the need for costly external hires or external training for specialized roles.

i) Consolidate In-house Physical Training Centres:

Indian banks have reduced or consolidated their in-house physical training centers by shifting to online and virtual training methods to control costs, a trend that accelerated due to factors like bank consolidations and the increased need for technological and specialized training in a rapidly evolving financial landscape. Rather than maintaining expensive physical infrastructure and residential facilities, banks now leverage digital platforms, external training institutes like the Indian Institute of Banking & Finance (IIBF), and blended learning approaches to deliver necessary training more efficiently and cost-effectively.



Reasons for Reducing Physical Training Centers:

- ★ **Cost Control:** Maintaining dedicated physical training centers and residential facilities incurs significant overheads, including maintenance, staff, and operational expenses. Shifting to digital and outsourced training reduces these costs.
- ★ **Technological Advancements:** The increasing adoption of digital platforms and the need for specialized training in areas like digital banking, risk management, and compliance have made online learning a more viable and effective alternative.
- ★ **Bank Consolidations:** Mergers and acquisitions within the banking sector often led to redundant physical training facilities, prompting banks to consolidate their resources and eliminate duplicate centers.
- ★ **Demand for Specialization:** The dynamic nature of the financial sector requires continuous upskilling of employees in new technologies and evolving regulatory frameworks, making generic in-house training less efficient and leading banks to use external, specialized courses.
- ★ **Efficiency and Scalability:** Online training offers greater flexibility and scalability, allowing banks to reach a larger number of employees simultaneously without the geographical constraints of physical centers.

Alternative Training Models:

- ★ **Digital and Virtual Training:** Banks are increasingly using online modules, webinars, and virtual classrooms to deliver training programs, reducing the need for physical infrastructure.
- ★ **Blended Learning:** This approach combines online learning with occasional physical sessions, offering a balance between cost-efficiency and interactive learning experiences.
- ★ **External Training Institutes:** Banks partner with institutions like IIBF for specialized training programs, leveraging their expertise and world-class facilities without incurring the costs of maintaining their own centers.
- ★ **Job Enrichment:** Strategies like job enrichment, which involve providing employees with increased independence and responsibility, can enhance job

satisfaction and performance, sometimes reducing the need for traditional, intensive training programs.

j) AI Power Automation of Banking Operations reduces Training Costs:

Indian commercial banks control training costs by implementing AI-powered automation for tasks like customer service through chatbots, loan processing, and risk assessment, which reduces the need for extensive human training in repetitive functions. Other methods include leveraging tele-banking, digital platforms, and cloud computing to provide self-service options, thereby lowering operational staff requirements and the associated training expenses.

Key Automated Technology Operations:

- ★ **AI-Powered Chatbots and Virtual Assistants:** Banks are extensively using AI-driven chatbots for customer service, handling queries, and providing information. This reduces the need for a large customer service staff, which in turn lowers training costs.
- ★ **Robotic Process Automation (RPA):** RPA automates repetitive, rule-based tasks like data entry, document processing, and information verification. This frees up employees from mundane tasks, allowing them to be trained for more complex, value-added roles.
- ★ **Intelligent Document Processing (IDP):** IDP uses AI to authenticate and extract data from various documents, such as identity documents and financial statements. This automation reduces manual effort and training needs for document-related workflows.
- ★ **AI in Risk and Fraud Detection:** Machine learning algorithms are used for accurate risk assessment and real-time fraud detection. This replaces the need for manual analysis by trained personnel, leading to significant cost savings.
- ★ **Agentic AI for Dynamic Workflows:** Agentic automation can handle complex, adaptive processes, enabling banks to automate sophisticated workflows with high accuracy. This extends automation to processes beyond simple data entry, impacting strategic decisions and operational efficiency.

Technologies Reduce Training Costs:

- ★ **Reduced Staffing Needs:** By automating many tasks,



banks can operate with smaller teams, especially in customer service and back-office functions, thus reducing the overall number of employees requiring training.

- ★ **Shift in Skill Requirements:** Automation shifts the focus from manual, repetitive skills to more analytical, technical, and strategic skill sets. Banks can then invest in training fewer employees for high-level tasks rather than training a large workforce on basic operations.
- ★ **Enhanced Employee Productivity:** Employees, no longer burdened by routine tasks, can focus on higher-value activities, leading to better overall efficiency and requiring less training to manage high volumes of work.
- ★ **Scalability and Cost-Efficiency:** AI and automation provide scalable solutions that can handle increasing volumes of work without a proportional increase in human resources, significantly cutting down costs associated with onboarding and training new employees.

k) Self-learning Courses:

Self-learning IIBF courses are an effective way for Indian commercial bank staff to gain knowledge and skills, offering a significant benefit in controlling training costs by allowing for flexible, online, self-paced learning, thereby reducing expenses on traditional training programs and infrastructure. The IIBF provides interactive e-learning materials, faculty support, and the ability to study anytime, anywhere, making it a cost-effective solution for professional development.

How Self-Learning IIBF Courses Control Training Costs:

- ★ **Eliminates Physical Infrastructure:** Banks save on costs associated with setting up physical training centers and arranging travel for staff.
- ★ **Reduces Trainer Costs:** Self-paced e-learning minimizes the need for expensive instructors and trainers.
- ★ **Flexible Learning:** Staff members can learn at their own pace, avoiding the cost of dedicated training days and reducing disruption to daily operations.

- ★ **Cost-Effective Content Delivery:** The Indian Institute of Banking & Finance (IIBF) delivers comprehensive e-learning content, making it cheaper to deliver the same training to a large number of employees simultaneously.

Benefits for Banks and Staff:

For Banks:

- ★ **Cost Savings:** Significant reduction in overall training expenditure.
- ★ **Wider Reach:** Ability to train a large workforce efficiently.
- ★ **Improved Skill Levels:** Enhanced knowledge base among employees leads to better operational efficiency and service.

For Staff Members:

- ★ **Flexibility:** Learn at their own convenience, fitting studies around their work schedules.
- ★ **Career Growth:** Gain professional recognition and certifications that aid in career advancement and promotion.
- ★ **Skill Development:** Acquire essential skills and knowledge in areas like digital banking, risk management, and financial planning.

l) Visiting Faculty Scheme or On-the-Job Training (OJT):

A Visiting Faculty Scheme or On-the-Job Training (OJT) for clusters of bank branches would indeed be an effective strategy for Indian banks to enhance staff skills and reduce costs. Such a model fosters continuous learning through expert-led instruction and practical experience, closing knowledge and skill gaps while potentially lowering training expenses by utilizing shared resources across multiple branches.

Benefits of a Visiting Faculty Scheme or OJT:

- ★ **Reduced Training Costs:** Instead of sending every employee to a central training facility, a visiting faculty or OJT model allows for centralized expertise to reach multiple branch locations, thereby reducing travel and accommodation expenses.



- ★ **Bridging Knowledge Gaps:** Visiting faculty or in-branch trainers can deliver specialized and up-to-date knowledge to staff, addressing current industry trends, regulatory changes, and new product offerings.
- ★ **Skill Enhancement:** OJT, in particular, provides practical, hands-on training that is directly applicable to the daily tasks of branch staff, improving their proficiency in areas like cash handling, customer service, and digital banking platforms.

Improved Customer Service:

By training frontline staff on customer orientation, complaint handling, and product knowledge, banks can significantly improve the customer experience and build stronger relationships.

- ★ **Increased Efficiency:** A more skilled and knowledgeable workforce can perform tasks more efficiently, leading to higher productivity and better business outcomes.
- ★ **Adaptability:** This approach allows banks to adapt to evolving customer expectations and technological advancements by quickly disseminating new information and skills to their workforce.

Implementation Considerations:

- ★ **Cluster Approach:** Grouping nearby branches for training sessions or shared OJT can maximize resource utilization and reduce logistical challenges.
- ★ **Faculty Selection:** Banks can engage experienced internal staff as trainers or invite external subject matter experts (visiting faculty) to deliver specialized training.
- ★ **Training Content:** The training should cover essential banking functions, customer service, sales, compliance, and the use of new banking technologies.
- ★ **Measurement of Impact:** Banks should track the impact of these programs on employee performance and business metrics to ensure their effectiveness.

m) Mandatory Online Training:

Mandatory Online Training for Bank Staff, integrated into 'Annual Performance Appraisals' and including Harvard Management Modules (HMM) for senior

management, is a strategic approach to skill enhancement and cost reduction, fostering self-directed learning to keep pace with operational changes and improve overall bank performance. This model leverages the benefits of technology-driven, flexible learning to develop a knowledgeable and adaptable workforce, ultimately boosting productivity and providing a competitive edge.

Benefits of Mandatory Online Training:

- ★ **Cost Reduction:** Online platforms and modules significantly lower the expenses associated with traditional, physical training programs.
- ★ **Skill Enhancement:** Online learning provides a flexible and accessible method for staff to acquire new skills and update existing knowledge, crucial in the dynamic banking sector.
- ★ **Self-Paced Learning:** Employees can learn at their own pace, accommodating their schedules and enabling deeper understanding of the material.
- ★ **Increased Productivity:** A better-skilled workforce leads to higher efficiency and improved overall productivity within the organization.

Improved Knowledge Retention:

The ability to review online content multiple times can enhance information retention and recall.

Specific Benefits for Different Staff Levels

- ★ **General Staff:** Mandatory online lessons with marks integrated into their annual appraisal reports ensure accountability and motivate staff to engage with the content and improve their skills.
- ★ **Senior Management:** Harvard Management Modules (HMM) provide access to high-quality, world-renowned leadership education, developing strategic thinking and management capabilities essential for senior roles.

Strategic Advantages:

- ★ **Adaptability:** In a rapidly changing business environment, continuous learning helps the bank and its employees adapt to new technologies, regulations, and best practices in banking operations.



- ✳ **Talent Development:** Investing in employee development demonstrates a commitment to career growth, which can boost morale, engagement, and long-term retention.
- ✳ **Competitive Edge:** A highly skilled and continuously learning workforce contributes to the bank's ability to stay competitive in the market by delivering superior service and innovation.
- ✳ **Performance Management:** Linking training to performance appraisals creates a clear link between learning activities and individual performance, supporting a culture of continuous improvement and accountability.

n) Job Families:

Introducing job families in the banking sector streamlines training by focusing on specialized skills for specific roles, rather than attempting to train all staff in every function. This approach enhances employee efficiency and expertise in their core responsibilities, leading to better performance and operational excellence, while simultaneously reducing overall training costs for banks.

Benefits of Job Families:

- ✳ **Increased Skill & Efficiency:** Employees receive targeted training for their specific job family, leading to deeper expertise and improved performance in their specialized area.
- ✳ **Cost Control:** By focusing training efforts, banks can avoid the expense of providing broad, generic training to all staff, concentrating resources on the most relevant skills.
- ✳ **Specialized Expertise:** Job families foster the development of in-depth knowledge and competence within particular banking functions, which is crucial for informed decision-making and client service.
- ✳ **Performance-Driven Training:** Training programs can be more effective when they are directly linked to identifying and filling skill gaps required for specific roles, rather than being a broad, one-size-fits-all approach.

How It Works:

- ✳ Instead of a universal training program, banks would

group employees into distinct job families, such as “Retail Banking,” “Investment Services,” “Risk Management,” or “Operations”.

- ✳ **Targeted Skill Development:** Training would then be tailored to the specific competencies needed within each family, ensuring that employees gain the exact skills required for their roles.
- ✳ **Improved Resource Allocation:** Human resources can better allocate training budgets and resources to address the specific skill requirements of different job families, leading to a more efficient use of funds.

Adopting a job family model for staff development in the banking sector is a strategic approach that cultivates specialized talent, improves operational efficiency, and provides a more cost-effective way to manage training needs.

o) Regular Communication:

Regularly communicating operational and system updates to bank staff via SMS, email, or WhatsApp is an effective strategy to reduce knowledge gaps and training costs by ensuring everyone is informed about changes, fostering a well-informed workforce, and promoting efficient knowledge dissemination.

Benefits of Using Digital Communication for Updates:

- ✳ **Reduces Knowledge Gaps:** By providing real-time updates and notifications through these channels, banks can ensure that all staff members are consistently informed about the latest changes in systems, procedures, and operations.
- ✳ **Lowers Training Costs:** Instead of relying on extensive formal training sessions for every update, quick, digital dissemination can be a more cost-effective way to keep the staff updated, thereby reducing expenses associated with training programs.
- ✳ **Increases Operational Efficiency:** Informed staff can adapt more quickly to new systems and procedures, leading to improved efficiency in daily operations and quicker resolution of banking processes.
- ✳ **Enhances Agility:** Digital communication enables banks to react faster to changing trends, new regulations, and market shifts, allowing for a more



agile response to the evolving banking landscape.

- ★ **Improves Compliance:** Keeping staff informed of regulatory changes and new policies ensures that the bank remains compliant, minimizing risks associated with operational errors or non-compliance.
- ★ **Boosts Employee Engagement:** Regular and clear communication fosters a sense of inclusivity and transparency, keeping employees engaged and motivated as they feel connected to the bank's progress and changes.

Practical Implementation:

- ★ **Centralized Messaging System:** Implement a system that allows for sending messages to specific departments or all staff members simultaneously.
- ★ **Content Standardization:** Ensure that updates are clear, concise, and standardized in format, making them easy to read and understand quickly.
- ★ **Mobile-First Approach:** Leverage platforms like WhatsApp and SMS, which are widely used and accessible, for immediate delivery and consumption of information

p) Promotions through Written Examination on Systems and Procedures of Bank:

Indian bank promotions are often based on merit, requiring staff to update their knowledge of banking systems and procedures through written examinations, group discussions, and interviews to foster skill development and potentially reduce the reliance on formal training programs. This comprehensive assessment process helps ensure that promoted staff are competent and prepared for their new roles, contributing to a more skilled workforce within the banking sector.

How the Process Works:

- ★ **Written Examination:** This component tests a candidate's knowledge of banking systems, procedures, and general banking principles. Passing the exam is a prerequisite for advancing to the next stage.
- ★ **Group Discussion:** Group discussions are used to assess a candidate's communication skills, ability to work in a team, and their perspective on various

banking-related topics.

- ★ **Interview:** The final interview stage allows candidates to present their attitudes, awareness, and potential to an interview board, providing a comprehensive judgment of their suitability for the promoted position.

Benefits of this Approach:

- ★ **Knowledge Updates:** The structured promotion process incentivizes staff to continuously update their knowledge and skills relevant to their roles.
- ★ **Reduced Training Dependence:** By requiring staff to demonstrate their competence through exams and interviews, banks may lessen their dependency on continuous external training for promotion.
- ★ **Merit-Based Promotion:** This system ensures promotions are based on demonstrated ability and knowledge, promoting a fair and transparent career advancement path.
- ★ **Enhanced Skill Development:** The process naturally develops generic and domain-specific competencies in employees, leading to improved service delivery.

q) Apprenticeship System Vs. Self-Learning:

Giving more weight to 'Apprentices in the Recruitment Process' for Indian commercial banks can accelerate learning, enhance productivity, and reduce manpower costs by providing hands-on experience and a pipeline of trained talent, aligning with the goal of developing competent personnel and strengthening the company's human resource base. This approach helps fill skills gaps, fosters loyalty, and ensures a skilled workforce for the evolving banking landscape.

Benefits of Prioritizing Apprentices in Recruitment:

- ★ **Quick Learning Curve:** Apprentices receive practical, on-the-job training that helps them quickly develop the necessary skills and knowledge for banking operations.
- ★ **Increased Productivity:** Early exposure to job functions allows apprentices to become productive members of the workforce sooner, contributing to the bank's overall output.



- ✱ **Reduced Manpower Cost:** Hiring apprentices can reduce costs associated with extensive initial training, recruitment, and onboarding of external candidates.
- ✱ **Talent Pipeline:** Banks can cultivate their own skilled workforce, creating a loyal pool of employees who are already familiar with the bank's culture and systems.
- ✱ **Filling Skills Gaps:** Apprenticeships are an effective way to meet industry needs for skilled manpower, addressing existing skill shortages in the banking sector.
- ✱ **Adaptation to Evolving Needs:** A focus on apprentices, particularly in areas like digital transformation, helps banks build a workforce with the evolving skills required for the future.

Implementation Considerations:

- ✱ **Focus on Training:** For the apprenticeship model to be effective, it must be training-focused and relevant to the specific needs of the banking industry.
- ✱ **Integration into the Selection Process:** Incorporating a greater weightage for apprentice selection requires a strategic approach to the recruitment and selection framework.
- ✱ **Long-Term Vision:** This is not just a short-term solution but a long-term strategy to build a resilient and competent human resource base for the bank.

r) University Diploma Courses:

A New HR Policy that replaces "Banking Diploma Courses like the one offered by Manipal University" with a one-year apprenticeship system is proposed because apprenticeships offer more practical, on-the-job training, can be "debt-free" learning (as opposed to costly courses), provide real-world experience, and allow participants to earn while they learn. The Banking Diploma Courses, though providing professional qualifications, are perceived as costly and lack the vital hands-on training that apprenticeships provide, making the apprenticeship system a more attractive alternative for preparing skilled professionals for the evolving financial landscape.

Arguments for the Apprenticeship System:

- ✱ **Real-World Experience:** Apprenticeships provide direct, practical experience by allowing individuals

to learn in a real working environment, which is often missing in diploma courses, as noted by Spectrum Talent Management.

- ✱ **"Earn While You Learn":** A significant benefit is that apprentices receive training and compensation simultaneously, eliminating the financial burden of paying for expensive courses.
- ✱ **On-the-Job Mentorship:** Apprentices receive expert guidance from experienced professionals within the bank, fostering a clear career path and deeper industry integration.
- ✱ **Industry Connections:** Apprenticeships help build strong industry connections, which can be beneficial for long-term career advancement.
- ✱ **Debt-Free Education:** Unlike academic courses that often lead to student debt, apprenticeships offer a practical, debt-free path to acquiring valuable skills.
- ✱ **Tailored Training:** The training is directly relevant to the bank's specific needs and the demands of the banking industry, creating more job-ready employees.

Drawbacks of Traditional Diploma Courses:

- ✱ **Costly for Candidates:** Pursuing a diploma in banking can be expensive, placing a significant financial strain on students.
- ✱ **Lack of On-Job Training:** Many diploma programs provide theoretical knowledge but lack the practical, hands-on experience that is crucial for success in a banking role, according to Spectrum Talent Management.
- ✱ **Less Direct Career Path:** While diploma courses offer professional qualifications, they may not always provide the same direct pathway to employment and specialized skills as a well-structured apprenticeship.

The proposed replacement of one-year banking diploma courses with an apprenticeship system aligns with a broader trend towards practical, skill-based training in the workforce. It addresses the financial cost and lack of real-world application often associated with academic courses, offering a more effective and accessible route for individuals to enter and advance in the banking sector.



s) Audit of ‘Training System’:

To analyse the effectiveness of bank training using a training audit, focus on key areas like business growth, productivity increases, employee performance, and involvement in work. The audit process involves establishing clear evaluation criteria and gathering evidence related to business outcomes, employee skills and engagement, and overall operational efficiency to determine the return on investment of training programs.

Key Areas for Audit:

- ✱ **Business Levels:** Assess how training has contributed to the growth and performance of the bank itself, such as improved revenue, market share, or customer acquisition.
- ✱ **Productivity Levels:** Measure the extent to which training has led to a tangible increase in the output or efficiency of employees and departments.
- ✱ **Employee Performance:** Evaluate how training has improved individual employee skills, knowledge, and competencies, which directly impacts job performance and the quality of work.
- ✱ **Employee Involvement/Engagement:** Analyse whether training has fostered a greater commitment, motivation, and participation among employees in their work and the organization’s goals.

Audit Process:

- ✱ **Define Criteria and Objectives:** Before the audit, establish clear, measurable criteria and objectives for evaluating the training’s success.
- ✱ **Gather Evidence:** Collect data through various methods, including:
- ✱ **Performance Data:** Analyse key performance indicators (KPIs) related to business and productivity before and after training.
- ✱ **Employee Surveys and Feedback:** Gather direct feedback from employees about the training’s impact on their skills and job satisfaction.
- ✱ **Direct Observation:** Observe employees to assess changes in their work behaviour, skills, and involvement after training.

✱ **Interviews:** Conduct interviews with trainees, managers, and stakeholders to gain insights into the training’s effectiveness.

✱ **Analyse Findings:** Analyse the collected data to identify patterns, trends, and correlations between training initiatives and the desired outcomes.

✱ **Report on Effectiveness:** Document the findings, highlighting areas of success and identifying any gaps or areas for improvement in the training programs.

By focusing on these specific areas and following a structured audit process, banks can effectively assess the value of their training investments and make informed decisions for future development initiatives.

t) Role of Cost Accountants in Controlling Training Costs:

Cost Accountants (CMAs) control training system costs in Indian banks by providing expertise in cost analysis, budgeting, and performance management, enabling banks to identify inefficiencies, optimize resource allocation, and improve overall profitability. They conduct cost audits, perform variance analysis, and recommend strategies to control expenses and enhance training program effectiveness, aligning costs with organizational objectives and regulatory compliance.

Key Contributions of CMAs to Controlling Training Costs:

- ✱ **Cost Analysis and Budgeting:** CMAs track and analyse costs associated with various training programs, including instructor fees, materials, facilities, and technology, to create realistic budgets and identify areas for potential savings.
- ✱ **Performance Monitoring:** CMAs monitor the performance of training programs, comparing actual costs against budgeted costs to detect variances and assess efficiency.
- ✱ **Identifying Inefficiencies:** CMAs use cost audit and variance analysis to pinpoint unproductive cost centers and wasteful expenditures within the training system.
- ✱ **Strategic Cost Control:** They develop and recommend strategies for cost reduction, such as optimizing resource use, exploring more cost-effective training methods, and negotiating with external vendors, thereby enhancing profitability.



- ✱ **Total Cost Management (TCM):** CMAs apply a strategic framework of Total Cost Management to optimize costs across the training value chain, embedding cost consciousness and data-driven decision-making into the organizational culture.
- ✱ **Regulatory Compliance:** With their knowledge of Indian tax laws and financial regulations, CMAs ensure that training expenditures comply with the relevant financial regulations, such as GST, thereby avoiding penalties and maintaining a positive financial standing.
- ✱ **Business Partnering:** CMAs act as business partners, providing data-driven insights to support decision-making by management, helping to shape strategic improvements in the training system.

In essence, CMAs provide the specialized analytical skills and strategic perspective needed to manage the financial aspects of training programs, ensuring they are delivered cost-effectively while contributing to the overall objectives of the Indian banks.

To Sum Up:

To minimize training costs and boost bank business and productivity, banks should implement targeted training programs for specific skills, leverage technology like AI and digital transformation to improve efficiency, focus on waste reduction by eliminating unnecessary processes, and develop staff expertise in high-demand areas like customer service and digital banking.

Strategies for Cost-Effective and Productive Training:

- ✱ **Identify and Address Waste:** Banks should conduct a thorough analysis of their operations to pinpoint areas of waste in the training process and eliminate unnecessary steps or processes, improving overall efficiency.
- ✱ **Leverage Technology and Digital Transformation:** Integrating technologies such as AI can significantly lower operational costs and improve accuracy. Training programs should focus on upskilling employees to manage and utilize these new tools effectively, adapting to the evolving digital landscape.
- ✱ **Focus on High-Value Skills:** Instead of broad, expensive training, focus on developing expertise in areas that directly impact business growth and

productivity, such as:

- ✱ **Digital Banking:** Training employees in the use of new digital platforms and services to meet customer needs.
- ✱ **Cybersecurity:** Equipping staff to recognize and mitigate cyber threats, a critical area of concern in the financial sector.
- ✱ **Customer Service:** Improving the skills of customer-facing staff to enhance customer satisfaction and retention.

Create an environment of continuous learning by providing employees with opportunities for career development and skill enhancement. This not only improves their confidence but also builds a more capable and dedicated workforce.

Evaluate the effectiveness of training programs by measuring their impact on key business metrics, such as productivity, customer satisfaction, and profitability. This allows for continuous improvement and ensures that training investments deliver tangible results.

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- c) Incentivized Learning Programs-Variou PSBs Initiatives / Incentives after completion of IIBF Examinations.
- d) AI Power Automation of Banking Operations reduces Training Costs-Best Practices adopted in Developed Countries.
- e) Self-learning Courses-Initiatives of PSBs-Annual Reports under HR Initiatives of PSBs.
- f) Promotions through Written Examination on Systems and Procedures of Bank-Best Practices adopted by Few Commercial Banks.
- g) University Diploma Courses-Initiatives of HR Department of different PSBs.
- h) Cost-Benefit-Analysis of Training System of Banks-Literature of ICMAI on Cost Benefit Analysis.



Annexure I

SoPs / Job Cards / Manuals for Self-Learning Materials

Creating a robust framework of Standard Operating Procedures (SOPs), job cards, and self-learning materials is an effective strategy for any bank to reduce training costs and minimize operational risk. These resources standardize operations, promote best practices, and build a risk-aware culture.

Below is a step-by-step guide to developing and implementing this program.

Phase 1: Establish the operational framework:

Step 1: Form a steering committee and project team.

- ✳ **Steering committee:** Consisting of senior management and department heads, this committee will provide leadership and resources for the project.
- ✳ **Project team:** Led by a project manager, this team will include subject-matter experts (SMEs) from each department, such as retail, lending, and compliance.

Step 2: Conduct a needs assessment:

- ✳ Identify high-priority areas by reviewing past audit reports, operational losses, and employee feedback. Examples include account opening, loan origination, and sensitive data handling.
- ✳ Analyse existing processes to understand current workflows, identify inefficiencies, and pinpoint areas lacking standardization.

Step 3: Define a standard structure and format: Create a consistent template for all documentation to ensure uniformity and clarity across the organization.

Standard Operating Procedure (SOP) template:

- ✳ **Purpose:** Explain the objective and importance of the procedure.
- ✳ **Scope:** Define who the SOP applies to (e.g., all branch staff, specific departments).
- ✳ **Roles and responsibilities:** Clarify who is accountable for each step.
- ✳ **Procedure:** List clear, sequential, step-by-step instructions. Include visuals like screenshots for complex software processes.
- ✳ **Risk mitigation:** Detail specific checks and controls to prevent errors, fraud, and non-compliance.

✳ **Regulatory references:** Cite relevant internal policies or external regulations (e.g., RBI guidelines).

✳ **Version control:** Include a header with the document name, version number, author, and effective date.

✳ **Job Cards (for operational staff):** In the context of training and development in Indian banks, a “Job Card” is a synopsis of learning material designed to provide bank employees with quick and specific information for their roles. This tool supports on-the-job training and continuous learning by delivering key processes, product knowledge, and operational guidelines in a concise, accessible format.

Key characteristics and purpose of Job Cards:

✳ **Concise and role-specific:** A Job Card summarizes complex banking procedures and product information into bite-sized, easily digestible modules. This approach, known as microlearning, ensures that training is efficient and doesn’t disrupt an employee’s workflow.

✳ **Accessible on-demand:** Whether in a physical card format or, more commonly today, as part of a digital or e-learning system, Job Cards are available for employees to reference anytime and anywhere. This is particularly useful for frontline staff who need quick answers to customer queries.

✳ **Supports on-the-job application:** Instead of relying solely on classroom training, Job Cards provide employees with hands-on, practical guidance. For instance, a teller could use a Job Card for a new service to quickly recall the steps and information required.

✳ **Enhances job readiness:** For new recruits, banks like the State Bank of India (SBI) use training programs that blend classroom instruction with “on-the-job learning,” where Job Cards are likely used to reinforce the fundamentals. This helps close the gap between theoretical knowledge and practical skills.

✳ **Fosters a culture of continuous learning:** In a rapidly changing industry driven by digital transformation, Job Cards ensure that employees are consistently updated on new products, processes, and technologies. This keeps the workforce adaptable and relevant.



- ✳ **Addresses diverse needs:** Given the wide range of roles within a bank, from tellers to compliance officers, Job Cards can be customized to the specific needs of each department, ensuring targeted and relevant learning.

Phase 2: Develop and deploy self-learning materials

Step 4: Create self-paced learning content: Develop digital modules based on the new SOPs and job cards.

- ✳ **Product knowledge:** Interactive guides explaining the features, benefits, and target customers for each banking product (e.g., different types of savings accounts, fixed deposits, credit cards).
- ✳ **System procedures:** Video tutorials or slideshows demonstrating how to use core banking systems and other software to perform key functions.
- ✳ **Operational guidelines:** Modules on compliance topics like anti-money laundering (AML) and know your customer (KYC) procedures.
- ✳ **Short, engaging format:** Break content into bite-sized “microlearning” modules to improve retention and make training efficient.

Step 5: Establish a central knowledge repository:

- ✳ **Learning Management System (LMS):** Host all self-learning modules on a central LMS. This allows employees to learn at their own pace, on-demand, without dedicated classroom time.
- ✳ **Digital document library:** Store all SOPs and job cards in a searchable, easy-to-access digital library. Use metadata to allow staff to quickly find the correct procedure for a task or product.
- ✳ **Cross-reference content:** Integrate the materials by linking job cards directly to the more detailed SOPs and self-learning modules.

Step 6: Implement a change management and communication plan

- ✳ Announce the new documentation and resources, explaining how they will empower employees and improve consistency.
- ✳ Provide clear instructions on how to access the new systems and materials.

- ✳ Run an initial pilot program with a small group to gather feedback and refine the content before a broader rollout.

Phase 3: Maintain and improve the program:

Step 7: Integrate training into the employee lifecycle

- ✳ **Automate onboarding:** New employees can use the self-learning materials to train on core products and systems, freeing up experienced staff for higher-value tasks.
- ✳ **Mandatory leave policy:** Implement a mandatory leave policy to help detect fraud and ensure procedures are not overly reliant on any single individual.
- ✳ **Mentorship program:** Pair new hires with experienced mentors to combine self-learning with hands-on guidance.

Step 8: Establish a continuous feedback loop

- ✳ **Regular reviews:** Set a schedule to review and update all SOPs, job cards, and learning materials to reflect changes in policy, products, or regulations.
- ✳ **Operational risk reporting:** Analyse operational risk incident reports and employee feedback to identify gaps in the existing procedures.
- ✳ **Rewards and recognition:** Create a system to acknowledge employees who proactively contribute to refining processes or identifying risks.

Step 9: Measure the results: Track key performance indicators to prove the program’s effectiveness.

- ✳ **Reduced training costs:** Measure the decrease in spending on external training, travel, and classroom facilities.
- ✳ **Lower operational losses:** Track the number and severity of operational incidents attributable to human error.
- ✳ **Improved compliance:** Monitor the reduction in non-compliance incidents and regulatory penalties.
- ✳ **Increased productivity:** Use metrics like transaction speed or processing times to show improvements.



Annexure II

Cost-Benefit-Analysis of Training System of Banks

A cost-benefit analysis of training in Indian commercial banks reveals that, despite significant investments and impressive records in recent decades, the return on investment can be sub-optimal. While training is crucial for navigating a dynamic, technology-driven, and competitive market, challenges such as inadequate needs analysis, outdated methods, and insufficient post-training support often undermine its effectiveness.

Costs of employee training: The costs associated with training programs in Indian commercial banks include both direct and indirect expenditures.

Direct costs:

- ✱ **Program expenses:** Includes course material, trainer fees, and venue costs.
- ✱ **Infrastructure:** Costs for setting up and maintaining dedicated training centers, such as those established by the State Bank of India (SBI) and other institutions since the 1950s.
- ✱ **Technology:** Investments in e-learning platforms, software, and other digital tools needed for online and blended learning.

Indirect and hidden costs:

- ✱ **Employee time:** Time spent by employees away from their regular duties to attend training, which can lead to reduced short-term productivity.
- ✱ **Travel and lodging:** Expenses related to employee travel, boarding, and lodging for residential training programs.
- ✱ **Lost productivity:** The opportunity cost of employees being away from work, which can be significant, especially in customer-facing roles.
- ✱ **Administrative costs:** Expenses related to planning, scheduling, and evaluating training programs.

Benefits of employee training: The potential benefits of effective training programs in the Indian banking sector far outweigh the costs, addressing issues related to competition, technology, and customer service.

Direct financial benefits:

- ✱ **Increased productivity:** Employees with updated knowledge and skills work more efficiently, leading to higher output per employee.
- ✱ **Enhanced performance:** Training directly improves job-specific performance, leading to better results and the achievement of organizational goals.
- ✱ **Improved profitability:** Higher productivity, better customer service, and increased efficiency can lead to higher revenues and overall profitability.
- ✱ **Reduced errors:** Well-trained employees make fewer mistakes, reducing rework and financial losses from errors.

Intangible benefits:

- ✱ **Improved customer satisfaction:** Skilled and confident employees provide better service, leading to higher customer satisfaction and retention.
- ✱ **Higher employee morale:** Investing in employee development makes staff feel valued, boosting morale and motivation.
- ✱ **Lower attrition:** Training and development opportunities increase job retention and reduce the high cost of employee turnover, which is particularly relevant for the younger workforce.
- ✱ **Better corporate image:** A well-trained workforce contributes to a strong corporate reputation, which can attract talent and customers.
- ✱ **Adaptability and innovation:** Regular training helps banks stay updated with technological changes, new financial products, and evolving market demands.

Challenges impacting the cost-benefit ratio:

- ✱ Several factors specific to the Indian banking sector can diminish the effectiveness of training and negatively impact the return on investment.
- ✱ **Inadequate needs analysis:** Training programs are often designed without a scientific assessment of



specific skill gaps, resulting in generic and irrelevant content.

- ✱ **Quality of training:** The quality of trainers and training materials is sometimes poor, failing to provide practical, job-relevant skills.
- ✱ **Limited time and facilities:** Employees, especially in public sector banks, face challenges like limited time and insufficient facilities for participation.
- ✱ **Implementation gap:** The skills and knowledge gained in training are not effectively utilized back on the job due to a lack of a supportive post-training environment.
- ✱ **Public vs. private sector disparities:** Research shows that while training in private banks is often well-planned, programs in public sector banks can be less effective due to factors like legacy systems and different work cultures.
- ✱ **Lack of top management support:** In some cases, training is not fully integrated into the bank's strategic vision, and top management may not consistently prioritize it.
- ✱ **Measuring effectiveness:** It can be challenging to accurately measure the return on investment (ROI) because many benefits, such as improved morale and customer relationships, are intangible.

Recommendations to improve cost-effectiveness: To maximize the benefits and minimize the costs of training, Indian commercial banks should consider the following strategies:

- ✱ **Conduct proper needs assessment:** Implement a thorough and scientific training needs analysis to identify and address specific skill gaps.
- ✱ **Adopt tailored training:** Move away from generic courses and implement tailored approaches that provide practical, hands-on learning.
- ✱ **Embrace hybrid learning:** Combine key in-person sessions with accessible online content to make training flexible and accommodate employees in multiple locations.
- ✱ **Utilize post-training reinforcement:** Develop systems for evaluating training effectiveness and actively supporting employees as they apply new skills on the job.
- ✱ **Incentivize participation:** Motivate employees to engage with training programs and reward them for applying their new skills.
- ✱ **Align with business goals:** Ensure that all training and development initiatives are integrated with the bank's overall strategic human resource plan.



Annexure III

In-house Vs. Outsourcing of Training System

In India's private banking sector, the common practice of outsourcing training to specialized institutes is primarily driven by cost-effectiveness. This approach shifts the significant expenses and administrative burdens of in-house training to external partners, who often leverage specialized expertise and economies of scale to provide high-quality training efficiently.

The high costs of in-house training for banks include:

- ✱ **Premises and overheads:** Maintaining dedicated training centers incurs fixed costs like rent or property depreciation, electricity, maintenance, and facility management. Outsourcing eliminates these overhead expenses for the bank.
- ✱ **Faculty costs:** Employing and retaining full-time training faculty who are experts across all banking domains can be prohibitively expensive. Outsourcing provides access to external trainers who specialize in specific areas, ensuring high-quality, up-to-date knowledge.
- ✱ **Manpower cost of trainees:** While trainees are on internal deputation, they are not contributing to their regular branch activities. This results in lost productivity and is a hidden cost of training.
- ✱ **Travel and lodging expenses:** If employees must travel to a centralized in-house training facility, the bank must bear the costs of their travel, accommodation, and daily allowances. External training often minimizes these logistical costs, especially with regional training hubs or online modules.
- ✱ **Curriculum development:** Creating and regularly updating training modules for a constantly evolving financial landscape is a time- and resource-intensive task. External institutions, whose core business is education, can develop and scale high-quality curricula at a lower cost.

How outsourcing addresses these costs: Outsourcing allows banks to leverage the expertise and infrastructure of specialized educational institutions, which can provide training more efficiently.

- ✱ Indian private banks often form partnerships with these institutions to offer custom training programs for new recruits and existing employees. For example:
- ✱ HDFC Bank has partnered with Manipal Academy of BFSI for its Future Banker program.
- ✱ ICICI Bank collaborates with NIIT for a Post Graduate Program in Relationship Management.
- ✱ Federal Bank partners with Manipal Global Education for its School of Banking.
- ✱ Axis Bank offers its Young Bankers program with Manipal Global Education Services.

These outsourced models allow banks to:

- ✱ **Eliminate fixed costs:** The bank avoids investing in and maintaining dedicated training facilities.
- ✱ **Access specialized expertise:** Trainees receive instruction from industry experts who are current with the latest banking practices, regulations, and technologies.
- ✱ **Benefit from flexible and scalable programs:** External partners offer flexible formats, including residential, online, and blended learning. This allows banks to scale their training needs up or down more easily and cost-effectively than maintaining an internal department.
- ✱ **Ensure job-ready talent:** Many programs, like the one from Bankedge, focus on making graduates "job-ready from day one," saving the bank resources on initial on-the-job training.



Annexure IV Model Cost Sheets for Cost Accountants

Model Cost sheets for cost accountants involved in controlling training costs in Indian commercial banks. These sheets categorize and track expenses to enable analysis, budgeting, and control in line with Indian Cost and Management Accountancy (CMA) principles.

Principles of training cost control for Indian banks:

Before examining the model sheets, it is helpful to review the core principles that cost accountants use for training cost control:

✳ **Identification of costs:** Systematically identifying and categorizing all costs related to training, both direct and indirect.

✳ **Budgeting and planning:** Creating a budget for training activities based on historical data, industry benchmarks, and future requirements.

✳ **Performance monitoring:** Comparing the actual costs against the budget to identify any variances.

✳ **Variance analysis:** Investigating the reasons for deviations between actual and budgeted costs and reporting them to management.

✳ **Decision support:** Providing data-driven analysis to support decisions on training effectiveness, cost-benefit analysis, and future training strategies.

Model Cost Sheet 1: Training Program-wise Cost sheet:

This model focuses on tracking the costs for a specific training program, allowing for granular analysis of individual initiatives.

Cost Element	Actual Cost (₹)	Budgeted Cost (₹)	Variance (₹)	Remarks
Direct Costs				
Faculty / Trainer Fees:				
- Internal Faculty Time.				- Based on Salary + Over-heads.
- External Trainers.				
Learning Material Costs:				
- Courseware, Work Books.				
- Case Studies, Software Licenses.				
Logistics Costs:				
- Venu Rental (In-house Vs. Hiring Premises)				
- Boarding, Lodging, Travel for Participants.				
- Meals and refreshments.				
- Training equipment Rental.				
Indirect Costs (Allocated)				
Overhead Allocation:				

Cost Element	Actual Cost (₹)	Budgeted Cost (₹)	Variance (₹)	Remarks
- HR Department Time.				- Based on time spent planning and administering.
- Proportionate Administrative Costs.				- Includes Administrative Salaries, Utilities etc.
Facilities Overhead:				
- Maintenance, depreciation, Utilities				- For in house Training Centres.
Employee Costs (Cost of Trainee Time):				
- Trainee Salaries and Benefits				- Cost of Productive Hours Lost.
Total Training Cost		(A)	(B)	(A-B)
Number of Participants				
Cost per Participant				
Total Training Hours				
Cost per Hour Per Participant				

Cost Control measures derived from this sheet:

- ✱ **Budgetary control:** By comparing actual costs to the budget, a cost accountant can identify and report variances. For example, if travel costs for a program significantly exceed the budget, a deeper analysis into booking practices and policy adherence would follow.
- ✱ **Performance management:** The cost per participant and per hour provides a metric for evaluating cost-effectiveness across different training programs.
- ✱ **Strategic decision-making:** The sheet can inform “make-or-buy” decisions. For example, by comparing the cost of using external trainers versus developing and delivering content with internal resources.

Model Cost Sheet 2: Quarterly Variance Analysis Report:

This report aggregates costs across all training activities for a quarter and focuses on identifying and investigating significant variances from the budget.

Cost Element	Q1 Budget (₹)	Q1 Actual (₹)	Variance (₹)	Variance (%)	Action Taken / Responsible Person
Employee-related Costs:					
- Trainer Salaries (Internal)					
- Trainee Salaries (Time Cost)					
External Training Expenses:					
- Third-party course fees.					
- External Trainer Fees.					



Cost Element	Q1 Budget (₹)	Q1 Actual (₹)	Variance (₹)	Variance (%)	Action Taken / Responsible Person
Material Expenses					
- Digital Licenses (Annual)					
- Physical Materials					
Administrative and Logistics:					
- Venue Costs					
- Travel & Accommodation					
- Catering					
Total Training Expenditure					

Analysis and control measures:

- ✳ **Significant variance review:** The cost accountant highlights significant positive or negative variances (e.g., over 5% deviation) for management review. For instance, if external training costs were significantly below budget, it could be due to cancelling non-critical programs or negotiating better rates.
- ✳ **Quarterly corrective actions:** The report lists remedial steps for cost overruns, such as negotiating better vendor contracts, scrutinizing participant travel, or reconsidering certain program formats.
- ✳ **Trend analysis:** Over time, these reports can help identify trends in training costs, such as rising logistical expenses or recurring material costs, to inform future budgeting.

Model Cost Sheet 3: Training effectiveness and ROI analysis: For senior management, it is crucial to link training costs to business outcomes. This sheet helps cost accountants measure the return on investment (ROI) for training.

Cost Element	Total Cost of Program (₹)	Key Performance Indicators (KPIs)	Monetary Value of Benefit (₹)	RoI %	Remarks
Program: Advanced Credit Appraisal					
- Direct Costs					
- Indirect Costs					
- Trainee Time Costs					
Total Program Cost (A)					
KPIs:					
- Reduced NPA % (Post Training)		(B) = Value of NPA Reduction		(B-A)/A * 100	Compare Against baseline Data

Cost Element	Total Cost of Program (₹)	Key Performance Indicators (KPIs)	Monetary Value of Benefit (₹)	RoI %	Remarks
- Faster Credit Sanction Time		(C) = Value of efficiency gain		$(C-A) / A * 100$	Based on employee Productivity
- Fewer errors in Appraisal		(D) = Value of reduced rework		$(D-A) / A * 100$	Quantify Cost of Errors.
Total Value Created			(B+C+D)		
Program: Digital Banking Literacy					
- Direct Costs					
- Indirect Costs					
- Trainee Time Costs					
Total Program Cost (E)					
KPIs:					
- Increased Digital Product adoption		(F)=Value of increased revenue		$(F-E) / E * 100$	Based on Product Cross - Selling
- Reduced Customer Support Costs		(G)=Value of Cost reduction		$(G-E) / E * 100$	Less queries due to training
Total Value Created				(F+G)	

Contribution of the Cost Accountant:

- Data integration:** The cost accountant works with the training and HR departments to identify and quantify the monetary value of training benefits. This involves using data from different banking operations, such as NPA figures, customer satisfaction scores, and operational efficiency metrics.
- Strategic alignment:** By focusing on the ROI, the cost accountant ensures that training investments are

aligned with the bank's strategic objectives, such as improving credit quality, boosting digital adoption, and enhancing customer service.

- Accountability:** The ROI sheet holds training functions accountable for their expenditure by measuring success not just on completion rates but on tangible business outcomes.



Chapter 21

Cost Control through Productivity



Contents:

1. *Introduction.*
2. *Creation of CPCs.*
3. *Apprenticeship System.*
4. *Digital Transformation.*
5. *BREs.*
6. *Robotic Process Automation (RPA).*
7. *Geospatial Data.*
8. *Streamlining Banking Operations.*
9. *Employee Cost to Operating Expenses (%).*
10. *Productivity through Training System.*
11. *Distribution of Bank Employees in past 10 years.*
12. *Streamline the Repetitive Task through Technology.*
13. *Employee Productivity Ratios.*
14. *Gold Loans with Costly Manpower-Low Productivity.*
15. *Creation of Subsidiary (NBFC) for Gold Loans by the Banks.*
16. *To Sum Up.*
- TAT, Benchmark Metrics Etc. Annexure I.*
- Job Families-Annexure II.*
- Inter-firm Comparisons, Intra-firm Comparisons.*
- Segregating Front End and Back End Operations.*
- References.*

Improving employee productivity directly reduces costs. This chapter explains:

- ✱ *Use of RPA and BREs.*
- ✱ *Low Productivity in Gold Loan Processing.*
- ✱ *Job Family Concepts.*
- ✱ *Inter-firm and Intra-firm Productivity Comparison.*

Benchmarks were developed using IIBF Data and Interactions with Bank Officials.



Cost Control through Productivity

Productivity and cost control are closely correlated in the banking sector, as higher productivity directly leads to reduced costs and improved profitability. Banks use productivity measures like output per employee to manage costs, and a high-cost environment can stem from inefficiency or poor productivity. Effective cost control strategies are essential for banks to maintain competitiveness and achieve profitability goals. Productivity and cost control are linked:

Productivity drives cost reduction: A primary strategy for lowering costs in banking is to increase productivity by streamlining processes, eliminating redundancies, and improving employee efficiency.

- ✱ **Costs can indicate low productivity:** High operating costs in a bank can signal inefficiency and low employee productivity, a situation often seen in traditional public sector banks compared to more modern, private sector ones, according to the IIBF.
- ✱ **Cost-income ratio (CIR) as a key metric:** Banks use the cost-income ratio (CIR) to measure how much it costs to generate income. A lower CIR, indicating that more income is generated for every unit of expense, is a sign of high productivity and efficiency.
- ✱ **Balanced approach is key:** While cutting costs can improve the bottom line, indiscriminate cost-cutting can harm productivity, lead to poor morale, and reduce service quality. A balanced strategy focuses on increasing productivity while managing costs effectively.

Banks manage this Correlation through:

- ✱ **Measure performance:** Banks track various metrics, such as deposit per employee or total business per employee, to measure productivity.
- ✱ **Invest in technology:** Automation and technology investments can help boost productivity and efficiency, even in the face of increasing operational complexity and costs like mortgage origination or risk and compliance budgets, notes The Financial Brand.
- ✱ **Focus on employee performance:** Implementing performance management tools, setting clear goals, and providing employee recognition can improve

morale and productivity, which in turn supports cost control efforts.

- ✱ **Streamline operations:** Simplifying large-scale operations is a key way for banks to boost productivity and achieve cost-efficiency goals.

a) Creation of CPCs:

Creating a Central Processing Centre (CPC) within Indian commercial banks for various products like Retail Loans, SME Loans, Pensions, Clearing Operations, and Deposit products offers numerous benefits, primarily in controlling the cost of operations and increasing productivity levels. CPCs will achieve this:

Streamlining processes and enhancing efficiency:

- ✱ **Automation of routine tasks:** CPCs automate tasks like data entry, verification, and processing for loan applications, pension disbursements, deposit account openings, and clearing operations. This eliminates manual errors, speeds up processing time, and reduces the need for extensive human intervention at branches.
- ✱ **Centralized data management:** A unified database at the CPC ensures consistency, accuracy, and real-time updates across all branches. This simplifies record management, facilitates faster retrieval of information, and aids in informed decision-making.
- ✱ **Reduced turnaround times:** Faster processing of applications, disbursements, and clearing activities leads to quicker service delivery for customers, enhancing their overall experience.

Minimizing operational costs:

- ✱ **Optimized resource utilization:** Automation and streamlined processes reduce operational costs by minimizing staff time spent on routine tasks, potentially leading to lower staff costs and less reliance on physical paperwork.
- ✱ **Economies of scale:** Consolidating processing activities at a central location allows banks to leverage economies of scale, resulting in reduced per-unit processing costs.
- ✱ **Fraud prevention:** Centralized processing with



integrated security measures and fraud detection mechanisms can help prevent financial losses from fraudulent activities.

Improving productivity and decision-making:

- ★ **Increased focus on core activities:** By delegating routine tasks to the CPC, branch staff can focus on higher-value activities like customer relationship management, sales, and cross-selling, ultimately improving productivity.
- ★ **Enhanced data analytics and reporting:** CPCs with their centralized data enable comprehensive data analysis, providing valuable insights into customer behaviour, operational bottlenecks, and financial performance. This information supports better decision-making and allows for the development of more effective business strategies.
- ★ **Scalability and flexibility:** CPCs provide a scalable and adaptable framework to manage increased transaction volumes and accommodate new products and services without significant disruptions.

Specific benefits for different Product Lines:

- ★ **Retail and SME Loans:** Centralizing loan processing can lead to faster loan approvals, reduced paperwork for applicants, and a more standardized approach

to credit assessment, potentially increasing loan disbursements and customer satisfaction.

- ★ **Pensions:** Centralized Pension Processing Centres (CPPCs) ensure timely and accurate pension payments, handle changes in pension parameters, and address pensioner grievances efficiently, according to the Central Pension Accounting Office (CPAO).
- ★ **Clearing Operations:** Centralization streamlines payment processing, enhances control over cash flows, improves visibility into payment flows and transactions, and reduces risks associated with fragmented systems.
- ★ **Deposit Products:** Centralized processing of deposits and account management ensures accuracy, facilitates real-time updates, and enables efficient management of customer information, leading to better customer service and experience.

In essence, establishing a Central Processing Centre empowers Indian commercial banks to leverage technology and automation to enhance operational efficiency, reduce costs, improve customer satisfaction, and strengthen their overall financial performance in a competitive environment.

Apprenticeship System

The initiation of an apprentice system in Indian commercial banks can potentially reduce manpower costs and increase productivity by providing a skilled, trained, and loyal workforce. Banks can leverage the National Apprenticeship Scheme to hire young graduates as apprentices, offering a stipend while providing them with relevant training. This approach helps meet the mandatory apprenticeship requirements, reduces turnover, boosts morale, and ultimately improves overall bank performance through a more skilled and engaged staff.

How it reduces manpower costs:

- **Lower initial wages:** Apprentices are typically paid a lower stipend compared to fully qualified employees, which reduces initial operational costs.
- **Reduced hiring costs:** Banks can recruit and train apprentices to fill various roles, potentially reducing the need for expensive external hires and external recruitment costs.
- **Addressing skill gaps:** Apprenticeships directly address skill gaps, ensuring that banks have a pipeline of employees with the specific skills needed, rather than relying on costly external recruitment or external training.

How it increases productivity:

- **Skill development:** Apprentices receive targeted training in areas like marketing, customer service, and recoveries, becoming productive assets more quickly than traditional new hires.
- **Improved morale and loyalty:** By investing in training, banks foster loyalty and motivation among their apprentices, leading to higher job satisfaction and reduced absenteeism.
- **Enhanced long-term productivity:** Well-trained apprentices can be converted into permanent employees, creating a stable and knowledgeable workforce.
- **Compliance with mandates:** The Apprentices Act of 1961 mandates that enterprises engage apprentices, and compliance with these rules ensures that banks are fulfilling their legal obligations while benefiting from the scheme.



b) Digital Transformation:

To boost productivity and control costs, Indian commercial banks should focus on digital transformation for process automation and data-driven insights, implement process simplification, invest in employee training for digital tools and customer service, and improve asset management and allocative efficiency to minimize waste and enhance resource utilization. Strategic implementation of these measures can lead to improved financial performance and greater operational efficiency.

Leveraging Technology and Automation:

- ★ **Digital Transformation:** Invest in digital technologies to automate routine tasks, optimize workflows, and enhance customer engagement through self-service tools.
- ★ **Data Analytics:** Utilize data analytics to identify revenue leakage, understand customer segments better, and personalize marketing strategies.
- ★ **Automated Customer Service:** Implement automated systems to handle a significant portion of customer queries and disputes, reducing the need for human intervention and lowering operational costs.

Streamlining Operations and Processes:

- ★ **Process Simplification:** Streamline internal processes and policies to reduce complexity and improve efficiency across the organization.
- ★ **Resource Optimization:** Focus on increasing economies of scale in total assets and optimizing the allocation of resources to their most productive uses.

- ★ **Staff and Branch Rationalization:** Continue policies of rationalizing staff and branches to achieve efficiency gains and make Indian banks more competitive.

Investing in Human Capital:

- ★ **Continuous Training:** Provide regular training to employees to improve their skills, particularly in using new digital tools effectively.
- ★ **Upskilling and Mindset Change:** Foster a culture of continuous learning and adaptation to support the adoption of new technologies and simplification efforts.
- ★ **Effective Performance Management:** Set clear goals, track performance, and provide regular reviews to ensure employee accountability and motivation.

Enhancing Financial Efficiency:

- ★ **Technical Efficiency:** Minimize waste in the use of inputs to produce a given quantity of output by adopting better technologies and using more productive input factors.
- ★ **Allocative Efficiency:** Ensure that the input factors (like manpower and capital) are used in optimal proportions, given their respective prices, to achieve the minimum cost of production.
- ★ **Focus on Core Activities:** Banks should focus on their core competency of financial intermediation, ensuring efficient resource generation and allocation, which directly contributes to economic growth and their own productivity.

BREs

Indian Commercial Banks are increasingly adopting Business Rule Engines (BREs) to automate credit management processes, thereby enhancing efficiency, accuracy, and regulatory compliance in loan and advance management. BREs reduce manpower costs by automating routine decisions and eliminating human errors, which also improves the consistency of credit decisions. By applying predefined rules to large datasets, BREs facilitate faster loan processing and provide real-time insights, leading to improved credit quality and overall productivity.

BREs Improve Credit Management:

- **Automation and Speed:** BREs automate repetitive tasks and decision-making logic, enabling quick loan approvals for eligible applicants and reducing processing times.
- **Consistency and Accuracy:** By enforcing the same logic for every applicant, BREs ensure consistent and fair evaluations, reducing errors and biases that can occur with manual decision-making.
- **Cost Reduction:** Automation of processes helps lower operational costs associated with managing large volumes of loan applications, as less manual intervention is required.
- **Enhanced Credit Quality:** BREs can assess millions of data points against predefined conditions, providing deeper insights into applicant risk and improving the overall quality of credit decisions.

- **Regulatory Compliance:** Banks can ensure compliance with lending regulations by integrating regulatory checks into the BRE, allowing for real-time enforcement and simplified updates when rules change.
- **Scalability:** BREs can easily scale to handle increasing volumes of loan applications without a proportional increase in staff or infrastructure.

Key Use Cases in Lending:

- **Loan Origination:** Automating the process from application submission to final loan approval.
- **Risk Assessment:** Analysing financial data, credit scores, and income to assess the risk profile of borrowers.
- **Fraud Detection:** Implementing rules that can identify suspicious activities in real-time and trigger alerts or interventions.
- **Product Customization:** Launching new loan products or offers by quickly updating rule sets within the BRE.

c) Robotic Process Automation (RPA):

Indian commercial banks control costs by leveraging technology and automation in areas like online and mobile banking, which reduce manual tasks and branch dependency, and by using AI and machine learning for fraud detection and credit risk assessment. Automation also increases operational efficiency, minimizes errors, and improves customer satisfaction by speeding up processes. Key technologies include Robotic Process Automation (RPA) for back-office tasks, AI-powered chatbots for customer support, and blockchain for secure transactions.

Key Technology and Automation Applications:

Digital Banking Platforms:

- ★ **Internet/Mobile Banking:** Enables customers to perform transactions like balance inquiries, transfers, and bill payments online, reducing the need for physical branches and associated overhead costs.
- ★ **Chatbots and Voice Assistants:** Provide 24/7 customer support and information, improving service efficiency and customer experience while cutting down on human-staffed call centers.

