



# BANK MANAGEMENT THEORY & PRACTICE

Padma Charan Dhal  
Dr. Premalatha K P



# Bank Management

## Theory & Practice

---

**Padma Charan Dhal**  
**Dr. Premalatha K P**



# **Bank Management Theory & Practice**

Padma Charan Dhal  
Dr. Premalatha K P

**W**  
**Wisdom Press**  
NEW DELHI

**Bank Management: Theory & Practice**

*Padma Charan Dhal*  
*Dr. Premalatha K P*

*This edition published by Wisdom Press,  
Murari Lal Street, Ansari Road, Daryaganj,  
New Delhi - 110002.*

ISBN: 978-93-83318-01-8

Edition: 2022 (Revised)

ALL RIGHTS RESERVED

- 
- This publication may not be reproduced, stored in
- a retrieval system or transmitted, in any form or by
- any means, electronic, mechanical, photocopying,
- recording or otherwise, without the prior permission of
- the publishers.

**Wisdom Press**

**Production Office:** "Dominant House", G - 316, Sector - 63, Noida,  
National Capital Region - 201301.  
Ph. 0120-4270027, 4273334.

**Sales & Marketing:** 4378/4-B, Murari Lal Street,  
Ansari Road, Daryaganj, New Delhi-110002.  
Ph.: 011-23281685, 41043100.  
e-mail : wisdompress@ymail.com

# CONTENTS

<b>Chapter 1.</b> Bank Management: History, Definition and Functions.....	1
— <i>Dr Premalatha K P</i>	
<b>Chapter 2.</b> Banks: Mantaining the Economics and Finanical Dynamics .....	8
— <i>Dr Shashank M Hiremath</i>	
<b>Chapter 3.</b> Types of Banks: Commercial, Central and Cooperative .....	15
— <i>Dr Sireesha Nanduri</i>	
<b>Chapter 4.</b> Central Banks in Banking System: National Finanical System.....	23
— <i>Dr Sireesha Nanduri</i>	
<b>Chapter 5.</b> A Review: Banking Regulations and Supervision .....	31
— <i>Dr Shalini R</i>	
<b>Chapter 6.</b> Bank Capital and Solvency Management: Legal System.....	39
— <i>Dr Batani Raghavendra Rao</i>	
<b>Chapter 7.</b> A Brief Overview of Risk Management in Banking.....	46
— <i>Dr Vinoth S</i>	
<b>Chapter 8.</b> Liquidity Management in Banking: A Review .....	53
— <i>Dr Chaya Bagrecha</i>	
<b>Chapter 9.</b> Asset and Liability Management ALM: Improving Bank Financial State.....	61
— <i>Dr Vinoth S</i>	
<b>Chapter 10.</b> Credit Risk Assessment and Management: Sustaining Financial Stability .....	68
— <i>Dr Gopalakrishnan Chinnasamy</i>	
<b>Chapter 11.</b> Interest Rate Risk Management: Variables Influencing the Financial Landscape.....	76
— <i>Dr Premalatha K P</i>	
<b>Chapter 12.</b> Operational Risk in Banking: A Comprehensive Strategy .....	83
— <i>Dr Gopalakrishnan Chinnasamy</i>	
<b>Chapter 13.</b> Green Banking: Consumer Services and Green Investments .....	90
— <i>Dr Selvi S</i>	
<b>Chapter 14.</b> Digital Banking and Online Services: A Comprehensive Overview .....	97
— <i>Dr Krishna B Koppa</i>	
<b>Chapter 15.</b> Customer Relationship Management CRM in Banks .....	104
— <i>Dr Krishna B Koppa</i>	