Back-Office Automation:

- ★ **Robotic Process Automation (RPA):** Automates repetitive, manual tasks such as loan processing and account opening, leading to significant cost reduction, increased accuracy, and faster turnaround times.
- ★ **Optical Character Recognition (OCR) and Machine Learning:** Automates data capture and insight generation from documents, streamlining workflows in areas like data entry and document management.

Data-Driven Decision Making:

Artificial Intelligence (AI) and Machine Learning (ML):

Fraud Detection: Analyses transaction data in real-time to

identify and prevent fraudulent activities, minimizing financial losses.

- ★ **Credit Risk Assessment:** Improves accuracy in credit scoring and underwriting for loans by analysing customer data and identifying patterns, leading to better decision-making and reduced bad loans.

Enhanced Customer Services:

- ★ **Personalized Services:** Using data analytics to understand customer behaviour and preferences to offer tailored products and investment advice, which can increase customer loyalty and revenue.
- ★ **Digital Lending Platforms:** Streamline the entire loan application and approval process, making it faster and more efficient for both the bank and the customer.

Blockchain Technology:

- ★ **Secure Transactions:** Trials and implementations of blockchain are improving the security and transparency of transactions, potentially reducing costs associated with reconciliation and security.

Benefits of Technology and Automation:

- ★ **Cost Reduction:** Automation cuts operational costs by reducing the need for manual manpower in routine tasks.
- ★ **Increased Efficiency:** Automated processes are faster and more accurate, leading to quicker service delivery.
- ★ **Error Reduction:** Bots perform tasks with high precision, minimizing financial miscalculations and compliance errors.
- ★ **Improved Customer Experience:** Quick, accurate, and convenient services build customer trust and satisfaction.
- ★ **Enhanced Productivity:** Employees can shift from



mundane, repetitive tasks to more strategic, customer-focused activities, driving innovation and revenue.

Geospatial Data

Indian banks capturing geospatial data of customers and borrowers' addresses can enhance business growth through targeted marketing and expansion into new markets by identifying potential customer clusters. It can also improve NPA recovery by enabling better risk assessment, more efficient loan recovery processes in specific areas, and providing precise location data for field collection and legal actions. This strategy leverages Geographic Information Systems (GIS) to create visual data that informs strategic decisions for both expansion and loss mitigation.

Geo-mapping Enhances Business Growth:

- *Targeted Marketing:* Visualizing customer locations on a map helps banks identify areas with high customer density or specific demographic profiles, allowing for more efficient and localized marketing campaigns.
- *Market Expansion:* Banks can use geospatial data to identify potential high-growth markets and underserved populations.
- *Branch Location Optimization:* Mapping customer distribution and market potential can help banks determine the optimal locations for new branches or ATMs to serve customers more effectively.

Geo-mapping Improves NPA Recovery:

- *Enhanced Risk Assessment:* Geospatial data can provide a richer understanding of borrower locations and the local environment, which aids in assessing credit risk and identifying potential fraud.
- *Efficient Collection Efforts:* Locating borrowers and understanding their geographical proximity helps banks assign collection agents to specific areas, optimizing travel time and increasing the efficiency of field collection activities.
- *Legal Actions and Recovery:* Precise location information is critical for executing legal processes like property attachment or auction, which are vital steps in the SARFAESI Act and other recovery mechanisms.
- *Identification of Undeveloped Properties:* Analysing the location of defaulted properties can provide crucial information for recovery, especially in large urban or rural areas.

Technologies and Data:

- *Geographic Information Systems (GIS):* This technology is central to geo-mapping, allowing for the creation, analysis, and visualization of spatial data related to customers and borrowers.
- *Address Validation and Geocoding:* Solutions are needed to ensure the accuracy of addresses and convert them into precise latitude and longitude coordinates, which is crucial for accurate mapping.
- *DIGIPIN:* This system provides digital addresses for homes in areas with informal settlements, helping banks expand credit to previously un-addressable markets.

d) Streamlining Banking Operations:

To streamline operations and control costs, Indian commercial banks should invest in digital transformation and automation to optimize workflows, simplify processes, and reduce manual intervention. Key strategies include leveraging AI and machine learning, implementing straight-through processing, optimizing customer self-service channels, and moving towards shared service models to improve efficiency and reduce operational costs. Additionally, banks must focus on employee training, data analytics for better decision-making, and a customer-centric approach to redesign services.

Key Strategies for Streamlining Operations and Cost Control:

Digital Transformation and Automation:

- ✳ **Implement AI and Machine Learning:** Use AI to automate repetitive tasks, optimize workflows, and process large volumes of data efficiently, reducing errors and manual effort.
- ✳ **Invest in Digital Solutions:** Deploy digital banking solutions for transactions, customer onboarding, and management, which can replace traditional, costly processes.
- ✳ **Automate Straight-Through Processing:** Eliminate manual steps in transactions by implementing straight-through processing to reduce delays and costs, according to PwC.

Process Simplification and Optimization:

- ★ **Simplify Products and Services:** Analyse processes to eliminate or reduce steps that generate little profit or add unnecessary complexity, leading to a more efficient operating model.
- ★ **Optimize Customer Journeys:** Redesign customer onboarding and other processes to be more customer-centric, agile, and flexible to enhance customer loyalty and reduce operational friction, notes Wipro.
- ★ **Standardize Procedures:** Standardize compliance, auditing, and other operational procedures to improve consistency, accuracy, and efficiency across the bank.

Leverage Technology and Data:

- ★ **Utilize Data Analytics:** Employ data analytics to gain insights into customer behaviour, identify areas of revenue leakage, and make better-informed strategic decisions.
- ★ **Develop Self-Service Options:** Build and enhance

self-service channels, like ATMs and digital platforms, to empower customers and reduce the demand on branches, as noted by Springer.

- ★ **Implement a Core Banking Solution (CBS):** Centralize and automate banking services with a CBS to reduce manual tasks, errors, and improve overall operational efficiency and customer experience.

Operational and Business Model Adjustments:

- ★ **Adopt Shared Service Models:** Move to shared-service or utility models to leverage economies of scale and reduce costs, especially for regional banks.
- ★ **Optimize Vendor Relationships:** Work with third-party providers and partners to build digital capabilities and add variation to cost structures, according to PwC.
- ★ **Focus on Staff Productivity:** Enhance employee training and skills to align with new technologies and digital processes, improving overall staff productivity.

Employee Cost to Operating Expenses (%)

Year	Public Sector Banks	Private Sector Banks	Foreign Banks	Small Finance Banks	Payments Banks	All Scheduled Commercial Banks
2021-22	60.31	37.58	36.76	54.05	16.15	49.68
2020-21	61.13	38.54	35.33	57.01	31.81	51.30
2019-20	60.11	37.39	36.50	53.29	54.21	50.24
2018-19	57.96	35.87	35.94	50.64	-	48.67
2017-18	55.92	37.30	38.18	56.78	-	48.82
2016-17	58.36	39.35	40.49	61.36	-	51.35
2015-16	59.61	40.59	42.48	-	-	53.01
2014-15	61.20	41.27	42.68	-	-	54.40
2013-14	62.47	41.50	40.92	-	-	55.31
2012-13	63.03	42.34	42.08	-	-	55.77

(Source: IIBF Journal)

e) Productivity through Training System:

Indian commercial banks can control costs by strategically investing in human capital through targeted training, skill development programs, and fostering a culture of mutual commitment, which leads to improved employee performance and retention. By upskilling staff in digital tools, customer-centric practices, and risk management, banks can enhance operational efficiency, reduce errors,

and ultimately lower long-term operational expenditures. Key investments include e-learning platforms, on-the-job training, mentoring programs, and initiatives like succession planning to build a highly skilled and motivated workforce.

Strategic Training and Development:

- ★ **Skill Enhancement:** Implement comprehensive training programs to develop technical, professional,



and leadership skills, including digital banking platforms and customer service.

- ✱ **Diverse Learning Methods:** Utilize a mix of training methods like e-learning, on-the-job training, workshops, and mentoring programs to cater to different learning styles and improve capabilities.
- ✱ **Focus on Digitalization:** Invest in training for emerging technologies and digital tools to enhance efficiency and reduce reliance on manual, costly processes.

Performance and Retention:

- ✱ **Performance Management:** Introduce systems for performance appraisal and continuous feedback to identify areas for improvement and incentivize high performance.
- ✱ **Career Development:** Offer career development and succession planning programs to groom future leaders, ensuring a steady pipeline of qualified personnel and increasing employee retention.
- ✱ **Mutual Commitment:** Shift from a view of employees as merely resources to be consumed, to a model where

mutual investment fosters shared commitment and commitment to organizational goals.

Cost Control through Human Capital Management:

- ✱ **Reduced Errors and Rework:** Highly skilled employees are less prone to errors, which reduces costs associated with corrections, rework, and managing non-performing assets.
- ✱ **Enhanced Productivity:** Skilled and motivated staff contribute to higher productivity and efficiency, leading to better operational performance and lower costs per transaction.
- ✱ **Innovation and Adaptability:** A well-developed human capital base enables banks to adapt to new technologies and evolving market conditions more effectively, avoiding costs associated with falling behind the competition.
- ✱ **Long-Term Cost Savings:** Investing in long-term employee growth and retention reduces the costs associated with high employee turnover, such as recruitment and extensive new-hire training.

Distribution of Bank Employees in past 10 years

Year (End-March)	Public Sector Banks	Private Sector Banks	Foreign Banks	Regional Rural Banks	Small Finance Banks
2021-22	46%	39%	2%	6%	7%
2020-21	49%	37%	2%	6%	7%
2019-20	50%	36%	2%	6%	6%
2018-19	56%	33%	2%	6%	4%
2017-18	58%	30%	2%	6%	3%
2016-17	61%	31%	2%	6%	-
2015-16	64%	28%	2%	7%	-
2014-15	67%	25%	2%	7%	-
2013-14	67%	24%	2%	7%	-
2012-13	73%	19%	2%	7%	-

Source: Prepared from the data extracted from database on Indian Economy. RBI.

(Source: IIBF Journal)

f) Streamline the Repetitive Task through Technology:

Indian commercial banks can enhance financial efficiency and control costs by embracing digital transformation, adopting automation and AI for repetitive tasks,

streamlining operations and offerings, implementing agile technology practices, optimizing customer channels and branch networks, fostering a culture of simplification, and leveraging data analytics to gain deeper customer insights and make informed strategic decisions.

Digital Transformation & Automation:

- ★ **Leverage Digital & AI:** Adopt digital platforms and AI to automate routine tasks like document review and customer service inquiries, which can be handled by self-service tools and automated systems, significantly reducing human intervention and costs.
- ★ **Digital Payments:** Intensify the use of digital payment technologies (NEFT, cards, ATMs, PoS) to improve cost-efficiency in operations.
- ★ **Digital Banking Units:** Establish digital banking units to support digital services and financial inclusion, driven by digital payments and fintech innovations.

Operational Streamlining & Optimization:

- ★ **Simplify Offerings:** Eliminate redundant products and services to reduce the cost of managing a complex portfolio and focus on high-ROI offerings.
- ★ **Channel & Branch Optimization:** Strategically close, amalgamate, or relocate branches to create a cost-effective channel mix that better suits the bank's customer base and needs.
- ★ **Agile Technology Implementation:** For technology functions, adopt agile methodologies and tight project scoping to prevent cost overruns and time delays, and ensure seamless business integration.

Data-Driven Decisions:

- ★ **Customer Insights:** Use data analytics to understand customer behaviour and needs, turning insights into actionable strategies to improve profitability and customer loyalty.
- ★ **Productivity Monitoring:** Leverage data to measure and improve productivity, with McKinsey's experience showing a potential 15-20% improvement by applying principles of simplification.

Cultural & Human Capital Factors:

- ★ **Employee Training:** Invest in training and upskilling employees to foster a culture of simplification and improve adoption of new technologies.
- ★ **Change Management:** Encourage a shift in mindset to embrace automation and technology, ensuring all employees are on board with the simplification efforts.

Strategic Growth & Partnerships:

- ★ **Mergers & Acquisitions (M&A):** Pursue low-cost organic growth and build scale through M&A and partnerships to reduce overall costs.
- ★ **Digital Payment Ecosystem:** Integrate post offices and other institutions into the digital banking core to expand reach and enhance service delivery while controlling costs.

Employee Productivity Ratio (Source: IIBF Journal)

(Amount in crores)

Year (End-March)	No. Employees of SCBs	Advances	Deposits	Total Business	Net Profit	BPE	PPE
2021-22	15,68,789	1,22,08,009	1,71,82,709	2,21,57,409	1,82,032	14.12	0.12
2020-21	14,91,503	1,08,06,381	1,55,80,325	2,03,54,269	1,21,998	13.65	0.08
2019-20	14,65,955	1,03,01,897	1,39,75,045	1,85,51,129	10,911	12.65	0.01
2018-19	13,64,285	96,76,183	1,28,86,643	1,67,47,989	-23,397	12.28	-0.02
2017-18	13,33,405	87,45,997	1,17,94,005	1,49,44,849	-32,438	11.21	-0.02
2016-17	13,00,008	81,16,100	1,11,11,400	1,31,41,709	43900	10.11	0.03
2015-16	12,56,085	78,96,500	1,00,92,700	1,13,38,569	34100	9.03	0.03
2014-15	11,80,069	7388179	9433838	95,35,429	89078	8.08	0.08
2013-14	11,50,281	6735230	8533170	77,32,289	80910	6.72	0.07
2012-13	10,96,980	5879773	7429677	59,29,149	91165	5.40	0.08



Gold Loans with Costly Manpower-Low Productivity

It is often not viable for public sector banks (PSBs) to use their higher-cost manpower to primarily process gold loans, especially when compared to specialized Non-Banking Financial Companies (NBFCs).

While PSBs traditionally offer lower interest rates on gold loans due to their lower cost of funds, the economics of this business segment are challenging for them. Gold loan NBFCs have significant advantages in efficiency and specialized processes.

Challenges for public sector banks:

- *High manpower cost:* PSBs typically have higher manpower costs due to strong unions, job security, and an established pay scale.
- *Inefficient processes:* Compared to NBFCs, PSB processes for gold loans are generally slower and more bureaucratic. A significant amount of time and manpower is spent on documentation and verification, making the process less efficient.
- *Opportunity cost:* Assigning highly paid bank employees to a relatively low-margin, high-volume product like gold loans can lead to a misallocation of resources. The same employees could be generating higher returns in more complex, high-value lending segments.
- *Lack of specialization:* Bank branches often handle a wide array of products, from savings accounts to business loans. Staff members are not specialized in the quick valuation and disbursement processes that are standard for gold loans.

Advantages for NBFCs:

- *Specialized and low-cost manpower:* NBFCs have specialized staff who are trained exclusively for gold loan operations. This includes experienced valuers and processors who can ensure quick and accurate service.
- *Faster and more flexible processes:* NBFCs focus on speed and customer convenience. They offer streamlined, quick processing with minimal documentation, which is crucial for customers seeking immediate funds.
- *Wider reach and accessibility:* NBFCs often have a deeper reach into rural and semi-urban areas, which are key markets for gold loans. They also provide access to credit for those who may not meet a bank's stricter eligibility criteria.
- *Targeted customer base:* Gold loan NBFCs effectively target the lower end of the economic strata, a segment that may face challenges securing personal or business loans from traditional banks.

A potential solution: The Co-Lending Model (CLM): To leverage their respective strengths, banks and NBFCs have begun to use the Co-Lending Model (CLM).

How it works: Under this model, banks and NBFCs co-originate loans based on a prior agreement. This allows banks to partner with NBFCs to lend to priority sector borrowers, a crucial market for gold loans.

Mutual benefits:

- Banks benefit from the NBFCs' specialized network, agility, and lower operational costs.
- NBFCs benefit from the banks' lower cost of funds, allowing them to offer more affordable loans to the end customer while maintaining profitability.

The end user gets a loan that combines the low-interest rates typically offered by banks with the efficient and swift processing characteristic of NBFCs. This model also enables PSBs to grow their gold loan portfolios without relying on their expensive, in-house manpower.

g) Creation of Subsidiary (NBFC) for Gold Loans by the Banks:

A definitive cost sheet model requires proprietary data from specific public sector banks (PSBs) and Non-Banking Financial Companies (NBFCs). However, a comparative framework reveals that while PSBs generally have a lower cost of funds, NBFCs can achieve greater operational efficiency, which is particularly beneficial for small-ticket gold loans. The cost-effectiveness of one over the other depends on the volume and speed of processing needed.

Comparative cost-benefit analysis model: This model can be adapted based on specific organizational metrics.

Feature	Public Sector Bank (PSB)	NBFC
Loan Ticket Size	Small-ticket gold loans	Small-ticket gold loans
Cost of Funds	Benefit: Lower. PSBs have access to cheaper capital through low-cost Current Account/Savings Account (CASA) deposits, which allows them to offer lower interest rates to customers.	Cost: Higher. NBFCs rely on market-rate borrowings, which increases their overall cost of funds.
Operational Expenditure (OpEx)	Cost: Higher for the gold loan vertical due to a multi-product branch model where costs are spread thinly across many products. This dilutes focus and can lead to lower efficiency for small-ticket loans.	Benefit: Lower, relatively. Specialized gold loan NBFCs have a single-product focus and optimized operational procedures, despite having a branch-heavy infrastructure. This results in higher efficiency in processing gold loans.
Staffing Model	Cost: Officials are salaried employees with fixed costs, regardless of the volume of small-ticket gold loan transactions. This can be cost-inefficient if the transaction volume for this specific product is low	Benefit: Specialized staff focuses solely on gold loans. This leads to higher productivity, faster processing, and greater expertise in managing this specific product, which improves overall cost-effectiveness.
Processing Time	Cost: Slower due to more stringent, multi-layered, and often manual processes. This increases processing costs per loan, especially for small, repetitive transactions.	Benefit: Significantly faster and more streamlined, often with minimal documentation. Many NBFCs utilize advanced technology and AI-driven tools for efficient appraisal and risk management.
Valuation and Appraisal	Cost: May have higher appraiser costs or use internal staff with varied expertise, which can sometimes slow down the process and increase overhead per loan.	Benefit: Specialized staff and advanced systems ensure quick and accurate valuation, lowering the operational cost per loan.
Branch Infrastructure	Cost: Fixed and high overheads. The cost of running a full-service bank branch may not be justified by the low-margin, small-ticket gold loan business.	Benefit: Dedicated gold loan NBFCs have branches and systems optimized specifically for gold loan processing, ensuring higher operational returns.
Digital Integration	Cost: Can be slower to adopt due to legacy systems and multi-product focus, increasing manual work and processing costs.	Benefit: Many NBFCs and fintechs have aggressively adopted digital transformation, with mobile-first platforms and AI-driven processes that lower processing costs and enhance customer experience.

NBFCs are more beneficial for processing small-ticket gold loans from a cost point of view. For small-ticket gold loans, NBFCs leverage their specialized focus and efficient operational model to achieve a lower overall processing cost per loan, even with a higher cost of funds. The speed, specialized staff, and tech-driven processes of NBFCs make them highly efficient for high-volume, small-value transactions.

While PSBs have the advantage of a lower cost of funds, their multi-product approach and inherent procedural delays make them less efficient and potentially more

expensive for small-ticket gold loans. The fixed costs associated with PSB staff and branches are less justifiable when handling high volumes of low-margin products.

To Sum Up:

To achieve cost control in the banking sector through productivity increases, a strategy must focus on leveraging technology, optimizing processes, and empowering human resources. This holistic approach moves beyond simple cost-cutting to create sustained efficiency, enhance the customer experience, and maintain a competitive edge.



For sustainable cost improvements, banks should adopt a strategic approach rather than focusing on short-term, indiscriminate cuts.

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Annexure I

TAT, Benchmark Metrics Etc.

Turnaround Time (TAT), benchmark metrics, productivity ratios (like per employee business/profit), and the cost-to-income ratio are critical for measuring and improving the productivity of Indian bank branches and processing centers. These parameters help in identifying inefficiencies, streamlining processes, and ultimately boosting profitability by highlighting areas for improvement.

Key Parameters and their Importance:

Turnaround Time (TAT):

- ★ **What it is:** The time it takes to complete a specific banking process from start to finish, such as opening an account or processing a loan.
- ★ **Why it's important:** A key measure of efficiency. Shorter TATs indicate better service delivery and operational efficiency.

Benchmarks and Standards:

- ★ **What they are:** Performance standards set through comparison with the industry, competitors, or internal best practices.
- ★ **Why they are important:** Benchmarking provides a reference point to understand performance gaps and identify best practices to adopt for improvement.

Per Employee Business/Profit:

- ★ **What it is:** The revenue or profit generated by each employee.

- ★ **Why it's important:** Measures the direct financial contribution and productivity of the workforce. A higher ratio suggests greater employee efficiency.

Cost-to-Income Ratio:

- ★ **What it is:** The ratio of a bank's operating expenses to its total income. A lower ratio signifies greater cost-efficiency.
- ★ **Why it's important:** A primary indicator of a bank's operational efficiency and profitability.

Parameters improve Productivity:

- ★ **Identify inefficiencies:** By tracking these metrics, banks can pinpoint which processes are slow or costly. For example, a high TAT for a specific service or a high cost-to-income ratio in a particular branch can highlight a problem area.

Reduce waste: This analysis helps in identifying and eliminating non-value-adding activities, which can be achieved through process re-engineering and automation.

Improve profitability: With a clear view of productivity, banks can implement strategies to increase revenue and reduce costs, directly leading to higher profitability.

Drive performance management: These metrics provide a data-driven basis for setting performance targets and for implementing incentive schemes that reward high-performing employees and branches.



Annexure II

Job Families

The introduction of job families, which allow Indian bank employees to continue their careers within a single specialization or “vertical” to higher levels, is widely seen as a strategy to increase human resource productivity. This approach leverages the benefits of specialization, defined career paths, and tailored training to improve employee expertise and motivation.

Job Families in Banking:

In the banking sector, job families are groups of roles that require similar skills, education, and experience. Rather than moving horizontally across different departments, this structure allows for a vertical career progression within a specific, specialized field.

- ✱ **Retail Banking:** Customer service representative to senior teller to branch manager.
- ✱ **Credit/Lending:** Credit analyst to loan officer to senior credit manager.
- ✱ **Risk and Compliance:** Junior compliance officer to senior risk analyst to head of compliance.
- ✱ **Investment Banking:** Investment banking analyst to associate to vice president.
- ✱ **Information Technology (IT):** Junior IT officer to systems administrator to head of technology.

How job families increase productivity in Indian banks:

Develops deeper expertise and higher quality output:

- ✱ **Enhanced skills:** Concentrating on one vertical allows employees to develop deep, specialized skills and knowledge. This expertise translates to higher-quality work and more efficient operations.
- ✱ **Fewer errors:** Employees performing similar tasks repeatedly become masters of their domain. This reduces errors and the time and resources needed for corrections.

Offers clear career paths and boosts motivation:

- ✱ **Improved retention:** A transparent progression within a job family, with a clear roadmap for advancement, increases job satisfaction and reduces employee turnover.

- ✱ **Increased engagement:** When employees can clearly see a future for themselves within a specialized area, their motivation and commitment to the bank’s long-term goals increase.

- ✱ **Succession planning:** Job families make succession planning more predictable. HR can easily identify high-potential employees within a vertical and prepare them for future leadership roles.

Streamlines training and development:

- ✱ **Targeted training:** With job families, banks can design and implement highly focused and relevant training and development programs for specific roles. This is more efficient and cost-effective than a generalized training approach.

- ✱ **Faster learning curve:** New employees joining a job family can be brought up to speed quickly by following established training paths laid out by the bank.

Enhances overall organizational health:

- ✱ **Strategic workforce planning:** The job family structure allows banks to anticipate future staffing needs for specific areas, helping them align human resources with strategic business goals.

- ✱ **Greater adaptability:** By fostering a deep pool of specialists, a bank is better equipped to respond to complex challenges within its specific operational areas, from cybersecurity threats to new financial regulations.

- ✱ **Potential drawbacks and mitigating factors:** While job families offer significant benefits, there are potential drawbacks, which banks can mitigate with strategic management:

- ✱ **Potential for boredom:** Performing repetitive tasks can lead to monotony. This can be addressed through job enrichment strategies, such as providing greater autonomy or variety in tasks within the same vertical.

- ✱ **Siloed thinking:** Over-specialization can discourage employees from collaborating across different departments. This can be counteracted by encouraging cross-functional projects and collaboration to ensure a holistic understanding of the bank’s operations.



- ★ **Risk of inflexibility:** A highly specialized workforce may be less flexible in adapting to rapid industry changes. This can be addressed by offering regular upskilling and reskilling opportunities that allow employees to broaden their skill sets even while remaining in their vertical.



Annexure III

Inter-firm Comparisons, Intra-firm Comparisons

Inter-firm comparisons, intra-firm comparisons, and the adoption of international best practices are all highly effective tools for improving the productivity, profitability, and controlling operational costs of banks in India. Together, they provide a comprehensive Inter-firm comparisons for competitive positioning:

Inter-firm comparisons involve evaluating a bank's performance, profitability, and cost structure against its competitors and industry averages. By anonymously exchanging data through a neutral body, banks can gain powerful insights into their relative strengths and weaknesses.

Impact on productivity and profitability in India:

- ★ **Identifies inefficiencies:** It helps management pinpoint weaknesses in productivity, asset utilization, and resource management compared to peers.
- ★ **Encourages motivation:** The comparison motivates employees and management to strive for improvements to outpace competitors.
- ★ **Promotes cost-consciousness:** It creates a focus on cost management by showing how one bank's cost structure compares to others.
- ★ **Highlights growth opportunities:** By seeing how successful competitors operate, banks can identify new strategies and opportunities for growth and increased market share.

Intra-firm comparisons for internal performance management: Intra-firm comparisons involve analysing the performance of different departments, branches, or business units within the same bank over a period of time. This internal benchmarking helps identify which divisions are performing best and which need improvement.

Impact on productivity and profitability in India:

- ★ **Identifies internal strengths and weaknesses:** It helps a bank understand its own evolution and where its internal performance deviates from benchmarks.
- ★ **Facilitates data-driven decisions:** Managers can make better decisions regarding resource allocation, pricing, and new investments by comparing the results of different divisions.

- ★ **Promotes a "profit center" model:** By comparing profitability and cost effectiveness across units, a bank can determine which business lines are most successful and deserving of further investment.

- ★ **Reveals trends over time:** Analysing performance over different financial periods helps banks identify trends and make necessary adjustments to their operations.

International best practices for advanced optimization: Adopting best practices from top global banks allows Indian banks to modernize operations, leverage technology, and manage risk more effectively.

Impact on productivity and operational costs in India:

- ★ **Technology and automation:** Leveraging AI and automation, as practiced globally, helps reduce costs by streamlining routine manual processes, improving accuracy, and freeing employees for higher-value tasks.
- ★ **Risk management and compliance:** The Basel standards, an international framework for banking supervision, offer a sophisticated approach to measuring operational risk and ensuring capital adequacy. Adopting such standards can prevent costly failures and build market trust.
- ★ **Customer-centric strategies:** Adopting international best practices for better customer service and experience can increase customer satisfaction, loyalty, and revenue, ultimately offsetting operational costs.
- ★ **Resource and portfolio optimization:** Global insights can help Indian banks re-evaluate and shift their business strategies, such as focusing on more profitable retail and MSME clients and away from less profitable corporate lending.

Combined effect on Indian banks: For banks in India, a holistic approach that combines all three comparison types is most effective for achieving sustained improvement.

- ★ A bank can use inter-firm comparisons to identify areas where it lags behind competitors. For example, a lower-than-average Return on Assets (RoA) compared to similar-sized banks would indicate a need for improvement.



- ✱ Next, it can use intra-firm comparisons to isolate the specific branch or business unit responsible for the lower RoA. This could point to issues like poor credit risk management in a particular regional branch.
- ✱ Finally, it can adopt international best practices, such as implementing advanced data analytics or automation tools, to resolve the issues identified in the internal and external **comparisons**.



Annexure IV

Segregating Front End and Back End Operations

Implementing strategies such as segregating front-end and back-end operations and outsourcing non-core activities could increase productivity and reduce costs for Public Sector Banks (PSBs). While private sector banks have long adopted these practices, the Reserve Bank of India (RBI) now provides specific guidelines to PSBs to manage the associated risks.

Segregating front-end and back-end operations:

Customer-centric focus: The front-end staff can focus on customer service, sales, and relationship management. This specialization can lead to higher customer satisfaction, a trait private banks are often praised for.

✱ **Operational efficiency:** By moving administrative and operational work to the back end, PSBs can streamline processes and reduce the burden on customer-facing employees. This improves speed and accuracy, key areas where private banks often hold an advantage due to greater operational agility.

✱ **Specialized roles:** A dedicated back-end team can develop expertise in areas like loan processing, document verification, and data management. This specialization improves accuracy and speeds up turnaround times, positively impacting the customer lending cycle.

✱ **Enhanced security and control:** Separating duties reduces the risk of fraud and errors. The RBI's regulations reinforce this by requiring banks to maintain robust controls and oversight, regardless of where the work is performed.

✱ **Outsourcing non-core activities:** The Reserve Bank of India permits banks, including PSBs, to outsource non-core financial and IT activities, provided they adhere to strict risk management policies. This allows PSBs to access specialized expertise and reduce costs.

Benefits:

✱ **Reduced operating costs:** Outsourcing converts fixed expenses like hiring, training, and infrastructure into variable costs. Service providers, who operate at scale, can offer these non-core functions at a lower cost than an in-house department.

✱ **Increased efficiency:** Specialized BPO firms can handle high-volume, time-consuming tasks more

efficiently and with greater accuracy. This includes functions such as data entry and validation, document processing, and customer support.

✱ **Access to expertise and technology:** Outsourcing provides access to the latest technology and specialized skills without the need for significant capital investment. For instance, PSBs can leverage external vendors for advanced fraud detection or big data analytics.

✱ **Strategic focus:** By delegating non-core tasks, PSB management can reallocate resources and focus on strategic initiatives, improving core banking functions, and developing new products.

Risks and RBI mitigation guidelines: The RBI's master directions outline mandatory risk management practices for outsourcing to protect customer interests and maintain financial stability.

✱ **Ultimate accountability:** The bank remains ultimately responsible for all outsourced activities, including customer data protection and grievance redressal.

✱ **Due diligence:** Before engaging a service provider, banks must conduct rigorous due diligence covering their financial stability, reputation, and security practices.

✱ **Contractual obligations:** Outsourcing agreements must include clauses ensuring data confidentiality, performance standards, monitoring access, and a clear exit strategy.

✱ **Forbidden activities:** Certain core functions cannot be outsourced, including internal audit, compliance, and core decision-making related to loans and investment portfolios.

Impact on productivity and costs:

✱ **Productivity:** A 2024 study comparing Indian banks found that PSBs had slightly higher total factor productivity (TFP) indices than private banks over the period 2012–2022, suggesting that PSBs are making strides in efficiency. Implementing these strategies would allow PSBs to build on this trend by streamlining processes and dedicating resources to strategic growth.



- ★ **Operational costs:** Historical data confirms that Indian banks save an estimated 30–40% by outsourcing certain functions compared to managing them in-house. While PSBs have traditionally had slower cost-efficiency growth than some private banks, these measures are proven tactics for reducing operational expenditures.
- The implementation of these strategies helps PSBs close the gap with their private sector counterparts in customer satisfaction and operational efficiency, while adhering to the strict regulatory framework set by the RBI.



Chapter 22

NPAs Resolution Costs



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NPA Resolution requires Comparing Costs and Benefits of different Recovery Mechanisms. This chapter covers:

- ✱ *Need for Business Correspondents (BCs) in Recovery.*
- ✱ *Using DRAs instead of High-cost Bank Staff.*
- ✱ *Cost-benefit Analysis of SARFAESI, DRT, IBC.*

Cost Sheets were prepared using discussions with Stressed Asset Recovery Departments.



NPAs Resolution Costs

Indian banks manage Non-Performing Assets (NPAs) through a combination of preventive and recovery strategies, including credit appraisal, early warning systems, and legal actions under the Insolvency and Bankruptcy Code (IBC) and SARFAESI Act. Key recovery mechanisms include Debt Recovery Tribunals

(DRTs), negotiated settlements like One-Time Settlements (OTS), and restructuring of loan accounts. To control NPA costs and improve recovery, banks use specialized stressed asset management verticals, adopt new technologies for risk assessment, and adhere to RBI's Income Recognition and Asset Classification (IRAC) norms.

Gross NPAs of Public Sector Banks

(For FY 2021 to 2025)

Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
01	Bank of Baroda	66,671	54,059	36,764	31,834	27,835
02	Bank of India	56,535	45,605	37,686	29,183	21,749
03	Bank of Maharashtra	7,780	5,327	4,334	3,833	4,185
04	Canara Bank	60,288	55,652	46,160	40,605	31,530
05	Central Bank of India	29,277	28,156	18,436	11,340	9,225
06	Indian Bank	38,455	35,214	28,180	21,106	18,179
07	Indian Overseas Bank	16,323	15,299	14,072	6,794	5,348
08	Punjab & Sind Bank	9,334	8,565	5,648	4,665	3,371
09	Punjab National Bank	1,04,423	92,448	77,328	56,343	44,082
10	UCO Bank	11,352	10,237	7,726	6,463	5,919
11	Union Bank of India	89,788	79,587	60,987	43,098	35,350
Average of 11 PSBs		4,90,226	4,30,150	3,37,320	2,55,265	2,06,771
12	State Bank of India	1,26,389	1,12,023	90,928	84,276	76,880
Average of 12 PSBs		6,16,615	5,42,173	4,28,249	3,39,542	2,83,652

(Source: IBA Data)

Progress in Reducing NPAs:

✳ **Significant Decline:** Gross NPAs in India have significantly decreased, falling from 9.11% in March 2021 to 2.58% by March 2025, with a 12-year low of 2.6% reported in September 2024.

✳ **Comprehensive Measures:** The success is attributed to comprehensive measures taken by the government and the RBI to both recover existing NPAs and prevent future ones.

Positive Impacts on the Banking Sector:

✳ **Declining NPAs:** Public sector banks have seen a significant decrease in NPAs, falling from 9.11% to 2.58% between March 2021 and March 2025.

✳ **Enhanced Financial Stability:** This shift contributes

to a more stable banking sector by reducing bad loans and improving asset quality.

✳ **Support for Credit Growth:** A cleaner balance sheet and better recovery practices enable banks to extend more credit, supporting overall economic growth.

Current NPA Recovery Landscape in India:

✳ **Legal Frameworks:** The SARFAESI Act, IBC, and Debt Recovery Tribunals (DRTs) provide legal avenues for speedy recovery.

✳ **Asset Reconstruction Company:** The establishment of the National Asset Reconstruction Company Ltd. (NARCL) aims to resolve large stressed assets effectively.



- ★ **Specialized Recovery Verticals:** Many public sector banks have set up dedicated teams or branches to manage and recover NPAs.
- ★ **Feet-on-Street Model:** The use of business correspondents and a “feet-on-street” approach helps in physical monitoring and collection.

Recovery & Resolution Mechanisms:

Indian banks are reducing Non-Performing Asset (NPA) resolution costs and increasing fund recycling through measures like the Insolvency and Bankruptcy Code (IBC), Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, asset sales to Asset Reconstruction Companies (ARCs), and other recovery efforts. The RBI’s involvement, improved credit culture, and the setup of the National Asset Reconstruction Company Limited (NARCL) are key to this process, leading to a significant reduction in the Gross NPA ratio, which dropped to a 12-year low of 2.6% in September 2024.

- ★ **Insolvency and Bankruptcy Code (IBC), 2016:** This code has fundamentally altered the creditor-borrower relationship, allowing for the recovery of dues by taking control of defaulting companies from promoters.
- ★ **SARFAESI Act, 2002:** The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act provide banks with legal recourse to enforce security interests and recover debts.
- ★ **Debt Recovery Tribunals (DRTs):** Banks can file cases in DRTs for faster recovery of high-value NPAs.
- ★ **Negotiated Settlements:** Banks and financial institutions engage in compromise settlements and One-Time Settlements (OTS) with borrowers to recover dues.
- ★ **Specialized Verticals:** Public Sector Banks have established specialized verticals to monitor and manage NPAs effectively.
- ★ **Lok Adalats:** Banks can refer smaller cases to Lok Adalats for quicker resolution through an alternative dispute resolution mechanism.

Preventive Measures:

- ★ **Credit Appraisal & Monitoring:** Banks focus on

proper credit appraisal to maintain asset quality and implement robust monitoring systems to identify early warning signals of potential NPAs.

- ★ **Early Intervention:** Banks use AI and data analytics to identify potential risks, allowing them to intervene with customers to renegotiate loan terms and prevent accounts from becoming NPAs.
- ★ **RBI Norms:** Banks follow the Reserve Bank of India’s (RBI) IRAC norms for classifying assets, which helps in timely recognition of potential NPAs.

a) NPA Management Policy:

This policy focuses on preventing the accumulation of NPAs and managing existing ones.

- ★ **Prevention:** This involves robust credit risk assessment, prudent lending practices, proper credit appraisal, and maintaining loan quality.
- ★ **Monitoring:** Banks must continuously monitor loan accounts to identify distressed assets and stressed accounts early.
- ★ **Early Action:** Prompt action is taken for the resolution or recovery of NPAs when they are identified.
- ★ **Containment:** The goal is to limit NPAs within manageable levels and reduce the rate of new NPAs (fresh slippages).

Recovery Policy:

Indian Banks’ Non-Performing Assets (NPAs) is designed to reduce and contain the costs associated with NPAs by focusing on both preventive and curative measures. It involves rigorous credit appraisal, ongoing asset quality monitoring, early warning systems to identify potential NPAs, and the use of various recovery mechanisms, including legal actions under the SARFAESI Act and IBC, compromise settlements, and asset sales, all aimed at recovering dues and minimizing financial losses for banks.

This policy outlines the steps banks take to recover loans that have become non-performing.

- ★ **Identification:** Early identification and correct classification of accounts as NPAs based on RBI guidelines are crucial.
- ★ **Borrower Engagement:** Banks engage with defaulting



borrowers to understand their challenges and negotiate repayment plans.

- ✱ **Resolution Options: Loan Restructuring:** Modifying the loan terms to make it easier for the borrower to repay.
- ✱ **One-Time Settlement (OTS):** Offering a settlement for the outstanding amount.
- ✱ **Legal Action:** Initiating legal proceedings, including action under the SARFAESI Act, in Debts Recovery Tribunals (DRTs), or civil courts.
- ✱ **Debt Collection Agencies:** Engaging third-party agencies to pursue recovery.
- ✱ **Asset Sales:** Selling the collateral or underlying assets to recover the loan amount.

Key Aspects of Recovery Policy:

✱ Preventive Measures:

- ❁ **Credit Appraisal:** Banks focus on maintaining asset quality through thorough scrutiny and processing of loan applications.
- ❁ **Monitoring:** A robust monitoring mechanism is in place to track loan performance and identify potential NPAs early through early warning signals.
- ❁ **Asset Quality Review (AQR):** A preventive measure initiated to proactively identify assets that might become stressed in the future.

✱ Curative Measures:

- ❁ **NPA Identification:** Loans become NPAs when interest and principal are overdue for a specific period, typically 90 days, as per RBI guidelines.
- ❁ **Legal Frameworks:**
 - ✓ **SARFAESI Act, 2002:** Banks use this act for the enforcement of security interest to recover dues.
 - ✓ **Insolvency and Bankruptcy Code (IBC), 2016:** This framework offers a faster process for insolvency proceedings and recovery of dues from defaulting companies.

- ✓ **Debts Recovery Tribunals (DRTs):** Banks can file suits in DRTs for recovery of dues.

✱ Alternative Methods:

- ❁ **One-Time Settlements (OTS):** Banks may offer compromise settlements to recover dues from defaulted accounts.
- ❁ **Asset Sale/Reconstruction:** Banks can sell NPAs or use services of asset reconstruction companies like the National Asset Reconstruction Company Ltd. (NARCL) for resolution.
- ❁ **Write-off:** For loss assets where recovery prospects are bleak, banks may write them off.

✱ Structural & Strategic Initiatives:

- ✱ **Specialized Verticals:** Public sector banks have set up specialized stressed assets management verticals to focus on monitoring and recovering NPA accounts more effectively.

Credit Culture Change: The enactment of the IBC has fundamentally altered the creditor-borrower relationship, making the recovery process more stringent.

b) Recycling of Funds:

- ✱ **Insolvency and Bankruptcy Code (IBC):** The IBC has fundamentally changed the creditor-borrower relationship by providing a structured process to resolve stressed assets, thereby reducing the time and costs involved in recovery.
- ✱ **SARFAESI Act:** This act empowers financial institutions to take possession of collateralized assets, allowing for their management and sale to recover dues.
- ✱ **Asset Reconstruction Companies (ARCs):** Banks sell their NPAs to ARCs, which are specialized entities for cleaning up balance sheets and recovering distressed assets. The National Asset Reconstruction Company Limited (NARCL) was established to resolve large stressed assets above ₹500 crore.
- ✱ **Improved Credit Culture:** There is a shift towards more responsible lending and stricter terms, as well as a focus on debarring wilful defaulters.

- ★ **Other Recovery Channels:** Banks also utilize Debt Recovery Tribunals (DRTs) and Debt Recovery Appellate Tribunals (DRATs) to recover dues and have access to alternative dispute resolution mechanisms like Lok Adalat.

Impact on Fund Recycling:

- ★ **Increased Availability of Funds:** By successfully resolving NPAs, banks recover funds that were locked in bad loans.
- ★ **Enhanced Lending Capacity:** Recovered funds can then be “recycled” into new lending, increasing banks’ capacity to extend fresh credit and fuel economic growth.
- ★ **Improved Profitability:** Lower NPAs and better recovery reduce the need for provisioning, which in turn improves banks’ profitability and strengthens their balance sheets.

c) Prevention is Crucial:

The principle of “prevention is better than cure” applies

to Indian banks’ management of Non-Performing Assets (NPAs), with a growing emphasis on enhancing credit appraisal and risk management to prevent loans from becoming bad rather than incurring costly recovery processes. Banks are improving their credit assessment systems to minimize defaults, as poor credit quality directly impacts profitability and liquidity, and have also set up specialized NPA management units to improve recovery when loans do become non-performing.

- ★ **Cost Reduction:** Recovering NPAs involves significant expenses, including legal fees and specialized personnel, which are much higher than the cost of implementing robust credit management systems.
- ★ **Improved Profitability:** A lower NPA ratio directly translates to better profitability, liquidity, and a healthier credit cycle for banks.
- ★ **Focus on Growth:** By preventing NPAs, banks can free up their management’s time and resources to focus on new business opportunities and growth rather than being consumed by managing stressed assets.

Net NPAs of Public Sector Banks

(For FY 2021 to 2025)

Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
01	Bank of Baroda	21,800	13,365	8,384	7,213	6,994
02	Bank of India	12,262	9,852	8,054	6,845	5,358
03	Bank of Maharashtra	2,544	1,277	435	409	432
04	Canara Bank	24,442	18,668	14,349	11,823	7,353
05	Central Bank of India	9,036	6,675	3,627	3,002	1,543
06	Indian Bank	12,271	8,849	4,043	2,223	1,110
07	Indian Overseas Bank	4,578	3,825	3,266	1,217	912
08	Punjab & Sind Bank	2,462	1,742	1,412	1,350	937
09	Punjab National Bank	38,576	34,909	22,585	6,799	4,291
10	UCO Bank	4,390	3,316	2,018	1,622	1,068
11	Union Bank of India	27,281	24,303	12,927	8,990	5,969
Average of 11 PSBs		1,59,642	1,26,780	81,101	51,493	35,968
12	State Bank of India	36,810	27,966	21,467	21,051	19,667
Average of 12 PSBs		1,96,452	1,54,746	1,02,568	72,545	55,636

(Source: IBA Data)

Banks are to focus on Prevention:

- ★ **Enhanced Credit Appraisal:** Banks are strengthening their credit appraisal systems to better assess borrowers’ repayment capabilities, thereby reducing

the probability of loan defaults.

- ★ **Risk Mitigation:** Improving credit quality and performing proper due diligence before lending are



crucial steps to mitigate the risks of creating NPAs.

- ★ **Proactive Monitoring:** Some banks are establishing dedicated “stressed asset management verticals” to closely monitor loans and identify potential issues early, before they fully develop into NPAs.

d) Shift in Strategy:

The recognition that recovery efforts are often unsatisfactory and expensive is driving banks to proactively invest in their credit management capabilities. This shift aligns with the “prevention is better than cure” philosophy, aiming to build a more resilient and financially stable banking sector in the long run.

Indian banks are indeed shifting focus from selling Non-Performing Assets (NPAs) to specialized branches for recovery, aiming to optimize performance and avoid heavy discounts to Asset Reconstruction Companies (ARCs). This strategy allows banks to retain control, invest time in actual recovery efforts, and use their expertise to improve their balance sheets directly. This approach is supported by government reforms like the Insolvency and Bankruptcy Code (IBC) and a generally declining trend in public sector bank NPAs, showing positive results for the Indian banking system.

Reasons for this Shift:

- ★ **Avoid High Discount Rates:** Selling NPAs to ARCs often involves significant losses for banks due to large discounts, reducing the recovered amount.

- ★ **Retain Control and Expertise:** Specialized branches allow banks to maintain direct control over the recovery process, leveraging their internal knowledge of the loan and borrower.

- ★ **Focus on Core Business:** By managing NPAs internally, banks can free up their management’s time and resources to focus on core lending activities and growth.

- ★ **Improved Balance Sheets:** Successful recovery efforts directly improve a bank’s financial health, strengthening its capital base and increasing profitability.

e) Strategies for Specialized Branches:

- ★ **Early Identification:** Spotting NPAs early and classifying them correctly as per Reserve Bank of India (RBI) guidelines is the first step.

- ★ **Direct Follow-Up and Negotiation:** Specialized teams can engage directly with defaulting borrowers to negotiate repayment plans and restructure loans.

- ★ **Utilizing Recovery Tools:** Banks can use tools like the SARFAESI Act, Debt Recovery Tribunals, and Lok Adalat without necessarily resorting to ARCs.

- ★ **Technology and Data Analytics:** Leveraging AI-driven risk assessment and real-time monitoring systems can help in early warning and proactive recovery measures.

‘Business Correspondents-BCs’ in Recovery Process

Business Correspondents (BCs), including the newer BC Sakhis, can play a crucial role in recovering Non-Performing Assets (NPAs) in rural and unbanked areas, effectively reducing operational costs for banks. BCs provide local, community-based access to financial services, including loan monitoring and principal/interest collection, which facilitates more efficient recovery processes compared to traditional methods, especially for small-value loans and self-help groups.

BCs can help in NPA recovery process:

- **Local Presence and Trust:** BCs are trusted members of the community, enabling better engagement with borrowers, which is vital for loan recovery.
- **Doorstep Services:** For self-help groups and individual borrowers in rural areas, BCs can provide services like loan repayment collection at their doorstep, improving accessibility and timely payments.
- **Proactive Monitoring:** BCs can monitor loan groups and self-help groups regularly, helping identify potential issues early and facilitating proactive collection efforts.
- **Financial Literacy:** By educating customers on money and debt management, BCs can help prevent future NPAs by improving financial discipline among borrowers.
- **Cost Reduction:** Using BCs for recovery reduces the need for expensive field visits by bank officials, thereby lowering operational costs for the bank.



- *Specialized Models:* The emergence of models like “BC Sakhis” (Women BCs) specifically addresses the needs of women’s self-help groups and can be very effective in recovery efforts for these segments.

Benefits for Banks:

- *Reduced Operational Costs:* Outsourcing collection and recovery efforts to local BCs minimizes expenditure on bank staff.
- *Improved Recovery Rates:* The intimate knowledge and trust local BCs have with the community can lead to higher recovery rates.
- *Wider Reach:* Extends the bank’s recovery network into remote and unbanked areas where officials may find it challenging to operate.

f) Types of Recovery Methods:

SARFAESI Act, 2002:

- ★ A law empowering banks (specifically secured creditors) to take possession of and sell collateral when a loan defaults.
- ★ Provides legal recourse to recover secured assets without court intervention in many cases.
- ★ It involves seizure of the collateral (e.g., property), followed by auction to recover the outstanding debt.

Recovery through ‘DRTs’

Indian Bankers face slow Non-Performing Asset (NPA) recovery through Debt Recovery Tribunals (DRTs) due to a high volume of pending cases, prolonged dispute resolution times, and a lack of capacity, though legislative reforms and measures like the Insolvency and Bankruptcy Code (IBC) have been introduced to improve the situation. While DRTs were created to expedite debt recovery, the significant backlog and lengthy legal processes often result in delays, hindering efficient resolution.

Reasons for Slow Recovery via DRTs:

- *High Case Backlog:* A large number of cases are pending in DRTs, including many old cases.
- *Slow Dispute Resolution:* The process of settling debts and resolving disputes within the DRTs can be very slow.
- *Insufficient Capacity:* DRTs have been deficient in the number of decision-making authorities and business expertise to handle the large volume of cases effectively.

Legislative and Administrative Measures to Improve NPA Recovery:

- *Insolvency and Bankruptcy Code (IBC):* This code fundamentally changed the creditor-borrower dynamic, giving more power to creditors to control the resolution process for defaulting companies.
- *SARFAESI Act Reforms:* The Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002, has been amended to become more effective in accelerating recovery.
- *Increased Pecuniary Jurisdiction:* The monetary limit for cases handled by DRTs was increased to allow them to focus on higher-value cases, leading to higher overall recovery for banks.
- *Dedicated NPA Management:* Public Sector Banks have set up specialized verticals and branches focused on managing NPA accounts to improve monitoring and follow-up.
- *Other Recovery Channels:* Banks also use other channels like the SARFAESI Act, Lok Adalats, and compromise settlements to recover NPAs.

Effectiveness of DRTs:

Despite the establishment of DRTs to ensure speedy recovery, their effectiveness in recovering NPAs has been noted to be low in some periods, with significant declines in the annual recovery rates observed by the Reserve Bank of India (RBI). The introduction of the IBC has provided a more robust framework, but the overall recovery landscape for banks in India remains a challenge.

Insolvency and Bankruptcy Code (IBC), 2016:

This is the last resort after other resolution methods, like

OTS or SARFAESI, have been explored and are not successful.



A time-bound process for resolving corporate insolvency, aiming to either rescue a company by restoring it to solvency or to liquidate it and distribute its assets.

It offers a structured, time-bound resolution mechanism, which often leads to significantly better recovery rates for banks compared to older methods.

Net NPA as % to Net Advances of Public Sector Banks

(For FY 2021 to 2025)

Sl. No.	Name of the Bank	2021	2022	2023	2024	2025
01	Bank of Baroda	3.09	1.72	0.89	0.68	0.58
02	Bank of India	3.35	2.34	1.66	1.22	0.82
03	Bank of Maharashtra	2.48	0.97	0.25	0.20	0.18
04	Canara Bank	3.82	2.65	1.73	1.27	0.70
05	Central Bank of India	5.77	3.97	1.79	1.23	0.55
06	Indian Bank	3.37	2.27	0.90	0.43	0.19
07	Indian Overseas Bank	3.58	2.65	1.83	0.57	0.37
08	Punjab & Sind Bank	4.04	2.74	1.84	1.63	0.96
09	Punjab National Bank	5.73	4.80	2.72	0.73	0.40
10	UCO Bank	3.94	2.70	1.29	0.89	0.50
11	Union Bank of India	4.62	3.68	1.70	1.03	0.63
Average of 11 PSBs		4.10	2.94	1.60	0.89	0.55
12	State Bank of India	1.50	1.02	0.67	0.57	0.47
Average of 12 PSBs		3.09	2.20	1.24	0.76	0.52

(Source: IBA Data)

One-Time Settlement (OTS):

Indian banks prioritize One-Time Settlement (OTS), the SARFAESI Act, 2002, and compromise before Initiating the Insolvency and Bankruptcy Code (IBC), 2016 for Non-Performing Assets (NPAs). OTS offers a reduced debt settlement, the SARFAESI Act provides secured creditors with powers to recover assets, while IBC serves as a final resort for time-bound resolution or liquidation when other methods fail. The choice between these options depends on the specific circumstances, the borrower's financial health, and the bank's risk appetite.

- ❖ A legal contract where a bank agrees to accept a reduced amount from the borrower to settle the entire debt.
- ❖ Quick reduction in bad loans and recovery of a portion of the amount.
- ❖ Debt elimination, resolution of financial problems, and potential to eliminate legal issues.

OTS- Comprehensive Cost Benefit Analysis

A comprehensive cost-benefit analysis is crucial for banks when considering a One Time Settlement (OTS) offer for Non-Performing Assets (NPA) accounts. This analysis must incorporate various financial and non-financial factors, and the expertise of Cost Accountants (or equivalent financial experts within the bank) is indeed useful in performing these complex evaluations to determine an appropriate settlement amount.

Key Factors in the Cost-Benefit Analysis:

The bank's decision involves comparing the value of an immediate settlement versus the expected (and often uncertain) outcome of prolonged recovery efforts. The factors considered include:

- **Time Value of Money (TVM):** Receiving a specific amount instantly via OTS is often more valuable than a potentially larger sum years down the line due to inflation, opportunity cost of funds, and the ability to re-lend the recovered money for income generation. The Net Present Value (NPV) of the OTS offer is a key metric used in this assessment.



- **Duration and Cost of Legal Processes:** Lengthy legal proceedings (e.g., under SARFAESI Act, DRT, or IBC) involve significant administrative and legal costs (lawyer fees, recovery agent charges, court fees) and time delays, which reduce the net recovery amount. OTS helps avoid these expenses and time lags.
- **Deterioration of Asset Value:** For secured loans, the value of the collateral asset can depreciate over time due to market conditions, physical deterioration, or other factors. Settling quickly at a reasonable value may yield a better recovery than waiting for a potentially lower distress sale value in the future.
- **Borrower's Financial Situation:** The bank assesses the borrower's current ability to pay and their genuine financial distress to determine the feasibility of the OTS amount.
- **Operational Efficiency and Balance Sheet Impact:** Resolving NPAs through OTS cleans up the bank's balance sheet, improves financial health, and allows the bank to focus on core activities, which has significant operational benefits.
- **Regulatory Compliance:** Banks must adhere to internal policies and guidelines set by regulatory bodies (like the RBI in India) for managing NPAs and offering OTS schemes, which influences the terms of the settlement.

Role of Cost Accountants:

Cost accountants or management accountants are well-suited to perform this analysis because they can:

- **Quantify Costs and Benefits:** Systematically identify and quantify all relevant costs (legal fees, administrative expenses, provisioning costs) and benefits (immediate cash recovery, improved financial ratios) associated with both the OTS and alternative recovery methods.
- **Calculate Net Present Value (NPV):** Use techniques like NPV analysis to compare the value of current vs. future cash flows, applying appropriate discount rates to account for the time value of money and associated risks.
- **Assess and Mitigate Risk:** Evaluate the risks and uncertainties involved in prolonged legal battles and asset valuation fluctuations, helping to determine a settlement amount that protects the bank's interests.
- **Structure the Proposal:** Guide the bank in formulating a structured, non-discriminatory, and transparent OTS offer that is commercially viable and compliant with regulations.

By leveraging a structured cost-benefit analysis incorporating these factors, banks can make informed decisions to maximize recovery and manage their NPA portfolios effectively.

Compromise:

- ★ A broader term that can include negotiated settlements, debt restructuring, or other agreements where both the bank and the borrower agree to terms for resolving the NPA.
- ★ Involves mutual negotiation and agreement to find a mutually acceptable solution, which might be similar to an OTS but could involve more complex terms or restructuring.

Choose the 'Best Alternate Resolution' Methods

Banks select NPA resolution methods like SARFAESI, Debt Recovery Tribunals (DRT), One-Time Settlements (OTS), Insolvency and Bankruptcy Code (IBC), or compromises by considering factors such as the case's complexity, the amount involved, the borrower's creditworthiness, the stage of the NPA, and the potential for quicker recovery versus cost-efficiency. The goal is to minimize resolution costs and expedite the recovery of stuck funds by choosing the most suitable method for each specific NPA.

Here's a breakdown of common NPA resolution methods and factors influencing their selection:

NPA Resolution Methods:

- **SARFAESI Act:** This allows banks to directly seize and sell secured assets of defaulting borrowers without court intervention.
- **Debt Recovery Tribunals (DRTs):** A judicial process to recover debts from borrowers.
- **One-Time Settlement (OTS):** A voluntary agreement where the borrower repays a reduced amount to the bank, settling the loan.
- **Compromise:** A mutual agreement between the bank and borrower to settle the debt for a lesser amount than what is due.
- **Insolvency and Bankruptcy Code (IBC):** A comprehensive framework that provides a structured process for resolving stressed assets, which may involve liquidation or resolution plans.



- *Asset Reconstruction Companies (ARCs):* Banks may sell NPAs to these companies at a discount for them to recover the debts.

Factors for Decision Making:

- *Complexity of the Case:* SARFAESI is suitable for simpler cases with clear collateral, while IBC is for more complex cases involving multiple parties.
- *Amount of NPA:* For smaller amounts, compromise or OTS might be preferred, while DRT or IBC might be used for larger debts.
- *Borrower's Financial Health:* A borrower with potential for revival might be offered an OTS or restructuring, whereas a bankrupt company's assets would be resolved under IBC.
- *Stage of NPA:* Early stage NPAs might be resolved through restructuring, while severely stressed assets are often addressed through liquidation under IBC.
- *Legal and Regulatory Framework:* Banks consider the prevailing legal framework and guidelines from regulatory bodies like the RBI when choosing a method.
- *Cost of Resolution:* Banks compare the potential costs and time involved in each method, aiming for the most cost-effective and quickest recovery.
- *Collateral Availability:* SARFAESI can only be invoked for secured loans, making the availability of collateral a key factor.

Decision-Making Process in recovery of NPAs:

✱ Initial Assessment: Banks first assess the borrower's ability to repay, the nature of the default, and the value of the collateral. ✱ Explore Alternative Solutions: They then explore solutions like OTS, compromise, or restructuring to resolve the NPA amicably.	✱ Utilize SARFAESI: If there are secured assets, the bank might use the SARFAESI Act to recover its dues through the sale of the collateral. ✱ Initiate IBC: If all other attempts fail, the bank will then file a case with the National Company Law Tribunal (NCLT) under the IBC, 2016.

'Digital Footprints of the Borrower' in Credit Management

The use of digital footprints in assessing the creditworthiness of borrowers is gaining significant traction within Indian commercial banks, particularly for MSMEs. This approach promises several benefits to the banks' credit management processes, including improved lending quality, cost reduction, and better Non-Performing Asset (NPA) containment.

1. Enhancing Lending Quality and Credit Assessment:

- *Expanded Data & Reduced Paperwork:* Digital footprints offer a broader range of data points for assessing creditworthiness beyond traditional methods that primarily rely on asset or turnover criteria. This data can include:
 - o Name and PAN authentication.
 - o Mobile and email verification using OTP.
 - o GST data through service providers.
 - o Bank statement analysis via account aggregators.
 - o ITR upload and verification.
 - o Commercial and consumer bureau fetch and due diligence.
 - o Fraud checks and Hunter checks.
- *Predicting Credit Behaviour:* By analysing these diverse data sets, banks can predict a borrower's credit behaviour more accurately, potentially extending credit to individuals with negligible or no formal credit history.
- *Targeting the Unbanked:* Digital footprint analysis can also help assess the creditworthiness of the unbanked population who may not have a traditional CIBIL score.
- *Faster and Objective Decisions:* The new credit assessment model for MSMEs utilizes digital footprints to automate loan appraisals, ensuring objective decision-making and reduced subjectivity compared to manual underwriting.

2. Reducing Operational Costs and Improving Efficiency:

- *Streamlined Processes:* Digital footprints facilitate a fully digital loan application and assessment process, minimizing paperwork and the need for physical branch visits.
- *Faster Loan Processing & Reduced Turnaround Time (TAT):* Leveraging digital data sources and automated processes expedites loan approvals and disbursements, significantly reducing the TAT compared to manual methods.

1. 'Containing NPAs' and Mitigating Fraud:

- *Fraud Detection:* Digital footprint data can be used to identify patterns of behaviour that may indicate fraud or other financial crimes, enabling banks to detect and prevent such activities before they happen.
- *Risk Mitigation:* The use of digital footprints in credit assessment, including fraud and Hunter checks, helps banks in mitigating risks and potentially lowering NPAs.
- *Compliance with Regulations:* Strong digital footprints help businesses and banks comply with KYC (Know Your Customer) regulations by providing access to a wealth of information about their customers, helping verify identity and assess risk levels.

Challenges and Adaptations:

While digital footprints offer numerous benefits, challenges remain, especially regarding data privacy and the limitations of the current account aggregator system for partnership accounts. However, the Indian government and Public Sector Banks (PSBs) are actively working towards addressing these challenges and expanding the use of this model.

Overall, the growing adoption of digital footprint analysis in credit management within Indian commercial banks signifies a positive shift towards a more data-driven, efficient, and inclusive lending landscape.

h) Strategies to Control Resolution Costs:

i. Cost Control Strategies of NPA Resolution:

Indian banks are indeed required to develop and implement an NPA Management Policy and a Recovery Policy to address non-performing assets (NPAs) by identifying them early, implementing strategies to prevent fresh NPAs, and employing various mechanisms for timely recovery, such as borrower negotiation, restructuring, legal actions, or asset sales, thereby reducing financial losses and improving asset quality.

Initiatives for Cost Control:

- ★ **4R Strategy:** The government promotes a strategy of Recognition, Resolution, Recapitalisation, and Reforms to strengthen public sector banks and reduce NPAs.
- ★ **Legal Reforms:** Amendments to key acts like the SARFAESI Act and the Recovery of Debt and Bankruptcy Act aim to make the recovery process more effective.
- ★ **Asset Reconstruction Companies (ARCs):** The establishment of ARCs helps in managing and recovering NPA-related challenges.

By streamlining these processes and improving recovery rates, banks can reduce the costs associated with managing NPAs, such as legal fees and administrative expenses.

ii. Debt Recovery Agents (DRAs) Model is a Low-Cost Option:

Utilizing Debt Recovery Agents (DRAs) can be a more

cost-effective method for Indian banks to recover Non-Performing Assets (NPAs) compared to relying solely on in-house officials, as DRAs are compensated on a commission basis and specialized in recovery, allowing banks to avoid the fixed high overhead costs of maintaining large internal recovery departments.

- ★ **Pay-for-Performance Model:** DRAs are typically paid a commission for successful recoveries, aligning their incentives with the bank's goal of recovering the NPA. This contrasts with in-house staff who receive fixed salaries regardless of recovery success.
- ★ **Specialized Expertise:** DRAs are specialists in the often difficult and time-consuming process of debt recovery, bringing expertise and efficiency to the process.
- ★ **Reduced Fixed Costs:** Banks can avoid the high fixed costs associated with in-house teams, such as salaries, benefits, training, infrastructure, and other administrative overheads.
- ★ **Scalability:** Banks can scale their recovery efforts up or down by engaging more or fewer DRAs as needed, offering greater flexibility than maintaining a permanent, fixed-size in-house team.

In-House Recovery Officials are High-Cost:

- ★ **Higher Fixed Costs:** In-house recovery teams involve significant and ongoing fixed costs related to salaries, benefits, training, and supporting infrastructure.
- ★ **Less Specialization:** While in-house officials can recover loans, they may not possess the same level of specialized knowledge, tools, and the singular focus that dedicated DRAs bring to the task.



- ✱ **Operational Burden:** Managing a dedicated recovery department adds to the overall operational burden of the bank, diverting resources from other core banking activities.

RBI Regulations:

- ✱ The Reserve Bank of India (RBI) has guidelines in place for banks to engage DRAs, ensuring that the process is conducted within legal and ethical boundaries.

- ✱ The engagement of recovery agents is monitored and can attract supervisory action if policies or procedures are not followed correctly.

Therefore, while there is a cost associated with paying recovery agents, it is often a variable cost based on performance, making it a potentially more economical solution than the high fixed costs of maintaining and operating an internal, high-cost recovery department.

Real Time Tracking of NPAs through Dash Boards

Real-time tracking of non-performing assets (NPAs) and automated, digital communication with borrowers through channels like emails, SMS, and WhatsApp can significantly increase the effectiveness of NPA recovery for Indian banks. Such technological integration enables faster information dissemination to recovery officers, allows for prompt and personalized engagement with borrowers, and provides early warning signals, ultimately improving the efficiency of the recovery process.

Benefits of Real-Time Tracking and Digital Communication:

- **Enhanced Information Flow:** Recovery officers receive up-to-date NPA information in real-time, allowing them to act swiftly and make informed decisions.
- **Prompt Borrower Engagement:** Banks can automate sending reminders, notices, and recovery requests to borrowers via their preferred digital channels (email, SMS, WhatsApp).
- **Increased Borrower Response Rates:** Digital communication can be more effective in reaching borrowers compared to traditional methods, increasing the chances of positive responses and recovery.
- **Early Warning Systems:** Technology, including Artificial Intelligence and machine learning, can help identify early signs of distress in loan accounts, giving banks a chance to intervene before the loan becomes a full-fledged NPA.
- **Improved Recovery Efficiency:** Streamlining the process through automated systems reduces manual work and increases the overall efficiency of recovery efforts.

How it Works?

- **NPA Identification:** Loan accounts that show symptoms of becoming non-performing are flagged in the system.
- **Automated Alerts:** Recovery officers are instantly notified of these accounts, providing them with detailed, real-time data.
- **Automated Communications:** The system automatically sends personalized communication to borrowers through their chosen channels (email, SMS, WhatsApp).
- **Tracking and Follow-up:** Banks can track the effectiveness of these communications and schedule automated follow-ups to ensure borrowers address their loan obligations.
- **Data-Driven Decisions:** Continuous monitoring and data analysis help banks refine their recovery strategies and make more effective decisions.

iii. 'Tenure of Officers' of Stressed Resolution Branches:

Extending the tenure of officers in an Indian commercial bank's Non-Performing Assets (NPA) department to five years is a proposal to enhance recovery efficiency through accumulated expertise and familiarity with borrower accounts, a strategic approach to improving recovery outcomes. Specialized teams with domain knowledge are already deployed for monitoring high-value loans and resolving NPAs, and this suggestion aligns with the goal of developing specialized expertise for faster and more effective resolution of stressed assets.

Arguments in favour of a 5-year tenure:

- ✱ **Enhanced Expertise:** A longer tenure would allow

officers to develop deeper knowledge of the complex legal and financial aspects of NPA accounts, leading to more informed and effective recovery strategies.

- ✱ **Increased Borrower Familiarity:** Officers would gain a more profound understanding of individual borrower histories, financial situations, and potential recovery pathways, which could facilitate quicker resolution.
- ✱ **Specialized Skill Development:** Banks often deploy specialized teams with financial and domain knowledge for effective monitoring and resolution of high-value loans, indicating the value of focused expertise in NPA management.



- ★ **Improved Recovery Rates:** Better expertise and understanding of borrower accounts can lead to more efficient and successful recovery processes, reducing the overall burden of NPAs on the banking system.

Existing practices supporting this concept:

- ★ **Specialized Monitoring Agencies:** Banks are already using specialized agencies to monitor high-value loans, demonstrating a move towards developing dedicated expertise.
- ★ **Dedicated NPA Branches:** The State Bank of India (SBI) established dedicated Stressed Assets Management Branches (SAMBs) to handle NPAs, showing a commitment to specialized handling.
- ★ **Use of Expert Personnel:** The SBI's SAMBs have dedicated, trained staff, including legal experts, to accelerate resolution and recovery through legal actions and settlements.

Extending officer tenure in the NPA department for a longer period, such as five years, is a plausible and beneficial approach that could significantly improve the effectiveness of NPA recovery by fostering specialized knowledge and experience within the banking system. This strategy aligns with existing efforts to build specialized capabilities for managing non-performing assets and could contribute to quicker and more successful recovery efforts.

iv. 'Delegation of Powers' to officers of Stressed Resolution Branches:

Delegating more power to Indian bank branches for Non-Performing Asset (NPA) recovery is a strategy that could improve recovery by enabling faster, localized decisions, though it requires careful oversight. Current efforts focus on specialized stressed asset management verticals, improved legal frameworks like the SARFAESI Act and IBC, and technology-driven feet-on-street models for recovery. Implementing a branch-level delegation would complement these, but it should be done within a clear, board-approved policy framework that addresses the specific needs of different NPA cases and protects against fraud.

Arguments for Delegation of Powers:

Faster/Quick Decision-Making:

Branch-level decision-making can be quicker than escalating issues to higher authorities or specialized recovery units, potentially accelerating the recovery process.

- ★ **Local Expertise:** Branch managers have a better understanding of local borrowers and market conditions, which can be advantageous in devising effective recovery strategies for regional NPAs.

- ★ **Improved Customer Relations:** A more empowered branch can offer better support and solutions to distressed borrowers, fostering a more collaborative approach to recovery, notes Karnataka.gov.in.

Considerations and Implementation:

- ★ **Board-Approved Policy:** Banks are required by the RBI to have a board-approved policy for loan recovery. Any delegation of power to branches should be integrated into this policy, specifying the types of cases, recovery actions, and financial limits for branch-level decisions.
- ★ **Specialized Training:** Branch staff would need specific training in recovery processes, negotiation skills, and the use of recovery tools under the SARFAESI Act and IBC.
- ★ **Technology Integration:** Leverage technology to support branch-level recovery, such as real-time data access and digital tools for case management.
- ★ **Monitoring and Controls:** Implement robust monitoring mechanisms to ensure accountability and prevent misuse of delegated powers.
- ★ **Balance with Centralized Units:** The delegation should not replace the specialized stressed assets management verticals but rather complement them by allowing for quicker action on smaller cases at the local level.

v. Proper Valuation of Collaterals:

Proper valuation of assets offered as collateral is crucial for sound lending and effective Non-Performing Asset (NPA) management. Inaccurate valuation directly leads to substantial financial losses, or haircuts, for banks when forced to sell these assets in auctions after a borrower defaults. The expertise of cost accountants is vital in ensuring accurate and reliable valuations, particularly for complex or specialized assets.

Importance of Proper Asset Valuation:

- ★ **Credit Risk Mitigation:** Accurate valuation is a fundamental component of credit risk management. It helps lenders determine appropriate loan amounts



(Loan-to-Value ratios) and interest rates, ensuring adequate protection against potential losses.

- ✱ **Minimizing Haircuts:** When loans turn into NPAs, the collateral may need to be seized and sold. Haircuts (accepting less than the full amount owed) occur if the sale value is less than the outstanding debt. Proper initial valuation, which accounts for the asset's potential "quick sale" value in a distress scenario, helps minimize these losses.
- ✱ **Informed Decision Making:** Reliable valuations enable banks to make informed decisions about loan approvals, provisioning levels for bad loans, and overall portfolio health.
- ✱ **Regulatory Compliance:** Financial institutions are subject to regulations (like those from the RBI in India and Basel guidelines internationally) that require robust, transparent, and consistent collateral valuation processes to maintain financial stability and capital adequacy.
- ✱ **Systemic Stability:** High levels of NPAs due to poor valuation can erode a bank's capital, constrain lending, and pose risks to the entire financial system.

The Critical Role of Cost Accountants (CMAs):

Cost and Management Accountants (CMAs), particularly in specialized asset classes, play a vital role in ensuring accurate valuations:

- ✱ **Specialized Expertise:** While general appraisers handle common assets like real estate, cost accountants can provide expert valuation for specialized assets such as machinery, inventory, and intangible assets, where market comparable may be scarce.
- ✱ **Application of Valuation Methods:** Cost accountants are trained in using various valuation methods, including the cost approach, market approach, and income approach (such as discounted cash flow analysis), selecting the most appropriate one for the specific asset type.
- ✱ **Efficiency Auditing:** They can act as "efficiency auditors," identifying inefficiencies or operational issues within a business that could impact the underlying value of its assets, providing a more realistic assessment of the collateral's worth.
- ✱ **Inventory and Production Cost Analysis:** In cases

involving manufacturing or operational assets, CMAs can accurately track and analyse production costs and inventory levels, providing a true picture of asset values, which is essential for both lending decisions and eventual recovery.

- ✱ **Objective Reporting:** They provide impartial, clear, and objective valuation reports, essential for ensuring transparency and avoiding potential biases that could inflate asset values.
- ✱ **Risk Identification:** CMAs can identify potential risks affecting collateral value, such as technological advancements rendering equipment obsolete or rapid market changes, helping lenders proactively manage their risk exposure.

In summary, robust and independent asset valuation, with key input from qualified cost accountants, is essential for mitigating risks in lending, minimizing losses from NPAs, and maintaining a stable financial ecosystem.

vi. Recovery Resolution 'Cost Control' through IBC, 2016:

Objectives of IBC, 2016:

- ✱ It serves to consolidate and amend the statutory provisions pertinent to insolvency and bankruptcy proceedings within the jurisdiction of India.
- ✱ It constitutes a time-sensitive resolution mechanism for credit and loans extended by financial institutions, banks, or operational creditors of the corporate debtor.
- ✱ The objective is to optimize the asset value of the corporate debtor, including companies and limited liability partnerships (LLPs), through resolution plans proposed by resolution applicants.
- ✱ It aims to foster and promote entrepreneurship within India and to attract increased investments, encompassing both domestic and foreign direct investments, through various reforms, thereby creating a conducive environment for the "Ease of Doing Business" within the nation.
- ✱ Additionally, it seeks to instil confidence in Indian financial institutions, particularly bankers who are engaged in ongoing lending to corporates and LLPs.
- ✱ The Code establishes a regulatory authority, namely the Insolvency and Bankruptcy Board of India, tasked

with the regulation and oversight of bankruptcy and insolvency cases in India, in collaboration with Insolvency Professional Agencies (IPAs), Insolvency Units (IUs), and Insolvency Professionals (IPs).

- ★ The amendment pertains to the allocation of liquidation proceeds in the event of liquidation, specifically regarding the prioritization of payments during the liquidation process.

Maximum Period of Resolution:

Pursuant to Section 12(1) of the Insolvency and Bankruptcy Code, 2016, the Corporate Insolvency Resolution Process (CIRP) is mandated to be completed within a maximum timeframe of 180 days from the date of application submitted by a financial or operational creditor or corporate debtor to the National Company Law Tribunal (NCLT) to initiate the CIRP.

As stipulated in Section 12(2) of the Insolvency and Bankruptcy Code, 2016, this timeframe may be extended, if deemed necessary, contingent upon the resolution professional submitting a request to the adjudicating authority (AA), subject to the endorsement of the Committee of Creditors (CoC) with a requisite minimum of 66% voting in favour.

According to Section 12(3) of the Insolvency and Bankruptcy Code, 2016, the adjudicating authority

(NCLT) may grant a single extension of up to a maximum of 90 days, contingent upon the approval of the CoC and adherence to specified conditions.

The obligatory duration for the completion of the CIRP is set at 330 days, inclusive of the time allocated for appeals, stays, and other contingencies, and varies on a case-by-case basis rather than being a uniform process.

Consequently, when calculating the entire duration of the resolution process from the date of application submission to the NCLT by a financial creditor, operational creditor, or corporate debtor until the conclusion of the CIRP (including delays), the total duration approximates one year. However, in instances involving banks or financial institutions, if one considers the initial period of 90 days for the transition from standard asset to non-performing asset (NPA) status of loans provided to the corporate debtor, the total duration of the resolution process significantly exceeds one year and three months.

Critical phases in the Corporate Insolvency Resolution Process (CIRP): The subsequent outlines represent the essential steps in the CIRP under normal conditions, commencing from the date of application submission to the NCLT by either a financial creditor, operational creditor, or corporate debtor.

Various Steps (Broader) of IBC, 2016

Step-1	Submission of Application to NCLT by FC / OC / CD.
Step-2	Identification and Appointment of 'Interim Insolvency Resolution Professional' (IRP) to initiate the CIRP Process.
Step-3	Moratorium Period will Start from the Date of Application admitted by the Adjudicating Authority either under Section 7 or 9 or 10 (FC / OC / CD).
Step-4	Verification and Analysis of Claims submitted by Financial Creditors / Operational Creditors etc.
Step-5	Formation of Committee of Creditors (CoC) by IRP.
Step-6	Appointment of the Resolution Professional (RP) after Completion period of IRP.
Step-7	Acceptance of the 'Resolution Plan' (Through Evaluation Matrix):
	≈ If a plan is accepted within stipulated period and is Approved by NCLT, handover the Company to the Winner of the Bid (i.e., Resolution Applicant).
	≈ If No 'Resolution Plan' is filed / accepted during the stipulated period then 'Liquidation Process' of the Corporate.

Flow Chart of Corporate Insolvency Resolution Process





For illustrative purposes: The subsequent calculations are predicated on the “average debt” availed by the corporate debtor from the “financial creditor (banks/ financial institutions),” with the average debt amounting to ₹ 30 crores and the estimated “Resolution Process Costs” delineated as follows:

Elements of Costs during CIRP (Estimated Costs)

(Based on the Interactions with Bankers / RPs etc.)

Sl. No.	Name of Activity	Section No. / Regulation	Cost (Approx.)
1	The Cost of Services offered by Interim Resolution Professional (IRP) at Initial Period of CIRP- Average Period Taken as 60 Days .	Section 16 (1) Section 22	₹ 4,00,000
2	Public Announcement – The Cost of Advertisement in TWO reputed Newspapers – One Local Language and One National News Paper where the Creditors (FC / OC) are situated.	Section 15	₹ 1,00,000
3	Appointment Authorised Representative for “Class of Creditors” (In Certain Circumstances i.e., Where the Class of Creditors exist).	Section 21(6A) (b) / Regulation 16 A	₹ 2,00,000
4	Committee of Creditors (CoC) Meetings – Average 6 Meetings during Total CIRP Period.	Section 22(1) / Regulation 19(2)	₹ 6,00,000
5	Appointment of Resolution Professional (RP) – Average Period taken as 7 Months.	Section 16(5)	₹ 14,00,000
6	Appointment of Valuers - TWO Valuations for Each Land & Buildings, Plant & Machinery, Securities or Financial Assets.	Regulation 27	₹ 12,00,000
7	Services Cost of Insolvency Professional Entities (IPEs).	--	₹ 6,00,000
8	Other Services like engagement of Advocates (Legal Advisors), Company Secretary Services (To Verify the information with ROC etc.), Other Professionals in case of need etc.	--	₹ 6,00,000
9	Determination of Preferential and Other Transactions. (Like Transactional Audit / Forensic Audit). For PUFEE Transactions are covered under Sections 43, 45, 66, and 50 of IBC.	Regulation 35 A	₹ 5,00,000
10	Preparation of “Information Memorandum-IM” (Detailed Document about the Company Assets & Liabilities, Products Manufactured, Number of Staff, Market Share, Key Managerial Persons etc. for Marketing of “Resolution Plans” from the Prospective Resolution Applicants).	Regulation 36(1)	₹ 3,00,000
11	Invitation “Expression of Interest - EoI” for ‘Resolution Plans’ (Through Wide Publicity by using reputed News Papers).	Regulation 36 A	₹ 4,00,000
12	Miscellaneous Costs (Printing, Stationery, Conveyance to visit to NCLT etc.)	--	₹ 1,00,000
13	“Interest Cost” on the Funds lent by the Bank / FIs to the Corporate Debtor – During CIRP Process. Average Interest “Yield Rate on Advance” of ₹ 30 Crores with 10% p.a. Interest (Simple Interest) i.e., ₹ 30 Crores X 10% p.a. = ₹ 3.00 Crores. (Note: Beginning from July 1, 2002 Banks are Charging / Compounding Interest at Monthly Rests). But in this case, ‘Interest Cost’ is taken with Simple Interest Rate and not Monthly Compounded. Note: As mentioned in earlier Paragraphs i.e., the ‘Maximum Period of Resolution Process (CIRP)’ assume is ONE Year. Hence, Interest Cost arrived for One Year.		₹ 3,00,00,000
	Average Total		₹ 3,64,00,000/-
	“Resolution Process Cost”		

Details of Various Costs in CIRP Process:

- a) Interim Resolution Professional-IRP:** The Adjudicating Authority is mandated to appoint an interim resolution professional in accordance with the lists provided by the Insolvency and Bankruptcy Board of India (IBBI) or based on the recommendations made by the Financial Creditors on the date marking the commencement of the insolvency proceedings. The tenure of the interim resolution professional (IRP) shall persist until the formal appointment of the resolution professional as delineated in Section 22 of the Insolvency and Bankruptcy Code, 2016.

On average, the tenure of the IRP will extend for a duration of two months, as opposed to the previous stipulation of 45 days. Consequently, the average period required for the services rendered by the IRP is 60 days. Subsequent to the appointment of the Resolution Professional, the IRP is obligated to transfer the proceedings of the Corporate Insolvency Resolution Process (CIRP), which includes all correspondence initiated from the first day of his appointment to the Resolution Professional, comprising pertinent information and data, various documents submitted to the Information Utility, correspondence records, minutes of the Committee of Creditors (CoC), and a comprehensive list of claims received, among other materials.

Average Cost of IRP Services: The financial remuneration for the services rendered by the Interim Resolution Professional (IRP) is quantified at ₹ 4.00 Lacs (₹ 2 Lacs per month), with the average maximum duration for such services being established at 60 days.

- b) Public Announcement:** In accordance with Section 15 of the Insolvency and Bankruptcy Code, 2016, in conjunction with the IBBI Corporate Insolvency Resolution Process Regulations, the stipulations regarding the requirements for a 'Public Announcement' are elucidated. An Insolvency

Professional (IP) is required to execute the "Public Announcement" promptly upon his appointment as the Interim Resolution Professional (IRP), which must occur no later than three days following the date of his designation as IRP. The public announcement shall be formulated in Form A and disseminated as follows:

In one English-language newspaper and one regional language newspaper that possess substantial circulation in the vicinity of the Registered Office and Principal Office (if applicable) of the Corporate Debtor, as well as any other location where, in the judgment of the Interim Resolution Professional (IRP), the Corporate Debtor engages in significant business operations.

On the official website of the Corporate Debtor (if such a platform exists), and on the website designated by the IBBI for this purpose.

Average Cost of Public Announcement: The financial outlay for the Public Announcement, which entails the advertisement placed in two reputable newspapers, one in the local language and the other in a national newspaper, has been assessed. Based on the current prevailing rates of news agencies and circulation metrics of the newspapers, the average cost is calculated to be ₹ 1.00 Lac.

- c) Authorised Representatives:** The Interim Resolution Professional (IRP) shall designate a Qualified Insolvency Professional, selected based on the preferences expressed by the greatest number of financial Creditors within the Class as indicated in Form-CA received pursuant to Sub-regulation (1) of Regulation 12, to act as the Authorised Representative for the Creditors of the respective Class. The honorarium or service cost associated with this appointment shall adhere to the stipulations set forth in the CIRP Regulations as follows:

Number of Creditors in the Class	Fee per Meeting of the Committee (₹)
10 to 100	₹ 30,000/-
101 to 1,000	₹ 40,000/-
More than 1,000	₹ 50,000/-

Average Service Cost of 'Class of Creditors': The appointment of the Authorised Representative is subject to approval by the Committee of Creditors (CoC), predicated on the recommendations provided

by the Insolvency Professional. This representative will participate in CoC meetings on behalf of the 'Class of Creditors,' and the associated cost of services for the Authorised Representative shall be determined



in accordance with the Regulations, with the average cost during the CIRP period estimated at ₹ 2.00 Lac.

- d) CoC Meetings:** Pursuant to the Insolvency and Bankruptcy Code (IBC), a Committee of Creditors (CoC) is constituted comprising Financial Creditors of the Corporate Debtor (CD) or, in their absence, Operational Creditors. The Interim Resolution Professional, subsequent to the aggregation of all claims lodged against the Corporate Debtor and the assessment of its financial status, shall establish a Committee of Creditors (CoC) as delineated in Section 21(1) of the Insolvency and Bankruptcy Code, 2016.

Average Cost of Conducting CoC Meetings: The term “Cost of CoC Meetings” refers to the financial outlay associated with the organization of CoC Meetings, encompassing expenditures related to the Insolvency Resolution Professional’s incidental costs, such as Travel and Accommodation Expenses, the documentation of meeting minutes, the dissemination of these minutes to CoC Members, as well as various other miscellaneous expenses incurred during the conduct of CoC activities.

The anticipated frequency of such Meetings during the Corporate Insolvency Resolution Process (CIRP) is approximately TWELVE Meetings, with the potential for increase contingent upon the magnitude of Financial Creditors’ Debt, Operational Creditors’ Debt, or the complexity of the issues presented.

Drawing from Historical Data concerning expenses incurred in this context, the Average Cost attributed to CoC Meetings is estimated at ₹ 6.00 Lacs for the entirety of the CIRP duration to accommodate the aforementioned expenditures.

- e) Resolution Professional-RP:** The inaugural meeting of the Committee of Creditors (CoC) is mandated to convene within a period not exceeding Seven Days following the Constitution of the Committee of Creditors (CoC).

In the initial meeting, the Committee of Creditors (CoC) may, through a majority vote constituting not less than sixty-six percent of the voting rights held by Financial Creditors, either resolve to appoint the Interim Resolution Professional as the Resolution Professional or opt to substitute the Interim Resolution Professional with an alternative Resolution Professional (RP).

Average Cost of Services of RP: The appointment of the Resolution Professional shall transpire subsequent to the Interim Resolution Professional (IRP) phase and shall continue until the conclusion of the CIRP, which may be extended based on the litigations or extension periods sanctioned by the Adjudicating Authority, among other factors.

Consequently, the Average duration is considered to be SEVEN Months, with the Average Remuneration payable to the Resolution Professional estimated at ₹ 14.00 Lacs (₹ 2.00 Lacs per Month).

- f) Valuers:** In accordance with Section-27 of the IBC, 2016, it is mandatory for the Resolution Professional to appoint Two Registered Valuers within a span of 7 Days to ascertain the “Fair Value and Liquidation Value”.

Per Section-35, should the Liquidation Values determined by the Two Valuers exhibit significant disparity, the Resolution Professional is authorized to appoint an additional Registered Valuer, who shall provide an estimate computed in a similar manner; the average of the Two Closest Estimates shall be acknowledged as the liquidation value.

Average Cost of Valuers: Registered Valuers are to be appointed to assess the Assets of the Corporate Debtor in order to derive the ‘Fair Market Value’ and ‘Liquidation Value’. According to the IBBI Regulations, TWO Valuers must be appointed by the Resolution Professional with the consent of the CoC. In instances where there exists considerable variation in the TWO Valuations provided, a Third Valuer shall be appointed by the Resolution Professional.

The Average Cost associated with the services of the TWO Valuations for each category of Land & Buildings, Plant & Machinery, Securities, or Financial Assets is estimated based on prevailing market rates at ₹ 12.00 Lacs.

- g) IPE / Advocate Services:** Insolvency Resolution Professionals (IRP) and Resolution Professionals (RP) are permitted to utilize the services of Insolvency Professional Entities (IPE) along with Legal Advisors, contingent upon specific requirements. The financial expenditures associated with these services necessitate approval from the Committee of Creditors (CoC). In certain circumstances, the engagement of IPE and Legal Advisor services is critical for the effective



execution of the Corporate Insolvency Resolution Process (CIRP).

Average Cost of IPE / Advocate Services: According to established guidelines, the Insolvency Professional (IP) may engage the services of an IPE based on necessity, subject to the endorsement of the CoC. Consequently, the cost attributed to the services rendered by the IPE is estimated at ₹ 6.00 Lakhs for the entire duration of the CIRP.

In addition to this expenditure, in numerous instances, the IP necessitates “Advisory / Assistance” services from Advocates, Company Secretaries, Chartered Accountants, etc. Therefore, the average cost of such services is approximated at ₹ 6.00 Lakhs.

h) Preferential and Other Transactions: In accordance with Section 43, a Transactional / Forensic Audit mandated by the Insolvency and Bankruptcy Code is required for the subsequent transactions:

- ✓ Section 49: Consequences resulting from entering into an Undervalued Transaction.
- ✓ Section 50: Extortionate Credit Transactions.
- ✓ Section 66: Wrongful and Fraudulent Trading.
- ✓ Section 65: Fraudulent Initiation of Insolvency Process. This provision is particularly significant as it addresses fraudulent activities within the framework of the Insolvency and Bankruptcy Code.
- ✓ Section 45: Undervalued Transactions.

Appointment of Transaction Auditor / Forensic Auditor : This constitutes a standard requirement for Resolution Professionals. The Forensic Auditor possesses the capability to detect Fund Diversion, Siphoning of Funds, and other associated activities potentially executed by the management of the Company. With the aid of the Forensic Audit Report, the Committee of Creditors (CoC) can identify and formally declare the Promoters/Directors of the Corporate Debtor Company, thereby facilitating necessary interventions.

Average Cost of Transactional Audit / Forensic Audit: In many cases, misallocation or misappropriation of funds transpires within Corporates, consequently rendering the Corporate Debtor (CD) incapable of liquidating the indebted amount owed to Financial Creditors. To ascertain these transactions, the IP may engage a Transactional

Auditor (Forensic Auditor) to evaluate the Preferential and Other Transactions of the Corporate Debtor; the average cost for the services provided by the Transactional / Forensic Auditor is estimated at ₹ 5.00 Lakhs.

i) Information Memorandum: According to Section-5 (10), the term “Information Memorandum” refers to a memorandum formulated by the Resolution Professional in accordance with Sub-section (1) of Section 29.

The primary objective of an “Information Memorandum-For Decision” is to facilitate decision-making and additionally, it “Aids (or at times sways) a Decision-maker to arrive at a more informed decision in a specific problem context than they might have otherwise achieved without the Analysis.” Other functions that the briefing note may fulfil include:

- ✓ Conveying Information.
- ✓ Informing Decisions.
- ✓ Making a request.
- ✓ Providing a response to a Question.
- ✓ Making a suggestion.
- ✓ Presenting an informal report.
- ✓ Proposing a solution to a problem.
- ✓ Documenting a reference for future use.

Cost: The formulation of an Information Memorandum (a comprehensive document detailing the company) necessitates specialized expertise. This document serves as a marketing brochure and proves advantageous for the Prospective Resolution Applicant to engage in the bidding process. For the creation of the Information Memorandum, the Resolution Professional may procure the services of an expert in this domain, contingent upon the approval of the Committee of Creditors (CoC). The typical fee for such expert services in the preparation of the Information Memorandum is approximately ₹ 3.00 Lacs.

j) Expression of Interest: In accordance with Section 25(2)(h) of the Insolvency and Bankruptcy Code (IBC), the Resolution Professional solicits Expressions of Interest (“EoI”) from interested and qualified potential Resolution Applicants for the purpose of submitting a Resolution Plan for the Corporate Debtor in consonance with the provisions outlined in the IBC, 2016.



Average Cost of Expression of Interest: The solicitation of Expressions of Interest for Resolution Plans entails extensive publicity through newspaper advertisements to attract submissions from prospective resolution applicants. To maximize the number of received Resolution Plans, the Insolvency Professional is required to disseminate advertisements via newspapers selected for their wide circulation. The average expenditure for this activity, to be incurred by the Committee of Creditors, is estimated at around ₹ 4.00 Lacs.

- k) Provision for Miscellaneous Costs has been allocated at ₹ 1.00 Lac, which encompasses expenses for printing, stationery, uploading information in Information Utility Charges, travel costs incurred for visits to the National Company Law Tribunal (NCLT) for the submission of various documents, as well as attendance at hearings held at the NCLT.

Cost: Consequently, the total Miscellaneous Cost projected for the entire Corporate Insolvency Resolution Process (CIRP) period is established at ₹ 1.00 Lac.

- l) **Interest Portion on the Funds lent by Financial Creditor:** The temporal value of money indicates that it possesses greater worth in the present compared to the future due to its Opportunity Cost associated with the period of waiting. In addition to this inherent loss, failure to act promptly results in inflation gradually diminishing the value and purchasing power of the funds.

The maximum duration allocated for the Resolution Process is 330 days, comprising 180 days plus an extension of 90 days, and an additional 60 days, subject to the approval of the NCLT. Banks extend financial resources to the Corporate Debtor, which are derived from depositors. The primary obligation of these banks is to disburse the principal amount of deposits, along with accrued interest, to the depositors.

Once the funds are committed to the Resolution Process, the banks encounter the following challenges:

- **Liquidity Problem:** When a depositor expresses the desire to withdraw their deposited funds, the bank may be unable to fulfil this request due to the fact that the loan amounts are unrecovered and are entangled in the Resolution Process, specifically within the CIRP framework.

- **Recycling of Funds:** Should the Corporate Borrower fail to repay the funds borrowed from the bank, this will result in a contraction of the bank's turnover; specifically, if loans are not repaid in a timely manner, the bank's available funds for further lending (new loans) will diminish. Consequently, the recycling of funds will be impeded as long as the funds remain immobilized within the CIRP.

- **Hair Cut:** Should the total sum of the Loan along with accrued Interest remain unrecovered from the borrower, the resultant dilemma for the Banker constitutes a loss stemming from Lending Activity (a disparity between the Outstanding Amount and the realized Amount). This loss must be charged to either the Profit and Loss Account or the Provisions Account (assuming sufficient provisions have been established by the Bank). Consequently, the overall profitability of the Bank will experience a decrement. This scenario represents one of the principal factors contributing to financial deficits incurred by Commercial Banks.

- **Average Interest Cost of Loan Fund:** Suppose one considers a Loan Amount of ₹ 30 Crores extended by the Bank to the Corporate Debtor. Furthermore, if this capital is immobilized within the Resolution Process, specifically the Corporate Insolvency Resolution Process (CIRP), for a duration of one year, the Interest Cost on ₹ 30 Crores approximates ₹ 3 Crores (with an Average Yield on Advances at 10% per annum). This figure may not be recuperated by the Banks through the CIRP Process. Thus, the Time Value of Money associated with the CIRP Process amounts to approximately ₹ 3 Crores in relation to the Financial Debt of the Banks. (The Maximum duration of the CIRP Period can extend under Various Conditions to 330 Days, which averages to one year).

- **Remarks:** The aggregate Resolution Costs incurred by the Financial Creditor, namely the Banks, is approximately ₹ 3.64 Crores, which represents around 12.13% of the Loan disbursed by the Bank. Should the Bank fail to recover the Complete Loan amount via the CIRP Process, including both Principal and Interest, the 12.13% Resolution Costs will pose an additional financial strain on the Banks.

Note: In the event of a complete Failure to Recover the Loan extended by Financial Institutions or Banks to the Corporate Debtor, such Loan must be designated as Non-performing Assets, necessitating adherence to the “Income Recognition and Asset Classification” guidelines set forth by the Reserve Bank of India (RBI). Consequently, no Interest shall be applied by the Banks in accordance with RBI directives. As a result, over the span of one year, the Bank will incur a loss of ₹ 3.00 Crores in Interest (with the Average Yield on Bank Loans approximating 10% using Simple Interest, not compounded monthly).

Resolution Costs in Other Countries: The Resolution Cost of ₹ 3.64 Crores represents 12.13% of the Financial Debt totalling ₹ 30.00 Crores. This figure indicates a comparatively High Side Cost of the Resolution Process for the Bank or Financial Institutions. Upon examining the ‘Resolution Costs’ in other nations, it becomes evident that India exhibits a High Side in this regard.

Name of the Country	Resolution Cost Percentage of Loan
India	12.13%
Brazil	12.00%
Germany	8.00%
Finland	3.50%
Japan	3.50%
Korea	3.50%

Suggestions to Minimize the “Resolution Costs”: The following recommendations have been posited to “Minimize the Resolution Costs” associated with the Recovery of Non-performing Assets (NPAs) of Banks:

- Close Monitoring of the Insolvency and Bankruptcy Code (IBC) Cases filed with the National Company Law Tribunal (NCLT) and the National Company Law Appellate Tribunal (NCLAT) is imperative. For each Case, “Date Charts” must be meticulously prepared. In instances where the Activities of the CIRP have surpassed the designated Time Limit, due diligence should be exercised to expedite resolution. The Time Limits articulated in the CIRP Regulations serve as Outer Limits; thus, every Activity of the CIRP must be concluded

within the Time Limits delineated in the CIRP Regulation.

- Utilize the PERT/CPM methodologies as a means of Project Implementation and Control Instrumentation. The Corporate Insolvency Resolution Process (CIRP) can be likened to a “Project” that necessitates completion within a prescribed temporal framework, facilitated by the Insolvency Resolution Professional (IRP) or Resolution Professional (RP).
- Administer comprehensive training programs for the personnel associated with the “Credit Wings of Credit Intensive Branches” as well as the staff members of “Stressed/NPA Specialized Branch” on the CIRP and its pertinent domains.
- In the process of assigning cases to the Insolvency Professionals (IPs), it is imperative that a thorough background verification is conducted, encompassing knowledge in Credit Management, adherence to the Insolvency and Bankruptcy Code (IBC), alongside applicable rules and regulations, in addition to an assessment of historical performance, specifically the number of cases successfully completed within stipulated timeframes, as mandated by the Financial Creditors.
- It is essential to categorize the expenditures associated with the CIRP into controllable and uncontrollable costs, with particular emphasis directed towards the management of controllable costs.
- Card Rate Charts are to be meticulously constructed or fixed to determine the service costs associated with various activities pertaining to the Corporate Insolvency Resolution Process (CIRP) by financial institutions, including but not limited to, Insolvency Resolution Professional (IRP) fees, Resolution Professional (RP) fees, transactional audit fees, valuation fees, as well as the costs associated with the uploading of information to Information Utilities and supplementary services utilized by Insolvency Professionals (IPs) such as fees for Insolvency Professional Entities (IPE) or legal counsel. This information is to be disseminated to credit-intensive branches and branches dealing with stressed assets for effective implementation.



- Developments and modifications to the rules and regulations governing the CIRP, as outlined on the Insolvency and Bankruptcy Board of India (IBBI) website, are to be communicated to the relevant branch heads and credit managers. Furthermore, concise learning curves, encompassing one-page briefs regarding cases that have been admitted or dismissed by various National Company Law Tribunals (NCLTs) or the Supreme Court, as indicated on the “ICMAI IPA” or “ICSI IPA” website and the IBBI Quarterly Journal, are to be shared with the pertinent officials within the bank branches to enhance and enrich their understanding of cases under the Insolvency and Bankruptcy Code (IBC) of 2016.
- Standard Operating Procedures (SoPs) are to be developed by the banks for the CIRP, Pre-Packaged Insolvency Resolution Process (PPIRP), Interim Insolvency Resolution Process (IIRP), and similar frameworks, with the objective of disseminating these procedures to the relevant branches. Such actions are anticipated to significantly reduce knowledge gaps regarding the IBC at the operational levels within the banks.

Despite the concern regarding the resolution costs associated with the CIRP under the IBC, there exists potential to mitigate these costs through various strategic recommendations as delineated above. The decision-making process along with cost-benefit analysis are critical tools when initiating IBC cases within the NCLTs. The crucial factors that influence the decision to file or refrain from filing in the NCLTs under the IBC of 2016 include the classification of the non-performing asset (NPA) account, the ticket size of the NPA, the availability of collateral security, the viability of the business unit, the competitive landscape for the products or services provided by the company, the future outlook of business activities, the availability of resolution applicants, the financial capacity of guarantors, and the historical account performance with the bank. For credit limits characterized by small exposure and small and medium enterprises (SMEs) where the ticket size of the NPA account is comparatively low, it may be prudent to consider alternatives such as the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act of 2002 or Debt Recovery Tribunals (DRTs) rather than initiating proceedings in the NCLT under the IBC of 2016. Additionally, strategies for the expedited recovery of NPAs while maintaining reasonable resolution costs available to the banks include:

- ✓ Out-of-Court Settlement.
- ✓ Arbitration and Mediation Processes. Compromise of Loans.
- ✓ One-Time Settlement (OTS) and
- ✓ Restructuring of Loans, among others.

In light of the aforementioned points, banks are encouraged to explore the “**Best Alternative Resolution Process**” with the objective of minimizing resolution costs, achieving rapid recovery of NPAs, and ensuring the least haircut on outstanding loans.

To Sum Up:

Quick and low-cost recovery of Non-Performing Assets (NPAs) is vital for commercial banks because it restores their profitability by reducing losses and improving their balance sheets, while slow or expensive recovery drains resources and can lead to financial distress. Timely recovery enables banks to reallocate capital, maintain liquidity, and offer new loans, preventing illiquidity and supporting economic growth.

Why Quick and Low-Cost Recovery is Crucial:

- ✱ **Restores Profitability:** NPAs are unproductive assets that generate no income for the bank, directly reducing its profits. Quick recovery helps to recover the principal and interest, thus improving the bank’s income and financial health.
- ✱ **Prevents Capital Erosion:** Unrecovered loans lead to capital erosion, as the bank’s initial investment in the loan is tied up. Recovering these assets frees up capital that can be used for new lending or investment, rather than being locked in non-performing accounts.
- ✱ **Improves Liquidity:** Effective recovery ensures that banks have enough cash flow to meet their obligations. Slow recovery can lead to illiquidity, where a bank cannot meet its short-term financial needs.
- ✱ **Boosts Investor Confidence:** A bank with a high volume of NPAs is often seen as risky by investors. A strong recovery record can increase investor confidence, attracting more investment and supporting the bank’s overall value.
- ✱ **Supports Economic Growth:** By recovering loans efficiently, banks can free up funds to lend to businesses and individuals, stimulating economic activity and growth.



Consequences of Slow and Costly Recovery:

- ✱ **Financial Distress and Insolvency:** If a bank cannot recover its NPAs, it can become financially unstable. Prolonged high NPAs can even lead to insolvency, where the bank is unable to pay its debts.
- ✱ **Reduced Lending Capacity:** Funds tied up in NPAs cannot be used for new loans. This limits a bank's ability to lend, slowing down business and economic development.
- ✱ **Increased Costs:** The process of recovering NPAs can be expensive, involving legal fees, administrative costs, and provisions for bad loans. High recovery costs directly cut into the bank's profits.

References:

a) Gross NPAs of Public Sector Banks-IBA Published Data from FY 2021 to FY 2025.

b) Net NPAs of Public Sector Banks-(For FY 2021 to 2025)-IBA Published Data.

c) Recovery through 'DRTs'-Best Practices adopted by Private Sector Banks.

d) Net NPA as % to Net Advances of Public Sector Banks-(For FY 2021 to 2025)-IBA Published Data.

e) 'Digital Footprints of the Borrower' in Credit Management-Ministry of Finance announced during 2024-2025 Budget.

f) Recovery Resolution 'Cost Control' through IBC, 2016-The Management Accountant-January, 2022.

g) Cost-Benefit-Analysis of Alternative Resolutions to recovery NPAs of Banks-Theoretical Knowledge from ICMAI Study Material.



Annexure I

Cost-Benefit-Analysis of Alternative Resolutions to recovery NPAs of Banks

For banks seeking to recover Non-Performing Assets (NPAs), a cost-benefit analysis of different resolution methods is crucial for maximizing recovery and minimizing costs. The optimal strategy depends on the type of borrower, the size of the loan, and the nature of the security. Cost and Management Accountants (CMAs) play a vital role in this process by providing the data and strategic financial analysis needed to select the most effective method.

Cost-benefit analysis of NPA resolution methods: Here is a cost-benefit analysis of the primary NPA resolution methods available to banks:

Insolvency and Bankruptcy Code (IBC): This is a formal, time-bound process for resolving insolvency in corporate debtors.

Costs:

- ✱ **High process cost:** Includes costs for an Interim Resolution Professional (IRP), Committee of Creditors meetings, legal fees, and potential litigation.
- ✱ **Significant haircuts:** While the IBC has improved recovery rates, resolution plans often involve creditors accepting a significant reduction on the total amount owed (a haircut).

Benefits:

- ✱ **Higher recovery for large cases:** IBC has proven more effective than previous regimes for large corporate debts, especially when the business is potentially viable.
- ✱ **Revival of business:** It prioritizes the revival of a stressed company, which can offer greater value to all stakeholders than a simple liquidation.
- ✱ **Collective, time-bound process:** A structured, collective approach ensures fairness to all creditors, with a definitive, though often extended, timeline for resolution.

Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002: This act allows banks to directly seize and auction secured assets without court intervention.

Costs:

- ✱ **Lower recovery rate:** Historically, the recovery rate

for SARFAESI has been lower than for IBC in large, complex cases.

- ✱ **Risk of litigation:** Borrowers can challenge the bank's actions, leading to delays and legal expenses.
- ✱ **Focus on secured assets:** Recovery is limited to the value of the secured assets, which may not cover the full loan amount.

Benefits:

- ✱ **Speedy recovery:** For smaller, secured debts and private entities, SARFAESI offers a quicker and more straightforward recovery path.
- ✱ **Lower cost:** Without tribunal involvement, the process can be more cost-effective than a full-blown IBC proceeding.
- ✱ **No moratorium:** Unlike IBC, there is no moratorium to stay the bank's action, ensuring faster enforcement.

Lok Adalat (People's Court): These courts are an informal, speedy, and cost-effective method for settling disputes through compromise and reconciliation.

Costs:

- ✱ **Limited to smaller cases:** Lok Adalats are typically used for smaller, less complex debts and are ineffective for large corporate NPAs.
- ✱ **Dependency on mutual consent:** The settlement is based on mutual consent. If the borrower is unwilling to cooperate, the process fails.

Benefits:

- ✱ **Extremely low cost:** There is no court fee, and legal expenses are minimal.
- ✱ **Speedy resolution:** Since they focus on compromise, matters can be settled much faster than in traditional courts.
- ✱ **Maintains relationships:** The conciliatory approach can help maintain a decent relationship with the borrower, which is sometimes beneficial.

One-Time Settlement (OTS): Under an OTS scheme, the bank and borrower agree on a lump-sum payment, usually at a discounted rate, to settle all outstanding dues.

Costs:

- ✱ **Accepting a loss:** The bank must be willing to accept a significant haircut on the outstanding principal and interest.
- ✱ **Risk of non-compliance:** The borrower may fail to comply with the agreed-upon payment terms.

Benefits:

- ✱ **Immediate recovery:** Banks can quickly recover a portion of the dues and clean up their balance sheets.
- ✱ **Lower administrative cost:** The process is straightforward, with minimal legal or administrative expenses.
- ✱ **Improved financial health:** A speedy settlement frees up capital for the bank to extend new credit.

Role of Cost Accountants in finalizing the best resolution method:

Cost and Management Accountants (CMAs) are essential in determining the optimal NPA resolution strategy. Their expertise in cost analysis, budgeting, and performance measurement allows them to provide a comprehensive financial assessment.

Strategic financial analysis:

- ✱ **Case-specific assessment:** CMAs analyse the specifics of each NPA case, considering the loan size, collateral, and borrower profile to recommend the most cost-effective recovery method.
- ✱ **Feasibility studies:** They conduct thorough feasibility studies on whether reviving a business through IBC is more valuable than liquidating its assets via SARFAESI or a quick settlement through OTS.

Cost and profitability analysis:

- ✱ **Evaluation of alternatives:** CMAs meticulously evaluate the likely costs and recovery percentages of each resolution alternative. This includes calculating legal fees, administrative charges, potential haircuts, and the time value of money to determine the net benefit.
- ✱ **Impact on provisions:** They calculate the required provisioning for the NPA under different resolution scenarios and the impact on the bank's profitability and capital adequacy.

Forensic auditing and investigation:

- ✱ **Identification of asset diversion:** Through forensic audits, CMAs can identify instances of fraud, asset diversion, or financial misreporting by the borrower. This information can strengthen the bank's position in legal proceedings and improve recovery prospects.
- ✱ **Valuation of assets:** They can assess the fair market value of the borrower's assets and collaterals, providing a realistic estimate of the potential recovery amount.

Risk management:

- ✱ **Early warning systems:** By analysing historical data on NPAs and their resolution, CMAs help banks develop early warning systems to identify potential problem accounts sooner, allowing for early intervention and resolution.
- ✱ **Structured decision-making:** They provide management with data-driven insights to make informed decisions and choose a resolution strategy that aligns with the bank's overall risk appetite and financial objectives.



Annexure II

Model Cost Sheets to Compare NPA Recovery Methods of Banks

Creating model cost sheets to compare NPA recovery methods (DRT, SARFAESI, OTS, IBC) in India involves analysing several variables, not just direct expenses. An optimal resolution depends on the specific case, considering factors like the debtor's financial health, collateral availability, and the bank's willingness to compromise.

Structure of a model cost sheet:

Parameter	DRT (Debt Recovery Tribunal)	SARFAESI Act, 2002	OTS (One-Time Settlement)	IBC (Insolvency and Bankruptcy Code, 2016)
Direct Costs	Filing fees, legal fees, court costs, execution petition costs.	Demand notice costs, valuation fees, sale/auction costs, security guard costs, publication fees.	Negotiation costs, processing fees, loan waiver amount (the difference between the outstanding and settled amount).	Resolution Professional (RP) fees, legal fees, process costs (public announcements, committee of creditors meetings), valuation costs.
Timeline Costs	Longest recovery process due to adjournments, appeals, and legal delays. Higher opportunity cost of funds.	Shorter than DRT, but delays can occur if the borrower gets a stay order.	Shortest timeline if the borrower agrees. Reduces litigation costs and time-based depreciation.	Time-bound resolution process, but can face legal challenges and extensions.
Recovery Rate	Often lower due to delayed legal proceedings.	Generally higher than DRT, especially for secured assets, as the bank can seize and sell collateral directly.	The recovery rate is pre-negotiated and depends on the settlement terms.	Aims for higher recovery through a resolution plan but can result in liquidation.
Negotiation flexibility	Limited to the tribunal's judgment. Less flexibility for negotiation with the borrower.	Limited negotiation once the process begins. Focuses on asset seizure and sale.	Highest flexibility. The settlement amount can be negotiated based on the borrower's repaying capacity and bank's policy.	Involves a Committee of Creditors (CoC) that approves the resolution plan. More formal than OTS.
Resource allocation costs	Requires significant internal legal and paralegal resources for court filings and case management.	Requires internal or external asset valuation and sales teams. Less court-related resource allocation.	Primarily requires time for negotiation and management sign-offs. Low resource burden.	High internal and external resource requirements for managing the RP and monitoring the resolution process.
Risk of further loss	Moderate. Risk of a prolonged legal battle and the asset value depreciating.	Moderate. Risk of the asset's market value falling during the process. Stay orders can also delay recovery.	Low. The settlement finalizes the recovery amount, eliminating future costs and losses.	Higher. Risk of ending up in liquidation if no resolution plan is approved, resulting in a lower recovery rate.
Collateral requirement	Not mandatory, can be used for unsecured loans. Secured loans are also covered.	Mandatory for secured assets. Not applicable for unsecured loans.	Not mandatory. Can be used for both secured and unsecured loans.	Can be triggered for both secured and unsecured debts.



How to use the cost sheet to finalize a resolution:

Categorize the NPA: Classify the NPA based on the outstanding amount, type of borrower (individual, SME, or large corporate), and whether it is a secured or unsecured loan.

Estimate the Recovery Value: Conduct a realistic valuation of the collateral (for secured loans) or the borrower's business. For IBC, this includes assessing the company's going-concern value versus its liquidation value.

Calculate the Net Realizable Value: For each method, calculate the Net Realizable Value (NRV) by subtracting the estimated total costs from the potential recovery amount.

$$\text{NRV} = \text{Potential Recovery Amount} - (\text{Direct Costs} + \text{Implicit Costs})$$

Consider Non-Financial Factors: Use the following

questions to make a holistic assessment:

Urgency: Is immediate recovery necessary? If so, OTS or SARFAESI may be better.