<b>Chapter 16.</b> Retail Banking Services: A Comprehensive Overview.....	112
— <i>Dr Rashmi Akshay Yadav</i>	
<b>Chapter 17.</b> Corporate Banking and Services: Key Challenges .....	121
— <i>Dr Rashmi Akshay Yadav</i>	
<b>Chapter 18.</b> Investment Banking and Capital Markets: Global Financial Ecosystem .....	128
— <i>Dr Chaya Bagrecha</i>	
<b>Chapter 19.</b> Islamic Banking Principles and Practices: A Comprehensive Overview .....	136
— <i>Dr Chaya Bagrecha</i>	
<b>Chapter 20.</b> Microfinance and Financial Inclusion: Promoting the Economic Growth .....	143
— <i>Dr Chaya Bagrecha</i>	
<b>Chapter 21.</b> Foreign Exchange Operations in Banks: Exploring Market Dynamics.....	151
— <i>Dr Selvi S</i>	
<b>Chapter 22.</b> Trade Finance and International Transactions: Crossing the National Boundaries .....	159
— <i>Dr Selvi S</i>	
<b>Chapter 23.</b> Money Laundering and Anti-Money Laundering AML.....	167
— <i>Dr Batani Raghavendra Rao</i>	
<b>Chapter 24.</b> Basel Accords and Banking Standards: Global Banking Standards Architecture .....	174
— <i>Dr Batani Raghavendra Rao</i>	
<b>Chapter 25.</b> Bank Mergers and Acquisitions: A Comprehensive Overview .....	181
— <i>Dr Shashank M Hiremath</i>	

## CHAPTER 1

### BANK MANAGEMENT: HISTORY, DEFINITION AND FUNCTIONS

---

Dr Premalatha K P, Assistant Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-dr.premalatha\_kp@cms.ac.in

#### ABSTRACT:

For financial institutions to operate effectively, bank management is essential. An overview of the essential ideas and rules governing the subject of bank administration is given in this study. It examines the crucial functions that banks play in the economy and draws attention to the variety of services they provide. The definition of bank management and its importance in preserving financial stability and promoting economic progress is given at the beginning of the study. It clarifies the many bank types commercial, central, and cooperative banks among them and their distinctive roles within the financial system. To maintain the safety and soundness of banks, the study digs into the regulatory structure that oversees banking activities, highlighting the significance of adherence to banking laws and efficient supervision. The principles of capital adequacy, liquidity management, and risk assessment are introduced, underlining their crucial roles in preserving the institutions' financial stability.

#### KEYWORDS:

Bank Management, Economic Progress Financial Stability, Liquidity Management, Risk Assessment.

#### INTRODUCTION

A bank is a kind of financial organization that takes deposits, disburses loans, clears checks, pays interest at set rates, and often serves as a middleman in financial transactions. Additionally, it offers its clients additional financial services. In order to optimize revenues, bank management oversees a variety of bank-related issues. Liquidity management, asset management, liability management, and capital management are the main issues. These topics will be covered in subsequent chapters. The Roman Empire, which ruled throughout the Babylonian era, is when banks and banking-related activities first appeared. Compared to contemporary banking, it was being performed on a relatively small scale, and the framework was not organized. Modern banks follow government regulations and deal with banking activity on a wider scale. With its authority over the financial system, the government plays a significant role. This necessitates bank management, which further provides high-quality customer service and a scenario in which the client, the banks, and the government all profit [1]–[3].

#### Banks, both scheduled and unscheduled

Banks are divided into scheduled and non-scheduled categories according to the qualifying standards specified by the regional government. The following are the primary distinctions between scheduled and nonscheduled banks from the standpoint of Indian banking. Scheduled banks are those that have paid-up capital and deposits with the Reserve Bank of India totaling at least Rs.5 lakh. They conduct all of their banking operations in India. The majority of banks in



India are classified as scheduled banks. Banks having reserve capital of less than Rs.5 lakh are classified as non-scheduled banks. There aren't many banks that fit this description.

### **Changes in Banks**

From primitive banking, in which goods were lent out, to the present banking system, which offers a variety of financial services. The financial system developed gradually, with improvements in all areas of banking.

### **India's banking industry is expanding**

Based on the services they provide, the banking system in India may be divided into three distinct stages. These separate stages may be used to explain the overall development of banking:

#### **Phase 1**

From 1786 until 1969, this was the infancy of India's financial system. Indian banks began to be established at this time, and additional banks were opened. Between 1913 and 1948, the banking sector also had failures during this period of relatively sluggish expansion. The Banking Companies Act was created by the Indian government in 1949. This made bank operations and processes more efficient. The public's faith in banks was low at this time, and post offices were seen as safer places to deposit money [4], [5].