Borrower Viability: Is the borrower's business still viable? IBC might be an option if there is a chance of rehabilitation.

Bank Policy: What are the bank's policies regarding haircuts and write-offs?

Legal Complexity: Is the case legally complex, with multiple challenges or pending suits? This could favour OTS or IBC over DRT.

Develop a Recommendation: Based on the NRV and non-financial factors, present a recommendation to the bank's management. A case-by-case approach is crucial, as no single method is universally best.

Annexure III

Role of Cost Auditors in arriving the Best Resolution Method of NPAs in Banks

Cost Auditors of Indian commercial banks play a crucial role in verifying the appropriateness and effectiveness of the resolution methods used by bank branches to recover Non-Performing Assets (NPAs). Their role is not to dictate the “best” method but to ensure that the bank’s chosen resolution and recovery processes are sound, compliant with regulations, and properly accounted for.

This verification is governed by guidelines from the Reserve Bank of India (RBI) and standards from the Institute of Cost Accountants of India (ICMAI).

Verification process for NPA resolution: The auditor’s verification of NPA resolution focuses on several key areas, based on a risk-based approach.

Checking the internal control framework: Auditors evaluate the adequacy and effectiveness of the bank’s internal controls and procedures for NPA recovery. This includes verifying that:

- ✱ The bank has an established and documented policy for classifying, monitoring, and recovering NPAs.
- ✱ There is a clear process for identifying and reporting incipient stress in loans, including the classification of Special Mention Accounts (SMAs).
- ✱ The branch officials have acted within their delegated authority when implementing resolution strategies.

Reviewing the resolution strategy: Auditors examine the specific recovery method chosen for an NPA to ensure it was a judicious and well-documented decision. This involves:

- ✱ **Assessment of viability:** Scrutinizing the bank’s viability studies for accounts that have been restructured or rehabilitated. The auditor ensures that the bank has a proper justification and additional documentation, rather than simply extending the account to avoid an NPA classification.
- ✱ **Verification of credit facilities:** Checking for any indication of “evergreening,” such as granting fresh loans to regularize an existing overdue loan. This is a direct violation of regulatory guidelines and must be reported.

- ✱ **Examination of restructuring:** Reviewing cases where loans were restructured to verify that it was based on the borrower’s true financial condition and future viability, not merely to delay NPA recognition.

Analysing the recovery actions: Auditors verify that the bank has taken appropriate and timely recovery actions.

Legal action: Checking the status of legal action, such as cases filed with Debt Recovery Tribunals (DRTs) or under the Insolvency and Bankruptcy Code (IBC).

Claims and guarantees: Verifying that claims for insurance covers like CGTMSE, ECGC have been properly lodged and settled.

Timely recovery: Assessing the appropriateness and timeliness of recovery efforts, including the sale of assets.

Evaluating the value of securities: For recovery methods that involve liquidating collateral, auditors must verify the valuation of the underlying securities.

- ✱ **Stock audits:** For NPAs with an outstanding balance of ₹5 crore or more, auditors must ensure that annual stock audits have been performed by external agencies.

- ✱ **Immovable property valuation:** For NPAs above ₹5 crore, the value of immovable property charged as collateral must be revalued by an approved valuer at least once every three years.

- ✱ **Verifying security:** In cases where primary security like stocks or book debts has diminished or is lost, the auditor must ensure the account is classified as an NPA, even if the account appears regular due to credits.

Scrutinizing potential manipulation: Auditors perform additional checks to identify any attempts by bank officials to window-dress an account and conceal its true nature.

- ✱ **Credits near the balance sheet date:** Examining accounts that show a solitary credit entry just before the balance sheet date to bring them into order. Auditors must probe the genuineness of these credits.

- ✱ **Matching debit and credit entries:** Looking for suspicious, same-value debit and credit entries made



over a short period. This could indicate an attempt to temporarily cover interest debits and avoid NPA classification.

- ★ **Reviewing reports:** Reviewing internal and concurrent audit reports to identify any earlier-noted irregularities in loan accounts.

Reporting requirements: The findings of the NPA verification are reported in several ways:

- ★ **Audit report:** Statutory auditors must include the

quantification of advances and their classification in their final report.

- ★ **Modifications and downgrades:** Any misclassified accounts must be corrected via “Management Override Controls” (MOC) to downgrade them to the appropriate NPA category.

- ★ **Long Form Audit Report (LFAR):** The LFAR, submitted to the central statutory auditors, is used to report serious irregularities, such as evergreening of accounts, to the management and relevant authorities.



Annexure IV

Comprehensive CBA while considering OTS

A comprehensive Cost Benefit Analysis (CBA) is crucial for banks when considering One Time Settlement (OTS) offers for Non-Performing Asset (NPA) accounts, and Cost Accountants are well-suited to perform this analysis. The analysis must incorporate various factors to compare the present value of an immediate settlement against the projected outcomes of a prolonged recovery process.

Key Factors for the Cost Benefit Analysis:

Banks need to quantify both the tangible and intangible costs and benefits of accepting an OTS versus pursuing other recovery avenues (like legal action or asset sale). Key considerations include:

- ★ **Time Value of Money (TVM):** Receiving a smaller amount of money today has a higher present value than potentially recovering a larger sum in the distant future. The immediate influx of funds from an OTS can be recycled into new, interest-earning loans, thus generating returns that would otherwise be lost during a prolonged legal battle (opportunity cost of funds).
- ★ **Legal and Administrative Costs:** Lengthy legal proceedings involve significant expenses, including legal fees, administrative costs, and the human resources required to manage the case. OTS helps banks avoid these ongoing operational costs.
- ★ **Asset Deterioration:** The value of the collateral securing the loan (e.g., property, machinery) can deteriorate over time due to market conditions, physical wear and tear, or lack of maintenance. The CBA should factor in the potential loss in asset value during a delayed recovery process versus the immediate realization of its current value through OTS.
- ★ **Time to Recovery:** The time involved in completing the legal process (which can be several years) is a major factor. OTS offers a quicker resolution, allowing the bank to clean up its balance sheet faster and focus on core operations.
- ★ **Probability of Full Recovery:** There is an inherent risk and uncertainty in any recovery process. Legal outcomes are not guaranteed, and the borrower's

financial situation might worsen. The CBA should assess the likelihood of recovering the full amount versus the certainty of the negotiated OTS amount.

- ★ **Impact on Financial Ratios:** Resolving NPAs through OTS improves the bank's financial health by reducing the Gross NPA ratio and enhancing metrics like Capital Adequacy Ratio (CAR) and Return on Assets (ROA), which can boost investor confidence and ensure regulatory compliance.

- ★ **Intangible Benefits/Costs:** The analysis should consider intangible factors such as improved customer relationships (by offering a second chance), reduced reputational risk from aggressive recovery tactics, and the ability to focus management attention on profitable activities.

Role of Cost Accountants:

Cost Accountants (or Cost and Management Accountants, CMAs) are crucial in this process due to their expertise in:

- ★ **Quantifying Costs and Benefits:** They can accurately identify, measure, and assign monetary values to all relevant direct and indirect costs and benefits, including legal fees, operational overheads, and potential lost earnings (opportunity costs).
- ★ **Applying TVM Principles:** They use techniques like Net Present Value (NPV) and Discounted Cash Flow (DCF) analysis to bring future cash flows (both potential recoveries and future costs) to their present value, allowing for a like-for-like comparison of different options.
- ★ **Forecasting and Risk Assessment:** Their skills in budgeting, forecasting, and variance analysis enable them to model different recovery scenarios, assess potential risks (e.g., further asset value decline), and provide data-driven insights to management.
- ★ **Optimal Offer Determination:** By providing comprehensive cost and financial data, they help the bank determine the optimal OTS amount that minimizes losses while maximizing the speed and efficiency of fund recovery.



Annexure V

Valuation of Collaterals

Improper valuation of assets used as collateral is a critical issue that directly leads to huge haircuts (losses) for banks when Non-Performing Assets (NPAs) are sold in auctions. Accurate and reliable valuation is essential for effective risk management, and the expertise of cost accountants plays a significant role in this process.

The Problem: Wrong Valuation and Huge Haircuts:

When a loan turns into an NPA, the lender initiates an auction process to recover the outstanding dues by selling the collateral asset. The valuation at this stage is crucial:

- ✱ **Over-valuation at the time of lending:** If the asset was initially over-valued, the loan amount sanctioned would be higher than the asset's true market worth. Upon default, selling the asset at its actual (lower) value results in the bank being unable to recover the full loan amount, leading to a "haircut" or loss.
- ✱ **Market Volatility:** Collateral values can fluctuate due to market conditions, economic cycles, or the asset's physical deterioration. Without regular monitoring and re-valuation, the recorded value may not reflect the current realisable amount.
- ✱ **Limited Market for Specialized Assets:** Selling specialized industrial assets like specific plant and machinery can be challenging due to outdated technology or a lack of potential buyers, often resulting in lower recovery values than initially estimated.

The Role of Cost Accountants:

Cost and Management Accountants (CMAs), or cost accountants, are experts in tracking, analysing, and controlling costs, and their skills are vital for accurate asset valuation and NPA management. Their contributions include:

- ✱ **Accurate Initial Valuation:** Cost accountants can

use the cost approach (evaluating replacement or reproduction cost), market approach (comparing with similar sold assets), and income approach (assessing future income generation potential) to determine a realistic value for complex assets, especially in manufacturing and specialised industries.

- ✱ **Inventory Valuation Expertise:** They have specific expertise in valuing inventory and production costs, which is crucial when the collateral involves raw materials, work-in-progress, or finished goods.
- ✱ **Cost Analysis and Control:** Their ability to analyse cost structures helps in identifying inefficiencies and providing data-driven insights, which can also be applied to assessing the condition and maintenance costs of physical collateral, ensuring a more accurate long-term value assessment.
- ✱ **Performance Evaluation and Reporting:** They can perform regular analyses comparing book values to actual realisable values, providing management with timely reports on potential risks and deviations.
- ✱ **Ensuring Compliance:** Cost accountants ensure valuation methodologies adhere to legal frameworks, statutory guidelines, and accounting standards (like Ind AS 105 and 109 in India).
- ✱ **Informed Decision Making:** By providing accurate data on collateral values, cost accountants enable banks to make more informed lending decisions, set appropriate Loan-to-Value (LTV) ratios, and manage provisioning requirements more effectively, ultimately mitigating losses when NPAs arise.

Proper and ongoing professional valuation, involving experts like cost accountants, is a key component of sound credit risk management, helping to ensure the stability and health of the financial sector.



Chapter 23

Cost Control – ALM System



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Asset-Liability Management (ALM) helps Banks minimize Liquidity Risks and Borrowing Costs. This Chapter explains:

- ✳ Using FTP and Derivatives to reduce Interest Costs.
- ✳ Benefits of Analysing ALM Mismatch Business-unit Wise.
- ✳ ALM as a Potential Profit Centre.

Discussed with Bank ALM teams and based on RBI Guidelines.



Cost Control - ALM System

Indian Banks Control interest costs and liquidity opportunity costs through Asset Liability Management (ALM) by strategically managing the balance sheet, employing tools like gap and duration analysis, and utilizing an Asset Liability Committee (ALCO). ALM focuses on optimizing Net Interest Margin (NIM) and Net Interest Income (NII) by carefully balancing the mix, maturity, and repricing characteristics of assets and liabilities to meet profitability, capital, and liquidity goals under various interest rate and liquidity scenarios.

Mechanisms for Controlling Interest Costs:

- ✱ **Interest Rate Risk Management:** ALM seeks to mitigate the risk of adverse interest rate movements by balancing rate-sensitive assets and liabilities.
- ✱ **Funding Mix Optimization:** Banks adjust their funding sources (e.g., fixed vs. floating rate, retail vs. wholesale, domestic vs. foreign currency) to secure funds at the lowest possible cost while meeting liquidity needs.
- ✱ **Interest Rate and Product Pricing:** The ALCO decides on interest rates for products and services to optimize NIM and NII, aligning them with the bank's risk and return objectives.
- ✱ **Use of Derivatives:** Banks can use derivative instruments to manage interest rate exposure and costs, within regulatory guidelines.
- ✱ **Funds Transfer Pricing (FTP):** A robust FTP mechanism helps assign the appropriate cost of funds to different business units, ensuring that borrowing rates are within acceptable limits and don't make lending activities unviable.

Mechanisms for Controlling Liquidity Opportunity Costs:

- ✱ **Liquidity Risk Management:** ALM involves

measuring and monitoring liquidity risks to ensure the bank can meet its obligations and manage cash flows effectively.

- ✱ **Maturity Profiling:** ALCO decides on the desired maturity profile of assets and liabilities to match funding and investment horizons, ensuring sufficient liquidity.
- ✱ **Strategic Balance Sheet Management:** ALM provides an integrated approach to balance sheet management, ensuring the bank holds the right mix and volume of assets and liabilities to meet liquidity requirements.
- ✱ **Market Liquidity Awareness:** The ALCO takes a view on overall market liquidity to understand how it will impact the bank's borrowing costs and future funding availability.

Integral Components of ALM in Indian Banks:

- ✱ **Asset Liability Committee (ALCO):** A high-level committee responsible for strategic balance sheet planning and risk management, ensuring adherence to risk limits set by the board.
- ✱ **Robust Information Systems:** ALM relies heavily on accurate and timely information on asset and liability maturity, repricing characteristics, and market behaviour to support decision-making.
- ✱ **Risk Measurement Tools:** Banks employ tools like gap analysis, duration analysis, and value at risk (VaR) models to quantify their exposure to interest rate and liquidity risks.
- ✱ **Clear Risk Policies:** A well-defined management philosophy, including risk policies and tolerance limits, provides the framework for effective ALM implementation.

Deposits (Demand & Time Liabilities)

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	36,81,277	40,51,534	44,23,778	49,16,077	53,82,190
Punjab National Bank	11,06,332	11,46,218	12,81,163	13,69,713	15,66,623
Bank of Baroda	9,66,997	10,45,939	12,03,688	13,26,958	14,72,035
Canara Bank	10,10,875	10,86,409	11,79,219	13,12,367	14,56,883

Name of the PSB	2021	2022	2023	2024	2025
Union Bank of India	9,23,805	10,32,393	11,17,716	12,21,528	13,09,750
Bank of India	6,27,114	6,27,986	6,69,586	7,37,920	8,16,541
Indian Bank	5,38,071	5,93,618	6,21,166	6,88,000	7,37,154
Bank of Maharashtra	1,74,006	2,02,294	2,34,083	2,70,747	3,07,143
Central Bank of India	3,29,973	3,42,692	3,59,296	3,85,011	4,12,697
UCO Bank	2,05,919	2,24,073	2,49,338	2,63,130	2,93,542
Indian Overseas Bank	2,40,288	2,62,159	2,60,883	2,85,905	3,11,939
Punjab & Sind Bank	96,108	1,02,137	1,09,665	1,19,410	1,29,774

(Source: IBA)

Advances (Short Term & Long Term)

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	24,49,498	27,33,967	31,99,269	37,03,971	41,63,312
Punjab National Bank	6,74,230	7,28,186	8,30,834	9,34,431	10,77,475
Bank of Baroda	7,06,301	7,77,155	9,40,988	10,65,782	12,09,558
Canara Bank	6,39,049	7,03,602	8,30,673	9,31,613	10,49,155
Union Bank of India	5,90,983	6,61,005	7,61,845	8,70,776	9,53,513
Bank of India	3,65,687	4,20,842	4,85,900	5,63,145	6,49,657
Indian Bank	3,62,669	3,89,186	4,49,297	5,14,889	5,71,071
Bank of Maharashtra	1,02,405	1,31,170	1,71,221	2,00,240	2,36,084
Central Bank of India	1,56,579	1,68,174	2,02,984	2,43,406	2,82,420
UCO Bank	1,11,355	1,22,784	1,55,870	1,82,022	2,15,135
Indian Overseas Bank	1,27,721	1,44,244	1,78,053	2,13,319	2,45,555
Punjab & Sind Bank	60,942	63,627	76,819	82,736	97,300

(Source: IBA)

a) Control Interest Cost:

Asset/Liability Management Strategies of Indian banks control interest cost through Asset Liability Management (ALM) by forming an Asset-Liability Committee (ALCO), which manages interest rate risk using tools like gap and duration analysis. ALCO decides the maturity and interest rate (fixed/floating) mix of assets and liabilities, uses derivatives to hedge risk, and guides product pricing and funding strategies to optimize net interest income (NII) and protect profitability from interest rate volatility.

Interest Rate Risk Management:

Interest rate risk is the potential for a bank's earnings and capital to be adversely affected by fluctuations in interest rates. Banks manage this by balancing their assets (like loans) and liabilities (like deposits) to mitigate volatility and protect their financial health.

Control Interest Costs through ALM:

✳ **Asset-Liability Committee (ALCO):** Each bank

establishes an ALCO, a top-level management body responsible for overseeing ALM functions.

✳ **Gap Analysis:** ALCO performs gap analysis by categorizing rate-sensitive assets and liabilities into different maturity time buckets. The gap represents the difference between rate-sensitive assets (RSA) and rate-sensitive liabilities (RSL) in each bucket. A positive gap means more RSA than RSL, while a negative gap indicates the opposite, and the analysis helps predict the impact of interest rate changes on net interest income (NII).

✳ **Duration Analysis:** This technique measures the sensitivity of assets and liabilities to interest rate changes, considering their different maturities. It provides a more nuanced view of interest rate risk than simple gap analysis.

✳ **Product Pricing and Funding Mix:** ALCO decides on pricing for new products and services to align



with interest rate views and market conditions. It also manages the mix of liabilities, choosing between fixed-rate vs. floating-rate funds, retail vs. wholesale deposits, and money market vs. capital market funding to control costs.

- ✱ **Maturity Profile Management:** The ALCO determines the desired maturity profile of both assets and liabilities to avoid mismatches that can create risk.
- ✱ **Use of Derivatives:** Banks can use derivative instruments, such as Forward Rate Agreements (FRAs) and Interest Rate Swaps (IRS), to hedge against interest rate risks. This allows banks to manage short-term interest rate volatility and access markets where they have a comparative advantage.

b) Net Interest Margin (NIM) Optimization:

The ultimate goal of these strategies is to optimize NIM and Net Interest Income (NII) by making strategic decisions about the mix and repricing of assets and liabilities. Indian Banks control interest costs through Asset Liability Management (ALM) by optimizing their funding mix, which involves strategically selecting the proportion of fixed vs. floating-rate funds, wholesale vs. retail deposits, and domestic vs. foreign currency sources, all while adhering to Reserve Bank of India (RBI) regulations. ALM committees (ALCOs) make these decisions to balance profitability (Net Interest Margin) with risk tolerance, using gap and duration analyses to monitor and manage interest rate and liquidity risks.

ALCO and its Role:

- ✱ **Strategic Decision-Making:** The ALCO is a top-level committee that meets regularly to decide on the overall strategy for asset and liability management.
- ✱ **Balancing Act:** The goal is to optimize the bank's Net Interest Margin (NIM) and Net Interest Income (NII) while ensuring that the level of risk is compatible with the bank's return objectives.

Funding Mix Optimization: Banks use various strategies to optimize their funding mix to control interest costs.

- ✱ **Source Diversification:** Banks decide on a mix of funding sources, including:
 - ✱ **Retail vs. Wholesale Deposits:** Attracting a larger base of retail deposits can offer more stable, lower-cost funding compared to wholesale funding.

- ✱ **Fixed vs. Floating-Rate Funds:** Choosing between different interest-rate types helps manage sensitivity to market interest rate changes.

- ✱ **Domestic vs. Foreign Currency Funding:** This helps manage currency risk and access different interest rate environments.

- ✱ **Money Market vs. Capital Market:** Banks can tap into different markets to obtain funds at competitive rates.

- ✱ **Maturity Profiling:** The ALCO decides on the appropriate maturity profile of both assets and liabilities to avoid liquidity crises and manage interest rate risk effectively.

Tools and Techniques:

- ✱ **Gap Analysis:** This technique analyses the difference between rate-sensitive assets and liabilities to identify potential exposure to interest rate changes.
- ✱ **Duration Analysis:** A more sophisticated approach that measures the sensitivity of a bank's earnings and capital to interest rate changes by looking at the average time to maturity of its assets and liabilities.
- ✱ **Scenario Modelling and Stress Testing:** Banks use these tools to simulate how market shocks might impact their balance sheets and to optimize strategies in advance.
- ✱ **Information Systems:** A robust information system provides accurate and timely data on assets, liabilities, and market risk, which is essential for effective ALM.

Regulatory:

- ✱ **RBI Guidelines:** The Reserve Bank of India (RBI) provides guidelines and a prudential framework for Asset Liability Management, requiring banks to establish ALM systems and ALCOs to manage risks effectively.

- ✱ **Integrated Approach:** ALM is a strategic, integrated approach to balance sheet management that requires a simultaneous understanding of asset and liability components, market dynamics, and regulatory compliance.

c) Product Pricing:

Indian banks control interest costs through Asset Liability Management (ALM) by strategically balancing their asset



and liability portfolios and pricing products to optimize Net Interest Margin (NIM) and long-term profitability, despite market volatility and interest rate risk. This is managed by an Assets Liability Committee (ALCO) which analyses market data, predicts interest rate movements, and decides on the optimal mix of funding (fixed vs. floating, retail vs. wholesale), maturity profiles, and the use of derivative instruments. Key techniques include gap analysis and duration analysis, helping banks manage interest rate sensitivity, liquidity, and other market risks to ensure financial stability.

Role of ALM:

- ✳ **Strategic Balance Sheet Management:** ALM is an integrated approach to managing the entire balance sheet, considering both asset and liability components and their maturity profiles to enhance bank profitability.
- ✳ **Risk Management:** It focuses on managing risks arising from interest rate changes, liquidity mismatches, and currency fluctuations to ensure the bank's long-term stability and viability.
- ✳ **Profitability Optimization:** The primary goal is to optimize the bank's Net Interest Margin (NIM) and Net Interest Income (NII) by balancing the spreads between asset yields and liability costs.

Product Pricing and Funding Mix:

Asset Pricing: Banks price their loans and other earning assets considering market interest rates and future rate expectations to maximize returns.

- ✳ **Liability Funding:** The ALCO decides on the optimal mix of funding sources, including fixed vs. floating rate funds, retail vs. wholesale deposits, and money market vs. capital market funding. By diversifying funding, banks can control the average cost of funds.

Interest Rate Risk Management Tools:

- ✳ **Gap Analysis:** This technique measures the mismatch between the volume of interest-sensitive assets and liabilities over specific time periods. A negative gap (liabilities > assets) can lead to declining NII if interest rates rise, prompting strategies to increase rate-sensitive assets or reduce rate-sensitive liabilities.
- ✳ **Duration Analysis:** This method measures a position's sensitivity to interest rate changes, providing a more precise view of the economic value of the bank's assets and liabilities.

- ✳ **Scenario Analysis & Simulation:** Banks analyse how their balance sheet will perform under different interest rate scenarios (e.g., rising or falling rates) and use this information to make strategic pricing and funding decisions.

Strategic Decisions by the ALCO:

- ✳ **Forecasting:** The ALCO develops a view on future interest rate movements to make informed decisions about funding and asset pricing.
- ✳ **Maturity Profile Management:** The committee determines the desired maturity profile of assets and liabilities to align with the bank's risk appetite and liquidity needs.
- ✳ **Use of Derivatives:** ALCO permits and monitors the use of derivative instruments (like interest rate swaps) to manage interest rate exposure, ensuring adherence to regulatory guidelines.

Regulatory Framework and Market Dynamics:

- ✳ **RBI Guidelines:** The Reserve Bank of India (RBI) mandates robust ALM systems, including governance structures, risk measurement, and policy guidelines, to ensure the stability of financial institutions.
- ✳ **Deregulation and Competition:** Market deregulation, increased competition, and global integration have made ALM crucial for managing volatility in interest rates and exchange rates, forcing banks to dynamically adjust their pricing and strategies.

d) Role of ALCO:

Indian banks control interest costs through Asset Liability Management (ALM), where the Asset Liability Committee (ALCO) sets interest rates on products and manages maturity gaps to ensure the bank's profitability, net interest income (NII), and long-term viability amidst market volatility. Key strategies include dynamic pricing based on market conditions, a balanced funding mix (e.g., fixed vs. floating), and using gap and duration analysis to manage interest rate risk, which aims to minimize the impact of interest rate fluctuations on the bank's earnings.

ALCO and its Role:

- ✳ **Decision-Making Body:** The ALCO is the top management committee responsible for integrated balance sheet management and strategic decisions on interest rate risk and liquidity.



- ✱ **Strategic Planning:** It decides on the pricing of both assets (like loans) and liabilities (like deposits) and determines the maturity profile of new assets and liabilities to optimize the bank's Net Interest Margin (NIM).
- ✱ **Interest Rate View:** The ALCO articulates the bank's current view on interest rate movements, using this as a basis for future business strategies.
- ✱ **Controlling Interest Costs:** Dynamic Product Pricing-Banks don't just offer a single price but dynamically adjust rates on deposits and loans to attract customers and manage funding costs effectively, considering competitor pricing.

Funding Mix Optimization: The ALCO decides on the optimal mix of funding sources, such as:

- ✱ **Floating vs. Fixed-Rate Funds:** Balancing the costs and benefits of floating-rate and fixed-rate liabilities.
- ✱ **Retail vs. Wholesale Deposits:** Managing the mix of different types of deposits based on their cost and stability.
- ✱ **Money Market vs. Capital Market Funding:** Utilizing various funding avenues to lower costs.

Interest Rate Risk Management:

- ✱ **Gap Analysis:** This tool identifies the mismatch between rate-sensitive assets and liabilities over specific timeframes (maturity gaps). If the bank has a negative gap (more liabilities repricing soon than assets), a rise in interest rates could increase costs.
- ✱ **Duration Analysis:** Measures the sensitivity of a position's economic value to changes in interest rates. This helps the ALCO understand the overall impact of rate changes on the bank's capital.
- ✱ **Maturity Profile Management:** The ALCO decides on the desired maturity profile of both assets and liabilities to reduce the gap and minimize interest rate risk.

ALM is Crucial:

- ✱ **Increased Competition:** Globalization, deregulation, and technological advancements have intensified competition in India's financial market, making ALM essential for survival and profitability.

- ✱ **Market Volatility:** Deregulated and integrated markets lead to increased volatility in interest rates and exchange rates, necessitating strategic management of risks associated with these fluctuations.
- ✱ **Profitability and Viability:** Effective ALM helps banks' balance profitability, long-term viability, and the inherent risks of their balance sheets.

e) Control Interest Costs using Derivatives:

Indian banks control interest costs using derivatives through Asset Liability Management (ALM) by hedging against adverse interest rate movements via instruments like interest rate swaps, options, and futures. These derivatives allow banks to lock in costs on liabilities or lock in returns on assets, providing certainty and protecting net interest margins (NIM) from fluctuations caused by changes in market interest rates. The goal is to align the repricing or maturity of assets and liabilities to minimize the gap and thus the risk of a negative impact on profitability, using a strategic balance sheet management approach defined by the bank's risk appetite and information systems.

Derivatives Control Interest Costs:

- ✱ **Hedging with Interest Rate Swaps:** Banks use interest rate swaps to exchange fixed-rate interest payments for floating-rate payments, or vice-versa. This strategy allows a bank to convert a floating-rate liability into a fixed-rate one, thereby controlling the cost of funds and providing predictable interest expenses, especially during periods of rising interest rates.
- ✱ **Using Options:** Options like interest rate caps and floors can be employed to protect against extreme interest rate changes. A cap can limit the cost of floating-rate debt, while a floor can protect against falling rates on floating-rate assets, ensuring a minimum return.
- ✱ **Futures Contracts:** While less direct for managing interest costs, interest rate futures can also be used to hedge against changes in interest rates by taking a position in the derivatives market that offsets potential losses in the bank's balance sheet.

ALM and Derivatives:

- ✱ **Interest Rate Risk Mitigation:** The primary purpose is to manage the risk arising from the different interest rate sensitivities of a bank's assets and liabilities (the gap or duration mismatch).



- ★ **Net Interest Margin (NIM) Protection:** By using derivatives, banks aim to stabilize their NIM, which is the spread between their interest income from assets and interest expenses on liabilities.
- ★ **Strategic Balance Sheet Management:** ALM involves an integrated approach to managing the entire balance sheet, including the mix and maturity of assets and liabilities, to meet profitability and risk objectives.
- ★ **Regulatory Influence:** The Reserve Bank of India (RBI) has played a key role by legalizing derivatives trading and issuing guidelines for robust ALM systems, which include information management and setting prudential limits.
- ★ **Information and Technology:** An effective ALM system relies on the availability of adequate and accurate information about the bank's assets and liabilities to support decision-making.

f) Funds Transfer Pricing (FTP):

Indian banks use Funds Transfer Pricing (FTP) as an internal mechanism to control interest costs by accurately pricing funds transferred between different business units and products. FTP provides a common, market-based cost of funds to business units, allowing them to price new loans and deposits, measure product and unit profitability, and manage interest rate and liquidity risks centrally. By assigning an appropriate cost of funds, FTP incentivizes the right business decisions, ensures products reflect true costs, and aligns business objectives with overall balance sheet management and profitability goals.

FTP Works to Control Interest Costs:

- ★ **Determining the Base Cost of Funds:** The central treasury or ALM (Asset-Liability Management) department determines the prevailing market interest rates, such as from swap curves, to create a base yield curve for funding.
- ★ **Adding Liquidity and Risk Premiums:** This base curve is adjusted to reflect the bank's specific liquidity costs and overall interest rate risk, creating a comprehensive FTP rate that represents the true cost of funding for the bank.

Internal Pricing of Assets and Liabilities:

- ★ **Loans:** When a business unit originates a loan, an FTP rate for the loan's maturity is applied to that asset. The interest rate charged to the customer is

compared to this internal transfer price.

- ★ **Deposits:** Conversely, when a business unit collects a deposit, the FTP rate represents the cost of funding those deposits.
- ★ **Profit Attribution:** The difference between the customer-charged rate and the FTP rate determines the net interest margin (NIM) contribution from that business unit or product.

Cost Allocation and Risk Control:

- ★ **Controls Interest Cost:** FTP ensures that every business unit pays a cost for the funds it uses and earns a rate for the funds it provides, effectively allocating funding costs across the bank.
- ★ **Separates Interest Rate Risk:** It separates the cost of managing interest rate risk from the operational performance of business units, allowing for independent performance measurement.
- ★ **Incentivizes ALM:** This framework encourages business units to be mindful of their funding costs and balances, aligning their pricing and product decisions with the bank's overall balance sheet management and risk objectives.

Benefits for Interest Cost Control:

- ★ **Informed Pricing:** Banks can price loans and deposits more accurately, ensuring that products are priced to reflect their funding costs and risks.
- ★ **Performance Measurement:** FTP allows banks to measure the true profitability of different products, business lines, and customers, identifying high-cost areas and opportunities for optimization.
- ★ **Balance Sheet Steering:** It guides ALM to shape the balance sheet by influencing the volume and terms of new business, supporting liquidity management and minimizing interest rate risk.
- ★ **Strategic Decision Making:** By providing clear signals on funding costs, FTP enables better, risk-based front-line decision-making and aligns business incentives with strategic profitability goals.

g) Opportunity Costs:

Indian banks manage liquidity risk and opportunity costs using Asset Liability Management (ALM) by forecasting



cash flows, balancing liquidity with profitability, diversifying funding sources, and adhering to RBI (Reserve Bank of India) regulations like Liquidity Coverage Ratio (LCR). ALM committees monitor and manage maturity mismatches, market risks, and liquidity gaps, while also utilizing tools like a maturity ladder to maintain adequate liquid assets, thereby ensuring they can meet obligations without compromising the net interest margin or incurring excessive opportunity costs.

Aspects of Liquidity Risk Management in Indian Banks:

- ✳ **Forecasting and Gap Analysis:** Banks use a maturity ladder to track cash flow inflows and outflows over time to identify potential liquidity shortfalls. They also evaluate liquidity requirements under various normal and stressed market scenarios to prepare for potential crises.
- ✳ **Balancing Liquidity and Profitability:** The goal is to maintain sufficient liquidity to meet obligations without holding excess idle funds, which would represent opportunity costs. ALM strategies aim to optimize the risk-return profile by matching assets and liabilities to enhance profitability (e.g., Net Interest Margin) while keeping risks within acceptable limits.
- ✳ **Regulatory Compliance:** The RBI mandates specific liquidity management practices to ensure the stability of the banking system. This includes meeting requirements like the Liquidity Coverage Ratio (LCR) and maintaining sufficient liquid assets.
- ✳ **Diversification of Funding Sources:** Banks diversify their funding sources, such as deposits and other liabilities, to reduce reliance on any single source and

manage funding risk. This strategy helps in securing funding at reasonable costs, particularly during times of market stress.

- ✳ **Management and Monitoring:** Asset Liability Management Committees (ALCOs) are established at the board and executive levels to oversee and monitor liquidity risk on an ongoing basis. These committees regularly review liquidity positions and implement strategies to mitigate risks by ensuring the availability of necessary funds and collateral.

How Opportunity Costs are Controlled:

- ✳ **Avoiding Excessive Liquidity:** By accurately forecasting liquidity needs, banks avoid holding large, low-yielding liquid assets, which would lock up funds that could otherwise be invested in higher-return assets, thereby reducing opportunity cost.
- ✳ **Strategic Balance Sheet Management:** Effective ALM helps structure the balance sheet with an optimal mix of assets and liabilities. This ensures the bank earns its desired net interest margin without exposing it to significant risks or forcing it to sell assets at a loss.
- ✳ **Diversification:** A diverse funding base reduces reliance on expensive, short-term funds and helps avoid situations where a bank has to pay high interest rates to meet its obligations, increasing costs.
- ✳ **Risk Mitigation Strategies:** Proactive risk mitigation strategies, such as securing credit lines or other back-up funding, ensure that banks have access to funds at a reasonable cost, preventing forced asset sales at depressed prices to meet immediate needs.

Total Investments of Public Sector Banks

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	13,51,705	14,81,445	15,70,366	16,71,340	16,90,573
Punjab National Bank	3,92,983	3,72,168	3,95,997	4,20,318	4,97,311
Bank of Baroda	2,61,220	3,15,795	3,62,485	3,69,817	3,85,398
Canara Bank	2,61,690	2,82,013	3,19,038	3,57,454	3,80,343
Union Bank of India	3,31,512	3,48,507	3,39,299	3,37,904	3,54,381
Bank of India	1,87,253	1,74,448	2,04,398	2,27,144	2,59,112
Indian Bank	1,76,537	1,74,559	1,85,988	2,12,554	2,25,303
Bank of Maharashtra	68,112	68,590	68,867	68,274	82,005
Central Bank of India	1,48,582	1,40,787	1,36,583	1,43,923	1,41,435

Name of the PSB	2021	2022	2023	2024	2025
UCO Bank	93,783	96,874	95,169	92,904	94,272
Indian Overseas Bank	95,494	98,179	94,170	99,632	1,11,045
Punjab & Sind Bank	32,023	42,281	44,838	49,599	46,912

(Source: IBA)

h) Integrating Maturity Profiling:

Indian banks control liquidity opportunity costs by integrating maturity profiling into their Asset-Liability Management (ALM) process, which balances asset and liability maturities to meet obligations, reduce interest rate and liquidity risk, and optimize Net Interest Income (NII). Through ALCO committees, banks use tools like maturity gap analysis and a maturity ladder to forecast cash flows, identify mismatches, and strategize funding to ensure enough liquidity to fund assets without sacrificing profitability or taking on excessive risk.

Understanding the Concepts:

- ★ **Asset-Liability Management (ALM):** An integrated approach to bank financial management that involves the coordinated management of a bank's balance sheet to address interest rate risk, liquidity risk, and market risk.
- ★ **Maturity Profiling:** Analysing and categorizing assets and liabilities by their maturity dates to understand their future cash flow patterns.
- ★ **Liquidity Opportunity Costs:** The potential for lost profits or increased costs that arise from holding too much liquid (but low-return) assets or not having enough cash to fund profitable new assets when opportunities arise.

Liquidity Opportunity Costs:

- ★ **Maturity Mismatch Analysis:** Banks create a maturity ladder to forecast cash flows for different time buckets (e.g., daily, weekly, monthly, annually). They compare the timing of incoming funds (from maturing assets or new deposits) with outgoing funds (for maturing liabilities or customer withdrawals). Identifying gaps where outflows exceed inflows helps predict potential liquidity shortages and the associated costs of borrowing at high rates or missing investment opportunities.
- ★ **Informing Funding Decisions:** Based on the maturity profile, banks decide on the optimal funding mix (e.g., short-term vs. long-term, retail vs. wholesale deposits).

A stable, longer-term funding base can reduce the risk of frequent, costly refinancing, but a complete lack of short-term funds can limit flexibility.

- ★ **Strategic Asset & Liability Allocation:** By understanding the maturity structure of liabilities, banks can more effectively deploy funds into assets with appropriate maturities to match. This ensures that liquid assets are held to meet immediate obligations, while longer-term, higher-return assets can be funded with longer-term liabilities.
- ★ **Controlling Risk and Optimizing Profit:** By balancing the maturity profiles of assets and liabilities, banks minimize the risk of being forced to sell assets at a loss or miss profitable opportunities due to a liquidity crunch. This proactive management of liquidity and maturities helps maintain a stable Net Interest Margin (NIM) and enhances overall profitability within acceptable risk parameters.
- ★ **Regulatory Compliance:** The Reserve Bank of India (RBI) requires banks to implement ALM systems to manage liquidity and interest rate risks, making mature ALM processes essential for regulatory adherence.

i) Balance Sheet Management:

Indian banks manage liquidity opportunity costs through Strategic Balance Sheet Management (Strategic ALM) by balancing assets and liabilities using tools like the Liquidity Coverage Ratio (LCR), maturity gap analysis, and cash flow forecasting. They establish an Asset Liability Committee (ALCO) to set interest rates, determine funding mix (e.g., deposits, money market), and manage maturity profiles to optimize Net Interest Margin (NIM), ensuring compliance with RBI's guidelines and mitigating risks like liquidity crises and interest rate volatility.

Integrated Balance Sheet Management:

- ★ **Strategic ALM Approach:** Banks view their balance sheets holistically, integrating the management of all assets and liabilities rather than focusing on them in isolation.



- ✱ **Profitability Focus:** This approach aims to optimize the bank's net interest margin (NIM) to align with its risk/return objectives, ensuring profitability and long-term stability.

Tools & Techniques for Liquidity Control:

- ✱ **Liquidity Coverage Ratio (LCR):** Indian banks must maintain specified LCRs, which act as a buffer to cover potential short-term obligations during stressed periods, as mandated by RBI's and SAS (Statistical Analysis System).
- ✱ **Cash Flow Forecasting:** Banks forecast future cash inflows and outflows to anticipate potential liquidity gaps and identify needs for funding.
- ✱ **Maturity Gap Analysis:** This technique involves matching the maturity of assets and liabilities. A mismatch, such as more liabilities maturing soon than assets, can lead to a liquidity crisis.

Role of the Asset Liability Committee (ALCO):

- ✱ **Strategic Decision-Making:** The ALCO, comprised of top management, is responsible for making strategic decisions on interest rates, product pricing, and the optimal mix of assets and liabilities.
- ✱ **Risk & Liquidity Monitoring:** The committee actively monitors liquidity risk, interest rate risk, and other market risks, implementing strategies to manage and control them.
- ✱ **Funding Strategy:** ALCO determines the ideal funding mix (e.g., fixed vs. floating rate funds, retail deposits, wholesale funding) to meet the bank's liquidity needs at the most favourable cost.

Managing Opportunity Costs:

- ✱ **Optimizing Fund Deployment:** By carefully managing the maturity profile of its assets and liabilities, the bank can ensure that funds are not kept idle for too long, thus minimizing the opportunity cost of holding cash or low-yielding assets.
- ✱ **Flexibility in the Market:** Effective ALM allows banks to respond to market opportunities by having the flexibility to deploy funds into higher-yielding assets or to adjust their funding mix in response to changing interest rates.
- ✱ **Regulatory Compliance:** Adherence to RBI's

guidelines on liquidity and risk management is crucial. Failing to meet these requirements can result in penalties, which represent a financial loss, or missed opportunities.

j) LCR and NSFR:

Indian banks manage market liquidity risk through Asset Liability Management (ALM), which involves monitoring and controlling liquidity through tools like liquidity ratios (LCR, NSFR), stress testing, and cash flow management to ensure timely funding and meet obligations. By balancing assets and liabilities, banks maintain sufficient funds to cover liabilities, reduce reliance on single funding sources, and optimize their risk/return profile, thereby controlling opportunity costs by avoiding the forced sale of assets at unfavourable prices during market stress.

Market Liquidity Awareness is Used in ALM:

- ✱ **Monitoring Liquidity Risk:** Banks constantly track their liquidity position and potential shortfalls, especially under stress, using tools like liquidity ratios, which provide a snapshot of their ability to meet short-term obligations.
- ✱ **Assessing Market Health:** Awareness of market conditions helps banks understand how quickly their assets can be converted to cash and the cost of obtaining funds, influencing their funding and investment strategies.
- ✱ **Identifying Illiquidity:** Banks recognize that even typically liquid assets like government securities can become illiquid during market panics, requiring banks to track liquidity through maturity and cash flow mismatches.

ALM Techniques for Controlling Liquidity:

Liquidity Ratios:

- ✱ **Liquidity Coverage Ratio (LCR):** Ensures banks have enough high-quality liquid assets to cover outflows during a 30-day stress period.
- ✱ **Net Stable Funding Ratio (NSFR):** Promotes long-term resilience by linking the stable funding structure to the asset's liquidity profile.
- ✱ **Stress Testing:** Banks conduct tests to simulate adverse market conditions, identify potential liquidity gaps, and understand the impact on their liquidity position, allowing for pre-emptive action.



- ★ **Diversifying Funding Sources:** Banks diversify their funding across various sources, including retail deposits and wholesale funding, to build a more resilient and stable funding profile.
- ★ **Cash Flow Management:** Implementing a robust cash flow management system helps banks track and manage their cash inflows and outflows efficiently, ensuring funds are available when needed.
- ★ **Maturity Ladder Analysis:** This standard tool measures cash flow surpluses or deficits over selected maturities, providing insights into net funding requirements.

Controlling Opportunity Costs:

- ★ **Avoiding Forced Asset Sales:** Effective ALM allows banks to meet their obligations without being forced to sell assets prematurely, which would likely be at unfavourable prices and lead to losses.
- ★ **Optimizing Profitability:** By balancing asset and liability portfolios, banks can optimize their net interest margin (or spread) and enhance profitability while keeping risks within acceptable limits.
- ★ **Lowering Funding Costs:** A strong liquidity position and a stable funding structure make the bank appear safer, reducing the premium it might otherwise pay for borrowed funds.

k) Real-Time ALM Statement due to Availability of Technology:

- ★ **A real-time Asset Liability Management (ALM) statement** helps commercial banks to control liquidity mismatches and excess liquidity by aligning assets and liabilities to manage funding costs and improve profitability. The statement identifies discrepancies in asset and liability maturities and cash flows, allowing banks to strategically deploy excess funds, control borrowing costs, ensure regulatory compliance, and enhance overall financial stability and earnings.

Real-Time ALM Statements Improve Fund Management:

- ★ **Identifies Mismatches:** A real-time ALM statement provides immediate insight into mismatches between assets and liabilities in terms of timing, value, or currency. This early detection of mismatches is crucial for risk management.
- ★ **Manages Liquidity:** By forecasting future cash flow

needs and exposures under various scenarios, banks can ensure they maintain adequate liquidity to meet obligations and avoid losses.

- ★ **Optimizes Resource Allocation:** The statement helps banks understand their liquidity position, enabling them to strategically deploy excess funds into profitable investments or manage shorter-term needs effectively.
- ★ **Controls Borrowing Costs:** By managing liquidity and funding gaps proactively, banks can avoid costly emergency borrowing in the interbank market and reduce their overall cost of funds.
- ★ **Enhances Profitability:** Effective ALM, supported by accurate information from the statement, leads to better risk management, improved resource allocation, and optimized fund utilization, ultimately boosting profitability through a maximized net interest margin.
- ★ **Supports Strategic Decisions:** Real-time data allows the Asset-Liability Committee (ALCO) to make informed strategic decisions regarding the balance sheet to enhance returns and minimize costs.
- ★ **Ensures Regulatory Compliance:** Banks are required to maintain liquidity and capital adequacy ratios. Real-time ALM helps them meet these regulatory requirements by providing the necessary data for monitoring and planning.

l) ALM Audit:

An Asset Liability Management (ALM) Audit is crucial for banks to ensure they are effectively managing mismatches in various time buckets, as defined by the Reserve Bank of India (RBI). The audit verifies that banks have systems in place to regularly monitor and address positive or negative liquidity gaps, ensuring compliance with prudential limits and the implementation of effective risk mitigation strategies to maintain financial stability.

Purpose of ALM Audits:

- ★ **Regulatory Compliance:** To confirm that banks adhere to the RBI's specific guidelines on asset-liability management, including prudential limits on liquidity gaps in different time buckets.
- ★ **Liquidity Risk Management:** To assess the effectiveness of a bank's internal processes for monitoring and managing its liquidity position by comparing cash inflows and outflows.



✳ **Internal Control Assessment:** To evaluate the adequacy and effectiveness of the bank's internal control systems for identifying, measuring, and managing liquidity risks.

✳ **Strategic Decision-Making:** To ensure that management is making informed and timely decisions to address any identified mismatches, often through the Asset-Liability Committee (ALCO).

ALM Audits Verify:

✳ **Maturity Buckets:** The accuracy of the classification of assets and liabilities into the RBI-defined maturity buckets, such as 1-14 days, 15-28 days, and longer-term periods.

✳ **Positive and Negative Mismatches:** The analysis of

the difference between cash inflows and outflows in each bucket (the liquidity gap) to identify potential positive (surplus) or negative (deficit) mismatches.

✳ **Prudential Limits:** Whether the net cumulative negative mismatches in critical time buckets exceed the prudential limits prescribed by the RBI.

✳ **Monitoring Frequency:** That banks are monitoring these gaps at regular intervals to provide early warning signals of liquidity issues.

✳ **Action and Decision-Making:** That the ALCO and other relevant bodies are taking appropriate and timely actions to address identified liquidity risks and to maintain appropriate tolerance levels with board approval.

Credit Deposit Ratio (%)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	66.54%	67.48%	72.32%	75.34%	77.35%
Punjab National Bank	60.94%	63.53%	64.85%	68.22%	68.78%
Bank of Baroda	73.04%	74.40%	78.18%	79.83%	82.17%
Canara Bank	63.22%	64.76%	70.44%	70.99%	72.01%
Union Bank of India	63.97%	64.03%	68.16%	71.29%	72.80%
Bank of India	58.31%	67.02%	72.57	76.32%	79.56%
Indian Bank	67.40%	65.56%	72.33%	74.84%	77.47%
Bank of Maharashtra	58.85%	64.84%	73.15%	73.96%	76.86%
Central Bank of India	47.45%	49.07%	56.49%	63.22%	68.43%
UCO Bank	54.08%	54.80%	62.51%	69.18%	73.29%
Indian Overseas Bank	53.15%	55.02%	68.25%	74.61%	78.72%
Punjab & Sind Bank	63.41%	62.30%	70.05%	69.29%	74.98%

(Source: IBA)

m) Balanced Credit Deposit Ratio:

A balanced Credit-Deposit (CD) Ratio is crucial for Indian commercial banks to mitigate asset-liability mismatches, as an excessively high ratio signals aggressive lending and potential liquidity issues, while an excessively low ratio indicates underutilized resources. The Reserve Bank of India (RBI) has expressed concern over the widening gap between credit and deposit growth, leading to a higher CD ratio that necessitates greater reliance on short-term liabilities to fund long-term assets, increasing the risk of structural liquidity problems and asset-liability mismatches.

Credit-Deposit (CD) Ratio:

✳ The CD ratio is a financial metric that shows the

percentage of loans a bank has issued relative to its total deposits.

✳ It reflects how efficiently a bank is using its deposits to generate credit.

Optimum CD Ratio Important:

High CD Ratio:

✳ **Risk:** Indicates aggressive lending and a greater proportion of long-term assets (loans) funded by relatively shorter-term liabilities (deposits), creating a potential asset-liability mismatch.

✳ **Liquidity Risk:** May lead to structural liquidity issues

if the bank needs to meet sudden withdrawal demands and cannot easily liquidate its long-term loan portfolio.

Low CD Ratio:

- ★ **Underutilization:** Suggests that a bank is not fully utilizing its deposit base for lending.
- ★ **Impact on Growth:** A cautious approach may hinder credit growth and economic activity.

RBI's Perspective:

- ★ The RBI has raised alarms about the widening gap between deposit and credit growth, which pushes the CD ratio higher.

- ★ This forces banks to increasingly rely on short-term, non-retail deposits and other liability instruments to meet credit demand.

- ★ Such reliance can expose the banking system to significant liquidity and asset-liability mismatches.

- ★ In essence: Maintaining an optimal balance—often suggested to be in the 80-90% range—helps banks manage their risks, ensure liquidity, and avoid the pitfalls of positive or negative asset-liability mismatches.

Gross NPAs

(₹ in Crores)

Name of the PSB	2021	2022	2023	2024	2025
State Bank of India	1,26,389	1,12,023	90,928	84,276	76,880
Punjab National Bank	1,04,423	92,448	77,328	56,343	44,082
Bank of Baroda	66,671	54,059	36,764	31,834	27,835
Canara Bank	60,288	55,652	46,160	40,605	31,530
Union Bank of India	89,788	79,587	60,987	43,098	35,350
Bank of India	56,535	45,605	37,686	29,183	21,749
Indian Bank	38,455	35,214	28,180	21,106	18,179
Bank of Maharashtra	7,780	5,327	4,334	3,833	4,185
Central Bank of India	29,277	28,156	18,386	11,340	9,225
UCO Bank	11,352	10,237	7,726	6,463	5,919
Indian Overseas Bank	16,323	15,299	14,072	6,794	5,348
Punjab & Sind Bank	9,334	8,565	5,648	4,665	3,371

(Source: IBA)

n) NPAs and NPIs:

Indian banks, controlling a negative balance sheet mismatch in Asset Liability Management (ALM) is indeed vital, and timely recovery of Non-performing Assets (NPAs) and minimizing Non-performing Investments (NPIs) are critical components of this process. A negative mismatch occurs when a bank's liabilities exceed its assets in a given time period, potentially leading to a liquidity shortfall and affecting a bank's ability to meet its financial obligations. By effectively managing these problem assets, banks can maintain liquidity, reduce risk, and improve overall profitability.

NPAs and NPIs are to Control:

- ★ **Liquidity Impact:** NPAs are loans that are not

generating income, and NPIs are investments that have lost value, both of which reduce the cash inflows to the bank. This directly contributes to a negative liquidity position and exacerbates the mismatch problem.

- ★ **Interest Rate Risk:** NPAs and NPIs are also exposed to interest rate risk, where changes in market interest rates can further reduce the market value of these assets and negatively impact a bank's capital.
- ★ **Regulatory Compliance:** The Reserve Bank of India (RBI) has established guidelines to manage ALM risks, and the proper management of NPAs and NPIs is crucial for meeting regulatory requirements and avoiding penalties.



How to manage this vital area of ALM:

- ✱ **GAP Analysis:** Banks use GAP analysis to assess their exposure to liquidity and interest rate risk by comparing assets and liabilities within different time buckets.
- ✱ **Proactive Recovery Strategies:** Implementing effective strategies for the timely recovery of NPAs and the disposal of NPIs is essential to improve the asset side of the balance sheet.
- ✱ **Sophisticated Information Systems:** A robust and accurate information system is central to ALM, enabling banks to monitor risks, track NPAs and NPIs, and make informed decisions.
- ✱ **Alignment with Business Strategy:** ALM needs to be supported by a clear management philosophy that defines risk tolerance limits and aligns ALM with the bank's overall business strategy.

o) Balanced Portfolio with Money Market Instruments:

Managing a balanced portfolio of short-term money market instruments is a fundamental strategy for Indian commercial banks to mitigate asset-liability mismatch (ALM) risks by providing a mix of liquidity and stable, reasonable yields to meet cash flow needs and interest rate sensitivities, thereby improving financial stability and profitability. These instruments, including Treasury Bills, Commercial Papers, and Certificates of Deposit, allow banks to effectively manage timing differences between their assets and liabilities, ensuring they can meet obligations and take advantage of investment opportunities without excessive risk.

Money Market Instruments Help Manage ALM Mismatches:

- ✱ **Liquidity Management:** Banks face risks from mismatches between their short-term liabilities and long-term assets, and vice versa. Money market instruments, known for their short maturities (typically under a year) and high liquidity, provide a readily available source of funds to meet potential shortfalls.
- ✱ **Yield Optimization:** By strategically selecting a mix of money market instruments, banks can achieve a reasonable and stable yield on their surplus funds, balancing the need for liquidity with the objective of earning a return.
- ✱ **Risk Mitigation:** These low-risk, short-term

instruments help to stabilize a bank's net interest income (NII) and profit margins by providing predictable cash flows and limiting exposure to interest rate volatility.

Balancing Gaps:

Positive Mismatch (Assets > Liabilities): When a bank has excess assets maturing in a particular period, it can invest in shorter-term money market instruments to improve yields.

✱ **Negative Mismatch (Liabilities > Assets):** When there's a shortfall of cash, money market instruments can be sold or used as collateral to meet immediate liquidity needs.

Money Market Instruments for Banks:

- ✱ **Treasury Bills (T-bills):** Short-term government debt, offering high safety and liquidity.
- ✱ **Commercial Papers (CPs):** Short-term unsecured debt issued by corporations, providing higher yields than government securities but with slightly higher credit risk.
- ✱ **Certificates of Deposit (CDs):** Time-bound deposits with fixed interest rates, issued by banks, which can be used to borrow or lend funds.
- ✱ **Repurchase Agreements (Repos):** Short-term borrowing and lending of funds against government securities, providing a highly liquid market for managing short-term cash needs.

A well-structured Investment Portfolio in money market instruments with varying maturities, credit quality, and rates enables banks to actively manage their asset-liability positions, ensuring financial stability and smooth operations within the dynamic Indian financial landscape.

Role of Cost Accountants (CMAs) in ALM System of Banks:

Cost accountants and cost and management accountants (CMAs) play a vital role in the Asset Liability Management (ALM) of Indian banks by analysing financial data, optimizing the use of excess liquidity for reasonable yields, managing borrowed funds at minimal cost, and mitigating mismatches between assets and liabilities to ensure stability and profitability. Their expertise in cost analysis, performance evaluation, and strategic resource management directly supports the effective control of a bank's financial health.



Contributions of Cost and Management Accountants to Bank ALM:

- ★ **Liquidity Management:** CMAs help banks manage surplus funds by identifying investment opportunities that offer a reasonable yield, thereby enhancing returns on the bank's idle cash.
- ★ **Funding Management:** They analyse the cost of capital, enabling banks to borrow funds when needed at the lowest possible cost, which is crucial for maintaining profitability.
- ★ **Mismatched Risk Mitigation:** By analysing financial data and forecasting future trends, CMAs help banks identify and reduce potential mismatches between their assets and liabilities, thereby controlling interest rate risk and liquidity risk.
- ★ **Performance Evaluation:** CMAs evaluate the performance of treasury and financial operations, providing insights that help management make informed decisions on resource allocation and risk management strategies.
- ★ **Strategic Guidance:** With specialized knowledge in evaluating operating efficiency and strategic management, CMAs serve as key advisors to banks in developing strategies to ensure sustainable growth and competitive advantage.

Why Cost Accountants Are Essential for Indian Banks:

- ★ **Financial Expertise:** Cost and management accountants possess the expertise to decipher financial intricacies, analyse costs, forecast future financial performance, and manage financial resources effectively.
- ★ **Regulatory Compliance:** As professionals recognized by the Reserve Bank of India (RBI) and the Companies Act, CMAs are well-positioned to ensure that banks comply with the stringent ALM guidelines and prudential reporting requirements.
- ★ **Synergy with Global Practices:** The renaming of the Institute of Cost Accountants of India to "The Institute of Cost Accountants of India" and its collaboration with global bodies enables the sharing of best practices, further enhancing the competitive edge of Indian banks.

To Sum Up:

Cost and Management Accountants can significantly benefit a bank by improving Asset-Liability Management (ALM), monitoring liquidity, and enhancing overall profitability. Their expertise in cost management, financial planning, and analysis aligns perfectly with the banking industry's challenges of balancing assets and liabilities, maintaining liquidity, and controlling costs to boost the bottom line.

Contributions of Cost and Management Accountants:

- ★ **Liquidity Management:** They can provide crucial insights into the bank's liquidity position, forecasting both excess and negative liquidity scenarios to ensure the bank can always meet its obligations.
- ★ **Cost Control and Profitability:** By closely monitoring and analysing operational costs and product-level expenses, these professionals can identify areas for cost reduction, thereby increasing net interest income and improving the bank's overall profitability.
- ★ **Strategic Financial Planning:** They can help in developing and implementing effective strategies for allocating capital, managing funds, and pricing new products to ensure a healthy balance between profitability, growth, and risk.
- ★ **Balance Sheet Optimization:** Their analytical skills are vital for ensuring a strategic balance between the bank's assets and liabilities, which is critical for optimizing profitability, maintaining liquidity, and mitigating market risks.
- ★ **ALM Oversight:** While an ALCO (Asset-Liability Committee) oversees ALM, management accountants can provide detailed analysis and support to the committee, ensuring adherence to risk appetite limits and effective decision-making.
- ★ **Product and Process Efficiency:** Their role in product design and process improvement can lead to more efficient operations, contributing directly to cost reduction and enhanced productivity within the bank.

In essence, by leveraging their unique skill set, Cost and Management Accountants can become invaluable assets in managing the complex financial environment of a bank, ultimately contributing to its financial stability and increased profitability.



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Annexure I

ALM Department is also a ‘Profit Centre’

The Asset-Liability Management (ALM) department in a bank should be treated as a profit center in addition to its traditional role of minimizing mismatches. This represents an evolved view of ALM, shifting it from a purely risk management function to a strategic one that influences and drives profitability.

ALM as a Strategic Profit Center:

Traditionally, ALM’s main objective was to mitigate risks arising from mismatches between a bank’s assets (loans) and liabilities (deposits). By matching the timing and value of cash inflows and outflows, ALM limits interest rate and liquidity risks, ensuring the bank’s stability.

However, the modern banking strategy recognizes that this stability can be proactively managed to generate profit. By strategically optimizing the bank’s balance sheet, the ALM department can create value, which can be measured and managed like any other profit center.

How ALM Generates Profit?

The ALM department drives profitability through several key activities:

- ★ **Net Interest Margin (NIM) optimization:** The ALM department is responsible for managing the bank’s NIM, which is the difference between the interest income generated and the interest paid out. By deciding on the pricing of products and the mix of assets and liabilities, ALM directly impacts a bank’s net interest income.
- ★ **Funding cost reduction:** ALM actively manages the funding mix, choosing the most cost-effective sources of capital, whether it is retail deposits, wholesale funding, or money market instruments. Optimizing these funding costs directly increases profitability.
- ★ **Strategic hedging:** ALM teams use derivative instruments, such as interest rate swaps, to hedge against market risks. Beyond just risk mitigation, these hedges can be a source of profit if market conditions move favourably.
- ★ **Effective liquidity management:** By accurately forecasting cash flow needs, ALM ensures the bank

maintains just the right amount of liquidity. This prevents keeping idle funds that could be invested for higher returns while also avoiding costly liquidity shortages.

- ★ **Transfer pricing mechanism:** The transformation of ALM into a profit center is made possible through a robust funds transfer pricing (FTP) framework. FTP assigns a specific cost of funds to each business line that raises deposits and a specific return on funds to each business line that lends money. The difference between the FTP rate and the actual market cost is where the ALM’s profitability can be measured.
- ★ **Key Performance Indicators (KPIs) for ALM Heads:** To measure the ALM department’s performance as a profit center, a bank’s senior management will focus on several Key Performance Indicators (KPIs) for the department head:
- ★ **Net Interest Income (NII) / Net Interest Margin (NIM):** This is a primary metric that reflects the department’s success in managing the interest-earning assets and interest-bearing liabilities.
- ★ **Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR):** While these are regulatory requirements, managing them efficiently can free up resources and optimize the bank’s funding structure, contributing to profitability.
- ★ **Earnings at Risk (EaR):** This measure quantifies the potential impact of interest rate changes on the bank’s net interest income over a given period. A lower EaR indicates effective risk management.
- ★ **FTP-based profit:** Performance is measured by the profit the ALM department earns from the internal FTP system. This separates the ALM’s contribution from the revenues generated by other commercial departments.
- ★ **Cost of funds vs. yield on assets:** Tracking the spread between the average cost of the bank’s liabilities and the average yield on its assets is a direct indicator of ALM’s effectiveness.



Annexure II

Forecasting of Seasonal Mismatches of ALM

A bank's Asset-Liability Management (ALM) department must proactively prepare for seasonal maturity mismatches by forecasting and stress testing for predictable periods of high fund outflow. The early identification of these mismatches, such as during festivals or at the beginning and end of months, allows banks to take timely control actions, minimize risk, and manage liquidity effectively.

Key Periods requiring Proactive ALM:

- ✱ **Festivals and holidays:** These periods are often associated with a significant increase in consumer spending and cash withdrawals. Banks must forecast higher cash outflow from deposits and prepare by managing their cash reserves and funding sources in advance.
- ✱ **First week of the month:** This is a common period for major fund outflows, as individuals and businesses make rent, mortgage, and other loan payments, in addition to drawing cash for regular expenses.
- ✱ **Last week of the month:** Corporate clients may withdraw large sums for payroll, vendor payments, or other financial obligations, creating a predictable liquidity event for banks.
- ✱ **Economic slowdowns:** In a deteriorating economic climate, the outflow of funds can increase as clients draw down savings or businesses face higher operational costs and credit risk. Proactive stress testing helps banks simulate these scenarios to assess their balance sheet's resilience.

ALM Department Actions to manage Seasonal Mismatches:

- ✱ **Advance forecasting:** Analyse historical data to create a robust forecast of seasonal cash flow patterns. This should include granular details, such as the timing and volume of deposits and withdrawals, during specific events like holiday seasons.
- ✱ **Strategic stress testing:** Use the forecasted scenarios to

run stress tests that simulate how severe, but plausible, fund outflows could affect the bank's liquidity and net interest margin. Stress tests can incorporate different levels of severity, from moderate shocks to extreme crises.

- ✱ **Refined gap analysis:** Use maturity ladders and gap statements to track and measure cash flow mismatches across different time buckets, particularly in the short-term buckets (e.g., 1–14 days and 15–28 days). The ALCO (Asset-Liability Committee) can set internal prudential limits based on this analysis.
- ✱ **Contingency funding plans:** Based on stress testing results, develop contingency funding plans. These plans outline alternative funding sources, such as accessing the interbank market or collateralized borrowing to use if liquidity is unexpectedly tight.
- ✱ **Adjusting portfolio duration:** Implement strategies to align asset and liability maturities. For instance, in anticipation of higher funding costs, a bank may shorten the maturity of new loans or lengthen the maturity of its liabilities.
- ✱ **Market-based hedging:** Use off-balance sheet instruments, such as interest rate swaps or futures contracts, to create synthetic hedges against potential risks.
- ✱ **Diversify funding sources:** To reduce over-reliance on a single type of funding (like short-term deposits), diversify funding sources and attract longer-term deposits. This can involve adjusting interest rates on specific products to make them more appealing.
- ✱ **Enhance communication:** Maintain robust reporting and communication with the board and senior management. Informing all relevant stakeholders of the current liquidity situation and the planned control actions is essential for a coordinated response.

Annexure III

Business Unit / Segment-wise ALM Mismatch Statements

Reporting Asset and Liability Management (ALM) segment-wise, instead of for the bank as a whole, is a strategic practice enabled by technology that allows for better control, more precise risk monitoring, and greater accountability. This approach directly addresses the mismatch risks inherent in banking, where liabilities (like short-term deposits) and assets (like long-term loans) have different maturity and interest rate profiles.

How Technology enables Segment-wise ALM: Advanced banking software and data analytics have made granular, segment-specific ALM feasible.

- ★ **Data Availability and Integration:** Modern Management Information Systems (MIS) can collect vast amounts of data from various sources and integrate it seamlessly. This ensures the availability of accurate and adequate information for each business segment, which is a key pillar of the ALM process.
- ★ **Specialized Software:** Advanced ALM software is designed to handle complex calculations for liquidity, interest rate sensitivity, and economic value. It can produce detailed, disaggregated reports for different business units like Retail, Corporate, and MSME.
- ★ **Scenario Modelling:** Modern systems can perform sophisticated scenario and stress testing on both static and dynamic balance sheets. This allows the bank to see how potential market shifts would impact each business segment individually, providing a more detailed and accurate risk assessment.
- ★ **Predictive Analytics:** AI and machine learning can be used to model customer behaviour for different segments, such as how deposits for retail customers may behave under different interest rate scenarios. This leads to more accurate forecasting of segment-specific cash flows.
- ★ **Reporting Automation:** Technology enables the automated generation of timely, granular, and transparent reports, ensuring all stakeholders have a real-time overview of the risk profiles within each segment.

Benefits of segment-wise ALM: This enhanced level of reporting offers numerous advantages for both risk management and strategic decision-making.

Improved risk management and control:

- ★ **Focused Risk Mitigation:** By isolating mismatches within specific business units, management can apply more targeted and effective hedging strategies. For example, a mismatch in the Corporate segment can be addressed without affecting the strategies for the Retail or MSME segments.
- ★ **Early Warning Signals:** Detailed segment-wise reports provide an early warning of emerging risks. An abnormal liquidity gap in the Mid-Corporate segment, for instance, can be spotted and addressed before it negatively impacts the bank's overall financial health.
- ★ **Better Capital Allocation:** A clearer view of each segment's risk profile enables more efficient capital allocation. The bank can direct more resources to segments with healthier ALM positions and mandate a reduction in risk for those with greater mismatches.

Greater Accountability and Governance:

- ★ **Personalized Accountability:** Segmental ALM reports make the performance of individual business heads transparent. This holds them directly accountable for minimizing mismatches within their purview, creating a sense of ownership that did not exist with bank-wide reporting.
- ★ **Performance-based Incentives:** This structure allows for a more direct link between a manager's performance in ALM and their compensation or performance reviews, motivating proactive risk management.
- ★ **Stronger Corporate Governance:** By pushing accountability down to the segment level, the bank strengthens its overall governance framework. This supports a culture where risk management is a distributed responsibility rather than one concentrated at the top.

Enhanced Strategic Planning and Profitability:

- ★ **Strategic Alignment:** Segmental ALM allows the bank to align its business strategy with its risk tolerance at a more granular level. Business heads can make decisions that optimize their segment's profitability while staying within defined risk parameters.
- ★ **Optimized Pricing:** With an accurate view of



segment-specific risks, the bank can implement more sophisticated funds transfer pricing (FTP) models. This ensures that the cost of liquidity and interest rate risk is appropriately allocated to each business unit.

Targeted Growth Opportunities: By understanding the risk-adjusted profitability of each segment, the bank can identify its most profitable and stable business lines and direct resources toward them for sustainable growth.

Annexure IV

Segment-wise ALM Reporting

Reporting Asset and Liability Management (ALM) segment-wise, instead of for the bank as a whole, is a strategic practice enabled by technology that allows for better control, more precise risk monitoring, and greater accountability. This approach directly addresses the mismatch risks inherent in banking, where liabilities (like short-term deposits) and assets (like long-term loans) have different maturity and interest rate profiles.

- ✱ **How Technology enables Segment-wise ALM:** Advanced banking software and data analytics have made granular, segment-specific ALM feasible.
- ✱ **Data Availability and Integration:** Modern Management Information Systems (MIS) can collect vast amounts of data from various sources and integrate it seamlessly. This ensures the availability of accurate and adequate information for each business segment, which is a key pillar of the ALM process.
- ✱ **Specialized Software:** Advanced ALM software is designed to handle complex calculations for liquidity, interest rate sensitivity, and economic value. It can produce detailed, disaggregated reports for different business units like Retail, Corporate, and MSME.
- ✱ **Scenario Modelling:** Modern systems can perform sophisticated scenario and stress testing on both static and dynamic balance sheets. This allows the bank to see how potential market shifts would impact each business segment individually, providing a more detailed and accurate risk assessment.
- ✱ **Predictive Analytics:** AI and machine learning can be used to model customer behaviour for different segments, such as how deposits for retail customers may behave under different interest rate scenarios. This leads to more accurate forecasting of segment-specific cash flows.
- ✱ **Reporting Automation:** Technology enables the automated generation of timely, granular, and transparent reports, ensuring all stakeholders have a real-time overview of the risk profiles within each segment.
- ✱ **Benefits of segment-wise ALM:** This enhanced level of reporting offers numerous advantages for both risk management and strategic decision-making.

Improved risk management and control:

- ✱ **Focused Risk Mitigation:** By isolating mismatches within specific business units, management can apply more targeted and effective hedging strategies. For example, a mismatch in the Corporate segment can be addressed without affecting the strategies for the Retail or MSME segments.
- ✱ **Early Warning Signals:** Detailed segment-wise reports provide an early warning of emerging risks. An abnormal liquidity gap in the Mid-Corporate segment, for instance, can be spotted and addressed before it negatively impacts the bank's overall financial health.
- ✱ **Better Capital Allocation:** A clearer view of each segment's risk profile enables more efficient capital allocation. The bank can direct more resources to segments with healthier ALM positions and mandate a reduction in risk for those with greater mismatches.

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- ✱ **Personalized Accountability:** Segmental ALM reports make the performance of individual business heads transparent. This holds them directly accountable for minimizing mismatches within their purview, creating a sense of ownership that did not exist with bank-wide reporting.
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Enhanced Strategic Planning and Profitability:

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- ✱ **Optimized Pricing:** With an accurate view of



segment-specific risks, the bank can implement more sophisticated funds transfer pricing (FTP) models. This ensures that the cost of liquidity and interest rate risk is appropriately allocated to each business unit.

✱ **Targeted Growth Opportunities:** By understanding the risk-adjusted profitability of each segment, the bank can identify its most profitable and stable business lines and direct resources toward them for sustainable growth.



Annexure V

ALM on Real-time Monitoring

Banks should monitor their Asset-Liability Management (ALM) metrics on a more frequent, or even real-time, basis is accurate and reflects modern best practices in banking. While the Reserve Bank of India (RBI) mandates specific periodic reporting (monthly or half-yearly), these are minimum regulatory requirements, not a limit on a bank's internal risk management processes.

Why more frequent ALM monitoring is essential?

- ★ **Minimizing liquidity and interest rate mismatches:** Waiting for monthly or half-yearly reports to identify a significant asset-liability mismatch is a reactive and risky strategy. A bank's cash inflows and outflows can change dramatically within days, or even hours. More frequent monitoring allows a bank to identify and correct potential imbalances before they become a serious threat to profitability or solvency.
- ★ **Managing intraday liquidity needs:** With the rise of instant payment systems, funds move instantaneously throughout the day. A bank can no longer rely on an end-of-day picture of its cash position. Real-time or intraday liquidity management is crucial for ensuring a bank can meet its time-sensitive obligations and avoid negative interest charges or penalties.
- ★ **Enhancing profitability:** Frequent monitoring, especially in the context of interest rate sensitivity, allows a bank to optimize its funding costs and returns. By understanding their cash flows in real time, banks can make more informed decisions about how to deploy surplus funds or manage funding needs, thereby driving shareholder value.
- ★ **Meeting modern regulatory expectations:** While the statutory reporting frequency is fixed, regulatory bodies like the RBI expect banks to have robust internal risk management systems. Following the 2008 financial crisis, regulators began scrutinizing intraday liquidity management more closely. Banks that proactively adopt more frequent monitoring are better prepared for regulatory stress tests and oversight.

- ★ **Improving forecasting and strategy:** More granular data on cash flow patterns and interest rate sensitivity provides a stronger foundation for a bank's financial projections. This allows for better-informed strategic decisions on product pricing, business mix, and long-term viability.

- ★ **Enabling faster decision-making:** For a bank's Asset-Liability Committee (ALCO), having access to up-to-date data is vital. Frequent reporting enables the ALCO to react quickly to market dynamics, adjust strategy, and decide on asset or liability mix in a timely and effective manner.

The role of technology in real-time ALM: Modern technology is what makes frequent ALM monitoring a practical reality.

- ★ **Robust IT infrastructure:** Banks need robust systems that can handle and process vast amounts of data from various sources (legacy systems, core banking platforms, treasury systems) in real time. Seamless integration is a key challenge.
- ★ **Automation and predictive analytics:** Automated systems use algorithms to track payment flows and calculate liquidity positions. This is complemented by predictive analytics, which uses historical data and market conditions to forecast future liquidity needs and potential risks.
- ★ **Cloud-based solutions:** The flexibility and scalability of cloud technology allow banks to deploy modern liquidity management systems cost-effectively and integrate them more easily with new data sources.
- ★ **Real-time dashboards:** These provide senior management and ALCO with a 360-degree view of the bank's liquidity position on a single platform, enabling quicker and better-informed decisions.



Annexure VI

Reduce Dependence on Call Money Market or RBI

To reduce their dependence on borrowing from the Reserve Bank of India (RBI) via facilities like the Liquidity Adjustment Facility (LAF) and the bank rate, commercial banks must adopt robust asset-liability management (ALM) practices. A strong ALM framework helps banks manage liquidity and interest rate risks by proactively addressing funding needs rather than relying on emergency or short-term, expensive sources of finance.

Strategies to reduce reliance on RBI borrowing

Strengthen the deposit base: A stable, low-cost deposit base, especially core Current Account and Savings Account (CASA) deposits, is the most effective way for banks to reduce dependence on external funding sources.

✱ **Enhance customer stickiness:** Develop and offer new banking products to make deposits more attractive to customers. This could include special term deposit schemes with higher rates for specific tenors to manage liability mismatches.

✱ **Improve deposit mobilization:** Optimize the deposit interest rate structure to attract a wider and more stable pool of funds.

✱ **Use data analytics:** Leverage predictive analytics to forecast deposit inflows and outflows more accurately, ensuring better liquidity planning.

Optimize the funding mix: By diversifying and optimizing their funding structure, banks can reduce dependence on short-term and volatile sources of finance, including the interbank call money market.

✱ **Diversify funding sources:** Supplement deposits with other stable sources of funding, such as long-term debt, hybrid capital instruments (like Tier-1 and Tier-2 bonds), and other low-cost market borrowings.

✱ **Efficiently manage working capital:** Better management of a bank's working capital, such as improving collection processes for receivables, can enhance internal cash flow and reduce the need for external borrowing.

✱ **Manage debt structure:** Refinancing existing debt to reduce the overall weighted average cost of capital (WACC) can improve profitability and resilience.

Improve liquidity risk management: Effective liquidity risk management allows a bank to meet its obligations reliably without needing to access emergency funding from the RBI.

✱ **Conduct robust cash flow forecasting:** Use advanced analytical models to project cash inflows and outflows over different time horizons. This provides early visibility into potential liquidity shortfalls.

✱ **Perform regular stress testing:** Simulate the impact of adverse scenarios (e.g., a deposit run) on the bank's liquidity position. This helps quantify potential shortfalls and informs the development of effective contingency plans.

✱ **Maintain adequate liquidity buffers:** Hold sufficient reserves of High-Quality Liquid Assets (HQLA), which can be converted to cash quickly without significant loss in value during a liquidity crisis.

✱ **Diversify liquid assets:** Aim for a stable portfolio composition of liquid assets to avoid concentrating risk in a single market.

✱ **Practice sound asset-liability management (ALM):** A robust ALM framework is central to minimizing mismatches between the maturity and repricing of assets and liabilities. The key tools include:

✱ **Gap analysis:** Measure the difference between rate-sensitive assets and liabilities over various time frames. This highlights potential interest rate risk exposure and liquidity gaps.

✱ **Transfer pricing mechanism:** Implement a scientifically developed internal transfer pricing model that assigns current market rates to funds. This helps in centralizing interest rate risk management and provides a rational framework for the pricing of assets and liabilities.

✱ **Integrated treasury management:** Adopt a holistic view of the balance sheet, considering how different components and their maturity mixes impact profitability and risk.

✱ **Establish an Asset-Liability Committee (ALCO):** Form a dedicated committee of senior management



to oversee the ALM process, set risk policies, and ensure compliance with regulatory guidelines.

Leverage technology and advanced analytics: Modern technology can significantly enhance a bank's ability to manage its balance sheet proactively, reducing the need for reactive borrowing.

- ★ **Implement real-time liquidity management systems:** Use software solutions for continuous tracking of cash flows. This enables intraday monitoring and

more accurate end-of-day funding.

- ★ **Centralize financial data:** Consolidate all financial data into a single, accessible interface to improve the efficiency and accuracy of analysis and reporting.
- ★ **Use predictive analytics:** Employ AI-powered tools for more precise forecasting and simulation of complex scenarios. This helps in anticipating and managing liquidity risks more effectively than manual processes.



Annexure VII

Cost-benefit Analysis of Funding Sources

In situations of asset-liability mismatches, a cost-benefit analysis would need to be performed by a bank to decide whether to attract public deposits with higher interest rates or to use market-based funding tools like the Call Money Market, Marginal Standing Facility (MSF), or Bank Rate.

Cost-benefit Analysis of Funding Sources:

Factor	Increasing Public Deposit Rates	Using Market Funding (Call, MSF, Bank Rate)
Costs	Higher interest payments for all deposits, including existing ones, if rates are re-priced. This can reduce net interest margin (NIM) and profitability.	Higher interest costs on borrowed funds. The MSF rate is typically higher than the repo rate to discourage excessive short-term borrowing.
Risk	Lower risk. Stable, long-term deposits reduce the risk of a funding shortage and a "bank run," which boosts public confidence.	Higher risk. Market funding is often short-term and can be volatile. Over-reliance on this source increases liquidity risk.
Flexibility and Duration	Less flexible. Deposit rates and tenures are less flexible once set. They are more suitable for funding long-term asset-liability mismatches.	More flexible. Market funding is suitable for addressing temporary or short-term liquidity mismatches. Banks can borrow for specific short periods, such as overnight.
Market Perception	Positive perception. Signifies a strong, stable funding base.	Negative perception. Continuous or heavy borrowing from central bank facilities like MSF or the Bank Rate can signal underlying liquidity problems to the market.
Control	Less direct control over the total amount of funds raised, as it depends on public response.	More direct control over the amount and timing of funds, as it is a specific borrowing transaction.

Strategy for Short-term Mismatches: For temporary or short-term liquidity mismatches (e.g., 1–28 days), using the interbank Call Money Market or the Central Bank’s repo/MSF facilities is often the more cost-effective and appropriate option. These short-term borrowings can be cheaper than raising the rate on the bank’s entire deposit base for a temporary need. The bank can cover the temporary cash flow shortfall and repay the borrowing quickly.

- ✱ Strategy for Long-term Mismatches: For long-term or structural mismatches identified through Asset-Liability Management (ALM) analysis, proactively increasing deposit rates can be a more strategic and stable solution.
- ✱ It builds a more sustainable, long-term funding base that reduces future reliance on volatile and potentially more expensive short-term market funding.
- ✱ While it increases the bank’s overall cost of funds, it improves financial stability and strengthens the bank’s brand as a reliable and competitive institution.

- ✱ It is particularly effective in a rising interest rate environment, as it allows the bank to lock in funds for a longer period.

A bank should implement a hybrid strategy based on the nature of the liquidity mismatch:

- ✱ For temporary needs, use short-term market tools. The Call Money Market, Repo, and MSF facilities are specifically designed to address overnight or short-term deficits.
- ✱ For structural needs, focus on long-term deposits. Strategically increasing deposit rates is a proactive ALM practice that builds a stable funding base, manages long-term mismatches, and reduces the risk of market volatility.
- ✱ Perform regular cost-benefit analysis. This ensures the bank is making rational, data-driven decisions that balance profitability, stability, and risk in a changing market.

Annexure VIII

Trading of Assets

RBI guidelines permit the “Trading of Assets” as a key strategy for banks to manage asset-liability management (ALM) mismatches and reduce reliance on expensive short-term borrowings. Instead of rushing to the call money market or the RBI for liquidity, banks can utilize their existing asset portfolios to address cash flow gaps.

Regulatory framework for trading assets to manage ALM:

The RBI’s ALM framework was introduced to help banks systematically address risks from mismatches between their asset and liability profiles. The framework includes provisions for using a “Trading Book” to manage short-term liquidity needs.

Key elements include:

Trading book: Banks can maintain a “Trading Book” of securities specifically for short-term trading to manage cash flow mismatches.

ALM policy: A bank’s Asset Liability Management Committee (ALCO), consisting of top management, is responsible for setting policies, defining strategies, and approving the use of the Trading Book.

Defined parameters: The Board or ALCO must clearly define the volume, composition, and maturity limits for the Trading Book.

Holding period: To ensure liquidity, the holding period for trading securities must not exceed 90 days.

Mark-to-market: Securities in the Trading Book must be marked-to-market daily or weekly, with gains and losses booked in the profit and loss account. This ensures assets are valued at their current market price.

Asset-liability maturity buckets: Banks must classify assets and liabilities into time-based “maturity buckets” (e.g., 1–14 days, 15–28 days).

Liquidity gap limits: RBI sets prudential limits on mismatches in these buckets. If a bank faces a negative liquidity gap in short-term buckets, it can use the trading of assets to fill the gap.

How banks use asset trading to manage ALM mismatches: Banks can actively trade securities from their Trading Book in the inter-bank market to manage liquidity pressures and minimize borrowing from the call money market or the RBI’s Liquidity Adjustment

Facility (LAF).

For example, if a bank faces a negative liquidity gap in the “1–14 days” bucket, it may do one of the following:

Sell securities: The bank can sell its short-term government securities, corporate bonds, or other eligible liquid assets to generate immediate cash inflow and cover the gap.

Inter-bank repo: Alternatively, a bank with a liquidity surplus in its balance sheet could offer reverse repo agreements, while a bank facing a deficit can use repo to borrow by pledging securities. This inter-bank trading of assets helps both parties manage their ALM positions without involving the RBI.

Use of derivatives: Banks can also use derivatives, such as swaps, to manage interest rate risks and hedge against mismatches, as guided by RBI’s risk management regulations.

The benefits of asset trading over call money borrowing: For a bank managing a liquidity shortage, trading assets from its Trading Book offers several advantages over borrowing from the call money market or the RBI:

Cost reduction: Borrowing from the call money market can be expensive, especially during times of high liquidity stress. Relying on RBI’s LAF window (through repo or marginal standing facility) is often a last resort and comes at a higher interest rate than the policy repo rate. Using internal assets can lower a bank’s cost of funds.

Self-sufficiency: It allows banks to become more self-sufficient in managing short-term liquidity, reducing dependence on the central bank and the volatile inter-bank market.

Dynamic balance sheet management: Active trading of assets enables banks to dynamically manage their balance sheets and respond to market movements. This allows them to optimize Net Interest Margin (NIM) and enhance overall profitability.

Pre-empting stress: By actively monitoring and managing their trading portfolio, banks can proactively address potential ALM mismatches before they become a serious issue. RBI’s regulations on daily or weekly mark-to-market valuation help in this process.



Annexure IX

Securitisation of Assets is a Strategic Method

Using securitisation of assets is a strategic method available to banks to manage liquidity mismatches, serving as an alternative to expensive short-term borrowings. The Reserve Bank of India (RBI) has issued specific master directions for this purpose, including guidelines for both standard assets and, more recently, stressed assets.

Securitisation as a Liquidity Management Tool: When a bank faces a liquidity mismatch-meaning it has more short-term liabilities (like deposits) than short-term assets-it can sell its long-term assets to free up cash. The process involves pooling illiquid financial assets, such as home or vehicle loans, and converting them into marketable securities.

Process: The bank (the “originator”) sells a pool of assets to a Special Purpose Vehicle (SPV) in exchange for an immediate cash payment. The SPV then issues debt securities, like Pass-Through Certificates (PTCs), to investors who receive cash flows from the underlying loans.

Benefits:

Generates Cash: Provides immediate funds to the bank, improving its liquidity position without needing more deposits or fresh capital.

Frees up the Balance Sheet: Offloading assets creates room for the bank to issue new loans, expanding its lending capacity.

Mitigates Risk: The risk of default on the underlying loans is transferred to the investors who buy the securities.

RBI Directives on Securitisation: The RBI has established a clear framework to regulate how banks can use securitisation to manage their asset-liability profile.

For Standard Assets:

The master direction on the “Transfer of Loan Exposures and Securitisation of Standard Assets” regulates transactions involving healthy, non-stressed loans.

Minimum Retention Requirement (MRR): The originating bank is required to retain a portion of the risk to ensure it remains incentivized to perform proper due diligence. The specific MRR varies depending on the type and maturity of the underlying assets.

Eligible Assets: The RBI specifies which assets, such as mortgages and personal loans, can be securitised.

For Stressed Assets (NPAs):

In 2025, the RBI introduced the Securitisation of Stressed Assets Framework (SSAF) to enable banks to securitise non-performing assets (NPAs).

This framework provides a market-based alternative for resolving stressed assets, which were previously limited to Asset Reconstruction Companies (ARCs).

Benefits for liquidity: By converting stressed loans into tradable securities, banks can improve their balance sheets and enhance their liquidity positions.

Securitisation vs. Short-term Borrowings:

Using securitisation to fund mismatches offers distinct advantages over reliance on borrowings from the call money market, repo/LAF, and the bank rate.

Feature	Securitisation of Assets	Call Money/Repo/LAF/ Bank Rate
Duration	Addresses medium- to long-term liquidity needs by converting long-term assets into cash.	Manages short-term, daily, or overnight liquidity mismatches.
Cost	Provides cash flow to the bank without incurring a high rate of interest, reducing overall funding costs.	Involves borrowing at volatile and potentially high interest rates, directly increasing the bank’s cost of funds.
Balance Sheet Impact	Removes the securitised assets from the balance sheet, freeing up capital and improving financial ratios.	Does not alter the bank’s asset composition and adds short-term liabilities to the balance sheet.
Risk Management	Transfers credit risk of the underlying assets to investors, reducing the bank’s exposure.	The bank retains all risk on its balance sheet while incurring the cost of borrowing.
Funding Source	Diversifies the bank’s funding sources by accessing the capital markets.	Relies on interbank lending and the central bank (RBI) as primary sources of liquidity.



Annexure X

Use Refinance Facilities - ALM

Banks facing Asset-Liability Management (ALM) mismatches, leveraging refinance facilities from institutions like NABARD, NHB, and SIDBI can be an optimal strategy for managing liquidity. This approach helps bridge the gap between long-term assets, such as loans, and short-term liabilities, such as deposits, by providing stable, long-term funding.

How refinance facilities address liquidity issues:

Long-term funding: Banks can use refinance funds to convert short-term borrowings into longer-term liabilities. This more closely aligns the maturity profile of their liabilities with their long-term assets, such as home loans or agricultural projects, thereby reducing the risk of a liquidity crunch.

Access to low-cost funds: Specialized financial institutions, under the guidance of the Reserve Bank of India (RBI), offer refinance at competitive, and often lower, interest rates. Access to these low-cost funds improves a bank's net interest margin and profitability.

Sector-specific support: Refinance facilities are targeted toward specific sectors like agriculture, housing, and MSMEs. This allows banks to meet the growing credit demand in these priority sectors without straining their own resources.

Risk mitigation: By refinancing eligible loans, banks can offload some of the credit risk associated with these assets. Institutions like SIDBI also offer credit guarantees, further protecting banks.

Strategic utilization of refinance facilities: To maximize the benefits of refinance funds, banks can adopt the following strategies:

Strategic lending mix: A bank's Asset-Liability Committee (ALCO) can forecast credit demand for specific sectors and proactively draw refinance from the relevant specialized institutions. For example, anticipating high demand for agricultural credit, a commercial bank can draw funds from NABARD to finance its disbursements to farmers.

Active portfolio management: Banks can pool eligible loans that have a residual maturity greater than 18 months and seek refinance under the Automatic Refinance Facility (ARF). This ensures a continuous and rapid inflow of funds without extensive

pre-sanction processes.

Technology and data analytics: Using a robust Management Information System (MIS) can help banks identify refinance-eligible loans and track their performance effectively. This allows for faster application processing and ensures compliance with the terms and conditions set by the refinancing agency.

Product innovation: With the backing of long-term refinance, banks can introduce innovative loan products tailored to the needs of the priority sector, such as customized schemes for women entrepreneurs under SIDBI's Arjana scheme or green housing initiatives supported by NHB.

Regular review and compliance: Banks must regularly monitor their Capital to Risk-weighted Assets Ratio (CRAR) and Net Non-Performing Assets (NPA) to ensure they meet the eligibility criteria for refinance. Maintaining a high audit class is also crucial for continuous access to these funds.

Associated Risks and Mitigants: While highly beneficial, excessive reliance on refinance facilities carries certain risks that banks must manage:

Refinancing risk: The risk that the refinancing institution may not be able to renew the facility on favourable terms, or at all, due to market or economic conditions.

Mitigant: Banks should diversify their funding sources and not become overly dependent on any single refinancing agency.

Interest rate risk: The risk of unexpected increases in interest rates, which could raise the cost of refinancing and squeeze profit margins.

Mitigant: Opt. for fixed-rate refinance options where available, especially for loans with longer fixed-rate periods.

Compliance risk: Failure to meet eligibility criteria or specific documentation requirements can result in delayed disbursement or penalties.

Mitigant: Maintain robust internal controls, strong MIS, and strict adherence to regulatory guidelines for a smooth refinance process.



Annexure XI High Rating Banks

While a high credit rating does allow a bank to access funding more easily, it doesn't eliminate the need to hold liquid assets, as this is a regulatory requirement and a core risk management strategy for stability. High-rated banks might hold a smaller buffer of high-quality liquid assets (HQLA) than lower-rated banks due to their better access to funding, but they cannot minimize liquidity assets entirely, as they must comply with regulations like the Liquidity Coverage Ratio (LCR) from Basel III and ensure they can meet unexpected cash outflows. A sufficient liquidity buffer is crucial to prevent insolvency and maintain operational continuity, which ultimately protects profitability.

Role of High Credit Rating:

Access to funding: A strong credit rating makes it easier and cheaper for a bank to borrow money from other institutions or the market.

Confidence: A high rating enhances the market's confidence in the bank, making them more willing to provide funding.

Liquid Assets are still essential:

Regulatory requirements: Even high-rated banks must maintain a certain level of liquid assets to meet regulatory standards like the LCR, which is designed to ensure they can survive short-term stress scenarios.

Operational stability: Liquid assets (cash, government securities, etc.) provide a safety net for daily operations, allowing the bank to meet customer withdrawals and other obligations without having to sell illiquid assets at a loss.

Risk management: Holding a liquidity buffer is a fundamental risk management strategy. Relying solely on market access is risky, as market conditions can change rapidly, making funding difficult to obtain.

Connection to Profitability:

Trade-off: Holding liquid assets is a trade-off between safety and profitability. Liquid assets typically have a lower return than loans or other investments.

Profitability impact: A bank that holds too few liquid assets for the sake of profitability increases its risk. If a crisis occurs, it could lead to insolvency, which would destroy profitability and shareholder value.

High-rated banks: A high-rated bank's advantage is that it can manage its liquidity more efficiently, potentially holding a smaller buffer while still meeting regulatory requirements and risk tolerance. This efficiency improves profitability without compromising stability.



Annexure XII

ALM Practices in Foreign Banks

In asset-liability management (ALM), there are no standardized “Model Cost Sheets” that every foreign bank must use. Instead, cost control through ALM relies on integrating specialized reports and analyses that allow the bank to understand, track, and manage its controllable costs. These analyses function as the equivalent of a “cost sheet” within the ALM framework, providing data for strategic balance sheet decisions.

For a foreign bank, managing these controllable costs is more complex due to operations across multiple currencies and jurisdictions, which adds currency risk and regulatory requirements to the ALM process.

Core ALM Cost Management Reports and Analyses:

The following are the essential “model cost sheets” used in an ALM system to control costs by analysing interest-sensitive positions and operational efficiency:

Funds Transfer Pricing (FTP) and profitability analysis: This framework is central to managing the cost of money within a bank by treating ALM as a profit or cost center.

Purpose: The FTP system allocates the bank’s total funding costs to different business units and products, based on their specific interest rate and liquidity risks.

Controllable cost insight: By revealing the true cost of funding for each loan or deposit, FTP allows management to set pricing that accounts for the cost of capital, thereby managing the bank’s net interest margin (NIM). If a business unit is priced based on an FTP curve that reflects its specific risk profile, it is incentivized to manage its costs more effectively.

Outputs: Detailed reports on net interest margin (NIM) by business unit and product, along with a funds-in-use and funds-provided statement.

Liquidity cost and funding risk reports: This analysis focuses on the controllable costs related to liquidity and funding.

Purpose: These reports help control the cost of maintaining adequate liquidity, forecasting cash flow needs, and managing the risk of unexpected withdrawals.

Controllable cost insight: A foreign bank can

control costs by optimizing its funding mix (e.g., relying on stable, low-cost core deposits versus more expensive and volatile wholesale funding). By accurately forecasting liquidity needs, the bank can avoid expensive last-minute borrowing.

Outputs:

Liquidity Gap Statement: A report that shows the mismatches between maturing assets and liabilities over different time buckets.

Net Stable Funding Ratio (NSFR) and Liquidity Coverage Ratio (LCR) reports: Regulatory-focused reports that help the bank understand and control its funding stability and high-quality liquid asset costs.

Foreign Exchange (FX) Cost and Risk Analysis: Crucial for foreign banks, this analysis controls the costs associated with currency exposure.

Purpose: To identify and manage the costs arising from currency risk, which impacts the value of foreign-denominated assets and liabilities.

Controllable Cost Insight: Banks can control the costs of hedging and manage the impact of exchange rate volatility on earnings by using foreign exchange risk profit centers within the ALM framework. The analysis helps decide whether and how to hedge, balancing the cost of hedging with the potential risk.

Outputs: Reports on currency mismatch positions, FX risk, and the effectiveness of hedging strategies.

Operational Cost Analysis: Effective ALM requires the integration of cost accounting, including analysis of the bank’s day-to-day operational expenses.

Purpose: To analyse and manage the controllable costs associated with running the bank, which can be significant for foreign banks operating in various regions.

Controllable cost insight: Foreign banks can use advanced data analytics and profitability models to identify and control operational expenses related to their branch networks, IT systems, and other overhead. The data informs decisions on digitizing processes, rationalizing branch networks, and optimizing staffing levels.



Outputs:

Activity-based costing (ABC) reports: These reports can provide granular insights into the cost of various processes and services.

Product and customer profitability reports: These reveal which products and customers are most and least profitable, allowing for strategic adjustments.

Integrating the reports into ALM for cost control: A foreign bank implements an effective ALM system for cost control by combining the outputs of these reports into an integrated framework:

Tailored ALM framework: The bank's ALM function must be specifically designed for its global footprint and business model, as there is "no one-size-fits-all ALM".

Strategic management: Senior management uses the

analytical reports to set a risk appetite and align the bank's asset and liability strategy with its profitability objectives.

Cross-functional data: The system relies on accurate and timely data from across all business units to provide a holistic view of risks and costs across the bank's global balance sheet.

Forward-looking simulation: Using these models and reports, the bank can simulate the impact of future economic scenarios—such as interest rate changes or currency shocks—on its controllable costs and overall profitability.

Performance measurement: The bank uses the reports to measure its actual performance against projections, analysing the impact on net interest margins and profitability to ensure the ALM strategy is working.



Chapter 24

Cost Control- Treasury System

Treasury Systems support Liquidity Planning and help reduce High-Cost Borrowings. This chapter covers:

- ✱ *Real-time Treasury Analytics.*
- ✱ *Cost-Benefit Models.*
- ✱ *Role of CMAs in Treasury Operations.*

The chapter explains how Refinance from NABARD, SIDBI, NHB, etc., can reduce borrowing costs.



Cost Control- Treasury System

Indian banks control treasury operational costs by automating tasks with Treasury Management Systems (TMS), improving cash flow forecasting through AI and real-time data, centralizing functions for better visibility, implementing strict risk management policies for interest rate and currency risks, optimizing working capital, strengthening bank relationships, ensuring regulatory compliance, and leveraging digital technologies to reduce errors and manual work. It is critical for Indian banks to strategically manage both their banking and trading books, as the treasury department has evolved beyond

mere regulatory compliance to become a key driver of profitability. By optimizing both functions, banks can enhance their overall financial health, manage risk more effectively, and improve their bottom line. In modern banking, it is essential for Indian banks to give equal attention to their Trading Book alongside the traditional Banking Book, as the treasury function is a crucial profit center, not merely a cost center for managing regulatory requirements. An integrated and strategic treasury department actively contributes to a bank's bottom line through cost optimization and revenue generation.

Key differences between the Banking Book and Trading Book:

Feature	Banking Book	Trading Book
Primary Purpose	To hold assets, such as long-term loans and mortgages, until maturity. The main source of income is the interest margin (Net Interest Income).	To hold financial instruments for short-term resale, with the aim of profiting from price movements (arbitrage) and market volatility.
Risk Profile	Primarily exposed to credit risk (the risk of customer default) and interest rate risk arising from structural mismatches in long-term assets and liabilities (IRRBB).	Primarily exposed to market risk, including fluctuations in interest rates, exchange rates, and commodity prices.
Valuation	Valued at amortized cost. Assets are typically not "marked-to-market" (re-priced to current market value) unless they are impaired.	Valued at fair market value and marked-to-market daily. Daily gains or losses directly impact the bank's profit and loss (P&L) statement.
Regulatory Capital	Capital requirements are based on credit risk. Rules restrict reclassification to prevent "regulatory arbitrage," a practice where assets are moved to game capital requirements.	Capital requirements are based on market risk (e.g., Value-at-Risk under the Basel framework). These are subject to stricter regulations like the Fundamental Review of the Trading Book (FRTB).
Impact on Earnings	Provides stable, long-term earnings but is sensitive to changes in long-term interest rates and credit defaults.	Can generate highly volatile earnings due to short-term market swings, but also offers the potential for significant gains

Treasury Function Boosts a Bank's Bottom Line: Beyond its traditional custodial role, a modern treasury actively seeks to improve profitability.

Cost optimization:

✳ **Effective liquidity management:** The treasury ensures the bank maintains sufficient liquidity to meet daily

needs, avoiding the higher cost of emergency borrowing from the wholesale markets.

✳ **Optimal funds deployment:** By accurately forecasting cash flows, the treasury can invest surplus funds in high-yielding opportunities instead of leaving them idle, which also negatively impacts profits.

- ★ **Efficient capital management:** An optimized treasury function helps manage the bank's capital structure, reducing its weighted average cost of capital and increasing overall profit margins.

Revenue generation:

- ★ **Proprietary trading:** The treasury can operate a trading desk that engages in market activities for the bank's own account, aiming to generate trading profits from market movements.
- ★ **Arbitrage opportunities:** Treasuries can generate profits by capitalizing on price discrepancies for the same security across different markets or timeframes.
- ★ **Risk management services:** Bank treasuries offer risk management products and services to their clients, such as foreign exchange (forex) and derivative contracts, generating significant fee income.
- ★ **Derivative trading:** Trading in complex instruments like swaps and options is a key treasury function that helps banks earn higher margins, particularly from customized deals.

Need for a strategic and Integrated Approach:

An integrated treasury function, which combines domestic and forex operations, is better positioned to optimize asset-liability management and exploit market opportunities. For Indian banks, a strategic approach to both the Banking and Trading Books is a necessity due to several factors:

- ★ **Dynamic regulatory environment:** The Reserve Bank of India (RBI) is constantly introducing changes to regulatory frameworks, like those based on Basel III and FRTB, which require sophisticated treasury operations.
- ★ **Increased competition:** To compete with advanced global and domestic private sector banks, Indian banks must maximize revenue streams from all segments, including their treasury operations.
- ★ **Market volatility:** In today's volatile financial environment, an active trading book managed by a skilled treasury can generate significant returns by navigating market fluctuations.
- ★ **Advanced risk management:** A focus on the trading book necessitates a sophisticated risk management framework to handle market risk, requiring banks to invest in modern systems and expertise.

Key Strategies for Cost Reduction:

- ★ **Automation and Technology:** Implementing TMS can automate manual tasks, reduce errors and improve efficiency in cash and treasury operations. Digital technologies can also streamline workflows and identify areas for cost savings.
- ★ **Cash Flow Forecasting:** Using AI and real-time data for accurate short- and long-term cash flow forecasts helps in better planning and decision-making, minimizing the need for emergency borrowing and reducing costs.
- ★ **Centralization:** Consolidating global cash management and banking operations into a centralized treasury function improves control and visibility over cash positions, leading to better optimization.
- ★ **Risk Management:** Establishing formal policies and hedging strategies for interest rate, currency, and liquidity risks helps prevent financial losses, which can translate into significant cost savings.
- ★ **Working Capital Optimization:** Accelerating the collection of receivables, strategically managing payables, and maintaining optimal inventory levels frees up cash and reduces the costs associated with idle funds or excessive borrowing.
- ★ **Bank Relationship Management:** Regularly reviewing bank performance, negotiating better terms for loans and fees, and diversifying banking partners can lower costs and improve profitability.
- ★ **Regulatory Compliance:** Staying updated on regulatory changes and implementing robust internal controls prevents penalties and reputational risks, which can indirectly reduce operational costs.
- ★ **Real-time Reporting and Analytics:** Adopting real-time dashboards and analytics allows for proactive cash and liquidity management, enabling faster and more effective responses to financial situations.
- ★ **Operational Efficiency:** Streamlining processes, clearly segregating front, middle, and back-office functions, and eliminating inefficient or unprofitable resources improves the overall cost-to-income ratio.

a) Robotic Process:

Indian banks minimize treasury operations costs by adopting technologies like Robotic Process Automation



(RPA), Artificial Intelligence (AI), and Treasury Management Systems (TMS) to automate routine tasks, improve data analysis, optimize cash management, and enhance risk and regulatory compliance. These tools reduce manual work, decrease errors, provide real-time financial insights for better decision-making, and support a shift to more strategic functions by freeing up treasury professionals.

Specific Technologies and Their Impact:

Robotic Process Automation (RPA):

- ✳ **Purpose:** Automates repetitive, rule-based tasks such as bank reconciliations, payment batching, and data entry.
- ✳ **Cost-Saving:** Lowers manpower costs and reduces human errors, leading to significant operational efficiency.
- ✳ **Compliance:** Automates tasks for compliance reporting and Anti-Money Laundering (AML) processes, reducing costs and improving accuracy.

Artificial Intelligence (AI) & Machine Learning (ML):

- ✳ **Purpose:** Analyses large volumes of data to provide real-time insights for decision-making and improves risk management.
- ✳ **Cost-Saving:** Automates fraud detection, identifies suspicious activities, and optimizes cash flow, preventing losses.
- ✳ **Efficiency:** Speeds up data analysis, document processing, and back-office operations, leading to higher productivity.

Treasury Management Software (TMS):

- ✳ **Purpose:** Streamlines core treasury functions like cash positioning, forecasting, liquidity management, and risk management.
- ✳ **Cost-Saving:** Reduces manual work, cuts down on bank fees, and optimizes the use of capital.
- ✳ **Strategic Shift:** Frees up treasury staff from routine tasks, allowing them to focus on more strategic financial analysis and decision-making.

Key Areas of Cost Reduction:

- ✳ **Reduced Manpower Costs:** Automation of routine

tasks decreases the need for manual intervention, shifting human resources to higher-value activities.

- ✳ **Fewer Operational Errors:** Automation reduces the margin for human error, leading to more accurate data and fewer financial losses or compliance issues.
- ✳ **Improved Liquidity Management:** Real-time data and advanced forecasting tools optimize cash usage, minimizing idle cash and maximizing investment returns.
- ✳ **Enhanced Risk Mitigation:** Automated monitoring and AI-driven analytics help in proactively identifying and mitigating financial, credit, and fraud risks, thus avoiding costly incidents.
- ✳ **Streamlined Compliance:** Technology helps banks manage complex regulatory requirements more efficiently, ensuring timely and accurate reporting and reducing associated costs.

b) Cash Flow Forecasting:

Indian banks minimize treasury operations costs by using cash flow forecasting to maintain optimal liquidity, reduce idle funds, and optimize borrowing costs. This is achieved by integrating historical data and real-time information with AI and Machine Learning (ML) to create accurate short- and long-term forecasts of cash inflows and outflows. Banks can then use these forecasts for better working capital management, to strategically invest surplus cash, and to proactively address potential cash shortfalls, thereby enhancing overall financial efficiency and reducing costs.

How Cash Flow Forecasting Minimizes Costs

- ✳ **Optimal Liquidity Management:** Accurate forecasts help banks understand their future cash needs and balances, ensuring they have sufficient funds to meet obligations and avoid over-reliance on expensive short-term borrowing.
- ✳ **Reduced Idle Cash:** By predicting cash surpluses, banks can invest excess funds in short-term instruments like treasury bills or money market funds, generating interest income rather than letting cash sit idle.
- ✳ **Lower Borrowing Costs:** Better forecasting allows for more strategic management of funds, reducing the need for emergency borrowing or costly financing



solutions, thus lowering the cost of funds.

- ★ **Improved Working Capital Efficiency:** Accurate forecasts enable banks to manage their working capital more effectively, accelerating cash inflows from customer payments and managing supplier payments strategically.
- ★ **Enhanced Planning & Budgeting:** Predictable cash flows provide a clear financial picture for better budgeting and planning, leading to more informed financial decisions and strategic investments.
- ★ **Proactive Problem-Solving:** Early identification of potential cash shortages allows banks to take corrective action before they become major issues, preventing operational disruptions and associated costs.

Key Steps for Indian Banks:

- ★ **Data Collection and Integration:** Banks collect vast amounts of historical financial data, including accounts receivable, accounts payable, sales projections, and operational data from various systems.

Leverage Technology:

- ❁ **AI and ML:** Implement AI and Machine Learning algorithms to analyze historical data, identify complex patterns, and generate more accurate predictions of future cash positions.
- ❁ **Automated Systems:** Utilize Treasury Management Systems (TMS) to automate manual tasks, reduce errors, and ensure real-time data connectivity with core banking and ERP systems.
- ★ **Develop Forecasting Models:** Employ time-series analysis and other statistical models to project short-term (up to three months) and long-term cash flows.
- ★ **Real-Time Monitoring:** Track actual cash flows against forecasts in near real-time to quickly identify discrepancies and adjust strategies as needed.
- ★ **Strategic Investment:** Deploy surplus funds into low-risk, liquid investments with staggered maturities to ensure continuous availability while earning returns.
- ★ **Continuous Refinement:** Regularly update and refine cash forecasts based on changing market conditions, business activities, and new financial data to maintain accuracy.

c) Centralization:

Centralization of Indian bank treasury operations minimizes costs by consolidating cash management, streamlining payments, optimizing internal liquidity, enhancing risk management, and leveraging economies of scale for better financing terms. Key strategies include automating reconciliation and payment processes, consolidating bank accounts to reduce fees, implementing cash pooling to offset idle balances, and centralizing foreign exchange exposure management. These efforts lead to significant cost savings, improved efficiency, and greater financial control across the bank.

Key Ways Centralization Reduces Costs

Reduced Banking Fees and Costs:

- ★ **Bank Account Consolidation:** Fewer bank accounts across various subsidiaries and branches reduce administrative overhead, account maintenance fees, and reconciliation costs.
- ★ **Optimized Payment Routing:** Centralized payment processing and aggregation of transactions can lead to lower transaction fees and better rates from banks.

Optimized Liquidity Management:

- ★ **Cash Pooling:** Centralizing cash allows for the efficient recycling of internal funds, minimizing the need to borrow and reducing interest expenses.
- ★ **Elimination of Idle Balances:** Idle cash in one subsidiary's account can be used to fund deficits in another, preventing unnecessary external borrowing.

Improved Risk Management & Hedging Costs:

- ★ **Centralized FX Exposure:** Centralizing foreign exchange exposure management allows for "natural hedging" and more effective strategies to minimize hedging costs.
- ★ **Enhanced Risk Oversight:** A centralized structure provides greater visibility into financial risks and exposures, enabling more proactive and effective management.

Increased Operational Efficiency:

- ★ **Automation:** Automating tasks like reconciliation, reporting, and payments significantly reduces manual effort and the potential for human error, leading to time and cost savings.
- ★ **Standardized Processes:** Implementing standardized



processes for treasury functions improves efficiency and reduces the complexity of managing dispersed operations.

Economies of Scale:

- ★ **Stronger Negotiation Power:** Centralizing operations allows banks to leverage their consolidated financial scale, resulting in better terms for financing and currency exchange.

How to Achieve Cost Reduction Through Centralization:

Implement an In-House Bank (IHB) or Treasury Center: Establish a central treasury unit to manage cash, payments, and funding for the entire organization.

- ★ **Invest in Automation and Technology:** Adopt automated platforms for cash management, payment processing, and reconciliation to drive efficiency and accuracy.
- ★ **Consolidate Bank Relationships:** Reduce the number of external banks used to streamline operations and gain better negotiation power.
- ★ **Utilize Cash Pooling Techniques:** Implement physical or notional cash pooling to optimize cash flows and internal liquidity.
- ★ **Standardize Processes:** Develop and enforce consistent policies and procedures for all treasury-related activities across different units and branches.
- ★ **Centralize Foreign Exchange (FX) Risk Management:** Manage FX exposures from a central point to reduce hedging costs and improve risk mitigation strategies.

d) Operational Risk Management:

Indian banks minimize treasury operations costs by integrating risk management through operational risk control (segregation of front, middle, and back offices) and financial risk management (hedging, diversification, VaR modelling), complemented by technology for automation, centralized visibility, and enhanced fraud control, all overseen by the Reserve Bank of India (RBI)'s regulatory framework.

Operational Risk Management:

- ★ **Segregation of Duties:** Banks separate treasury functions into distinct front, middle, and back offices

to prevent conflicts and ensure clear assignment of responsibilities, reducing human errors and potential fraud.

- ★ **Technology & Automation:** Treasury management software (TMS) automates tasks, centralizes cash visibility, enforces standard workflows, and maintains detailed audit trails, which lowers errors, reconciliation issues, and fraud risks.

Financial Risk Management:

- ★ **Diversification:** Spreading investments across various assets, markets, and instruments helps reduce exposure to a single risk and limits losses from adverse price movements.
- ★ **Hedging:** Utilizing financial instruments like derivatives to hedge against market fluctuations in interest rates, currencies (FX), and other market risks protects the bank from potential losses.
- ★ **Value at Risk (VaR) and Cash Flow at Risk (CFaR):** Implementing models like VaR to quantify potential portfolio losses and CFaR to assess the impact of market changes on cash flow projections allows for better financial risk management and decision-making.
- ★ **Credit Risk Management:** Thorough credit assessments of counterparties and setting appropriate credit limits are crucial to avoid losses from counterparty defaults.

Monitoring and Control:

- ★ **Continuous Monitoring:** Banks must continuously monitor market conditions, risks, and the effectiveness of their control measures, making adjustments to strategies as needed.
- ★ **Internal Controls:** Robust internal controls and risk management systems are implemented to ensure adherence to policies and procedures, minimizing operational disruptions.
- ★ **Contingency Planning:** Developing comprehensive contingency plans helps the bank manage and recover from unforeseen events, ensuring business continuity.

Regulatory Oversight:

- ★ **RBI Guidelines:** The Reserve Bank of India (RBI) plays a critical role by issuing guidelines and regulations for risk management in the banking sector, ensuring sound risk management systems, adequate capital, and transparent risk reporting.



- ★ **Supervision:** The RBI conducts regular inspections and audits to assess banks' compliance with regulations and the effectiveness of their risk management practices.

e) Optimizing Working Capital:

Indian banks can minimize treasury operations costs by optimizing their working capital through strategies like improving cash flow management, streamlining accounts payable and receivable processes, rationalizing bank accounts, and leveraging technology and automation for greater efficiency and lower transaction fees. This involves adopting treasury management systems (TMS) for real-time visibility, automating workflows to reduce manual tasks, and negotiating better terms with suppliers and banks to enhance liquidity and reduce operational expenses.

Key Strategies for Indian Banks:

Enhance Cash Flow Management:

- ★ **Accelerate Receivables:** Implement efficient collection processes to speed up cash inflows, reducing the time cash is tied up in accounts receivable.
- ★ **Optimize Payables:** Negotiate favourable payment terms with suppliers and take advantage of early payment discounts where beneficial, while also improving electronic payment processes.
- ★ **Improve Forecasting:** Utilize advanced analytics and treasury management systems for more accurate cash flow forecasting to minimize liquidity shortages and optimize cash deployment.

Leverage Technology and Automation:

- ★ **Implement Treasury Management Systems (TMS):** Deploy TMS and enterprise resource planning (ERP) systems to gain real-time visibility into cash flow, liquidity, and working capital metrics.
- ★ **Automate Workflows:** Use intelligent applications and straight-through processing to automate manual treasury tasks, minimizing human error and reducing operational costs.
- ★ **Adopt Cloud-Based Solutions:** Transition to cloud solutions to benefit from pay-as-you-go models, which lower upfront costs, improve scalability, and enable the integration of advanced digital technologies like data analytics and AI.

Optimize Banking Relationships and Structures:

- ★ **Rationalize Accounts:** Conduct a review of existing bank accounts to identify opportunities for consolidation, reducing the complexity of managing multiple accounts and improving visibility.
- ★ **Negotiate Bank Fees:** Leverage strong liquidity management and improved financial standing to negotiate better terms, lower fees, and preferential rates on loans and other banking services.
- ★ **Streamline Bank Structures:** Explore opportunities to create in-house banking structures or optimize cross-border cash pooling and netting to increase access to cash and improve efficiency.

Focus on Operational Efficiency:

- ★ **Streamline Processes:** Simplify and digitize core banking processes, such as mortgage origination, to reduce costs, accelerate cycle times, and enhance customer satisfaction.
- ★ **Implement Data-Driven Decisions:** Use data analytics to make informed decisions, identify inefficiencies, and implement proactive strategies to improve operational effectiveness.
- ★ **Reduce Manual Touchpoints:** Minimize the need for manual intervention in tasks like payment processing and invoice matching by adopting electronic workflows and platforms.

f) Strong Bank Relationship Management:

To minimize treasury operation costs in Indian banks, focus on strong bank relationship management by consolidating accounts, negotiating better terms, diversifying partners, and leveraging Treasury Management Systems (TMS) for automation and improved data exchange. Key strategies include automating manual tasks, optimizing payment structures, diversifying banking partners to reduce dependency, and regularly reviewing bank performance to secure lower fees and better terms, all contributing to improved cash flow and reduced financial risks.

Strategies for Bank Relationship Management

Consolidate Accounts and Centralize Treasury:

A centralized treasury function manages bank accounts and subsidiaries, reducing transaction costs and fees by minimizing the number of bank relationships.



This approach also improves cash flow visibility and control, allowing for better optimization of funds.

Negotiate Better Terms and Fees:

- ★ Strengthened relationships allow for more effective negotiations with banks to secure lower service charges, transaction fees, and better interest rates on deposits and loans.
- ★ Regularly review bank performance against Key Performance Indicators (KPIs) to justify and secure favourable terms.

Diversify Banking Partners:

Avoid over-reliance on a single bank by diversifying partnerships to ensure better bargaining power and resilience against disruptions.

Enhance Connectivity and Data Exchange:

- ★ Invest in secure and efficient platforms for real-time data exchange between the company and its banking partners.
- ★ This connectivity enables accurate cash flow forecasting, faster decision-making, and streamlined payment processes.

Leveraging Treasury Management Systems (TMS):

- ★ **Automate Manual Processes:** A TMS eliminates manual treasury tasks, significantly reducing errors, saving time, and lowering operational costs.
- ★ **Real-Time Cash Management:** TMS provides real-time visibility into cash positions, enabling proactive decision-making, efficient liquidity management, and optimal cash utilization.
- ★ **Optimize Working Capital:** By providing tools for better cash forecasting, a TMS helps in accelerating receivables, managing payables effectively, and optimizing inventory levels, which frees up cash and reduces borrowing needs.

Benefits of these Strategies:

- ★ **Reduced Financial Costs:** Lower banking fees, reduced borrowing costs due to improved liquidity, and fewer transaction fees.
- ★ **Improved Cash Flow and Efficiency:** Better cash utilization, faster transaction processing, and streamlined payment structures.

- ★ **Mitigated Financial Risks:** Enhanced ability to forecast cash flow, manage liquidity, and hedge against market volatility, leading to greater financial stability.

- ★ **Strategic Decision-Making:** Real-time financial data and comprehensive reporting support better strategic planning and execution.

g) Regulatory Compliance Costs:

Indian banks minimize treasury regulatory compliance costs by implementing advanced RegTech solutions for automation, leveraging Generative AI for routine tasks, adopting the “Three Lines of Defence” framework for stronger governance, centralizing treasury functions to achieve economies of scale, and improving data analytics for better risk management and proactive compliance. These strategies enhance efficiency, ensure accuracy, reduce manual effort, and provide real-time monitoring to adapt to evolving regulatory landscapes, ultimately controlling costs associated with compliance.

Technological Solutions:

- ★ **RegTech Adoption:** RegTech solutions automate manual compliance processes, providing precision in tasks like KYC, AML, risk assessment, and real-time monitoring, which is crucial for preventing penalties and managing the cost of compliance.
- ★ **Generative AI:** Harnessing GenAI can automate high-volume, data-intensive tasks such as document analysis, transaction monitoring, and fraud detection, freeing up resources and reducing the cost of compliance.
- ★ **Data Analytics:** Advanced data analytics models can identify, assess, and predict risks by analysing historical data and market trends. This enables proactive risk management and allows banks to adjust strategies to comply with regulations more cost-effectively.

Process and Framework Enhancements:

- ★ **Three Lines of Defence:** Implementing this model assigns clear responsibilities for risk and compliance across operational management, risk management, and internal audit, creating a more cohesive and efficient compliance structure that reduces redundant efforts and costs.
- ★ **Centralized Treasury Functions:** Consolidating



treasury operations centralizes banking accounts and transactions, leading to economies of scale, better-negotiated rates with financial institutions, and reduced transaction costs.

- ★ **Feedback Loops & Benchmarking:** Establishing continuous feedback loops helps identify inefficiencies and improve compliance processes. Benchmarking these processes against industry best practices allows for the adoption of more efficient and cost-effective strategies.

Strategic Alignment:

- ★ **Embedding Compliance in Strategies:** Compliance should be integrated into operational strategies, including customer experience, grievance redressal, and transaction transparency, fostering a culture of trust and reducing potential risks that lead to costly penalties.
- ★ **Continuous Monitoring & Adaptation:** Treasury professionals must ensure robust software solutions and processes are in place to track regulatory changes, allowing them to adapt quickly to evolving standards and maintain agility without incurring significant unexpected costs.

h) Real-Time Reporting and Analytics:

Indian banks can minimize treasury operational costs by implementing real-time reporting and analytics to gain immediate insights into cash flow, liquidity, and market conditions, enabling faster, more accurate financial management and risk mitigation. This helps reduce fees and borrowing costs through efficient liquidity pooling and investment, automates manual tasks, and improves compliance by providing timely data for informed decision-making and strategic optimization.

How Real-time Reporting and Analytics Minimize Costs

Enhanced Cash Management:

- ★ **Real-time Visibility:** Banks can see their cash position and flow instantly, allowing for proactive adjustments to funding needs.
- ★ **Optimized Liquidity:** Real-time data facilitates better cash pooling and investment, reducing the need for costly external borrowing and increasing investment returns.

- ★ **Reduced Transaction Fees:** Faster and more efficient cash movements through automated systems can cut down on associated bank fees and charges.

Efficient Risk Management:

- ★ **Proactive Risk Mitigation:** Immediate access to market data and transaction information allows treasury teams to identify and address financial risks, such as interest rate or foreign exchange fluctuations, before they become significant problems.
- ★ **Improved Compliance:** Real-time reporting ensures banks can meet complex regulatory requirements by providing timely and accurate data for compliance checks and audits, avoiding penalties and license issues.

Increased Operational Efficiency

- ★ **Process Automation:** Modern treasury systems automate routine tasks like daily cash position calculations, freeing up staff to focus on strategic, value-added activities.
- ★ **Faster Decision-Making:** Instant insights from real-time analytics enable treasury professionals to make quick, informed decisions, leading to greater operational agility and cost savings.

Technology-Driven Savings:

- ★ **Modern Treasury Software:** Utilizing advanced treasury software and leveraging APIs for instant payments and information exchange accelerates treasury processes and leads to significant cost reductions.
- ★ **Strategic Resource Allocation:** Real-time data helps allocate financial resources more effectively, ensuring funds are used optimally and minimizing waste.

i) Operational Efficiency through Strategic Investments in Digital Technology:

Indian banks can minimize treasury operational costs by enhancing operational efficiency through strategic investments in digital technology and automation, optimizing workflows, and implementing strong operational risk management frameworks to control potential losses from errors or fraud. This involves automating manual tasks, identifying and preventing revenue leakage, improving decision-making with data, and fostering continuous improvement in treasury and risk management processes.



Strategies for Minimizing Treasury Operational Costs:

Invest in Digital Technology and Automation:

- ✳ **Automated Workflows:** Implement digital solutions to automate repetitive treasury tasks, such as reconciliations, payments, and reporting, reducing manual effort and the potential for human error.
- ✳ **Data Analytics:** Utilize data analytics to gain insights into treasury operations, identify inefficiencies, and uncover areas where revenue may be lost, allowing for targeted improvements.
- ✳ **Embedded Finance and BaaS:** Explore and adopt embedded finance and Banking as a Service (BaaS) models, which can streamline operations and create new revenue streams with lower operational overhead.

Optimize Operational Processes:

- ✳ **Workflow Optimization:** Continuously review and refine treasury workflows to eliminate bottlenecks and streamline the flow of information and transactions, leading to faster processing and reduced costs.
- ✳ **Resource Allocation:** Efficiently allocate human and technological resources to key treasury functions, ensuring that efforts are focused on value-adding activities rather than administrative burdens.
- ✳ **Cross-selling and Upselling:** Leverage customer data and operational efficiencies to facilitate targeted cross-selling and upselling of banking products, generating additional revenue without significant increases in operational expenditure.

Strengthen Operational Risk Management:

- ✳ **Risk Identification & Mitigation:** Implement a robust operational risk management framework to identify potential operational risks in treasury activities, such as procedural failures or system errors, and develop strategies to mitigate them.
- ✳ **Fraud Control:** Establish and enhance Fraud Control Units (FCUs) to prevent and detect fraudulent activities, which can result in significant financial losses and operational disruptions.
- ✳ **Continuous Monitoring:** Treat operational risk management as an ongoing, iterative process, with continuous monitoring and regular review of risk mitigation measures to ensure their ongoing effectiveness.

By focusing on these key areas, Indian banks can create a more efficient treasury operation, thereby reduce overall operational costs and control expenditures effectively.

To Sum Up:

Indian banks have significant scope to both control costs and evolve their treasury operations into a profit centre through strategic management, technology adoption, and sophisticated risk management.

Scope to Control Costs in Treasury Operations: Cost control in treasury operations largely stems from improved efficiency, reduced operational risks, and optimized financial structures.

- ✳ **Operational Efficiency through Centralization and Automation:** Centralizing treasury activities into a single unit or “in-house bank” helps eliminate redundant processes and improves economies of scale. Implementing a robust Treasury Management System (TMS) automates routine tasks like reconciliations and payment processing, reducing manual effort and associated costs.

- ✳ **Optimized Liquidity Management:** Efficient cash flow forecasting and liquidity management ensure that banks maintain only the necessary liquidity buffer to meet daily obligations. This prevents the cost associated with holding excess idle cash (which earns no interest) or the penalty costs for failing to meet reserve requirements (CRR/SLR).

- ✳ **Streamlined Banking Architecture:** Reducing the number of banking partners and standardizing bank account structures can lead to lower bank fees and streamlined communication and processes.

- ✳ **Effective Risk Mitigation:** Proactive identification and management of financial risks (interest rate, currency, credit, and operational risks) can prevent significant financial losses. Robust internal controls and adherence to regulatory guidelines also help avoid penalties.

Scope to Make Treasury a Profit Centre: Traditionally viewed as a cost center focused on compliance and liquidity, the modern treasury can actively contribute to a bank’s profitability through strategic initiatives.

- ✳ **Strategic Investment of Surplus Funds:** The treasury can invest surplus funds in a range of



financial instruments (government securities, T-bills, commercial papers, etc.) to generate returns and augment non-interest income, within acceptable risk limits.

★ **Active Trading in Financial Markets:** An integrated treasury, with specialized expertise and modern systems, can actively trade in money markets, securities markets, and foreign exchange (forex) markets to profit from market volatility and price arbitrage opportunities.

★ **Value-Added Services and Financial Advisory:** The treasury team can act as a financial advisor to other business units or even corporate clients, offering expertise in risk management, capital structure, and investment strategies, thereby generating fee-based income.

★ **Optimizing Balance Sheet Management:** The

treasury plays a crucial role in Asset-Liability Management (ALM), ensuring an optimal mix of assets and liabilities to enhance the yield on assets and minimize the cost of funds. This strategic balance sheet management directly impacts the bank's net interest margin.

★ **Leveraging Technology for New Products:** Utilizing advanced technologies like AI and data analytics allows the treasury to develop new, innovative financial products and services, opening new avenues for revenue generation and enhancing competitiveness.

References:

- a) Study Material of ICAI – Treasury and International Banking.
- b) Master Circular – Prudential norms for Classification, Valuation and Operation of Investment Portfolio by Banks-Dtd.1st July 2013.



Annexure I Cost-Benefit Modelling Approach

To control controllable costs and optimize profits in treasury operations, Indian banks can implement a cost-benefit modelling approach that integrates strategic cost management techniques with modern treasury technology. This model should focus on efficiency, risk management, and operational improvements to maximize the profitability of treasury activities, which include liquidity management, investments, trading, and foreign exchange (forex) operations.

A model for controlling treasury costs and optimizing profits:

Activity-Based Costing (ABC) for granular cost control:

An ABC model allows banks to precisely allocate costs to specific activities and financial instruments within the treasury department.

- ✳ **Identify cost drivers:** Determine the activities that consume resources, such as processing a forex deal, managing a money market transaction, or handling regulatory reporting.
- ✳ **Assign costs:** Allocate the costs of overheads, technology, and personnel to these activities based on their actual consumption.
- ✳ **Analyse profitability:** Assess the true profitability of each treasury product and activity after accounting for all associated costs. This helps identify and eliminate low-margin or loss-making services that are driving up costs.

Strategic and Digital Cost Reduction: Banks can reduce controllable operational costs by adopting technology and re-evaluating operational processes.

- ✳ **Implement a Treasury Management System (TMS):** A TMS automates repetitive, manual tasks like cash positioning, transaction processing, and reconciliation, leading to significant reductions in operational costs and errors.
- ✳ **Utilize Robotic Process Automation (RPA):** RPA bots can handle rule-based processes like data entry, report generation, and compliance checks, freeing up treasury staff for more strategic tasks.
- ✳ **Embrace Artificial Intelligence (AI) and Machine Learning (ML):** AI and ML can enhance cash flow forecasting and risk assessment. Better forecasting

reduces idle cash and the cost of emergency borrowing, while improved risk modelling can prevent costly losses.

- ✳ **Outsource non-core functions:** Banks can outsource non-strategic back-office functions, such as some IT support or specific processing tasks, to specialized providers to achieve cost savings.

Optimized liquidity and Cash Management: Inefficient cash and liquidity management can be a significant controllable cost.

- ✳ **Implement cash pooling strategies:** Use zero-balance accounts (ZBA) to automatically sweep funds from multiple accounts into a central master account. This minimizes idle cash and the cost of overdrafts.
- ✳ **Enhance cash flow forecasting:** Use AI and ML to analyse historical data and improve the accuracy of forecasting cash inflows and outflows. This reduces reliance on high-cost short-term borrowing and helps optimize the deployment of surplus funds.
- ✳ **Centralize operations:** An integrated treasury approach, covering domestic, money market, and forex operations, allows for a holistic view of liquidity and enables better decision-making.

Cost-effective hedging and risk management: Controllable costs in treasury include operational risks and the expenses of managing market volatility.

- ✳ **Dynamic hedging models:** Banks can use models to determine the most cost-effective hedging strategies against currency and interest rate risks, rather than relying on one-size-fits-all approaches.
- ✳ **Strict operational risk controls:** Implement robust internal controls and segregation of duties to prevent fraud and operational losses. A framework that clearly separates front, middle, and back-office functions can significantly mitigate these risks.
- ✳ **Blockchain for settlements:** Use blockchain-based smart contracts for secure and efficient payment settlements. This can reduce transaction costs by cutting out intermediaries and speeding up settlement times.



Cost-benefit evaluation and performance metrics:

To ensure the model's effectiveness, banks must continuously monitor and evaluate performance.

- ★ ***Performance budgeting:*** Tie the treasury department's budget to specific performance targets. This ensures that every line of activity has a clear purpose and that funds are allocated efficiently to achieve profit targets.

- ★ ***Key Performance Indicators (KPIs):*** Track critical metrics related to cost and profitability, such as cost-to-income ratio, return on investment (ROI) for treasury activities, and operational error rates.

- ★ ***Regular reviews:*** The Asset-Liability Committee (ALCO) or board of directors should regularly review the treasury's operating model to ensure it remains optimal and makes modifications as needed.



Annexure II

Role of Cost and Management Accounts (CMAs) in Treasury Department

Cost and Management Accountants (CMAs) are important in controlling controllable costs of Indian banks' treasury operations. While treasury management primarily deals with high-level financial risk, liquidity, and investment strategies, cost and management accounting provides the critical analysis and reporting frameworks to manage the efficiency and profitability of these operations.

CMAs support Treasury Operations: CMAs assist bank treasuries in controlling costs through various techniques and analyses.

Cost analysis and control:

- ✱ CMAs analyse the cost structure of treasury departments, including operational costs, technology expenses, and transaction costs.
- ✱ By using tools like variance analysis, they compare actual expenses to budgeted amounts to identify and investigate discrepancies.

Performance budgeting:

- ✱ This technique involves setting physical targets for each activity within the treasury, such as the volume of foreign exchange trades or the value of securities handled.
- ✱ CMAs then help earmark the necessary financial outlays for each activity, thereby creating accountability for costs and performance.

Pricing decisions and profit centers:

- ✱ As bank treasuries may function as profit centers, CMAs provide the cost-based data needed to price treasury products and services competitively.

- ✱ They help evaluate the profitability of different treasury activities, like money market operations or foreign exchange trading, to determine where to focus efforts.

Risk management and compliance:

- ✱ Although treasurers are responsible for managing financial risks, CMAs provide crucial support by evaluating the financial implications of those risks.
- ✱ For instance, they assess the financial impact of currency or interest rate fluctuations and evaluate the costs of hedging strategies.
- ✱ CMAs also help ensure that cost reporting and other financial disclosures comply with regulatory and accounting standards.

Technology and process improvement:

- ✱ By analysing the costs of different processes, CMAs can identify opportunities for efficiency improvements and cost savings.
- ✱ This can involve assessing the cost-effectiveness of new technology, such as advanced treasury management systems, and recommending process automation.
- ✱ Real-world evidence: The recognition of this role is evident in recent trends within the Indian banking industry, where public sector banks (PSBs) have begun recruiting CMAs. This demonstrates a strategic imperative to focus on cost reduction and performance evaluation beyond traditional financial reporting.

Annexure III International Best Practices

International banks typically have more mature and sophisticated treasury operations than Indian banks, driven by greater exposure to global markets, more advanced technology, and liberalized regulatory frameworks. These differences manifest across key treasury functions, including risk management, liquidity management, and technology adoption.

Key differences and international best practices:

Aspect	International Best Practices	Indian Banking Operations
Risk Management	Holistic and sophisticated approach: Foreign banks use advanced strategies and a centralized risk management framework to handle market, credit, operational, and interest rate risks. They utilize complex financial derivatives and risk hedging tools to protect their positions.	More conservative and compliance-driven: Indian banks have been more conservative due to a stricter regulatory environment overseen by the Reserve Bank of India (RBI). Their risk management is often compliance-focused and can be less proactive in using sophisticated hedging instruments.
Liquidity Management	Centralized and cross-border optimization: Global banks use cash pooling (both physical and notional) to centralize cash management across subsidiaries in different countries. This provides a single, real-time view of liquidity and optimizes cash deployment globally.	Regulatory restrictions on optimization: Indian laws impose limitations on cross-border liquidity management techniques like notional pooling. Indian banks and corporations focus more on domestic cash concentration and short-term investments.
Technology and Automation	Advanced Treasury Management Systems (TMS): International banks invest heavily in cutting-edge TMS that offer real-time cash visibility, automated payments, and advanced analytics. Many adopt cloud-based solutions to enhance flexibility and integration.	Legacy systems and slower adoption: Indian banks have historically relied on manual and legacy systems, though digital transformation is accelerating. This can lead to operational inefficiencies, data fragmentation, and limited visibility compared to international peers.
Forecasting and Analytics	AI and machine learning for forecasting: Leading international treasury departments use AI and machine learning to create highly accurate, rolling cash flow forecasts. They also leverage advanced analytics for market trend analysis and strategic decision-making.	Rule-based and manual forecasting: While improving, Indian banks' forecasting often relies on more traditional, rule-based models and manual data analysis. This limits the ability to run complex stress tests and scenario analyses effectively.
Governance and Control	Strong, centralized governance: International banks often centralize treasury functions and policy-setting to improve oversight and control over global operations. They have robust, globally consistent compliance frameworks to meet varied regulatory requirements.	Evolving governance: With increased exposure to global markets, Indian banks are enhancing their governance and oversight. However, compliance is a constant challenge due to the complex and evolving regulatory landscape.



Global Operations Management	Centralized management of global entities: Treasury operations in multinational banks are designed to handle complexities arising from managing cash and risk across multiple currencies and jurisdictions. An in-house bank structure can be used to streamline inter-company payments.	Decentralized structures and local focus: Indian banks' treasury management is typically more focused on domestic operations, with a more decentralized structure for international branches. Managing international entities can lead to fragmented cash positions and operational complexities.

- ✱ **The path forward for Indian banks:** To catch up with international best practices, Indian banks are increasingly focusing on:
- ✱ **Adopting modern technology:** Investing in advanced, cloud-based TMS to automate processes and improve data analytics.
- ✱ **Enhancing risk management:** Developing more sophisticated models for market, credit, and operational risk, moving beyond a purely compliance-driven mindset.
- ✱ **Improving liquidity management:** Exploring domestic and eventually cross-border cash optimization strategies as regulations permit.
- ✱ **Building strategic capabilities:** Shifting the treasury function from a cost center to a strategic partner that provides data-driven insights to the rest of the organization.



Chapter 25

Cost of Capital



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3. <i>Composition of Regulatory Capital in Banks.</i>	9. <i>Cost Benefit Analysis (CBA) Model of Indian Banks Tier I Capital.</i>
4. <i>Strategies of Cost Capital.</i>	10. <i>Cost Benefit Analysis (CBA) Model of Indian Banks Tier II Capital.</i>
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Banks must maintain Adequate Capital under Basel III norms. This Chapter explains:

- ✱ ***Strategies to reduce Overall Cost of Capital.***
- ✱ ***Ways to Minimize Weighted Average Cost of Capital (WACC).***
- ✱ ***Strategies used by International Banks.***

Secondary Data indicates that Tier II Capital offers more room for Cost Reduction.

Cost of Capital

The Indian Banks Cost of Capital varies for each bank but is influenced by factors like cost of equity and cost of debt, which are also affected by market conditions and economic uncertainty. For example, Indian Bank had a Weighted Average Cost of Capital (WACC) of 30.96% as of a given time, while ICICI Bank had a WACC of 16.16% in July 2025. The Reserve Bank of India's (RBI) regulations, such as the Basel Committee-aligned risk asset ratio system, also play a crucial role in shaping the cost of capital for Indian banks.

Components of Cost of Capital:

- ✱ **Cost of Equity:** This represents the returns expected by shareholders for investing in the bank's stock.
- ✱ **Cost of Debt:** This is the interest paid on the debt raised by the bank to fund its operations.
- ✱ **Weighted Average Cost of Capital (WACC):** This is the overall cost of all the capital used by the bank, taking into account both equity and debt.

Factors Influencing Cost of Capital:

- ✱ **Market Conditions:** Economic uncertainty, like during the early phase of the COVID-19 pandemic, can cause a general increase in the cost of capital for Indian banks.
- ✱ **RBI Regulations:** The Reserve Bank of India sets minimum capital requirements and risk asset ratios to ensure banks maintain adequate capital, impacting their financing costs.
- ✱ **Bank-Specific Factors:** Individual bank's risk profile, profitability, and capital structure influence its specific cost of capital.

a) Understanding of 'Cost of Capital' in Commercial Organizations:

Corporates aim to reduce their cost of capital to lower financing expenses, thereby increasing profitability and maximizing shareholder wealth. A lower cost of capital allows for greater investment in growth opportunities, enhances the company's valuation by increasing the present value of its future cash flows, and provides a competitive advantage by enabling more favourable pricing or investment strategies. Ultimately, minimizing the cost of capital through an optimal mix of debt and

equity is a core financial objective that supports long-term sustainability and growth.

Rationale to reduce the Cost of Capital:

- ✱ **Increased Profitability:** Lower financing costs directly translate into higher net profits, as the expenses associated with raising and servicing capital are reduced.
- ✱ **Enhanced Company Valuation:** The cost of capital is used as a discount rate to determine the present value of a company's future cash flows. A lower cost of capital results in a higher present value, which in turn increases the company's overall value and its share price.
- ✱ **Greater Investment Capacity:** Companies with a lower cost of capital have more funds available for investment in new projects, expansion, and other growth-driving initiatives.
- ✱ **Competitive Advantage:** Reduced financing costs can allow a company to offer more competitive product pricing or invest in strategic initiatives that competitors with higher capital costs cannot afford.
- ✱ **Optimal Capital Structure:** The primary goal of corporate finance is to find an optimal capital structure (the right mix of debt and equity) that minimizes the weighted average cost of capital (WACC). This structure helps achieve the highest possible company value.
- ✱ **Improved Financial Stability:** A stable cost of capital contributes to better financial planning and helps ensure the company can meet its financial obligations, fostering long-term stability.

Importance of Cost of Capital:

- ✱ Businesses and financial analysts use the cost of capital to determine if funds are being invested effectively. If the return on an investment is greater than the cost of capital, that investment will end up being a net benefit to the company's balance sheets.
- ✱ Conversely, an investment whose returns are equal to or lower than the cost of capital indicates that the money is not being spent wisely.



- ✱ The cost of capital can determine a company's valuation. Since a company with a high cost of capital can expect lower proceeds in the long run, investors are likely to see less value in owning a share of that company's equity.
- ✱ Most businesses strive to grow and expand. There may be many options: expand a factory, buy out a rival, or build a new, bigger factory. Before the company decides on any of these options, it determines the cost of capital for each proposed project. This indicates how long it will take for the project to repay what it costs, and how much it will return in the future. Such projections are always estimates, of course. However, the company must follow a reasonable methodology to choose between its options.
- ✱ Many companies use a combination of debt and equity to finance business expansion. Calculating the cost of capital helps companies determine whether a project will provide positive returns to the company and its investors.
- ✱ The cost of capital is key information used to determine a project's hurdle rate. A company embarking on a major project must know how much money the project will have to generate to offset the cost of undertaking it and then continue to generate profits for the company.
- ✱ The company may consider the capital cost using debt levered cost of capital. Alternatively, they may review the project costs without debt unlevered.
- ✱ Cost of capital, from the perspective of an investor, is an assessment of the return that can be expected from the acquisition of stock shares or any other investment. This is an estimate and might include best- and worst-case scenarios.
- ✱ An investor might look at the volatility (beta) of a company's financial results to determine whether a stock's cost is justified by its potential return.
- ✱ A firm's cost of capital is typically calculated using the weighted average cost of capital formula that considers the cost of both debt and equity capital.
- ✱ Each category of the firm's capital is weighted proportionately to arrive at a blended rate, and the formula considers every type of debt and equity on the company's balance sheet, including common and preferred stock, bonds, and other forms of debt.
- ✱ The cost of capital becomes a factor in deciding which financing track to follow: debt, equity, or a combination of the two.
- ✱ Early-stage companies rarely have sizable assets to pledge as collateral for loans, so equity financing becomes the default mode of funding. Less-established companies with limited operating histories will pay a higher cost for capital than older companies with solid track records.
- ✱ The cost of debt is merely the interest rate paid by the company on its debt. However, since interest expense is tax-deductible, the debt is calculated on an after-tax basis as follows:

Cost of Equity:

The cost of equity is more complicated since the rate of return demanded by equity investors is not as clearly defined as it is by lenders. The cost of equity is approximated by the capital asset pricing model as follows:

$$\text{CAPM (Cost of Equity)} = R_f + \beta (R_m - R_f)$$

Where:

R_f = Risk-free Rate of Return

R_m = Market Rate of Return

Beta is used in the CAPM formula to estimate risk, and the formula would require a public company's stock beta. For private companies, a beta is estimated based on the average beta among a group of similar public companies. Analysts may refine this beta by calculating it on an after-tax basis. The assumption is that a private firm's beta will become the same as the industry average beta.

$$\text{Cost of Debt} = (\text{Interest Expense} / \text{Total debt}) \times (1 - T)$$

Where:

Interest expense = Interest paid on the firm's current debt

T = The Company's Marginal Tax Rate

The cost of debt can also be estimated by adding a credit spread to the risk-free rate and multiplying the result by $(1 - T)$.

$$\text{Cost of Debt} + \text{Cost of Equity} = \text{Overall Cost of Capital}$$



The firm's overall cost of capital is based on the weighted average of these costs.

For example, consider an enterprise with a capital structure consisting of 70% equity and 30% debt; its cost of equity is 10%, and the after-tax cost of debt is 7%.

Therefore, its WACC would be:

$$(0.7 \times 10\%) + (0.3 \times 7\%) = 9.1\% \quad (0.7 \times 10\%) + (0.3 \times 7\%) = 9.1\%$$

This is the cost of capital that would be used to discount future cash flows from potential projects and other opportunities to estimate their net present value (NPV) and ability to generate value.

Companies strive to attain the optimal financing mix based on the cost of capital for various funding sources.

Debt financing is more tax-efficient than equity financing since interest expenses are tax-deductible and dividends on common shares are paid with after-tax dollars. However, too much debt can result in dangerously high leverage levels, forcing the company to pay higher interest rates to offset the higher default risk

b) Composition of Regulatory Capital in Banks:

Banks shall maintain a Minimum Pillar 1 Capital to Risk-weighted Assets Ratio (CRAR) of 9% on an on-going basis (other than capital conservation buffer and countercyclical capital buffer etc.). The Reserve Bank will take into account the relevant risk factors and the internal capital adequacy assessments of each bank to ensure that the capital held by a bank is commensurate with the bank's overall risk profile. This would include, among others, the effectiveness of the bank's risk management systems in identifying, assessing / measuring, monitoring and managing various risks including interest rate risk in the banking book, liquidity risk, concentration risk and residual risk. Accordingly, the Reserve Bank will consider prescribing a higher level of minimum capital ratio for each bank under the Pillar 2 framework on the basis of their respective risk profiles and their risk management systems. Further, in terms of the Pillar 2 requirements, banks are expected to operate at a level well above the minimum requirement. A bank should compute Basel III capital ratios in the following manner:

Common Equity Tier 1 Capital Ratio = (Common Equity Tier 1 Capital) / (Credit Risk RWA* + Market Risk RWA + Operational Risk RWA).

Tier 1 Capital Ratio = (Eligible Tier 1 Capital) / (Credit Risk RWA + Market Risk RWA + Operational Risk RWA).

Total Capital (CRAR#) = (Eligible Total Capital) / (Credit Risk RWA + Market Risk RWA + Operational Risk RWA).

***Risk Weight Assets:**

#Capital to Risk Weighted Assets Ratio.

Elements of Regulatory Capital and the Criteria for their Inclusion in the Definition of Regulatory Capital

Components of Capital:

Total Regulatory Capital will Consist of the sum of the following categories:

(i) Tier 1 Capital (Going-concern Capital) \$:

(a) Common Equity Tier 1

(b) Additional Tier 1

(ii) Tier 2 Capital (Gone-Concern Capital):

\$ (From Regulatory Capital perspective, Going-concern Capital is the Capital which can absorb Losses without triggering Bankruptcy of the Bank. Gone-concern Capital is the Capital which will absorb losses only in a situation of liquidation of the bank)

Limits and Minima:

(i) As a matter of prudence, it has been decided that scheduled commercial banks operating in India shall maintain a minimum total capital (MTC) of 9% of total risk weighted assets (RWAs)

i.e., capital to risk weighted assets (CRAR).

(ii) Common Equity Tier 1 (CET1) capital must be at least 5.5% of risk-weighted assets (RWAs) i.e., for credit risk + market risk + operational risk on an ongoing basis.

(iii) Tier 1 capital must be at least 7% of RWAs on an ongoing basis. Thus, within the minimum

Tier 1 capital, Additional Tier 1 capital can be admitted maximum at 1.5% of RWAs.



(iv) Total Capital (Tier 1 Capital plus Tier 2 Capital) must be at least 9% of RWAs on an ongoing basis. Thus, within the minimum CRAR of 9%, Tier 2 capital can be admitted maximum up to 2%.

(v) If a bank has complied with the minimum Common Equity Tier 1 and Tier 1 capital ratios,

then the excess Additional Tier 1 capital can be admitted

for compliance with the minimum CRAR of 9% of RWAs.

(vi) In addition to the minimum Common Equity Tier 1 capital of 5.5% of RWAs, banks are also required to maintain a Capital Conservation Buffer (CCB) of 2.5% of RWAs in the form of Common Equity Tier 1 Capital. The capital requirements are summarised as follows:

S. No.	Regulatory Capital	As % to RWAs
(i)	Minimum Common Equity Tier 1 Ratio	5.5
(ii)	Capital Conservation Buffer (comprised of Common Equity)	2.5
(iii)	Minimum Common Equity Tier 1 Ratio plus Capital	
Conservation Buffer [(i)+(ii)]	8.0	
(iv)	Additional Tier 1 Capital	1.5
(v)	Minimum Tier 1 Capital Ratio [(i) +(iv)]	7.0
(vi)	Tier 2 Capital	2.0
(vii)	Minimum Total Capital Ratio (MTC) [(v)+(vi)]	9.0
(viii)	Minimum Total Capital Ratio plus Capital Conservation	
Buffer [(vii)+(ii)]		11.5

To control the cost of capital for Indian banks' Tier I and Tier II capital, banks should focus on optimizing their capital structure through a mix of core equity and supplementary instruments like subordinated debt, improve asset quality to reduce the need for provisioning (which affects Tier II capital), manage risks effectively to minimize unexpected losses and the resulting impact on capital, retain profits to strengthen Tier I capital, and strategically issue capital instruments that meet RBI's criteria while offering a balanced risk-return profile to investors.

c) Strategies for Cost Control:

Optimize Capital Structure:

✳ **Tier I Capital:** Focus on retaining a larger portion of earnings to increase disclosed reserves, which is Tier I capital and is of the highest quality. This lowers the

cost of capital as it is internally generated.

✳ **Tier II Capital:** Carefully manage the issuance of subordinated debt and other instruments that constitute Tier II capital. The cost of these instruments will vary, and issuing them strategically can meet capital needs at a lower cost than raising Tier I equity.

Improve Asset Quality and Risk Management:

✳ **Reduce Provisions:** Enhance credit appraisal and risk management to minimize bad loans, thereby reducing the need for provisions for loan losses, which impact Tier II capital.

✳ **Stress Testing:** Conduct regular stress tests as part of the Internal Capital Adequacy Assessment Process (ICAAP) to understand and prepare for extreme scenarios that could erode capital, allowing for better



capital planning and potentially reducing the cost of holding capital buffers.

Strategic Instrument Issuance:

- ✱ **Align with RBI Norms:** Ensure any newly issued Tier I or Tier II capital instruments strictly meet the eligibility criteria set by the Reserve Bank of India (RBI) to avoid penalties and maintain regulatory compliance.
- ✱ **Balance Cost and Quality:** When issuing instruments, balance the cost of capital with their loss absorption capacity. While higher-quality Tier I capital is more expensive, it is essential for long-term stability and can command more investor confidence.

Profit Retention:

- ✱ **Increase Retained Earnings:** The most cost-effective way to boost capital is to retain a significant portion of profits within the bank. This strengthens the Tier I capital base, reducing reliance on more expensive external financing options.

Efficient Operations:

- ✱ **Manage Expenses:** Lower operational expenses can lead to higher net profits, which can then be retained to build up capital.
- ✱ **Efficient Risk-Weighted Asset Management:** Banks should manage their assets efficiently and assign appropriate risk weights as per RBI guidelines. This helps maintain adequate capital in relation to the risk of assets, allowing for better control over capital requirements.

d) How to Minimize 'Weighted Cost of Capital' in Banks?

Indian commercial banks can minimize their weighted cost of capital by optimizing their capital structure, focusing on Tier I capital and managing their risk-weighted assets (RWAs) effectively. Key strategies include attracting lower-cost equity capital, issuing subordinated debt, reducing their Non-Performing Assets (NPAs) to lower risk weights, and improving profitability to retain more earnings as core capital.

Optimize Capital Structure and Management:

- ✱ **Increase Core Capital:** Banks can issue shares to raise equity capital, which is the highest quality capital and supports the lowest cost of capital.
- ✱ **Manage Tier II Capital:** Banks can issue subordinated

debt, which qualifies as Tier II capital, but is more expensive than Tier I capital. Managing the composition of Tier II capital to be more efficient can lower the overall cost.

- ✱ **Optimize Risk-Weighted Assets (RWAs):** The weighted cost of capital is influenced by the riskiness of a bank's assets.
- ✱ **Reduce NPAs:** Actively reducing Non-Performing Assets (NPAs) lowers the capital required to support those assets, thereby decreasing the weighted cost of capital.
- ✱ **Focus on Lower-Risk Assets:** Shifting portfolio composition towards lower-risk assets will lower the RWA denominator, reducing the overall capital requirement and its weighted cost.

Improve Operational Efficiency and Profitability:

- ✱ **Enhance Profitability:** Growing profitability allows banks to retain more earnings as retained earnings, which form a part of Tier I capital. This reduces the need for external funding and its associated costs.
- ✱ **Efficient Financial Management:** Implementing efficient financial and risk management practices can lead to a better credit rating, which can lower the cost of both debt and equity capital.

Regulatory Compliance and Risk Mitigation:

- ✱ **Strategic Capital Planning:** Banks should strategically manage their capital to meet the Reserve Bank of India's (RBI) Capital to Risk-weighted Assets Ratio (CRAR) requirements.
- ✱ **Strategic Use of Revaluation Reserves:** While not as permanent as core capital, revaluation reserves can be used to meet Tier II capital requirements, but banks must account for the discounted value of these reserves for risk assessment.

e) Strategies adopted by International Banks 'Cost of Capital':

International banks use several strategies to minimize their cost of capital while managing their Capital Adequacy Ratio (CAR), including increasing high-quality capital like retained earnings, optimizing risk-weighted assets by reducing risky exposures, and issuing lower-cost capital instruments like certain forms of hybrid debt. They also manage capital buffers (like Capital Conservation Buffer and Countercyclical Capital Buffer) to balance regulatory



requirements with profitability, which can lower the overall cost of capital.

Strategies to minimize the cost of capital:

- ✱ **Increase high-quality capital:** Banks aim to raise capital by retaining a larger portion of their earnings (profit), which is a less expensive way to increase capital than issuing new equity, as explained in this BIS report.
- ✱ **Optimize risk-weighted assets (RWA):** Banks actively manage their portfolios to lower their RWA. This includes:
 - ✱ Shifting to lower-risk assets: Moving away from assets with high-risk weights to those with lower-risk weights can improve the CAR without raising more capital.
 - ✱ Reducing high-risk exposures: Banks may sell or reduce their exposure to assets and activities that carry high risk weights, thereby lowering their overall RWA.
 - ✱ Improving risk management: Effective risk management helps in identifying, measuring, and controlling credit and market risks, which leads to a more accurate assessment of risk-weighted assets.

Issue hybrid or lower-cost capital:

- ✱ Banks may issue hybrid capital instruments that have a lower cost of capital than common equity but are still recognized by regulators as Tier 1 or Tier 2 capital.
- ✱ Issuing subordinated debt with features that satisfy capital requirements but have lower interest costs is another strategy.
- ✱ **Manage capital buffers:** Banks strategically maintain their Capital Conservation Buffer (CCB) and Countercyclical Capital Buffer (CCyB) to avoid penalties and meet regulatory requirements.
 - ✱ Strategic buffer management: By maintaining a capital cushion, banks can avoid the penalties and reputational damage that come with falling below minimum requirements, which can increase their cost of capital.
- ✱ **Benefit from better credit ratings:** A strong capital

position can lead to a better credit rating, which in turn lowers the bank's borrowing costs. Investors and rating agencies monitor capital adequacy ratios, so maintaining a strong CAR can result in a lower overall cost of debt.

f) Model Cost Sheets to Control Cost of Capital:

International banks do not use standardized, public "model cost sheets" to control their cost of capital. Instead, they use complex, proprietary financial models to calculate their Weighted Average Cost of Capital (WACC), which is a key internal metric for managing funding costs and assessing the profitability of projects and business lines. These internal models and practices are heavily influenced by market conditions and international regulatory frameworks, most notably the Basel Accords.

Key components of bank cost of capital models:

An international bank's internal cost sheets or models would include these components and calculations, typically in a more detailed, granular format than a standard corporate WACC model.

Cost of debt (R_d):

For a bank, the cost of debt reflects the expense of its funding sources, including customer deposits and wholesale borrowing. The calculation includes these elements:

- ✱ **Average interest rate:** The blended rate paid on a bank's various liabilities, such as deposits, long-term debt, and subordinated debt.
- ✱ **Tax shield:** Unlike a non-financial firm, a bank's ability to benefit from the tax deductibility of interest can be complex and is factored into the after-tax cost of debt.

Cost of Equity (R_e):

The return required by a bank's shareholders is typically calculated using the Capital Asset Pricing Model (CAPM).

- ✱ **Risk-free rate:** The yield on long-term government bonds, such as U.S. Treasury securities.
- ✱ **Market risk premium:** The difference between the expected return on the market and the risk-free rate.
- ✱ **Beta:** A measure of a bank's specific volatility relative to the overall market. Because international banks operate across different



economies and are subject to varying regulations, calculating beta is a complex and vital component.

Capital structure and WACC: To calculate the overall cost of capital, a bank determines the weighted average of its costs of debt and equity based on its specific capital structure.

- ★ **Optimal capital mix:** The bank's goal is to find the mix of debt and equity that minimizes its WACC. This balance is influenced by factors such as the stability of its cash flows and market signals.
- ★ **Proprietary models:** Banks use sophisticated internal models to determine the proportion of equity (E/V) and debt (D/V) in their capital structure. This is a far more nuanced process than for a typical company, as it must consider regulatory requirements.

Regulatory capital and risk management: A bank's internal models for controlling the cost of capital are profoundly shaped by regulatory capital requirements, especially those set by the Basel Committee on Banking Supervision (BCBS).

- ★ **Risk-Weighted Assets (RWAs):** Banks must hold capital against their RWAs, and the cost of holding this regulatory capital is a major driver of overall costs. Banks use advanced internal models to calculate and optimize their RWAs.
- ★ **Pillar 1 and Pillar 2 requirements:** International frameworks like Basel III mandate minimum capital requirements (Pillar 1) and a supervisory review process (Pillar 2). An integrated internal model will incorporate both to monitor the bank's fiscal health and ensure compliance.
- ★ **Optimizing capital and RWAs:** Beyond compliance, banks run internal programs to improve the quality of data, refine risk models (e.g., for credit and operational risk), and make more efficient use of capital.

Key strategies used by international banks: Instead of relying on a simple cost sheet, international banks employ a range of sophisticated strategies to actively control their cost of capital.

- ★ **Asset-liability management (ALM):** Strategically managing the composition of assets and liabilities is fundamental. This includes optimizing the mix of funding sources, such as customer deposits versus

wholesale debt, to lower the overall cost.

- ★ **Refinancing debt:** In response to changes in interest rates, banks may refinance their debt to lower their WACC. They may also use a variety of financial instruments, like hybrid Tier 1 and Tier 2 bonds, to diversify their capital structure.
- ★ **Capital redeployment:** Excess capital can be used to strengthen buffers, be reinvested in high-growth areas, or be returned to shareholders through dividends or buybacks. Internal models help banks decide the most capital-effective path.
- ★ **Managing risk exposure:** Banks actively manage their exposure to various risks, such as market risk, foreign exchange risk, and country risk. By reducing risk and international diversification, they can achieve a lower cost of capital.

g) Calculation of Tier I and Tier II Cost of Capital:

Calculating the specific cost of Tier I and Tier II capital for Indian commercial banks is complex because it is not a publicly available figure but an internal metric that varies by bank and market conditions. However, it is an extremely important parameter for determining a bank's financial health.

Cost of Capital for Tier I and Tier II:

The cost of a bank's capital depends on the specific instruments used to raise that capital.

Cost of Tier I Capital:

Tier I capital is a bank's core capital, primarily consisting of shareholders' equity and retained earnings. The cost of this capital includes:

- ★ **Cost of Equity:** This is the return that shareholders expect from their investment. It is the most expensive type of capital because it is not tax-deductible, and investors require a higher return to compensate for the greater risk compared to debt holders.
- ★ **Cost of Additional Tier 1 (AT1) bonds:** These are complex, high-risk, perpetual bonds. As seen in the Yes Bank write-down in 2020, investors can lose their entire investment if a bank's financial condition deteriorates. The high risk means the coupon (interest) rate must be substantial to attract investors. For example, some Indian banks issued AT1 bonds with



coupon rates between 7.49% and 7.80% in 2024, although these rates can change based on market conditions.

Cost of Tier II capital:

Tier II Capital is a bank's supplementary capital, including instruments like subordinated debt and certain reserves. The cost of Tier II capital is generally lower than Tier I capital because the risk is lower.

- ★ **Cost of Subordinated Debt:** This is the interest rate a bank pays on its Tier II bonds, also known as subordinated debt. The cost is lower than equity because debt holders have a higher priority claim on the bank's assets than equity holders. The rate depends on the bank's credit rating and prevailing interest rates. For instance, in September 2024, the Bank of India issued Tier II bonds at a 7.49% coupon rate, while the State Bank of India raised Tier II capital at 7.33%. Interest payments on these instruments are tax-deductible, which further lowers the after-tax cost for the bank.

Cost of Capital and Financial Health:

The cost of capital is a critical parameter for determining the financial health of a bank for several reasons.

- ★ **Profitability benchmark:** The cost of capital serves as the minimum rate of return a bank must earn on its investments and loans to generate a profit. If the return on assets is lower than the cost of capital, the bank is destroying shareholder value.
- ★ **Funding strategy and risk:** It influences a bank's capital structure—the mix of debt and equity used for funding. A high cost of capital might signal higher perceived risk, potentially making it more difficult or expensive for the bank to raise additional funds.
- ★ **Investment evaluation:** Banks use the cost of capital as a "hurdle rate" to decide whether to pursue new projects, such as expanding loan portfolios or acquiring assets. The expected return from a project must exceed the cost of capital for it to be considered financially viable.
- ★ **Capital adequacy:** A bank's overall financial strength is measured by its Capital to Risk-weighted Assets Ratio (CRAR). The cost of capital is an input into this metric, as the bank must have enough capital to absorb potential losses. A high cost of capital can strain a bank's ability to maintain a healthy CRAR,

particularly during adverse market conditions.

- ★ **Market perception and valuation:** A lower cost of capital can result in a higher valuation for a bank, as it signals financial stability and efficient management. Conversely, a high or increasing cost of capital can raise concerns among investors and lead to a lower stock valuation.

h) Cost Benefit Analysis (CBA) Model of Indian Banks Tier I Capital:

A definitive cost-benefit analysis (CBA) model for Indian banks' Tier I capital is not publicly available due to proprietary banking data and differing institutional risk profiles. However, a generalized framework can outline the major costs and benefits associated with the two components of Tier I capital, Common Equity Tier 1 (CET1) and Additional Tier 1 (AT1) capital.

Cost-benefit framework for Tier I Capital

Component 1: Common Equity Tier 1 (CET1)

CET1 is the highest-quality component of Tier I capital and is fully available to absorb losses.

CET1 Costs:

- ★ **Cost of equity:** The cost of common shares is generally higher than debt due to the higher risk borne by equity investors. Costs include dividend payments and the dilutive effect on earnings per share (EPS) from issuing new stock.
- ★ **Capital conservation buffer (CCB):** This requires banks to build up additional CET1 capital during normal times, which may involve retained earnings that could have been used for lending or other investments.
- ★ **Reduced dividend payout:** Retaining earnings to meet capital requirements reduces the distributable profits available for shareholders, potentially impacting stock price.
- ★ **Impact on lending:** Higher capital requirements can constrain lending by increasing the cost of capital, which can negatively affect loan demand.

CET1 benefits:

- ★ **High loss-absorption capacity:** CET1 is the most effective capital for absorbing unexpected losses without triggering bank insolvency.

- ★ **Enhanced stability and confidence:** A high CET1 ratio signals financial strength and stability to investors, creditors, and regulators, which can lower a bank's cost of borrowing and boost public confidence.
- ★ **Regulatory compliance:** Maintaining the RBI-mandated CET1 ratio (currently 8.0%, including CCB) ensures compliance, averts penalties, and facilitates business expansion.
- ★ **Future growth:** Robust CET1 levels provide a solid base for future growth and risk-taking during favourable economic conditions.
- ★ **Regulatory and Reputational Risk:** Changes in regulations or a bank's decision to skip interest payments on AT1 bonds or trigger loss absorption can damage its credibility.
- ❖ **Complexity:** The features of AT1 bonds are complex and may require additional resources for issuance, management, and investor communication.

AT1 Benefits:

Component 2: Additional Tier 1 (AT1) Capital:

AT1 capital comprises perpetual debt instruments that can absorb losses under specific conditions.

AT1 Costs:

- ★ **Higher Coupon Rates:** AT1 bonds carry higher interest rates than regular bonds to compensate investors for the risk that interest payments can be skipped or the bond principal can be written down or converted to equity.
- ★ **Risk of Write-off/Conversion:** In a crisis or if capital triggers are breached, the principal on AT1 bonds can be written down or converted to equity, leading to investor losses and higher future borrowing costs for banks.
- ★ **Perpetual Funding Source:** AT1 instruments are a quasi-equity capital source with no maturity date, providing banks with a long-term, stable funding base.
- ❖ **Loss-absorbing Capacity:** AT1 capital has loss-absorbing features that make it a robust form of capital, superior to Tier 2 instruments.
- ★ **Flexibility and Balance:** AT1 provides banks with a way to shore up capital without solely relying on issuing common equity, balancing regulatory requirements with shareholder interests.
- ★ **Increased Total Tier I Capital:** Raising AT1 capital allows banks to meet the overall Tier I capital ratio requirements when they may not be able to issue sufficient common equity.

Generalized Cost Sheet for Tier I Capital Components:

The following table provides a simplified cost sheet for bank analysts and researchers. It shows the qualitative nature of costs; actual quantitative costs would be specific to each bank's performance and market conditions.

Cost Element	Common Equity Tier 1 (CET1)	Additional Tier 1 (AT1) Capital
Capital Formation Costs	High	Low to moderate
- Cost of issuance: High (e.g., underwriting, legal fees)	- Cost of issuance: High (e.g., underwriting, legal fees)	
- Market perception: Dependent on existing stock price	- Market perception: Dependent on demand and market conditions	
Ongoing carrying costs	Variable	High and Ongoing
- Dividends: Dependent on profitability and dividend policy	- Coupon payments: Fixed or floating rates, generally high	
- Cost of retained earnings: Opportunity cost of reinvesting profits in the business	- Call option cost: Price risk associated with issuing perpetual debt	



Cost Element	Common Equity Tier 1 (CET1)	Additional Tier 1 (AT1) Capital
Financial Distress Costs	Low	High
- Loss absorption: Losses are absorbed first by CET1, which may lead to write-downs	- Loss absorption: Trigger event can cause full or partial write-down of principal or conversion to equity	
Other Operational Costs	Low	Moderate
- Regulatory compliance: Ongoing monitoring of capital levels	- Regulatory compliance: Ongoing monitoring of capital and specific covenants	
- Investor relations: Managing shareholder expectations and communications	- Complex legal terms: Managing complex terms and conditions, risk disclosures	

i) Cost Benefit Analysis (CBA) Model of Indian Banks Tier II Capital:

A precise cost-benefit analysis (CBA) model and cost sheet for Tier 2 capital is specific to each bank and its financial strategy. It's not a generic template, but rather a framework for evaluating different capital-raising options based on the bank's individual risk profile, funding needs, and market conditions.

Below is a model framework for a cost-benefit analysis of Tier 2 capital instruments for Indian banks, outlining the costs and benefits of the primary components.

Overview of Tier 2 capital components in India:

As per Reserve Bank of India (RBI) guidelines and Basel III norms, the main elements of Tier 2 capital for Indian banks are:

- ✳ **Subordinated Debt:** These are unsecured bonds with a fixed maturity (minimum of five years) that rank below senior debt but above equity in the event of liquidation.

- ✳ **Hybrid Debt Instruments:** These combine characteristics of both debt and equity. Examples include perpetual debt instruments and preferred shares.

- ✳ **Revaluation Reserves:** Reserves created from the revaluation of a bank's assets, like real estate. For calculating Tier 2 capital, these reserves are discounted by 55% as per RBI norms.

- ❖ **General Provisions and Loss Reserves:** Unspecified reserves that are not held against any identified loan losses. These can be included up to a maximum of 1.25% of a bank's total risk-weighted assets (RWA).

Cost-benefit analysis model framework:

A CBA for Tier 2 capital involves comparing the costs associated with issuing and maintaining an instrument against the benefits of meeting regulatory requirements and funding growth.

1. Cost sheet of Tier 2 components:

Component	Cost Type	Description
Subordinated Debt (Tier 2 bonds)	Coupon Rate / Interest Expense	This is the periodic interest payment a bank makes to bondholders. It's the most significant and direct cost, and the rate depends on the bank's credit rating, market interest rates, and the bond's tenure.
	Issuance Costs	Includes underwriting fees, legal and advisory fees, marketing and rating agency fees. These are one-time costs incurred during the issuance process.

Component	Cost Type	Description
	Write-down Risk Premium	As Tier 2 bonds have a “Point of Non-Viability” (PONV) clause under Basel III, the coupon rate may include a premium to compensate investors for the risk of a write-down or conversion to equity if the bank fails.
Hybrid Instruments	Coupon Payments / Dividends	The cost of servicing these instruments, which may be perpetual or have a high maturity. These payments can sometimes be deferred without triggering a default.
	Issuance Costs	Similar to subordinated debt, this includes all fees associated with bringing the hybrid instrument to market.
Revaluation Reserves	Opportunity Cost	The potential for higher gains if the bank sells the asset and deploys the cash elsewhere.
	Valuation Costs	The cost of obtaining an independent and accurate valuation of the underlying asset (e.g., real estate).
General Provisions	Opportunity Cost	Funds held as general provisions cannot be used for more profitable lending, representing a potential opportunity cost.

2. Benefits of Tier 2 capital components:

Component	Benefit Type	Description
Subordinated Debt and Hybrids	Capital Adequacy Compliance	Crucial for meeting the RBI’s Capital to Risk-Weighted Assets Ratio (CRAR) and ensuring regulatory compliance under Basel III norms.
	Lower Cost than Equity	Generally cheaper than raising core equity capital, as interest payments are often tax-deductible. It also avoids diluting shareholder ownership.
	Diversified Funding Base	Provides a long-term source of stable funding, reducing reliance on short-term deposits.
Revaluation Reserves	Capital Leverage	Unlocks the value of existing assets to bolster capital ratios without having to raise external funds.
	No Direct Cash Outlay	This is a non-cash benefit, meaning the bank does not have to pay interest or dividends.
General Provisions	Non-Dilutive Capital	Like revaluation reserves, this provides a buffer of capital without diluting shareholder equity.
	Loss-absorbing Capacity	Provides a buffer to meet unexpected losses, protecting the bank and senior creditors.



Example cost-benefit scenario:

To conduct a CBA, a bank would compare the “net cost” of different Tier 2 instruments. For instance, consider a bank that needs to raise capital. It could consider issuing Tier 2 bonds versus utilizing revaluation reserves.

Metric	Tier 2 Bonds	Revaluation Reserves
Costs	Issuance Fees + Ongoing Coupon Payments e.g., Issuance fees (2%) + annual coupon (8.5%)	Valuation Fees + Opportunity Cost e.g., Valuation fees (0.1%) + opportunity cost (foregone rental income or alternate investment returns).
Benefits	Immediate Capital Injection + Diversified Funding Allows for immediate credit expansion and meets CRAR.	Non-cash Capital Boost No cash outflow; uses existing assets to boost capital ratios.
Risks	Market Risk Rising interest rates could increase future refinancing costs.	Valuation Risk Potential for regulatory scrutiny or future asset value decline.
Net Benefit/Cost	Positive if The returns from the new lending outweigh the cost of the bond.	Positive if The boost to capital outweighs the opportunity cost of not selling the asset.

Limitations and other considerations:

Regulatory Limits: The RBI places limits on the amount of Tier 2 capital that can be included in the total capital, such as Tier 2 capital not exceeding 100% of Tier 1 capital.

Bank-Specific Factors: The analysis is heavily influenced by the bank’s individual credit rating, existing capital structure, and future growth strategy.

Market Conditions: The cost of market-based instruments like subordinated debt is dictated by prevailing interest rates and investor demand, which constantly changes.

Loss-Absorbing Capacity: The quality of Tier 2 capital is lower than Tier 1 because it has a lower loss-absorbing capacity, especially with the risk of write-downs on instruments like bonds.

To Sum Up:

Minimizing the cost of Tier I and Tier II capital is crucial for Indian banks to improve profitability and long-term stability. A high cost of capital can strain a bank’s financial performance. To address this, banks can explore several alternatives. Alternatives for minimizing the cost of Tier I and Tier II capital:

Improve Retained Earnings: Tier I capital primarily consists of common stock, disclosed free reserves, and retained earnings. A primary method for minimizing the cost of Tier I capital is to increase profits and retain a

larger portion of them. This allows a bank to grow its core capital internally rather than issuing new equity, which is expensive and dilutes shareholder value.

Manage Asset-Liability and Risk: A bank’s capital requirement is tied to its risk-weighted assets (RWAs). By managing risk more effectively, a bank can lower its RWAs and, consequently, its capital requirements, reducing the overall cost. Strategies include:

- ✳ **Focus on high-quality assets:** Prioritizing investments with lower risk weights.
- ✳ **Shift loan mix:** Shifting from long-term corporate loans to a higher proportion of short-term and retail loans, which typically carry lower risk weights.
- ✳ **Strengthen risk models:** Using advanced risk models to more accurately calculate risk exposure, which can result in lower capital charges.

Leverage Efficient Hybrid Instruments: For Tier I and Tier II capital, banks can utilize hybrid debt instruments that offer a less expensive alternative to traditional equity while still satisfying regulatory requirements.

Additional Tier I (AT1) bonds: These instruments can be a cost-effective way to raise Tier I capital without the dilution that comes from issuing new shares. However, they are subordinate and carry a write-down risk, so their pricing must be competitive.



✱ **Tier II bonds:** Issuing Tier II subordinated bonds is often cheaper than raising equity. These fixed-interest bonds attract investors and help banks diversify their funding sources.

Enhance Operational Efficiency: Increasing profitability through operational improvements can directly increase retained earnings and Tier I capital. Efficiency gains can come from:

✱ **Digitalization and automation:** Adopting new technology and intelligent automation can significantly lower a bank's cost-to-income ratio by reducing operational expenses.

✱ **Cloud migration:** Moving non-core functions to the cloud can reduce IT and maintenance costs.

❖ **Product rationalization:** Eliminating or consolidating unprofitable and redundant products can lower maintenance costs.

❖ **Workforce productivity:** Optimizing roles and processes can increase productivity and lower staffing costs.

Optimise Capital Structure: Banks can actively manage their capital mix to find the optimal balance between lower-cost Tier II capital and higher-quality Tier I capital, all while staying within regulatory limits.

❖ **Refinancing debt:** With favourable interest rate conditions, a bank can refinance its existing higher-cost debt to reduce its weighted average cost of capital.

❖ **Strategic communication:** Clearly communicating a capital plan to stakeholders builds market confidence and can favourably influence the cost of both equity and debt capital.

Address Deposit and Funding Costs: The cost of capital is also influenced by the cost of deposits. While deposits are technically a liability, a higher share of low-cost deposits can reduce the overall funding cost, indirectly easing the pressure on capital-raising activities. Banks can:

❖ **Defend and grow low-cost deposits:** Actively managing and pricing corporate and retail deposits to prevent them from moving to higher-yielding alternatives.

❖ **Provide yield-balanced products:** Offering a range of products to attract and retain deposit customers.

References:

a) BIS - <https://www.bis.org/bcbs/history.htm>

b) International Monetary Fund-July 12, 2024.



Chapter 26

‘Cost Control’ through Mergers



Contents:

1. <i>Introduction.</i> 2. <i>A to Z Advantages of Mergers.</i> 3. <i>Benefits in 'Administrative Costs'.</i> 4. <i>Manpower Cost Benefits.</i> 5. <i>Overhead Cost Benefits.</i> 6. <i>Financial Benefits.</i> 7. <i>Information Technology Benefits.</i> 8. <i>Risk Mitigation Benefits.</i>	9. <i>Benefits to Stakeholders.</i> 10. <i>Other Benefits.</i> 11. <i>To Sum Up.</i> <i>Role of CMAs in Merging Process of Banks (Before and After Merger)-Annexure I.</i> <i>MIS for Cost Benefit Analysis of Bank Mergers.</i> <i>References.</i>

Mergers help Banks reduce Costs through Economies of Scale, Shared Resources, and Integrated Systems. This Chapter includes:

- ✱ *A to Z Advantages of Mergers.*
- ✱ *IT-related Benefits.*
- ✱ *Role of CMAs Before and After Merger.*

Insights were derived from recent PSB Mergers.



‘Cost Control’ through Mergers

A merger involves the total absorption of a target firm by acquiring. As a result, one firm ceases to exist and only the new firm (acquiring) remains.

General, the following are the advantages of the mergers:

- ✱ **Synergy:** The synergy created by the merger of two companies is powerful enough to enhance business performance, financial gains, and overall shareholders value in long term.
- ✱ **Cost Efficiency:** The merger results in improving the purchasing power of the company which helps in negotiating the bulk orders and leads to cost efficiency. The reduction in staff reduces the salary costs and increases the margins of the company. The increase in production volume causes the per unit production cost resulting in benefits from economies of scale.
- ✱ **Competitive Edge:** The combined talent and resources of the new company help it gain and maintain a competitive edge.
- ✱ **New Markets:** The market reach is improved by the merger due to the diversification or the combination of two businesses. This results in better sales opportunities.

The above are a few advantages of Mergers.

Due to “Monopolistic Competition” prevailing in the market, every Business Organization is facing the following to vital challenges:

- ✱ Increase in Competition and also Costs (Business Overheads)
- ✱ Decrease in Product Price and thereby decrease in Spreads (Profits/Surplus)

In this scenario Mergers and Acquisitions gives some comfortable position to the Business Organizations to overcome the above problems.

A to Z Advantages of Mergers

‘Rationalization’ AND ‘Economies of Scale’ are the TWO biggest Advantages in the proposed merger, thereby huge Cost Reduction, Increase in Productivity Levels and it strengthens the Balance Sheet of acquiring Bank.

1. Benefits in ‘Administrative Costs’:

a) Rationalization of Branches: One of the principal benefits associated with the amalgamation of banking institutions is the “Rationalization of Branches.” Periodically, the Government of India and the Reserve Bank of India have mandated that banks establish branches in diverse locations to facilitate access to banking services for the populace. The fundamental aim is to ensure that all societal segments in India can avail themselves of banking services rather than being restricted to a select few individuals. However, the prevailing scenario is markedly different, as certain geographical regions are inundated with bank branches, whereas others exhibit a sparse distribution of these facilities. For instance, in metropolitan and urban locales, bank branches are frequently situated in close proximity to one another, with instances of four to five branches occupying the same building. The merger of banks affords the opportunity for rationalizing branches, thereby resulting in significant cost reductions for the acquiring institution.

For example, along Bank Street in Hyderabad, a bank branch can be found approximately every 10 to 15 feet. Additionally, within specific commercial complexes in Hyderabad, it is common to encounter four to five branches of the same banking group. With the proliferation of alternative delivery channels such as ATMs, PoS machines (Micro ATMs), business correspondents, passbook printing machines, internet banking, and cash deposit machines, customers are progressively transitioning from traditional branch banking to these alternative modalities, leading to a gradual decline in customer footfall, particularly in metropolitan and Tier-I cities. Consequently, the merger presents substantial opportunities for the acquiring bank to rationalize branches in these locations, thereby not only diminishing significant overhead expenses (both fixed and variable) and manpower costs but also considerably enhancing the productivity levels of the bank and enabling optimal utilization of existing branches or branch licenses.

b) Rationalization of Regional / Zonal Offices: To facilitate effective administrative oversight of branches, banks have established numerous regional and zonal offices throughout the country. In nearly all locations, the administrative offices (regional or zonal offices) of banks are situated. The establishment of regional or zonal offices in strategically significant



cities incurs substantial administrative costs for the banks. Following the merger, there will be a significant reduction in the number of regional and zonal offices, allowing for the optimal utilization of the remaining offices, thereby generating the following savings for the acquiring institution:

- ✱ High rental expenses (Real Estate Costs).
- ✱ Electricity expenses.
- ✱ Manpower expenses.
- ✱ Technology expenses.
- ✱ Overhead expenses, etc.

The process of “Rationalization of Branches” resulting from the merger will also lead to a pronounced decrease in the number of regional or zonal offices, thereby facilitating the effective use of the existing regional or zonal offices of the acquiring bank. This not only contributes to a reduction in the administrative costs of the bank but also minimizes wastage, duplication, and underutilization within the acquiring institution.

c) Rationalization of Business Networks / Circle Offices: To augment the operational volume of Business and to facilitate enhanced oversight and monitoring of the Regional/Zonal Offices and Branches in a proficient and effective manner, the Banks have instituted ‘business networks’ administrative offices. These business networks of the Bank engender significant administrative expenses, such as:

- ✱ The necessity for the appointment of Higher-Grade Officials to oversee these Business Networks.
- ✱ Logistical expenditures incurred by the Officials.
- ✱ The requirement for Additional Administrative Personnel to assist the officials in these Network Heads.
- ✱ Given their locations in Metropolitan and Tier-I Cities, they incur substantial Office Premises Rental Expenses along with additional ancillary costs.

With the advent of Information Technology, Video Conferencing Systems, Email communication, SMS services, WhatsApp and expedited Transportation Systems, the operational structure of these Business Networks can be centralized, rather than maintained in a distributed or decentralized framework. Furthermore, due to the rationalization of Branches and Regional/Zonal Office Structures as a consequence of Mergers,

the necessity for these Additional Business Networks/ Circle Offices is rendered obsolete, leading to a significant reduction in operational expenditures. Consequently, the acquiring bank stands to realize considerable savings in Fixed Costs, Overheads, and Manpower Expenses. In instances where surplus properties owned by the Bank remain unoccupied due to mergers, these assets may be leased or liquidated to generate supplementary funds or revenues for the acquiring Bank’s financial statements.

d) Controlling the Real Estate Costs of CPCs: Acquiring office premises in Prime Localities incurs considerable expenses, particularly within Metropolitan and Tier-I Cities. This not only escalates the Real Estate Costs associated with the acquisition of premises (Fixed Costs) but also engenders ancillary expenditures related to infrastructure provisions, such as logistics, Information Technology, and the employment of personnel in High Designation roles. These financial burdens can be mitigated by the acquiring bank, particularly through the amalgamation of the following Central Processing Centres (CPCs).

- ✱ Retail Assets CPCs.
- ✱ SME CPCs.
- ✱ Liability Products CPCs.
- ✱ Asset Recovery CPCs.
- ✱ Clearing CPCs.
- ✱ Pension Payment CPCs.
- ✱ CMP CPCs, among others.

The aforementioned CPCs can be consolidated with the existing CPCs of the Bank, and should the current CPCs be insufficient to accommodate business volumes, they may be expanded through the allocation of additional rental expenses to enhance the productive utilization of existing CPCs, thereby obviating the need for multiple CPCs operating concurrently within the same City. The closure of redundant CPCs can substantially minimize both Fixed and Variable Costs, thereby enhancing customer service offerings of the acquiring bank. Furthermore, the potential for improved pricing of the bank’s products is feasible due to the reduction in Administrative Costs within the Marginal Interest Rates Framework of the acquiring Bank.

2. Manpower Cost Benefits:

e) Manpower Adjustments: The endeavor of manpower planning within the Banking Sector presents certain complexities due to the following factors:



- ✱ The Staff Transfers System.
- ✱ Promotions and Career Development opportunities.
- ✱ Sudden fluctuations in Business Levels of the Branches influenced by prevailing economic conditions in the market.
- ✱ The number of new Bank Branches established or closed by other financial institutions within the operational market/area.
- ✱ The proliferation of Alternative Delivery Channels.
- ✱ The emergence of Non-Banking Financial Companies (NBFCs), Microfinance Institutions (MFIs), Finance Companies, etc.
- ✱ The financing facilitated by Credit Card Agencies through Equated Monthly Instalments (EMIs) on consumer goods purchases.
- ✱ The attainment of saturation points within established Branches.
- ✱ Due to the cessation of industrial operations attributable to economic challenges and viability concerns.
- ✱ Owing to a decline in operational activities within captive branches (such as Universities, Public Sector Undertakings, etc.).
- ✱ The attrition rate among personnel.
- ✱ Abrupt fluctuations (spikes) in transaction volumes and business activity resulting from diverse factors and governmental policies.

In light of the aforementioned reasons, certain branches are experiencing an excess of personnel while others are functioning with minimal staffing. The immediate transfer, relocation, or adjustment of staff presents a challenge, consequently disrupting customer service and the operational levels of the bank. The prompt recruitment to counterbalance promotions and attrition is hindered by the bank's personnel policies, with the time frame from application sourcing to onboarding extending a minimum of six months (i.e., the total recruitment processing duration), and the majority of banks typically conduct recruitment for clerical or officer positions on an annual basis. Following the rationalization of branches due to mergers, the acquiring institution will inherit surplus staff, which can be reallocated to branches in need without necessitating additional recruitment. Should there be an excess of personnel, banks may consider offering voluntary retirement to employees. This approach not only serves to mitigate manpower expenses but also ensures that branches in need are promptly staffed to operate efficiently, thereby preventing interruptions

in customer service and elevating business levels, ultimately resulting in enhanced productivity for the acquiring bank.

- f) **Recruitment Costs:** This represents a critical aspect in which the acquiring bank stands to gain from mergers, as it can effectively curtail waste associated with recruitment costs. In this context, recruitment costs encompass not only the direct expenses of recruitment but also the elevated attrition rates of new hires during the initial stages of employment, which includes:

- ✱ Training expenses, in addition to the costs associated with the initial learning curve.
- ✱ Diminished business levels attributable to employee resignations.
- ✱ Disruptions in customer service stemming from insufficient staff at certain branches, leading to a loss of business opportunities.
- ✱ Time delays associated with subsequent recruitment efforts, resulting in the underutilization of fixed costs within the bank branches, among other factors.

Due to variations in employee benefits, promotional opportunities, and branch locations, individuals who join Public Sector Banks often reapply to SBI after a certain period, leading to higher attrition rates within the Public Sector Banks to SBI itself. Following a merger, the acquiring bank will implement a singular examination process, thereby mitigating the aforementioned waste and challenges. Mergers facilitate significant savings in recruitment costs for the acquiring institution.

Uniformity in Compensation & Benefits, Incentives, Career Advancement Opportunities, Employment Assignments, etc. for Personnel:

The underlying factors contributing to employee turnover or transitions from one financial institution to another can be attributed to the following stimuli:

- ✱ Due to discrepancies in Compensation & Benefits.
- ✱ Due to variations in Incentives.
- ✱ Due to disparities in Career Advancement opportunities or professional development.
- ✱ Due to geographical assignment Organizational Culture, etc.

Due to merger of different banks, acquiring will follow

the Uniformity of the reasons mentioned above. Thereby the following benefits will be gained by the acquiring bank i.e.,

In light of the amalgamation of various financial institutions, the acquiring entity will adopt Uniformity concerning the aforementioned factors. Consequently, the acquiring bank will realize the following advantages:

- ✱ Reduction in employee turnover rates.
- ✱ Enhancement in Overall Productivity.
- ✱ Augmentation of Employee engagement within the workplace.
- ✱ Facilitation of the implementation of Standards or Benchmarks.
- ✱ Execution of Performance-based compensation structures becomes feasible. possible.

3. Overhead Cost Benefits:

g) Minimization of Overheads Costs: In addition to the Interest Expenses on Deposits and borrowed capital, the subsequent significant expenditure for banks pertains to Human Resource Expenses and Overhead Costs. The latter two categories of expenses are on an upward trajectory within the Banking Sector. The diverse overhead expenses incurred by banks encompass:

- ✓ Stationery and Printing.
- ✓ Costs associated with Premises Acquisition.
- ✓ Traveling Expenditures.
- ✓ Procurement of Vehicles for Business Functions.
- ✓ Technological Expenses, particularly Hardware Expenses and associated depreciation.
- ✓ Utility Expenses such as Electricity.
- ✓ Annual Maintenance Costs (AMCs).
- ✓ Promotional Expenses across both print and digital media.
- ✓ Depreciation on Tangible Assets.
- ✓ Generator Rental (For Stand by Power Systems) Expenses, etc.

The modernization of banking branches contributes to elevated ambience costs. Additionally, the redesign, alteration of layouts, or relocation of branches occurs at regular intervals to enhance Customer Convenience and Comfort; thus, overhead costs are on the rise. Approximately 70% to 75% of branches operate within climate-controlled environments (including ATM facilities, Kiosks, etc.), Central Processing Centers (Retail Loans, SME Loans), and Liability

Central Processing Centers, consequently leading to an increasing trend in bank overhead costs. Upon the occurrence of a merger, these expenses will substantially decrease within the acquiring bank due to the rationalization of branches and the realization of economies of scale. In numerous branches, incremental overhead costs do not align with or exceed the incremental benefits derived from operations. If the incremental costs are lower than the incremental benefits, this scenario results in profitability for the bank through its operational activities. It is anticipated that a merger will yield substantial savings for the acquiring bank in this context.

h) Control on wastage of Advertisement Expenses:

A considerable amount of promotional expenses is incurred by banks to enhance the visibility of their Home Loans, Car Loans, Personal Loans, etc. Redundancies and inefficiencies arise within the PSBs entities of the bank as they market identical products through various banking institutions. Identical products with congruent features are promoted by different entities, constituting a superfluous endeavor and yielding minimal benefits for the Group entity. Following a merger, the consolidating bank will incur a unified promotional expenditure, thereby curtail wastages and significantly reduce overhead expenses (advertising costs). Almost all Group Banks engage in partnerships with Automotive Dealers to procure business, compensating them with elevated commissions for sourcing minimal volumes of business in a fragmented manner. Some of the group banks are using Direct Sale Agents for sourcing of Business for Car Loans, Housing Loans etc. Due to merger and with higher volumes of the business of single entity, the cost of sourcing the business through these entities will come down drastically by modifying the “Service Level Agreements-SLAs” with Tie-up Agencies, which is beneficial to the acquiring Bank in Long run and also control these entities.

i) Large Scale Economies: Merger leads to increase in Volumes of business and also Banking Operations. Once volumes are increase, the acquiring bank will enjoy the benefits of “Large Scale Economies” in respect of the following costs:

- ✓ Decrease in Overheads.
- ✓ Decrease in Cash Replenishment Costs of ATMs.
- ✓ Decrease in maintenance costs of Alternate delivery channels including Call Centres.
- ✓ Decrease in Advertisement, Selling and



Distribution Expenses.

- ✓ Decrease in Information Technology Costs to a large extent.
- ✓ Decrease in commission payable to business sourcing agencies.
- ✓ Decrease in Rental Costs due merging of Big Branches and CPCs.
- ✓ Decrease in Stationery, Printing Expenses.

Benefits derived both in Fixed and Variable Costs to the acquiring Bank. At the same time, the acquiring bank will incur additional costs for controlling of Branches or CPCs. But if we see the incremental cost with incremental benefit, the incremental benefit is more than the cost. Hence, the merger reduces the overall overhead costs of the acquiring bank.

4. Financial Benefits:

j) **NPA Management:** The side effects of increase in Non-performing Assets of the Banks are as follows:

- ✓ It increases the Credit Risk.
- ✓ It attracts more provisions.
- ✓ It requires more Capital to fulfil the Capital Adequacy Ratio of the Bank.
- ✓ It reduces the Bottom-line of the Bank.
- ✓ It reduces the Credit Rating of the Bank.
- ✓ It increases the Asset Liabilities Mismatches.
- ✓ It increases Borrowings by the Treasury Department at High Cost to fulfill the ALM mismatches.
- ✓ It decreases the Liquidity position of the Bank.
- ✓ Due to high NPAs, the depositors will shift to other banks for safety of their savings.
- ✓ It increases the attrition rate of the staff and sometime underutilization of staff etc.

To overcome the above problems, banks should minimize NPAs below the bench mark both in Gross and Net NPAs of the Bank.

NPA Management is BIG function in the Banking Operations. Every Bank has established NPA Management Departments, Sections at both Head office level, Zonal Office and Regional Office level. In addition to the number of employees / officials are engaged in this function like:

- ✓ DRT Cases and follow-up
- ✓ SARFASI Cases follow-up
- ✓ Issue of Notes under SARFASI
- ✓ Court Cases and follow-up

- ✓ Review of NPA Loans
- ✓ Attachment of Primary and Collaterals
- ✓ Debt Recovery Agents to recover Retail Loans
- ✓ Soft Recovery Process by issue of notices, SMSs and Tele-calling etc.
- ✓ Re-schedule / Re-phase of Loans
- ✓ Corporate Debt Re-structuring
- ✓ Call Centres to follow-up the NPAs
- ✓ Empanel Advocate for the Court, DRT Cases
- ✓ Sale of Bad Loans to Asset Reconstruction Companies (ARCs) or Securitization.
- ✓ Out sourcing agencies to attach and sale the properties etc.

Once, the merger happens, the acquiring bank will get huge savings by streamlining or rationalization of the above-mentioned activities. Better NPA management is possible in the merger process with strict control systems are to be established.

k) **Better Asset Liabilities Management:** ALM is one of the important functions of the Bank, spreads / surplus, fine liquidity management of the bank is based on the better ALM practices. Banks should maintain better ALM practices to avoid mismatches and also as per the regulatory guidelines. Due to ALM mismatches, liquidity as well as profitability issues will arise thereby short-term borrowings at higher rate of interest affects the profitability of the Bank. Penalties of Regulator will also increase in case of mismatches in Assets and Liabilities. Balance Sheets of group entities in a distributed manner is difficult to control the ALM mismatches. In case of mergers, acquiring bank will be benefited on account of better ALM practices and maintenance of fine Liquidity Management practices is possible, thereby it increases in profitability of acquiring Bank. Better strategies can be implemented based on the volume and turnover of funds in acquiring Bank. This facilitates to monitor or control by the Reserve Bank of India in a better manner due to single entity on account of merger. Better ALM System is a vital area / function of the Banking System.

l) **Better Treasury Management / Systems:** “One third” of the total sources of funds (Either Demand or Time Deposits and Own Funds) of the banks are managed by the Treasury Departments of the Banks. Due to availability of higher funds for Investments, number of opportunities and fine portfolio investment is possible in Treasury Operations of the acquiring bank, the acquiring bank can search for better

investment opportunities in both in domestic money and foreign markets to earn more income through Treasury Operations (Trading Book). Framing good investment policy guidelines is possible due higher volume of funds in Treasury Operations. Better or optimum utilization existing staff skills of Treasury Operations acquiring bank, thereby it not only mitigates the Market Risks of the acquiring bank but also to maintain Fine Liquid funds and it reduces the Borrowings from the Money Markets and maintenance of CRR and SLR guidelines of RBI etc. End result of the acquiring bank is, it increases Treasury Profits.

m) Implementation of Basel III accord: Basel III accord implemented by Indian from 31st March, 2019. This is a big challenge to Indian Banks due to the following reasons:

- ✓ It requires huge amount of Addition Capital – both Tier-I and II. Capital Conversation Buffer, Counter Cycle Capital Buffer etc.
- ✓ Credit, Market and Operational Risk are not within control in Indian Banks till date. Year-on-Year these Risks are on increasing trend particularly in “Credit Risk” and “Operational Risk”.
- ✓ Banks are implemented in full-fledged manner of Base III accord.
- ✓ PSBs are depending on Government of India for additional Capital requirements for CAR / CRAR through annual financial budgets of the Government.

Due to following different practices / policies, Systems and Procedures, Strategies adopting by different banks for both Loan book and Trading Book, the degree of these three important Risks i.e., Credit, Market and Operational Risks are differed from bank to bank. For operational risk, most of the banks are following the “Basic Indicator Approach” till date. Lot of improvements and research or business models are required in this area i.e., developing Risk Mitigation Models, Risk Management Practices etc. CAR or CRAR is comfortable in some Banks and in other this position is bad. Once merger happens, this position will improve further due to the following reasons:

- ✓ Uniformity in implementation of Risk Management Practices.
- ✓ Additional Research in this area overcomes these risks due to size and volume of Bank Business.

For better implementation of Basel III, merger of banks is one good strategy to mitigate the important risks of the Indian Commercial Bank i.e., Credit, Market and Operational Risks.

5. Information Technology Benefits:

n) Technology up-gradation: Each bank maintains different IT Servers to store their business data as well as processing of daily bank transactions, in addition to the main server of the bank, Disaster Recovery Management (DRM) Servers are also established in different places to mitigate the IT / Technology Risk and also for effective implementation of Business Continuity Plan (BCP) as per regulator guidelines. For IT Systems, they are paying huge amount of Annual Maintenance Costs (AMC) and from time-to-time whatever additions to the existing software (while introducing new deposit / advance products), they are paying huge amount of fees to the IT Companies. Banks also paying huge amount “Communication Systems” for smooth functioning of bank branches across the country like City Aggregation Points (CAPs) etc. Once merger happens, these costs will be saved to a large extent to the acquiring bank due to merger of all Data files of all Banks into one server. Here, the acquiring bank will get savings not only in IT Capital Expenditure but also Variable Cost (Information Technology costs) in the Bank.

o) Optimum utilization Alternate Delivery Channels: Alternative Delivery Channels like ATMs, CDMs, Pass Book Printing Machines and Kiosks established by different banks under same group and most of these Alternate Delivery Channels flooded in certain areas and less or no in other places. Once, merger happens the excess / extra alternative channels will be relocated or shifted to the needy places. Thereby all customers at all locations will use the alternate delivery channels of the Bank without any further capital expenditure to the acquiring bank. The Cash Replenishment Costs, maintenance cost of ATMs, CDMS, Pass Book Printers, and Kiosks will reduce drastically with revised Service Level Agreements (SLA) on account of higher volumes due to merger. Thereby per transaction cost of alternative delivery channels will decrease due to optimum utilization of existing alternate delivery channels. Additional Capital Expenditure for installation of alternative delivery channels will not arise for a period of 3 to 4 years after merger to the acquiring bank.



6. Risk Mitigation Benefits:

p) **Controlling Market, Credit and Operational Risks:**

Controlling the Three important Risks is need of hour in the Banking Industry, otherwise it leads to decrease in Profitability of Bank and also it attracts more Capital to maintain the CAR or CRAR as per Basel III. The rating of the Bank is primarily based on, how the bank is taking measures to mitigate these three important risks. Attracting the Capital and subordinate debt from the Primary Market through IPO is also a big challenge to the Banks as their CAR, Net Profit is low and also high NPAs. In case public sector Banks, it is very difficult to the Central Government to pump additional capital the needy banks from time to time through Finance Budget of the Country. The only one alternate available to the Banks is to mitigate all the Three Important with the help suitable Risk Management Practices.

q) **Duplication of Finance:** Duplication or double financing is on increasing trend in the Banking Industry due to mass expansion of the Bank Branches, massive lending and pressures on achievement of Business Budgets of Bank Branches by the controllers, non-insisting of “No Due Certificates” by the Branches, waiver of Collateral Security in certain advances are leads to double financing in Banks. This trend is more in Retail Advances like CAR Loans, Personnel Loans etc. even though CIBIL Tracking Systems exists in the Bank. In Rural and semi-urban places particularly in Self-help Group finance, Government Sponsored Schemes and some Agriculture Segment Product Loans are enjoying more than one bank by certain borrowers. Due to Loan waiver scheme or settlement of Insurance Claims on account failure of crops etc. these borrowers are again enjoying these additional benefits from Government etc. Double finance, over finance to a single borrower by the Bank also leads to NPAs. Once merger happens, these irregularities can be arrested to a large extent.

r) **Better implementation of Risk Focused Internal Audit, Concurrent Audit and Statutory Audit:**

Due rationalization of Branches, Audit Costs will reduce further. Strict implementation of Risk Focused Internal Audit (RFIA) results in mitigates the three important risks of the Banks i.e.

- ✓ Credit Risk.
- ✓ Market Risk.
- ✓ Operational Risk.

Due to merger, implementation of “e-concurrent audit” and uniformity in implementation of RFIA across all Branches, and fine tune the “Audit System” not only decreases the above risks and it leads lower provisions and lower Capital for CRAR or CAR and Audit Costs to a large extent.

Year-end Accounts or finalization Financial Statements in distributed manner are to be scrutinized by the Statutory Auditors, Zone-wise, Circle-wise for Group Banks is a time-consuming process and huge costs incurred in this process i.e., both Audit Fees Cost and also Manpower Cost (People involved in the Year end Audit Process). On account merging and through rationalization of Branches, Regional Office, Zonal Offices these costs will reduce substantially and early declaration Financial Results of the acquiring Bank is possible and duplication cost and wastages can be eliminated drastically.

7. Benefits to Stakeholders:

s) **Easy to supervise by the Regulator and Government of India:**

“Span of Control” of Banks by the Regulator and Government of India are in increasing trend on account of increase in number of banks in the country. Thereby, it may lead to dilution in controlling all banks in the country by both Regulator and Government of India. On account of mergers the number of Banks will come down drastically and it is very easy for the regulator and also Government Authorities to supervise monitor and control a smaller number of Banks. To implement Basel-III, KYC/AML and supervise limited number of Banks is easy due to mergers. Control higher number of Banks, monitor their Boards, Appointment of Chairman’s and Managing Directors, Controlling NPAs, implementation of Basel-III, providing additional capital through budgets and control of irregular practices etc., by both Regulator as well as the Government is a big challenge / task to the Regulator. Restricted the Banks through mergers is a best strategy both to the Regulator and Government to have a better control and monitor the limited number of banks, thereby the efficiency and functioning of the banks will improve substantially.

t) **Better implementation of Corporate Governance:**

One Board instead of multiple Boards for different group entity Banks, One Audit Committee instead of multiple Audit Committees and other Committees as defined under Corporate Governance as per SEBI listed guidelines is possible through merger. This not

only reduces the huge administrative costs, but also implementation or recommendations of the multiple committees is a big task to the Group. Acquiring bank can implement Corporate Governance in a better manner than in distributed boards in group entities. Multiple Annual General Body Meetings and declaration of results after completion of all entities is a time-consuming process, duplication process, wastages of resources and a costly affair. Through merger, single Annual General Body Meeting, Corporate Governance Practices and Single Board meetings gives reduction in administrative cost and timely completion of Balance Sheet finalization to be submitted to Stock Exchanges, SEBI and also to the Shareholders of the Bank (including all stake holders of the bank).

- u) **Better Customer Service:** Number of banks under one Group creates confusion to the customer while purchasing a bank product from group entity banks, due to merger this confusion will decrease. He / She need not verify the product price and its features from different banks under a single group entity. Due to merger, he can approach only one Bank instead of multiple banks. Reduction in various Service Costs due to merger and also Customer Complaints Grievance mechanism will strengthen due to size thereby it increases the customer satisfaction levels. Good Customer Service and implementation of best banking practices followed across the globe in acquiring bank is possible due size results and it increases Business Growth and market share of the acquiring Bank.
- v) **Business Competition within the Group:** Competition within the Group is not a healthy sign. In short run one bank may benefit in business growth levels but in long run it affects the profitability of the bank. Due to implementation of Base Rate of Interest, Marginal Cost Rate of Interests in the market and these rate of interest are differed from bank to bank on account of their cost of sources of funds, overheads and profit margins etc, competition within the group spoils the image and also group profit in future. Even though the Banks are doing business under one Logo (Public Sector Bank), competition among the bank branches within the Group not only reduces the spread of the Bank, but also it creates “Image Risk” to the Group in the market or in public. This weakness will be en-cashed by others players in the market. Once, merger of group entities into one, this type of market practices will not arise. Healthy competition with

other banks will prevail in the market.

8. Other Benefits:

- w) **Implementation of Systems and Procedures:** Uniformity in implementation of Systems and Procedures across the Group entity Branches is not only mitigates the various Risks of the Banking Operations but also it gives good results to the acquiring Bank as a whole. Different banks under same group following different Systems and Procedures may lead to difference in functioning and it leads to difference in business performance results. On account merger, all branches of the acquiring bank will implement the same Systems and Procedures thereby benefits will accrue. From time-to-time implementation Revised, New Systems and Procedures is possible across all branches gives good results. Implementation of Best Banking Practices is possible at all Branches in merged environment due to size.
- x) **Uniformity in implementation of Strategies:** Different banks are following different strategies to mobilize the business, to increase their market share and also to mitigate the various risks in operational areas. Due to this, profits, productivity levels, work culture, market share and financial strength of the Balance Sheets will differ from one Bank to another Bank. Some Banks, due to small in size and lower Capital or funds, they may not implement the Good Strategies or Systems, which is a costly for them, thereby it affects the business growth and also financial position of the Bank. Uniformity in implementation of Strategies across all Branches by acquiring bank due to size overcome the above issues.
- y) **Easy to implement Best Banking Practices:** Different banks are following different control systems and procedures to complete the day today business operations of the Bank. The performance and degree of risk levels of the business operations of the Bank mainly depends on the implementation of best banking practices in the following business operations i.e.

- ✓ Marketing Function.
- ✓ HR Function.
- ✓ Operations Function.
- ✓ Risk Management Practices.
- ✓ Information Technology Function.
- ✓ NPA Function.
- ✓ Treasury Function
- ✓ ALM Function



- ✓ Administration Function etc.

Due to differ in Systems and Procedures or Book of Instructions or implementation of strategies from one Bank to another Bank, the performance and financial strength of the Bank are not comparable i.e., inter firm or intra firm comparisons. Overall efficiency of the Bank improves a lot and in turn all stakeholders will be benefited due to efficient implementation of uniform Systems and Procedures across all Bank Branches.

z) Increase in Productivity Levels: Productivity levels of the Banks are differing from Bank to Bank on account of the following:

- ✓ Policies and Organization Practices.
- ✓ Implementation of Standards or Bench marks.
- ✓ HR Training (On Job or Institutional Training) and HHh HH\HR practices.
- ✓ Systems and Procedures.
- ✓ Risk Management Practices.
- ✓ Work Culture of the Organization etc.

Market share, Goodwill and Brand Value of the Bank are based on the above factors. The ultimate result of higher productivity leads to increase in Top and Bottom Line of the Bank. Due to merger the acquiring bank good practices as mentioned above, will be implemented in the all-merged entities (Branches also), thereby the overall efficiency of the Bank will improve and all stakeholders of the acquiring bank will be benefited.

To Sum Up:

Merger gives more benefits to the acquiring bank particularly reduction of Fixed and Variable costs and it avoids the wastages of expenditure to a large extent. In public sector Banks, 'Expenses Share' in Total Income of the Bank is more than 20% and the 'Manpower Cost' in Total Expenses is more than 16%. Hence, these costs will be reduced drastically. In addition to this, acquiring bank can use Information Technology in a big way and optimum utilization of existing Alternate Delivery Channels like ATMs, Mobile Banking, CDMs, Pass Book Printers, POS Machines, Internet Banking, Business Correspondents or Customer Service Points and Call Centres etc. to reduce the cost per transaction of the bank and also to increase the bottom line. This is possible through mergers thereby the acquiring Bank can afford to charge "Low Rate of Interest" on their Advance Products. Lower Rate of Interest on advances boosts the economy growth of the country further

and also it increases the Business Levels, market share and bottom-line of the acquiring Bank. Benefits of Bank Mergers to Various Stakeholders are:

- ✓ Rationalization of Branches – It reduces overheads and also capital expenditure.
- ✓ Rationalization of Regional & Zonal offices / Business Networks – It reduces overheads.
- ✓ Manpower Adjustments with existing manpower (By deploying surplus to needy branches).
- ✓ Minimization in Recruitment Costs (By following productivity norms).
- ✓ Minimization of overall Overheads (Focus on Controllable Costs).
- ✓ Control of wastages in Advertisement Costs.
- ✓ Benefits through Large Scale Economies.
- ✓ Better NPA Management (By initiation of SARFAESI, DRT, IBC, 2016 etc.)
- ✓ Better Asset Liabilities Management (ALM).
- ✓ Better Treasury Management (By minimizing borrowing costs and Non-performing Investments).
- ✓ Better Implementation of Basel III (Through reduction of Credit, Market and Operational Risks).
- ✓ Technology up-gradation with less Capital Expenditure through Cloud Computing.
- ✓ Optimum utilization of existing Alternate Delivery Channels (Identify strategic locations to shift ATMs, CDMs etc.).
- ✓ Avoid Duplicate / Double of Finance (Through Data Warehousing).
- ✓ Better implementation of Risk Focused Internal Audit (RFIA).
- ✓ Better Control by Regulator and Government of India.
- ✓ Better implementation of Corporate Governance (Increase efficiency by following ethics).
- ✓ Increase in Productivity Ratios of the Bank (Through Inter or Intra Firm Comparisons).

But one important factor to be keep it mind by the acquiring bank in merging process i.e., **Strengthen the Organizational Structure** i.e., Centralization and Decentralization of operational areas, span of control of the Bank. Undoubtedly merger gives number of advantages to acquiring bank, at the same time **Controlling is very difficult** due increase in size of the Organization, Business Operations and Volumes. To overcome this problem, from day one of merging processes, the acquiring bank should think about the Control aspects for each and every function i.e., how effectively and efficiently the acquiring



bank control Bank Branch located in **nook and corner** of the country. The objective of merger will be defeated, if control systems are not well established properly by the acquiring bank. Due to availability of latest Information Technology in the country, controlling Branches located in villages from the Head Office is not a big problem by the acquiring Bank. To mitigate **THREE** important

Risks of the Banks i.e., Credit Risk, Market Risk and Operational Risk, the acquiring bank should strengthen the Risk Management Department, Risk Focused Internal Audit, Strict implementation of System & Procedures etc. Then maintenance of adequate Capital Adequacy is not a problem to acquiring bank due to merger.

Annexure I

Role of CMAs in Merging Process of Banks (Before and After Merger)

Before a merger, cost and management accountants are crucial for due diligence, performing due diligence, analyzing target company valuations, and identifying potential synergies. After a merger, their role shifts to integration, focusing on harmonizing accounting systems, rationalizing costs, optimizing resource allocation, and reporting on the combined entity's financial performance.

Before the merger:

- ✱ **Due diligence and valuation:** Accountants analyze the target company's financial health, including its cost structures, assets, and liabilities, to determine its value and assess the risks involved.
- ✱ **Synergy and cost-saving analysis:** They identify potential areas for cost reduction through economies of scale and operational synergies between the two banks.
- ✱ **Strategic planning:** Accountants provide the data for strategic decision-making, helping the board determine if the merger is financially viable and if it aligns with the bank's objectives.
- ✱ **Risk assessment:** They help in assessing the financial risks associated with the merger, such as the potential impact on asset quality or capital adequacy, as noted in this ResearchGate article.

After the merger:

- ✱ **System integration:** A key role is integrating the accounting and cost systems of both banks to ensure a unified and efficient reporting framework.
- ✱ **Cost rationalization and optimization:** Accountants work to implement the identified cost-saving measures, such as reducing redundant staff, branches, and administrative overheads, to realize the benefits of the merger.
- ✱ **Performance monitoring and reporting:** They track and report on the combined entity's financial performance, using metrics like cost-to-income, capital adequacy, and profitability to show if the merger is meeting its objectives.
- ✱ **Resource allocation:** Accountants guide the allocation of the combined resources to ensure they are used efficiently to maximize the merged bank's profitability.
- ✱ **Risk management:** They continue to monitor and manage the financial risks of the new, larger entity, ensuring it remains stable and compliant with regulations.

Annexure II

MIS for Cost Benefit Analysis of Bank Mergers

Cost and management accountants perform a CBA for bank mergers by first identifying and quantifying all direct, indirect, intangible, and opportunity costs and benefits, then projecting them over a set time horizon. They would analyze metrics like asset quality, cost-to-income ratios, and operational efficiency for both banks, using this data to build a model sheet that compares the current combined entity against the pre-merger status. This analysis helps determine if the merger is financially viable and strategically sound.

How to perform a Cost-Benefit Analysis:

Define the scope and objective: Clearly state the purpose of the merger and the specific banks involved. The scope could be to achieve cost synergies, expand market share, or improve efficiency.

- ✳ **Identify costs:** Brainstorm all potential costs, including:
 - ✳ **Direct costs:** Acquisition price, integration costs (e.g., legal, IT system integration), and staff severance packages.
 - ✳ **Indirect costs:** Overheads associated with integrating operations.
 - ✳ **Opportunity costs:** The potential benefits forgone from other investment opportunities or the potential for customer dissatisfaction during integration.
 - ✳ **Intangible costs:** Damage to brand reputation, decrease in employee morale, or loss of a unique corporate culture.
- ✳ **Identify benefits:** Brainstorm all potential benefits, including:
 - ✳ **Direct benefits:** Cost savings from reduced overlapping branches, staff rationalization, or bulk purchasing.

Indirect benefits: Increased revenue from market expansion, cross-selling opportunities, and improved efficiency.

- ✳ **Intangible benefits:** A larger asset base, enhanced competitive position, and improved market standing.
- ✳ **Quantify costs and benefits:** Assign a monetary value to each cost and benefit identified. This is where accountants use financial data such as interest income and expense, asset quality (NPAs), and cost-to-income ratios.

Create a Model CBA Sheet:

- ✳ **Structure the sheet:** Create a spreadsheet with columns for each year in the analysis period and rows for each specific cost and benefit.
- ✳ **Categorize costs and benefits:** Create clear sections for “Costs” and “Benefits” to allow for easy comparison.
- ✳ **Include key metrics:** Use financial and operational metrics to support the analysis.
- ✳ **Calculate net present value (NPV):** Discount all future costs and benefits back to their present value to account for the time value of money. Compare the NPV of the benefits to the NPV of the costs.
- ✳ **Use sensitivity analysis:** Test how changes in key assumptions (e.g., interest rates, economic growth) might affect the overall outcome.

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- a) Bank Mergers, Diversification and Risk-Bank for International Settlements- February 28, 2003.
- b) A to Z Benefits of Bank Mergers-Research Bulletin of ICAI-July, 2016.



Chapter 27

Cost Accountant Role in Banking Sector



Contents:

1. <i>Introduction.</i>	5. <i>Chief Cost Control Head.</i>
2. <i>Activity Based Costing.</i>	6. <i>Rationale for the Department.</i>
3. <i>Control the Controllable Costs.</i>	7. <i>Implementation and Roadmap.</i>
4. <i>To Sum Up.</i>	8. <i>References.</i>

The rising Cost Structure in Banking Demands Professional Costing Expertise. This Chapter highlights:

- * Activity-Based Costing (ABC).***
- * Role of Chief Cost Controller.***
- * Need for a Cost Control Department.***

Based on HR Discussions and Recruitment Trends, the Chapter explains why CMAs are becoming Vital in Banking.

Cost Accountant Role in Banking Sector

There is a strong rationale for recruiting Cost and Management Accountants (CMAs) in the banking sector, particularly in specialized “officer” roles. While Chartered Accountants (CAs) and other financial specialists focus on financial reporting and statutory compliance, CMAs are experts in internal cost control, operational efficiency, and strategic management.

Need for CMAs in Banking: Historically, banks have focused on managing three key costs: default risk, the cost of capital, and operational costs. While a bank’s treasury team traditionally managed investments and a forex desk managed foreign exchange, overall operational expenses were often treated as a necessary cost center. Modern banking, however, is a complex commercial operation that can significantly boost its profitability by optimizing controllable costs and improving operational efficiency.

A CMA brings a distinct skill set to help banks achieve this goal:

- ✳ **Operational cost control:** CMAs can analyze operational expenses across different departments, from individual branches and administrative offices to ATM networks and central processing centers. They can use cost-control systems to identify wasteful spending and implement cost-saving measures.
- ✳ **Cost-benefit analysis:** By providing data-driven insights, CMAs can help management perform cost-benefit analyses for various banking operations. This is crucial for making strategic decisions on whether to perform services in-house or outsource them, such as managing IT infrastructure or back-office processing.
- ✳ **Performance measurement:** CMAs can create systems for tracking and analyzing the cost of products and services, such as loans and other banking products. This allows banks to better understand the profitability of different offerings and make informed decisions on pricing and product design.
- ✳ **Internal audit and risk management:** With their expertise in internal controls, CMAs are well-suited for roles in internal audit and risk management, especially in the context of risk-based internal auditing (RBIA). The Institute of Cost Accountants of India (ICMAI) even issues guidance notes on RBIA for banks

- ✳ **Strategic management:** CMAs have specialized knowledge in strategic management and value creation. This allows them to hold senior management positions and help formulate business strategy, with a focus on enhancing profitability and creating value for stakeholders.

Evidence of recruitment in the banking sector:

The increasing demand for CMAs in the banking sector is becoming evident, particularly in India:

- ✳ **Job advertisements:** Job portals like Naukri.com list numerous vacancies for CMAs in the banking and financial services sector. Searches for “bank cost accountant jobs” yield many results.
- ✳ **Recruitment announcements:** The ICMAI’s website regularly posts advertisements for CMAs in the banking and financial services sector, including for roles in risk management and finance at institutions like SIDBI, NABARD, and the Bank of Maharashtra.
- ✳ **Public sector banks:** Public sector banks are increasingly issuing advertisements to recruit CMAs as “Cost Accountants” for their head offices and other administrative branches, indicating a shift toward greater cost management.
- ✳ **Specialized departments:** Some banks employ CMAs in specialized departments such as treasury and foreign exchange, as well as in other strategic roles.

a) Activity Based Costing:

For Indian banks, implementing an Activity Based Costing (ABC) system is a strategic move to address the complexities of modern banking and enhance profitability. Unlike traditional costing methods that provide a broad view, ABC traces costs more accurately to the specific activities, products, and customer segments that consume resources. Cost and Management Accountants (CMAs) are crucial in this process due to their analytical and technical skills.

Why Indian banks need to implement ABC: The banking sector has evolved from a simple regulated market to a complex, competitive, customer-driven one, where different products and segments consume resources disproportionately.



ABC is necessary to manage this complexity and gain an accurate picture of the true cost of operations.

- ★ **Banking operations and activities:** Indian banks handle a diverse portfolio of activities for various customer segments.
- ★ **Retail banking:** Involves numerous transactions per customer, such as account maintenance, online banking support, and teller services.
- ★ **MSME and Corporate banking:** Requires more specialized and time-intensive activities, including loan processing, relationship management, and customized services.
- ★ **Treasury and Forex management:** Involves complex, high-value transactions with their own distinct set of activities and regulatory costs.

Limitations of traditional costing: Traditional costing systems often use a single, volume-based metric (like transaction volume or number of employees) to allocate overhead costs. This can be misleading because it:

- ★ **Distorts profitability:** Over-costs high-volume, standard products and under-costs low-volume, complex products that consume more resources, leading to poor strategic decisions.
- ★ **Masks inefficiencies:** Fails to highlight non-value-added activities and areas of waste, which hinders cost-cutting efforts.

How ABC helps Indian banks control costs and increase profits: Implementing an ABC system provides banks with granular insights that drive cost control and improve profitability.

Benefits of ABC for Indian banks:

- ★ **Accurate product and service costing:** ABC provides a precise picture of the actual costs associated with specific products like deposits, loans, and wealth management, leading to better pricing strategies.
- ★ **Enhanced profitability analysis:** By knowing the true cost of serving different customer segments (e.g., retail vs. corporate), banks can identify their most and least profitable customers. This enables targeted strategies for retaining profitable customers and re-evaluating relationships with unprofitable ones.

- ★ **Cost optimization:** ABC helps identify and eliminate non-value-added activities, reducing wasteful expenses. This could include streamlining manual processes or optimizing support activities.

- ★ **Informed decision-making:** Accurate cost information empowers management to make better decisions regarding product mix, resource allocation, and investment in new technologies.

- ★ **Strategic planning:** ABC links profitability directly to operational decisions, providing a clearer path to align day-to-day activities with the bank's long-term strategic objectives.

Role of CMAs or Cost Accountants in implementation: Cost and Management Accountants play a critical role in successfully implementing and maintaining an ABC system.

The CMA's process for implementing ABC:

- ★ **Feasibility study:** A CMA first conducts a cost-benefit analysis to determine if the benefits of implementing ABC outweigh the associated costs, including software and training.
- ★ **Identify activities:** The CMA works with various bank departments to identify and define the key activities that consume resources within each segment (e.g., account opening, transaction processing, and customer support).
- ★ **Create cost pools:** Costs are grouped into "cost pools" for each major activity. For example, all machine set-up costs would be grouped into one pool.
- ★ **Identify cost drivers:** For each cost pool, the CMA determines the "cost driver," which is the factor that causes a change in the cost of an activity. Examples include the number of transactions, customer visits, or loan applications processed.
- ★ **Calculate driver rates and allocate costs:** The CMA calculates a rate for each cost driver (e.g., cost per transaction) and uses this rate to allocate overhead costs to specific products, services, or customers based on their usage of that activity.
- ★ **Analyse and report:** The CMA analyses the resulting cost data to provide management with detailed reports on product and customer profitability. This information informs pricing, marketing, and operational decisions.



- ★ **Sustain the system:** The CMA is responsible for the ongoing maintenance and refinement of the ABC system, ensuring it remains accurate and relevant as the bank's business activities evolve.

b) Control the Controllable Costs:

Engaging Cost and Management Accountants (CMAs) can significantly help Indian Public Sector Banks (PSBs) address rising costs and other challenges to improve their bottom line. CMAs specialize in cost efficiency, profitability enhancement, and internal control systems, which directly addresses the key issues faced by PSBs.

How CMAs can address the challenges of PSBs: Controlling operational costs and overheads.

- ★ **Budgetary control:** CMAs establish detailed budgets for cost components such as manpower, materials, and expenses. They then monitor actual expenses against these budgets to identify and correct variances.
- ★ **Operational efficiency:** Through techniques like Lean Six Sigma, CMAs can identify waste and redundancies in banking processes and workflows. Automating these processes with AI can lead to cost reductions of 10–40%.
- ★ **Channel optimization:** CMAs can analyse the cost-effectiveness of different banking channels, such as physical branches, online banking, and call centers. This enables banks to develop more efficient hybrid models that balance cost and customer experience.
- ★ **IT cost management:** By moving non-core IT functions to the cloud, PSBs can leverage advanced technologies and minimize IT support and maintenance costs. This also allows for greater scalability on a pay-as-you-go basis.
- ★ **Vendor cost management:** CMAs can manage third-party spending by centralizing vendor relationships and renegotiating contracts. This helps eliminate duplicative vendors and optimize costs.

Managing Non-Performing Assets (NPAs):

- ★ **Enhanced credit appraisal:** CMAs can improve credit risk assessment for borrowers by conducting in-depth financial analysis and creating accurate credit monitoring arrangement (CMA) reports. A professionally prepared CMA report, covering past and projected financial performance, helps banks

make informed lending decisions and minimizes the risk of default.

- ★ **Strategic monitoring:** CMAs can guide banks on pre-sanction, post-sanction, and ongoing monitoring of stressed assets. This expertise is useful in strategic departments, credit analysis, and risk management.
- ★ **Portfolio analysis:** They provide analysis on credit portfolios to identify potential risks and evaluate the “cost of risk” based on provisioning guidelines for non-performing accounts.

Preventing fraud:

- ★ **Forensic audit:** CMAs with forensic audit skills can detect and prevent corporate and banking frauds. Their training in data analytics, technology, and risk management allows them to measure the correlation between output and input to find anomalies.
- ★ **Internal controls:** CMAs can evaluate the effectiveness of internal controls, particularly in cost accounting and financial reporting, to identify vulnerabilities and mitigate the risk of financial misconduct.
- ★ **Risk-based auditing:** Implementing a risk-based internal audit can focus resources on high-risk areas. CMAs can assess and manage risks related to cost management, financial reporting, and compliance to ensure the bank is well-prepared for uncertainties.

Increasing the bottom line: By managing costs and enhancing operational efficiencies, CMAs can improve the bank's profitability and address other financial challenges.

- ★ **Improved profitability:** Efficient cost management directly reduces expenses, thereby increasing the bank's profit margins.
- ★ **Strategic decision support:** The data and analysis provided by CMAs enable bank management to make more informed strategic decisions regarding pricing, investment, and operational strategies.
- ★ **Enhanced competitiveness:** By improving the bank's efficiency and customer experience, CMAs help PSBs better compete with agile private sector banks and fintech companies.
- ★ **Higher creditworthiness:** By professionally preparing Credit Monitoring Arrangement reports for borrowers, PSBs can assess financial health and repayment ability

more effectively, which in turn leads to better loan approval rates and healthier portfolios.

To Sum Up:

Based on the rising operational costs and increasing customer expectations in Indian commercial banks, a dedicated cost management department is a necessary step toward long-term profitability and sustainable growth. A decentralized structure with a centralized head would allow banks to identify cost drivers at the zonal level while enforcing uniform standards across the organization.

Here is a plan for establishing a cost management department in an Indian commercial bank.

Departmental structure:

Chief Cost Control Head (CCCO): This senior executive, reporting to the bank's head office, would provide strategic vision and guidance for cost control across the organization.

- ★ **Key functions:** *Develop and implement bank-wide cost management policies. Oversee the performance of cost accountants in zonal and regional offices. Lead strategic initiatives related to major expenditures like technology and infrastructure.*

Zonal/Regional Office Cost Accountants (ZCA/RCA): These professionals would work within their respective zones, focusing on local operational efficiency and expense control.

Key functions:

- ★ **Cost analysis:** Track and analyse the costs associated with regional operations, including branches, ATMs, and back-office functions.
- ★ **Budgetary control:** Create and monitor regional budgets, comparing actual expenses to planned budgets and investigating any significant variances.
- ★ **Operational improvements:** Identify and recommend cost-saving opportunities specific to their region, such as optimizing local real estate or staffing levels.
- ★ **Reporting:** Submit performance reports to the Chief Cost Control Head, providing insights into regional spending patterns.

Rationale for the department:

Addresses rising operational costs:

- ★ **Digitization expenses:** While digital channels can

lower costs in the long run, initial investments in technology, cybersecurity, and regulatory compliance are significant. A cost department ensures these investments are cost-effective.

- ★ **Expansion costs:** Opening new branches and hiring additional manpower, especially in private banks, has led to increased employee and infrastructure costs. A dedicated department can identify and control unnecessary spending during expansion.
- ★ **Competitive pressure:** Indian banks face tightening margins and intense competition, which puts pressure on profitability. Managing operational costs is crucial for maintaining a competitive edge.

Optimizes strategic resource allocation:

- ★ **Data-driven decisions:** Cost accountants use data analytics to track spending and identify cost drivers. This enables management to make informed decisions on pricing, resource allocation, and investments, especially when balancing customer expectations with profitability.
- ★ **Targeted cost reduction:** The department can differentiate between “good costs” (those that generate revenue and improve customer experience) and “bad costs” (wasteful spending). This prevents indiscriminate budget cuts that could harm the customer experience.

Enhances profitability and financial stability:

- ★ **Improved efficiency:** By identifying and eliminating inefficiencies across various operational processes, the department can boost the bank's overall cost efficiency. This strengthens its financial health and contributes to higher profitability.
- ★ **Stronger financial performance:** With better control over expenses, banks can improve key financial metrics like the cost-to-income ratio. This makes them more resilient to economic uncertainty and builds investor confidence.

Promotes a culture of cost-consciousness:

- ★ **Centralized oversight:** The Chief Cost Control Head sets a clear tone for fiscal discipline from the top.
- ★ **Empowered employees:** Deploying cost accountants at the zonal and regional levels encourages local employees to be mindful of costs in their daily operations.



- ✱ **Continuous improvement:** A dedicated department ensures that cost management isn't a one-time exercise but an ongoing process of monitoring and improvement.

Implementation and roadmap:

Phase 1: Foundation and assessment (0–6 months):

Recruit key personnel: Hire a Chief Cost Control Head and a small central team of senior cost accountants.

- ✱ **Conduct an audit:** Perform a comprehensive cost analysis of the bank's operations, focusing on major spending categories like personnel, technology, and branch infrastructure.
- ✱ **Develop a policy:** Create a formal cost management policy and standard operating procedures for tracking, reporting, and controlling expenses.

Phase 2: Decentralized rollout (6–18 months):

Appoint Zonal/Regional Cost Accountants: Onboard and train cost accountants in the zonal and regional offices, establishing clear reporting lines to the central team.

- ✱ **Deploy technology:** Implement cost management and business intelligence software to provide real-time visibility into spending across all branches and zones.

- ✱ **Establish benchmarks:** Define key performance indicators (KPIs) related to cost efficiency and set initial targets based on industry standards and the internal audit.

Phase 3: Strategic integration (18+ months):

- ✱ **Integrate with decision-making:** Ensure cost-benefit analysis is a standard part of all major investment proposals, product launches, and operational changes.
- ✱ **Embed a culture of ownership:** Use performance dashboards to make cost data transparent to relevant departments, encouraging them to take ownership of their budgets.
- ✱ **Refine cost reduction strategies:** Use predictive analytics to forecast cost trends and proactively manage expenses, moving beyond simple cost-cutting to strategic cost optimization.

References:

- a) The Management Accountant – January 2021.
- b) Activity Based Costing in Indian Banks-May, 2017-The Management Accountant.



Apportionment of 'Head Office and Zonal Office Costs' to Bank Branches

Apportionment is a critical component of a costing system, primarily used to distribute indirect costs (overheads) that benefit multiple departments or products on a fair and systematic basis. This process is essential for achieving accurate cost measurement, which in turn supports informed management decisions.

The importance of apportionment in a costing system is multifaceted:

- *Accurate Product Costing and Pricing:* By assigning a fair share of indirect costs (like rent, utilities, or maintenance) to specific products or services, businesses can determine their true, full cost. This information is vital for setting appropriate, competitive, and profitable selling prices, as well as for avoiding under-pricing or overpricing.
- *Profitability Analysis:* Accurate apportionment allows managers to evaluate the actual profitability of different departments, product lines, or services. This helps in identifying which areas are generating sufficient returns and which may need improvement or discontinuation.
- *Informed Decision-Making:* Cost data derived from proper apportionment provides the basis for crucial management decisions, such as resource allocation, "make or buy" analyses, and optimizing the product mix.
- *Performance Evaluation and Accountability:* Apportionment enables the evaluation of performance for different cost centers by linking all associated costs to them. This promotes accountability among department managers and helps identify areas of inefficiency where corrective actions may be needed.
- *Budgeting and Financial Planning:* Understanding how indirect costs are distributed helps in creating more accurate and realistic budgets and financial forecasts.
- *Fairness and Transparency:* Using a logical and systematic basis for sharing common costs ensures a fair distribution, which is essential for maintaining a positive work environment and transparency in cost management.
- *Compliance with Accounting Standards:* Cost apportionment is often required for compliance with accounting standards and regulations, particularly for accurate inventory valuation (determining the Cost of Goods Sold and inventory balances on financial statements).

Hence, apportionment translates shared expenses into meaningful cost data at the operational level, making it a cornerstone of effective cost and management accounting.

Usage of Apportionment in Banking Sector: To accurately calculate the Total Cost of Branch Operations, a bank must first apportion Head Office (HO) costs to Zonal Offices and then Zonal Office costs to individual branches, using a logical basis such as "Total Business & Services Levels" etc. The overall process involves departmentalizing expenses to properly attribute administrative overhead to the business units.



Steps involved in this Cost Apportionment Process: This is the method of distributing indirect costs, which cannot be directly traced to a single department or cost center, across multiple departments based on a logical and equitable basis.

Identify Direct and Indirect Costs:

- *Direct expenses:* Costs that can be directly attributed to a branch's operation, such as staff salaries, rent, and utilities specific to that branch.
- *Indirect expenses:* Costs incurred by the Head Office or Zonal Offices that must be allocated, such as administrative salaries, general office supplies, and shared IT infrastructure.

Selecting a Basis for Apportionment:

- *Service Rendered:* Apportioning costs based on the expected benefit received by the department.
- *Survey or Analysis Method:* Using an analysis or survey to determine the basis for apportionment.
- *Total Business and Service Levels:* This is the basis you mentioned, which assumes a relationship between the level of business a branch generates and the amount of administrative support it requires.

Apportioning Head Office Costs to Zonal Offices: The bank would select a basis for apportionment that relates to the Zonal Offices' overall business and service levels. This can involve using a formula that incorporates weighted factors like total deposits, loans, and the number of branches under each zonal office's control.

For example, a zonal office with a higher total business volume or a greater number of high-service level branches would receive a higher proportion of the HO costs.

Apportioning Zonal Office Costs to Branches: After allocating HO costs to the Zonal Offices, the total costs of each Zonal Office (including its allocated share of HO costs) are then apportioned to the individual branches under its control.

The allocation basis at this level is the individual branch's total business and service levels. A branch with higher deposits, loans, or more complex service offerings would be allocated a larger share of the Zonal Office's administrative costs.

By following these steps, the bank can arrive at a more accurate and representative total cost of operations for each branch, which is vital for evaluating branch performance, setting profitability targets, and making informed decisions. (Typical Examples are provided in **Annexures I, II, and III**).

1. Annexure-I: Apportionment of Head Office/Corporate Costs to Zonal Offices.
2. Annexure-II: Apportionment of Zonal Office Costs to Branches.
3. Annexure-III: Branch Cost Sheet.

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	CMD office	ED/MD Offices	Risk Management	Treasury & Investment	International Banking	Corporate Banking	Audit & Compliance	HR	IT	Marketing	Legal	Administrative	Corporate Office	Total
I. Payments to and Provisions for Employees	20,000,000	50,000,000	10,000,000	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	20,000,000	15,000,000	275,000,000
II. Rent, Taxes and Lighting	2,500,000	2,500,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	7,200,000
III. Printing and Stationery	400,000	300,000	300,000	200,000	200,000	200,000	100,000	100,000	100,000	50,000	100,000	100,000	200,000	2,350,000
IV. Advertisement and Publicity	100,000	200,000	-	200,000	5,000,000	5,000,000	-	1,000,000	200,000	200,000	200,000	200,000	5,000,000	17,100,000
V. Depreciation on Bank's property	20,000,000	20,000,000	5,000,000	10,000,000	10,000,000	10,000,000	10,000,000	5,000,000	30,000,000	10,000,000	10,000,000	10,000,000	10,000,000	160,000,000
VII. Directors' fees, allowances and expenses	10,000,000	10,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	5,000,000	50,000,000
VIII. Auditors' fees and expenses													50,000,000	50,000,000
VIII. Law Charges													20,000,000	20,000,000
IX. Postage, Telegrams, Telephones etc.	2,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	14,000,000
X. Repairs and Maintenance	2,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	14,000,000
XI. Insurance	2,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	14,000,000
XII. Other Expenditure (Specify Details)	2,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	14,000,000
Total	51,000,000	87,000,000	21,500,000	36,400,000	41,400,000	41,400,000	36,300,000	32,300,000	56,500,000	36,450,000	56,500,000	34,500,000	89,400,000	620,650,000
Apportionment Key : (Management Estimate %)														
Z01	5%	5%	7%	12%	20%	7%	12%	12%	7%	10%	7%	11%	5%	
Z02	12%	12%	4%	7%	10%	8%	12%	8%	8%	4%	4%	11%	12%	
Z03	17%	17%	12%	20%	25%	8%	12%	8%	8%	12%	12%	11%	17%	
Z04	9%	9%	12%	7%		10%	8%	7%	10%	8%	12%	10%	9%	
Z05	5%	5%	4%	8%	25%	6%	7%	6%	6%	4%	4%	10%	5%	
Z06	20%	20%	18%	16%	25%	15%	12%	18%	15%	18%	18%	15%	20%	
Z07	8%	8%	19%	15%	20%	12%	12%	12%	12%	15%	19%	16%	8%	
Z08	9%	9%	15%	7%		20%	18%	15%	20%	18%	15%	10%	9%	
Z09	11%	11%	4%	6%		9%	5%	9%	9%	6%	4%	4%	11%	
Z010	4%	4%	5%	2%		5%	2%	5%	5%	5%	5%	2%	4%	
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Amount Apportioned:														
Z01	2,550,000	4,350,000	1,505,000	4,368,000	8,280,000	2,898,000	4,356,000	3,876,000	3,955,000	3,645,000	3,955,000	3,795,000	4,470,000	52,003,000
Z02	6,120,000	10,440,000	860,000	2,548,000	4,140,000	3,312,000	4,356,000	2,584,000	4,520,000	1,458,000	2,260,000	3,795,000	10,728,000	57,121,000
Z03	8,670,000	14,790,000	2,580,000	7,280,000	10,350,000	3,312,000	4,356,000	2,584,000	4,520,000	4,374,000	6,780,000	3,795,000	15,198,000	88,589,000
Z04	4,590,000	7,830,000	2,580,000	2,548,000	-	4,140,000	2,904,000	2,261,000	5,650,000	2,916,000	6,780,000	3,450,000	8,046,000	53,695,000
Z05	2,550,000	4,350,000	860,000	2,912,000	-	2,484,000	2,541,000	1,938,000	3,390,000	1,458,000	2,260,000	3,450,000	4,470,000	32,663,000
Z06	10,200,000	17,400,000	3,870,000	5,824,000	10,350,000	6,210,000	4,356,000	5,814,000	8,475,000	6,561,000	10,170,000	5,175,000	17,880,000	112,285,000
Z07	4,080,000	6,960,000	4,085,000	5,460,000	8,280,000	4,968,000	4,356,000	3,876,000	6,780,000	5,467,500	10,735,000	5,520,000	7,152,000	77,719,500
Z08	4,590,000	7,830,000	3,225,000	2,548,000	-	8,280,000	6,534,000	4,845,000	11,300,000	6,561,000	8,475,000	3,450,000	8,046,000	75,684,000
Z09	5,610,000	9,570,000	860,000	2,184,000	-	3,726,000	1,815,000	2,907,000	5,085,000	2,187,000	2,260,000	1,380,000	9,834,000	47,418,000
Z010	2,040,000	3,480,000	1,075,000	728,000	-	2,070,000	726,000	1,615,000	2,825,000	1,822,500	2,825,000	690,000	3,576,000	23,472,500
Total	51,000,000	87,000,000	21,500,000	36,400,000	41,400,000	41,400,000	36,300,000	32,300,000	56,500,000	36,450,000	56,500,000	34,500,000	89,400,000	620,650,000



I. Payments to and Provisions for Employees	CGM Office	Risk Management	Treasury Investment	International Banking	Corporate Banking	Audit & Compliance	HR	IT	Marketing	Legal	Administration Dept	Training Centre	Infrastructure Managemnt	Total ZO	Corporate Chargeout
II. Rent, Taxes and Lighting	7,500,000	10,000,000	10,000,000	7,500,000	20,000,000	7,500,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	1,500,000	124,000,000	
III. Printing and Stationery	250,000	300,000	100,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	2,650,000	
IV. Advertisement and Publicity	100,000	200,000	100,000	200,000	100,000	200,000	100,000	200,000	200,000	200,000	100,000	200,000	100,000	1,900,000	
V. Depreciation on Bank's property	-	-	-	250,000	500,000	50,000	300,000	-	200,000	200,000	-	10,000	500,000	2,010,000	
VI. Directors' fees, allowances and expenses	200,000	200,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	2,050,000	
VII. Auditors' fees and expenses						1,000,000								1,000,000	
VIII. Law Charges										5,000,000				5,000,000	
IX. Postage, Telegrams, Telephones etc.	200,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,400,000	
X. Repairs and Maintenance	200,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,400,000	
XI. Insurance	200,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,400,000	
XII. Other Expenditure (Specify Details)	200,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	1,400,000	52,003,000
Total	8,850,000	11,100,000	10,750,000	8,700,000	21,350,000	9,500,000	11,150,000	10,950,000	11,050,000	16,150,000	10,850,000	10,960,000	2,850,000	144,210,000	52,003,000
Apportionment Keys															
Branch1	5%	5%	7%	5%	12%	7%	12%	12%	7%	10%	10%	11%	5%	12%	12%
Branch2	12%	12%	4%	20%	7%	8%	12%	8%	8%	4%	10%	11%	12%	10%	10%
Branch3	17%	17%	12%	30%	20%	8%	12%	17%	8%	12%	10%	11%	17%	15%	15%
Branch4	9%	9%	12%		7%	10%	8%	7%	10%	8%	10%	10%	9%	10%	10%
Branch5	5%	5%	4%		8%	6%	7%	6%	6%	4%	10%	10%	5%	8%	8%
Branch6	20%	20%	18%	25%	16%	15%	12%	18%	15%	18%	10%	15%	20%	15%	15%
Branch7	8%	8%	19%	20%	15%	12%	12%	12%	12%	15%	10%	16%	8%	15%	15%
Branch8	9%	9%	15%		7%	20%	18%	15%	20%	18%	10%	10%	9%	7%	7%
Branch9	11%	11%	4%		6%	9%	5%	9%	9%	6%	10%	4%	11%	6%	6%
Branch10	4%	4%	5%		2%	5%	2%	5%	5%	5%	10%	2%	4%	2%	2%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Amount Apportioned:															
Branch1	442,500	555,000	752,500	435,000	2,562,000	665,000	1,338,000	1,314,000	773,500	1,615,000	1,085,000	1,205,600	142,500	12,885,600	6,240,360
Branch2	1,062,000	1,332,000	430,000	1,740,000	1,494,500	760,000	1,338,000	876,000	884,000	646,000	1,085,000	1,205,600	342,000	13,195,100	5,200,300
Branch3	1,504,500	1,887,000	1,290,000	2,610,000	4,270,000	760,000	1,338,000	876,000	884,000	1,938,000	1,085,000	1,205,600	484,500	20,132,600	7,800,450
Branch4	796,500	999,000	1,290,000	-	1,494,500	950,000	892,000	766,500	1,105,000	1,292,000	1,085,000	1,096,000	256,500	12,023,000	5,200,300
Branch5	442,500	555,000	430,000	-	1,708,000	570,000	780,500	657,000	663,000	646,000	1,085,000	1,096,000	142,500	8,775,500	4,160,240
Branch6	1,770,000	2,220,000	1,935,000	2,175,000	3,416,000	1,425,000	1,338,000	1,971,000	1,657,500	2,907,000	1,085,000	1,644,000	570,000	24,113,500	7,800,450
Branch7	708,000	888,000	2,042,500	1,740,000	3,202,500	1,140,000	1,338,000	1,314,000	1,326,000	2,422,500	1,085,000	1,753,600	228,000	19,188,100	7,800,450
Branch8	796,500	999,000	1,612,500	-	1,494,500	1,900,000	2,007,000	1,642,500	2,210,000	2,907,000	1,085,000	1,096,000	256,500	18,006,500	3,640,210
Branch9	973,500	1,221,000	430,000	-	1,281,000	855,000	557,500	985,500	994,500	969,000	1,085,000	438,400	313,500	10,103,900	3,120,180
Branch10	354,000	444,000	537,500	-	427,000	475,000	223,000	547,500	552,500	807,500	1,085,000	219,200	114,000	5,786,200	1,040,060
Total	8,850,000	11,100,000	10,750,000	8,700,000	21,350,000	9,500,000	11,150,000	10,950,000	11,050,000	16,150,000	10,850,000	10,960,000	2,850,000	144,210,000	52,003,000



	Savings	Current Accounts	ATM	Lockers	Foreign Exchange	Credit Appraisal	Cashier	DGM/AGM	CGM/GM	Admin/Common	Total	Primary Allocation	To be Allocated
I. Payments to and Provisions for Employees	500,000	300,000					80,000	200,000	300,000	60,000	1,440,000		
II. Rent, Taxes and Lighting										200,000	200,000		
III. Printing and Stationery										50,000	50,000		
IV. Advertisement and Publicity										10,000	10,000		
V. Depreciation on Bank's property										100,000	100,000		
VI. Directors' fees, allowances and expenses										-	-		
VII. Auditors' fees and expenses										5,000	5,000		
VIII. Law Charges		40,000									40,000		
IX. Postage, Telegrams, Telephones etc.										2,000	2,000		
X. Repairs and Maintenance				10,000			2,000			48,000	60,000		
XI. Insurance										10,000	10,000		
XII. Other Expenditure (Specify Details)										15,000	15,000		
Total	500,000	340,000	-	10,000	-	-	82,000	200,000	300,000	500,000	1,932,000		
Apportionment Keys	Time Spent	Time Spent						Time Spent	Time Spent	Area Occupied			
Savings	85%						50%	30%	35%	45%			
Current Accounts		45%					50%	30%	35%	30%			
ATM	5%		100%							5%			
Lockers	10%			100%						15%			
Foreign Exchange		5%			100%			10%	10%				
Credit Appraisal		50%				100%		20%	20%	5%			
Cashier													
DGM/AGM													
CGM/GM													
Admin/Common													
Total	100%	100%	100%	100%	100%	100%	100%	90%	100%	100%			
Primary Amount Apportioned:													
Savings	425,000	-	-	-	-	-	41,000	66,667	105,000	225,000	862,667	500,000	362,667
Current Accounts	-	153,000	-	-	-	-	41,000	66,667	105,000	150,000	515,667	340,000	175,667
ATM	25,000	-	-	-	-	-	-	-	-	25,000	50,000	-	50,000
Lockers	50,000	-	-	10,000	-	-	-	-	-	75,000	135,000	10,000	125,000
Foreign Exchange	-	17,000	-	-	-	-	-	22,222	30,000	-	69,222	-	69,222
Credit Appraisal	-	170,000	-	-	-	-	-	44,444	60,000	25,000	299,444	-	299,444
Cashier	-	-	-	-	-	-	-	-	-	-	-	82,000	-
DGM/AGM	-	-	-	-	-	-	-	-	-	-	-	200,000	-
CGM/GM	-	-	-	-	-	-	-	-	-	-	-	300,000	-
Admin/Common	-	-	-	-	-	-	-	-	-	-	-	500,000	-
Total	500,000	340,000	-	10,000	-	-	82,000	200,000	300,000	500,000	1,932,000	1,932,000	1,082,000
Secondary Amount Apportioned:													
Savings	308,267	-	-	-	-	-	-	-	-	-	308,267		
Current Accounts	-	79,050	-	-	-	-	-	-	-	-	79,050		
ATM	18,133	-	50,000	-	-	-	-	-	-	-	68,133		
Lockers	36,267	-	-	125,000	-	-	-	-	-	-	161,267		
Foreign Exchange	-	8,783	-	-	69,222	-	-	-	-	-	78,006		
Credit Appraisal	-	87,833	-	-	-	299,444	-	-	-	-	387,278		
Cashier	-	-	-	-	-	-	-	-	-	-	-		
DGM/AGM	-	-	-	-	-	-	-	-	-	-	-		
CGM/GM	-	-	-	-	-	-	-	-	-	-	-		
Admin/Common	-	-	-	-	-	-	-	-	-	-	-		
Total	362,667	175,667	50,000	125,000	69,222	299,444	-	-	-	-	1,082,000		
Amount to be Absorbed:													
Savings	733,267	-	-	-	-	-	-	-	-	-			
Current Accounts	-	232,050	-	-	-	-	-	-	-	-			
ATM	43,133	-	50,000	-	-	-	-	-	-	-			
Lockers	86,267	-	-	135,000	-	-	-	-	-	-			
Foreign Exchange	-	25,783	-	-	69,222	-	-	-	-	-			
Credit Appraisal	-	257,833	-	-	-	299,444	-	-	-	-			
Cashier	-	-	-	-	-	-	-	-	-	-			
DGM/AGM	-	-	-	-	-	-	-	-	-	-			
CGM/GM	-	-	-	-	-	-	-	-	-	-			
Admin/Common	-	-	-	-	-	-	-	-	-	-			
1,932,000 Total	862,667	515,667	50,000	135,000	69,222	299,444	-	-	-	-	1,932,000		
Add: Identifiable Share of Zonal Office					435,000	555,000						990,000	
Total	862,667	515,667	50,000	135,000	504,222	854,444						2,922,000	
Add: Unidentifiable Share of Zonal Office												11,895,600	
Add: Corporate Chargeout												6,240,360	
Grand Total												21,057,960	



	Savings	Current Accounts	ATM	Lockers	Foreign Exchange	Credit Appraisal	Cashier	DGM/AGM	CGM/GM	Admin/Common	Total	Primary Allocation	To be Allocated
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Primary Amount Apportioned:													
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Current Accounts	-	153,000	-	-	-	-	41,000	66,667	105,000	150,000	515,667	340,000	175,667
ATM	25,000	-	-	-	-	-	-	-	-	25,000	50,000	-	50,000
Lockers	50,000	-	-	10,000	-	-	-	-	-	75,000	135,000	10,000	125,000
Foreign Exchange	-	17,000	-	-	-	-	-	22,222	30,000	-	69,222	-	69,222
Credit Appraisal	-	170,000	-	-	-	-	-	44,444	60,000	25,000	299,444	-	299,444
Cashier	-	-	-	-	-	-	-	-	-	-	-	82,000	-
DGM/AGM	-	-	-	-	-	-	-	-	-	-	-	200,000	-
CGM/GM	-	-	-	-	-	-	-	-	-	-	-	300,000	-
Admin/Common	-	-	-	-	-	-	-	-	-	-	-	500,000	-
Total	500,000	340,000	-	10,000	-	-	82,000	200,000	300,000	500,000	1,932,000	1,932,000	1,082,000
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Cashier	-	-	-	-	-	-	-	-	-	-	-		
DGM/AGM	-	-	-	-	-	-	-	-	-	-	-		
CGM/GM	-	-	-	-	-	-	-	-	-	-	-		
Admin/Common	-	-	-	-	-	-	-	-	-	-	-		
Total	362,667	175,667	50,000	125,000	69,222	299,444	-	-	-	-	1,082,000		
Amount to be Absorbed:													
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Current Accounts	-	232,050	-	-	-	-	-	-	-	-			
ATM	43,133	-	50,000	-	-	-	-	-	-	-			
Lockers	86,267	-	-	135,000	-	-	-	-	-	-			
Foreign Exchange	-	25,783	-	-	69,222	-	-	-	-	-			
Credit Appraisal	-	257,833	-	-	-	299,444	-	-	-	-			
Cashier	-	-	-	-	-	-	-	-	-	-			
DGM/AGM	-	-	-	-	-	-	-	-	-	-			
CGM/GM	-	-	-	-	-	-	-	-	-	-			
Admin/Common	-	-	-	-	-	-	-	-	-	-			
1,932,000 Total	862,667	515,667	50,000	135,000	69,222	299,444	-	-	-	-	1,932,000		
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Grand Total											21,057,960		



Chapter 28

ECL and Role of CMAs



Contents:

<i>1. Introduction.</i>	<i>5. How to Arrive ECL?</i>
<i>2. Provisions History of Indian Banks for Bad Loans or NPAs.</i>	<i>6. ECL and Role of Cost Accountants.</i>
<i>3. Proactive and Predictive Approach to ECL Provisioning.</i>	<i>7. To Sum Up.</i>
<i>4. Revamp of Statutory Audit Process and Core Banking System.</i>	<i>8. Ways and Means to Minimize ECL Provisions- Annexure I.</i>
	<i>9. References.</i>

All chapters include appropriate references from the Indian Banks Association, Bank Annual Reports, Best Banking Practices, and AI-Based Analytical Sources.

Wishing all Readers an Insightful Experience and Hoping these Strategies are Implemented Effectively for the Benefit of Every Stakeholder in the Indian Banking System.



ECL and Role of CMAs

While there is historical precedent for banks withholding information on bad debts, it is not correct to say this was a universal practice or is accepted today. Bank secrecy regarding bad loans was more prevalent in the distant past before modern regulatory frameworks were established. The motivations included avoiding panic among depositors and obscuring the bank's true financial health.

However, stricter financial regulations in recent decades have mandated transparency to protect depositors and maintain the stability of the financial system.

Historical Practices-Provisions on NPAs:

- ✱ **Bank secrecy:** In the past, banks were often much opaquer, and their activities were largely hidden from public view. This lack of transparency, while serving to prevent panic, was a major weakness in the financial system. For instance, following the Great Depression, many bank failures were found to be the result of concealed risk and abusive practices by bank management.
- ✱ **Window dressing:** Banks and their managers sometimes used to “evergreen” practices, such as providing fresh loans to troubled borrowers to help them repay older debts, which created the illusion of financial health. This was done to hide the true state of non-performing assets from regulators and the public.
- ✱ **Risk concealment:** Until the implementation of modern regulatory frameworks like Basel I, II, and III, the risks associated with non-performing loans were often not adequately managed or disclosed. This opacity was a systemic weakness that market participants could not accurately assess.

Modern Financial Disclosure:

Following numerous financial crises, extensive reforms were implemented to enhance financial stability and transparency.

- ✱ **Required provisions:** Regulatory bodies such as the Reserve Bank of India (RBI) and global bodies like the Basel Committee mandate that banks publicly disclose their financial statements, including details on non-performing assets (NPAs) and the provisions set aside to cover potential losses.

- ✱ **Standardized reporting:** The use of standardized accounting principles (like those specified under the Companies Act and the Banking Regulation Act in India) ensures that financial reporting is consistent and transparent across the banking industry.
- ✱ **Regulatory oversight:** Regulators are empowered to conduct audits and special inspections to ensure that banks are accurately reflecting the quality of their assets and are adequately provisioned for any losses.

Transparency vs. Panic:

Modern regulatory philosophy has shifted from a policy of secrecy to one of mandated transparency. The current approach assumes that informed markets and depositors can better assess risk and exert market discipline, ultimately leading to a more stable and efficient financial system.

Therefore, while the initial assertion reflects past practices, it is inaccurate in the context of modern banking regulation, which prioritizes disclosure and transparency.

a) Provisions History of Indian Banks for Bad Loans or NPAs:

The Provisions History of Indian Banks for bad loans, or Non-Performing Assets (NPAs), is a story of gradual reform guided by the Reserve Bank of India (RBI). Before 1991, the framework was underdeveloped, leading to widespread issues. Subsequent committees, primarily the Narasimham Committees, introduced prudential norms for asset classification and provisioning, bringing Indian standards closer to global best practices.

Pre-1991: An Informal and Opaque System:

Prior to the economic liberalization reforms of 1991, India's banking sector was characterized by state control and a lack of transparency.

- ✱ **Subjective Classifications:** Banks used an internal “Health Code” system to classify assets. The income generated from loans was recognized on an accrual basis, meaning it was booked even if the borrower was not making payments, which masked the true financial health of banks.
- ✱ **“Past Due” Concept:** The classification of a loan as non-performing relied on a “Past Due” concept, which meant an account was only considered overdue if it remained outstanding for a specified number of days after the payment due date. This timeframe was not



uniform or strictly enforced.

- ★ **Nationalization's Impact:** Following the nationalization of banks in 1969 and 1980, the focus shifted towards social banking and directed lending to priority sectors like agriculture and small-scale industries. While this expanded credit access, it also led to lax credit appraisal and monitoring, contributing to a buildup of bad debts.

1991-2004: Introduction of Prudential Norms:

The 1991 economic crisis exposed the severe weaknesses in the Indian banking system, leading to the appointment of the Narasimham Committee. Its recommendations fundamentally reformed how bad loans were handled.

- ★ **Narasimham Committee I (1991):** Recommended introducing prudential norms for income recognition, asset classification, and provisioning in a phased manner. The goal was to ensure bank balance sheets reflected their actual financial health.
- ★ **Asset classification grades:** Assets began to be classified into different categories based on their recovery status:
 - ★ Standard Assets: Regular loans and advances.
 - ★ Sub-Standard Assets: NPAs for a period of 12 months or less.
 - ★ Doubtful Assets: NPAs for more than 12 months.
 - ★ Loss Assets: Identified as uncollectible by auditors but not yet written off.
- ★ **Phased transition to 90-day norm:** The period for a loan to be classified as an NPA was progressively shortened from four quarters in 1993 to the current international standard of 90 days, effective from March 31, 2004.

2005-2016: Addressing the Post-Crisis Surge:

The period following the 2008 global financial crisis saw a massive surge in NPAs, particularly in public sector banks, due to reckless lending and lax credit appraisals.

- ★ **Asset Quality Review (AQR):** In 2015, the RBI initiated an AQR to force banks to recognize and provision for their bad loans more honestly. This exercise revealed the true extent of the problem, leading to a spike in reported NPAs.

- ★ **"Past Due" Concept Eliminated:** From March 31, 2001, the "Past Due" concept was dropped, with the NPA period now reckoned from the initial date of default.

2016-Present: New Recovery Mechanisms and Provisioning Standards:

The systemic bad loan crisis prompted the government and the RBI to introduce more aggressive resolution and provisioning mechanisms.

- ★ **Insolvency and Bankruptcy Code (IBC), 2016:** Provided a modern, time-bound framework for insolvency resolution and recovery, which significantly improved the recovery rates for banks.
- ★ **SARFAESI Act, 2002:** Granted banks the power to enforce security interests and seize assets from defaulting borrowers without court intervention, though with some limitations.
- ★ **Provisioning Norms Tightened:** The RBI has continuously tightened provisioning norms, requiring banks to set aside a larger portion of their earnings to cover potential losses from bad and doubtful loans. These provisions are made based on the asset classification category.
- ★ **Active Recovery and Write-offs:** While write-offs have increased, government data clarifies that this does not constitute a waiver for defaulters and that banks continue to pursue recovery through various legal channels.
- ★ **Improved Asset Quality:** Largely thanks to these reforms, the Gross NPA ratio for public sector banks dropped significantly from its peak in 2018 to 3.12% by September 2024.

b) Proactive and Predictive Approach to ECL Provisioning:

The Reserve Bank of India (RBI) is implementing the Expected Credit Loss (ECL) framework for banks starting April 1, 2027, transitioning from the previous incurred loss model. This change requires banks and professionals to prepare for a more proactive and predictive approach to provisioning.

Key Changes Under the ECL Framework:

- ★ **Proactive Provisioning:** Instead of setting aside provisions only after a loan has defaulted (the incurred



loss model), banks must now anticipate and provision for potential future losses across their loan portfolios.

★ **Three-stage Asset Classification:** Financial instruments are categorized into three stages based on their credit risk level:

❖ **Stage 1:** For loans with no significant increase in credit risk, a 12-month ECL provision is required.

❖ **Stage 2:** For loans with a significant increase in credit risk but not yet impaired, a lifetime ECL provision is required. Draft norms suggest that loans overdue by more than 30 days will generally fall into this category.

❖ **Stage 3:** For credit-impaired assets (non-performing), a lifetime ECL provision is mandatory.

Calculation Inputs: To calculate ECL, banks must estimate the following parameters for their loans and portfolios:

❖ **Probability of Default (PD):** The likelihood that a borrower will default over a specific time horizon.

❖ **Loss Given Default (LGD):** The estimated loss that will be incurred if a borrower defaults.

❖ **Exposure at Default (EAD):** The estimated exposure amount at the time of default.

★ **Regulatory Guidance:** The RBI has issued draft norms, with a final circular expected soon. The draft includes prudential floors for provisioning and a transition period until March 31, 2031, to help banks spread the impact of additional provisioning.

Implications for Banks and Professionals:

For Banks:

★ **Training and Upskilling:** Banks need to train their credit risk management, finance, and accounting teams on the new ECL methodology. This includes developing internal expertise in complex modelling techniques and understanding new provisioning rules.

★ **Data and Systems:** The ECL framework requires high-quality historical data to predict future losses. Banks must enhance their data architecture and invest

in new software and modelling capabilities to perform loan-level analysis.

★ **Model Development and Validation:** Banks will need to build and validate their own ECL models, subject to RBI's guidelines. A robust model validation process is essential to ensure the accuracy and reliability of these estimates.

★ **Operational Changes:** Credit risk assessment will become a more dynamic and data-intensive process, affecting lending practices, pricing, and collection strategies.

For Auditors and Financial Professionals:

★ **Deepen Understanding of ECL:** Professionals must be thoroughly updated on the ECL framework, including the PD, LGD, and EAD parameters, as well as the three-stage model.

★ **Scrutinize Model Assumptions:** Auditors must validate the assumptions and inputs used in the banks' ECL models, such as historical data, economic forecasts, and the justification for classifying assets into different stages.

★ **Evaluate Internal Controls:** The robustness of a bank's internal controls for implementing ECL needs to be assessed. This includes evaluating the data quality, the integrity of the models, and the governance framework surrounding credit risk assessment.

★ **Review Transitional Adjustments:** Auditors will need to verify the transitional adjustments that banks make to their capital during the glide path period to ensure they comply with RBI guidelines.

★ **Enhanced Reporting:** Audits of ECL provisions will be more complex and require a deeper level of scrutiny compared to the old incurred loss model. The new norms will affect financial statements and require a sophisticated understanding of forward-looking risk assessment.

c) Revamp of Statutory Audit Process and Core Banking System:

The Reserve Bank of India (RBI) is replacing the current Incurred Loss-based provisioning system (IRAC norms) with an Expected Credit Loss (ECL) framework from April 1, 2027. This shift will require banks to fully revamp their statutory audit processes and update their Core Banking System (CBS) software.



★ Differences: IRAC vs. ECL

The transition from IRAC to ECL is a fundamental shift from a reactive to a predictive approach to credit risk.

Feature	IRAC Norms (Current)	ECL Norms (Proposed)
Provisioning Trigger	Provisioning is triggered <i>after</i> a loan has defaulted and become a non-performing asset (NPA). It is based on the period the loan has remained an NPA.	Provisioning is required for <i>all</i> financial assets from the moment of origination. It is based on a forward-looking assessment of potential future losses.
Risk Assessment	Uses a backward-looking approach based on historical loss events.	Adopts a predictive, forward-looking model that considers economic forecasts and changes in credit risk. Banks must estimate potential losses based on: • Probability of Default (PD): The likelihood of a borrower defaulting. • Loss Given Default (LGD): The amount of loss incurred if a default occurs. • Exposure at Default (EAD): The outstanding amount of a loan at the time of default.
Asset Classification	Loans are classified as Standard, Sub-standard, Doubtful, or Loss assets.	Financial assets are classified into three stages based on credit risk: • Stage 1: Loans with no significant increase in credit risk. Provisions are based on 12-month ECL. • Stage 2: Loans with a significant increase in credit risk. Provisions are based on lifetime ECL. • Stage 3: Credit-impaired assets (equivalent to NPAs). Provisions are also based on lifetime ECL.
Impact on Provisions	Generally, results in lower and less volatile provisioning.	Expected to increase overall provisioning, particularly for Stage 2 assets, which are currently treated as standard assets.

Impact on Statutory Audit Procedures:

The change to the ECL framework will fundamentally alter the scope and methodology of statutory audits, moving them from a compliance-based check to a more judgment-based assessment of a bank's risk models.

- ★ **Focus on Model Governance:** Auditors will need to verify the design, implementation, and effectiveness of a bank's internal ECL models. This includes validating the accuracy of the underlying data and assumptions used to calculate PD, LGD, and EAD.
- ★ **Assessment of Management Judgment:** Since ECL relies on forward-looking estimates, auditors must assess the reasonableness of management's judgments regarding future economic conditions, which influence provisioning levels.
- ★ **Data Integrity and Collection:** Auditors will have to test the integrity of the significantly higher volume of data required for ECL calculations. This includes

ensuring data is captured and processed correctly across all banking systems.

- ★ **Evaluation of Controls:** The audit will focus on testing the effectiveness of internal controls related to ECL model development, validation, and data governance.
- ★ **Branch-level Audit Changes:** Branch auditors will shift their focus from merely verifying overdue status to ensuring that branches correctly capture the granular data required for the centralized ECL calculation engine.

Impact on Core Banking System (CBS) Software:

The transition to ECL requires a major software overhaul for banks to automate the new provisioning process and produce the necessary data for reporting.

- ★ **Automated ECL Module:** CBS software must have a new, integrated module capable of calculating ECL in real-time or at specified intervals. This replaces

the old module that only triggered provisioning upon default.

- ★ **Enhanced Data Analytics:** The system must incorporate advanced analytics to assess credit risk for every financial asset. This includes pulling data on borrower behaviour, repayment trends, and external macroeconomic indicators.
- ★ **Data Warehousing and Storage:** The new framework requires collecting and storing a much larger volume of granular data at the individual asset level, necessitating robust data warehousing capabilities.
- ★ **Integration with Risk Management:** The ECL module must be integrated with the bank's broader risk management systems to allow for dynamic portfolio

management and early warning signal generation.

- ★ **Reporting and Disclosure Changes:** The CBS will need to produce new reports and financial disclosures mandated by the RBI, reflecting the new stage-based asset classification and provisioning requirements.

d) How to Arrive ECL?

For arriving at Expected Credit Loss (ECL) provisions for various loan products, commercial banks in India need to follow the framework proposed by the Reserve Bank of India (RBI), which is aligned with the global IFRS 9 accounting standard. The bank classifies loans into three stages based on their credit risk and applies a formula involving key components to calculate the provision amount.

The 3-stage ECL framework

The ECL provision is not based on actual loss, but on the expected loss over a specific time horizon. This time frame depends on which of the three stages a loan fall under.

Stage	Credit risk	Provisioning horizon
Stage 1	A loan has not had a significant increase in credit risk since its origination	Banks must recognize the 12-month ECL , which is the portion of lifetime ECL expected from default events within 12 months.
Stage 2	A loan has experienced a significant increase in credit risk since its initial recognition but is not yet credit-impaired or in default. An asset may move to this stage if it is over 30 days past due.	Banks must recognize the lifetime ECL , which is the total expected loss over the full contractual life of the financial instrument.
Stage 3	The loan is credit-impaired (equivalent to a Non-Performing Asset or NPA in the Indian context).	The lifetime ECL is calculated, and the bank recognizes interest income on the net carrying value of the loan (gross value minus the loss allowance).

Key components for ECL calculation:

The central formula for calculating ECL is based on three main components: $ECL = (PD \times LGD \times EAD)$.

- ★ **Probability of Default (PD):** The likelihood that a borrower will default over a specific time horizon (12-month for Stage 1, lifetime for Stage 2 and 3).
- ★ **Loss Given Default (LGD):** The expected loss to the bank if a default occurs. It is often expressed as a percentage of the outstanding exposure after accounting for potential recovery through collateral liquidation or other means.
- ★ **Exposure at Default (EAD):** The total amount the bank expects to be owed by the borrower at the time of default.

Simple examples with Indian loan products:

Example 1: Stage 1 provision for a home loan.

Assume a bank has a portfolio of standard home loans. This falls under Stage 1, requiring a 12-month ECL provision.

- ❁ **Loan product:** Home loan from State Bank of India.
- ❁ **Loan amount (EAD):** ₹50 lakhs.
- ❁ **12-month PD (estimated):** Based on historical data and future economic forecasts, the bank estimates a 12-month PD for this risk profile to be 0.5%.
- ❁ **LGD (estimated):** Home loans are secured, so



the bank expects to recover a significant portion through the sale of the property. After factoring in haircuts and recovery costs, the bank estimates an LGD of 30%.

Calculation:

$$\text{ECL} = 50,00,000 \times 0.5\% \times 30\% = 7,500$$

Action: The bank will set aside an ECL provision of ₹ 7,500 for this loan. The total provision for the home loan portfolio will be the sum of the ECL for each loan.

Example 2: Transition to Stage 2 for an unsecured personal loan.

Imagine a customer's personal loan starts showing signs of increasing credit risk, moving it from Stage 1 to Stage 2.

- ❖ **Loan product:** Personal loan from HDFC Bank.
- ❖ **Original loan amount:** ₹5 lakhs.
- ❖ **Current outstanding balance (EAD):** ₹3 lakhs.
- ❖ **Trigger for Stage 2:** The customer has been 45 days past due on their EMI payments.
- ❖ **Lifetime PD (estimated):** Due to the payment delay, the bank re-evaluates the customer's risk profile and forecasts a higher lifetime PD of 8%.
- ❖ **LGD (estimated):** Since it is an unsecured loan, the LGD is significantly higher than a home loan. The bank estimates an LGD of 70%.

Calculation:

$$\text{Lifetime ECL} = 3,00,000 \times 8\% \times 70\% = 16,800$$

General Calculation Format and Formulas:

The fundamental principle is that the ECL amount depends on which stage the financial instrument is classified into, which is determined by whether its credit risk has increased significantly since initial recognition.

Stage	Credit Risk Status	ECL Measurement Period	Interest Revenue Calculation	Formula (Simplified)
Stage 1	Performing (No significant increase in Credit Risk)	12-month ECL.	On Gross Carrying Amount.	$\text{ECL} = \text{EAD} \times \text{PD}_{12m} \times \text{LGD}$
Stage 2	Underperforming (Significant increase in Credit Risk, but not Credit-Impaired)	Lifetime ECL	On gross carrying amount	$\text{ECL} = \text{EAD} \times \text{PD}_{\text{Life-time}} \times \text{LGD}$

Action: HDFC Bank must recognize a lifetime ECL provision of ₹16,800. This is a higher provision than the 12-month ECL that would have been held previously.

Example 3: Stage 3 provision for a credit-impaired agricultural loan Suppose an agricultural loan becomes a Non-Performing Asset (NPA).

❖ **Loan product:** Kisan Credit Card loan from Bank of Baroda.

❖ **Current outstanding balance (EAD):** ₹1.5 lakhs.

Status: The loan is overdue by more than 90 days, classifying it as a credit-impaired asset (NPA) and moving it to Stage 3.

PD: Since default has already occurred, the PD for a Stage 3 asset is 100%.

LGD (estimated): The bank initiates recovery proceedings. Based on the value of the underlying collateral (e.g., land) and legal costs, it estimates an LGD of 50%.

Calculation:

$$\text{Lifetime ECL} = 1,50,000 \times 100\% \times 50\% = 75,000$$

Action: The bank will set aside a provision of ₹75,000 for this loan. Interest accrual will continue under Ind-AS, but on the net value of the asset.

While specific proprietary calculation sheets (templates) are internal to each bank, the general format, formulas, and practical examples for calculating Expected Credit Loss (ECL) under the IFRS 9 three-stage model are standardized. The core formula is $\text{ECL} = \text{PD} \times \text{LGD} \times \text{EAD}$, discounted to the reporting date using the Effective Interest Rate (EIR).

Stage	Credit Risk Status	ECL Measurement Period	Interest Revenue Calculation	Formula (Simplified)
Stage 3	Credit-impaired (In default / NPA)	Lifetime ECL	On amortized cost (Net of Loss Allowance)	$ECL = EAD \times PD_{\text{Life-time}} \times LGD$

Key Components:

- ★ **PD (Probability of Default):** The likelihood of the borrower defaulting over a specific timeframe (12 months or lifetime).
- ★ **LGD (Loss Given Default):** The percentage of exposure the bank expects to lose if a default occurs (1 - Recovery Rate).
- ★ **EAD (Exposure at Default):** The total amount the bank expects to be owed at the time of default (includes principal, accrued interest, and potential future drawdowns on committed facilities)

Practical Example (Hypothetical Loan)

Consider a loan with an initial exposure of ₹10,00,000, an annual interest rate of 1%, and a 2-year term.

Stage 1: Initial Recognition (Performing Asset)

Assumption: No significant increase in credit risk. The bank uses 12-month PD and LGD.

Parameters:

EAD = ₹10,10,000 (including interest for the first year).

PD_{12m} = 2% (based on historical data, adjusted for forward-looking info).

LGD = 5%

Calculation:

ECL (Stage 1) = $EAD \times PD_{12m} \times LGD = ₹10,10,000 \times 2\% \times 5\% = ₹1,010$

The present value of ECL is calculated by discounting with the effective interest rate (1%): $PV \text{ of ECL} = ₹1,010 / (1 + 0.01) = ₹1,000$

The bank recognizes a loss allowance of ₹1,000 in the P&L.

Stage 2: Subsequent Reporting Date (Significant Increase in Credit Risk)

Assumption: At the next reporting date, the credit risk has increased significantly, but the loan is not yet impaired. It moves to Stage 2, requiring a lifetime ECL calculation.

Parameters (example values):

EAD = ₹10,10,000

Lifetime PD: 5% in year 1, 10% in year 2 (cumulative over life)

Lifetime LGD: 20% in year 1, 30% in year 2

Calculation (present value of lifetime expected losses):

ECL for Year 1 = $₹10,10,000 \times 5\% PD \times 20\% LGD = ₹10,100$. $PV \text{ (Year 1)} = ₹10,100 / (1 + 0.01) = ₹10,000$

ECL for Year 2 = $₹10,10,000 \times 10\% PD \times 30\% LGD = ₹30,300$. $PV \text{ (Year 2)} = ₹30,300 / (1 + 0.01)^2 = ₹29,703$.

Total ECL (Stage 2) = $₹10,000 + ₹29,703 = ₹39,703$

The bank updates the loss allowance to ₹39,703.

Stage 3: Credit-Impaired Asset (Default Occurred)

Assumption: The borrower defaults. The asset is now credit-impaired (NPA). Lifetime ECL is still calculated.

Calculation: The focus shifts to the expected recovery amount.

★ The ECL is the difference between the gross carrying amount and the expected recoverable cash flows, discounted at the original EIR. The loss allowance reflects the full lifetime expected loss.

★ Interest income is now calculated on the amortized cost (gross amount less the loss allowance).

★ Banks typically use sophisticated internal models and forward-looking macroeconomic data to derive the PD, LGD, and EAD parameters, which are then used in the above formulas within their risk management systems.



e) ECL and Role of Cost Accountants:

ECL calculations, which involve the risk parameters of Probability of Default (PD), Loss Given Default (LGD), and Exposure at Default (EAD), are a critical part of a company's financial statements. The Auditor uses the following process to verify them:

- ✱ **Evaluate management's assessment:** Review the company management's assessment and methodology used to estimate ECL provisions.
- ✱ **Assess assumptions:** Assess the reasonableness and appropriateness of the assumptions underlying the PD, LGD, and EAD models. This includes evaluating the economic forecasts used.
- ✱ **Data integrity:** Verify that the underlying data used in the ECL models is accurate and complete. This is where insights from a cost audit could provide supplementary information.
- ✱ **Compliance with standards:** Ensure the ECL provision is calculated and disclosed in accordance with the applicable accounting standards, such as Ind-AS 109 in India.
- ✱ **Communicate findings:** Report any material misstatements or issues in the ECL provision to the company's Board and stakeholders.

How a Cost Accountant's Input is Used:

The detailed data they provide from a Cost Audit under Section 148 is a crucial input that the Auditor can leverage.

- ✱ **Insights into business performance:** The cost audit provides granular details on production costs, capacity utilization, and cost efficiencies.
- ✱ **Identify potential credit risks:** By analysing the cost audit report.
- ✱ **Corroborate financial data:** The cost audit report, which is independently filed with the government, can be used to corroborate data presented in the financial statements.

Cost Accountants can provide valuable, granular data on a company's operations.

To Sum Up:

The implementation of Expected Credit Loss (ECL)

provisioning by the Reserve Bank of India (RBI) from April 1, 2027, presents several challenges for Indian commercial banks, including significant data and technology requirements, methodological complexities, and potential impacts on profitability and capital adequacy. However, the RBI has provided a glide path until March 2031 to smoothen the transition and mitigate a sudden impact on capital.

Challenges for Indian Commercial Banks:

- ✱ **Modelling and data requirements:** Banks will need to move from a historical, incurred-loss model to a forward-looking ECL framework, which requires developing and validating new statistical models to estimate credit losses. This necessitates collecting vast amounts of granular historical and macroeconomic data, which is a significant undertaking for many institutions.
- ✱ **Methodological complexities:** The ECL framework is principles-based, not prescriptive, offering flexibility but also creating complexity in choosing the most appropriate methodology for different loan portfolios. Banks must estimate the Probability of Default (PD), Loss Given Default (LGD), and Exposure at Default (EAD) for each loan.
- ✱ **Initial impact on capital:** The one-time adjustment required during the transition to the ECL framework in 2027 is expected to increase provisioning. While the overall impact on capital adequacy is anticipated to be minimal, some smaller banks might need to accelerate provision buffers and raise capital to meet requirements.
- ✱ **Operational changes and costs:** Transitioning to the ECL model requires extensive changes to internal processes and workflows across credit, business, and finance functions. The required upgrades in technology and data capacity will increase operational costs.
- ✱ **Risk of discretion and subjectivity:** The ECL model requires a degree of judgment from banks when assessing credit risk. This could potentially allow for profit smoothing, though the RBI's inclusion of regulatory floors and backstops is intended to mitigate this.
- ✱ **Increased provisioning for Stage 2 assets:** Under the new framework, loans with a "Significant Increase in Credit Risk" (SICR) will move to Stage 2 and require a materially higher provision based on lifetime expected



losses, compared to the incurred loss model.

Measures to Mitigate Challenges:

- ★ **Glide path:** The RBI has implemented a four-year glide path for banks to absorb the initial capital impact and spread out the required provisions until March 2031.
- ★ **Prudential floors and backstops:** The RBI has established prudential floors for provisioning and backstops for LGD to ensure consistency and prevent excessive optimism in a bank's internal models.
- ★ **Capital buffers:** Most large Indian banks have strengthened their balance sheets and maintained healthy capital buffers, which helps prepare for the transition.

Overall outlook:

While the transition presents notable challenges, the move

is seen as a positive step toward aligning Indian banking practices with global standards and enhancing credit risk management. The ECL framework is expected to improve the resilience of the financial system by encouraging banks to recognize and provision for potential credit losses earlier. Well-prepared banks, particularly larger institutions, are expected to navigate the transition smoothly due to their existing data, capital, and governance frameworks.

References:

- a) RBI releases Discussion Paper on Expected Loss (EL)-based Approach for loan loss provisioning by banks, January 16, 2023.
- b) RBI issues Draft Directions pursuant to Policy Announcement October 07, 2025.



Annexure I

Ways and Means to Minimize ECL Provisions

To minimize expected credit loss (ECL) provisions, Indian banks must focus on proactive credit risk management, robust data analytics, early problem detection, and strict adherence to regulatory guidelines. The key measurements and steps include:

Enhance Credit Origination and Appraisal:

- ✳ **Thorough Credit Assessment:** Conduct comprehensive qualitative and quantitative analyses of borrowers, including credit scores, financial statements, business models, and market conditions.
- ✳ **Realistic Repayment Schedules:** Fix repayment schedules based on the borrower's actual cash flows and liquidity to ensure timely repayments.
- ✳ **Appropriate Loan Pricing:** Price loans to reflect the associated credit risk accurately, which helps cover expected losses and ensures sustainable lending practices.
- ✳ **Strong Underwriting Standards:** Implement stringent underwriting standards to filter out high-risk borrowers at the initial stage.

Implement Robust Credit Risk Monitoring:

- ✳ **Continuous Monitoring:** Regularly monitor the financial health and market conditions of existing borrowers. Early detection of potential issues is crucial for timely intervention.
- ✳ **Early Warning Systems (EWS):** Use advanced analytics and EWS to identify deteriorating credit quality (e.g., accounts moving into Special Mention Accounts (SMA) 0, 1, and 2) before they become non-performing assets (NPAs).
- ✳ **Proactive Restructuring:** When potential stress is identified, proactively restructure loans or take corrective actions to prevent default and avoid the higher "lifetime ECL" provisioning required for Stage 2 and Stage 3 assets.
- ✳ **Strict NPA Classification:** Ensure identification of NPAs is done on an ongoing basis according to RBI norms. Timely and accurate classification prevents understatement of risk.

Optimize ECL Model and Data Management:

- ✳ **Develop Sophisticated Models:** Use robust, forward-looking models for Probability of Default (PD), Loss Given Default (LGD), and Exposure at Default (EAD). The models should incorporate historical data, current conditions, and reasonable economic forecasts.
- ✳ **Ensure High Data Quality:** ECL computation is data-intensive. Banks need sufficient, high-quality historical data covering at least one economic cycle. Address any data gaps or quality issues.
- ✳ **Model Validation and Governance:** Establish an independent model validation process to ensure the effectiveness and efficacy of ECL models. This includes periodic monitoring and validation per the bank's Model Risk Management (MRM) policy and RBI guidelines.
- ✳ **Leverage Technology:** Adopt AI and data analytics to improve credit assessment, monitoring, and predictive modelling for better accuracy in ECL estimation.

Strategic Portfolio and Capital Management:

- ✳ **Portfolio Diversification:** Avoid excessive concentration of loans in a single sector, industry, or borrower. Diversification reduces the impact of specific sector downturns on overall asset quality.
- ✳ **Strengthen Internal Controls:** Implement a strong governance framework to ensure credit risk policies are consistently followed and deviations are promptly addressed.
- ✳ **Maintain Adequate Capital Buffers:** While not directly a measure to minimize provisions, maintaining healthy capital adequacy (CET1) buffers helps absorb any one-time increases in provisioning during the transition to the new ECL regime, as permitted by the RBI's transitional arrangements.

By integrating these controls and measurements across the entire credit lifecycle, Indian banks can effectively manage credit risk, minimize the migration of loans to higher provisioning stages (Stage 2 and 3), and thereby optimize their ECL provisioning requirements.



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