#### **Phase 2**

During this period of banking, which lasted from 1969 to 1991, a number of significant choices were taken. Fourteen significant banks were nationalized in 1969. In 1971, the Credit Guarantee Corporation was established. This made it easier for individuals to get loans to start enterprises. Regional rural banks were established in 1975 to aid with the development of rural communities. These banks offered cheaper interest rate loans. The amount of deposits and loans made fell sharply as people's trust and confidence in the banking system increased.

#### **Phase 3**

This phase first appeared in 1991. The liberalization process started in 1991, and many measures were put into place to guarantee high-quality service and raise client satisfaction. ATMs were introduced during the current era, simplifying cash withdrawals. Internet banking was also introduced during this time to facilitate simpler financial transactions anywhere in the globe. Banks have been working to improve customer service and speed up and streamline banking operations. Building an organic and optimum interaction system between the components of banking systems with a view to profit is the basic goal of bank management. Every effective banker must carry out managerial duties in addition to technical banking tasks. The primary goal of a bank, despite the fact that it is a financial organization like other companies, is to maximize wealth via profit. The banking industry is unique from other industries. Other firms may move their products or services from a plant to an office, to distant locations, or even to other nations. However, banks are only permitted to transfer money or provide services after meeting the region where their office or branch is located and there's demand for a loan. High-quality services may be provided through efficient management, and effective organization management can guarantee effective management. Therefore, it is difficult to manage professionally without clearly defining the authority and duty of every employee working for a bank.

## **What is Bank Management?**

Bank management has numerous definitions. Generally speaking, managing a bank's statutory activities is referred to as bank management. Financial relations associated with banking operations and other interactions that are also associated with carrying out management tasks in banking are the particular object of management that defines bank management [6]–[8]. Effective bank management techniques play a key role in the profitability-risk ratio in bank lending operations being optimized successfully. One of the components of both the general entrepreneurial culture and the banking culture is the capacity for taking appropriate risks. The process of managing a bank is more difficult since a regulatory structure is constantly in place to oversee bank administration.

### **1. Bank Regulation is Changing**

Thousands of banks collapsed globally during the end of the third decade of the 20th century as a result of the Great Depression, an economic depression. Millions of depositors had a severe difficulty as a result of the bank bankruptcy since they were unable to receive their money back. The deposit insurance plan was made necessary for banks to defend depositor interests. From this point on, bank regulations multiplied and came from all directions. The governing agencies of banks used to believe that acquiring a registration certificate or certificate of beginning of business and presenting the financial statements was sufficient.

### **2. Changing technological development and Growing Competition**

The cornerstone of competitiveness is the quantity of customers serviced and the quality attributes of services. The bank may prevail in the marketplace if it offers superior service of a high caliber. Two banks collaborate to develop innovative services that provide clients an enduring competitive edge. Commercial banks must engage in the multifaceted competitive environment in order to demonstrate why the new benefit or service they provide is special and distinct from those of other businesses.

The bank can continually develop customers because it can draw in additional customers. More money was invested on and fresh training was required in this technological environment. Therefore, the management of the bank develops a new financial services strategy tailored to the banking industry's fierce competition.

### **3. International Relations Are Changing**

In the case of a new issue, the bank in the international banking industry is subject to a significant amount of laws. Global or bilateral interactions increase competitiveness in the banking industry. Other issues that threaten the banking industry include regulations governing the transfer of property, changes in social and cultural norms, and international trade and commerce.

The management of the bank employs a strategy to combine banks in the worldwide banking industry in this era of contemporary science as a response to the competitive environment and growth of international relations among banks. The aforementioned variables all add to the complexity and difficulty of bank administration.

## DISCUSSION

### Managing a Bank Concepts

Banks generate cash by receiving deposits of excess savings, capital from shareholders, or loans from other institutions, such as the central bank. A bank must pay certain collection fees and other associated expenses in order to get these monies. For a bank to be effective and profitable, after subtracting the cost of funding and other administrative costs, it must make money by collecting money and investing it. An suitable organizational structure must be chosen by a bank in order to carry out its operations in order to develop a competent management brigade. The circle that represents the bank management process is explained below. Planning, however, comes first in the management process, which is then followed by organization, coordination, inspiration, and control.

The efficient coordination of each of these components may guarantee ideal administration. **Planning** The planning phase of bank management is the first step. Planning is the process through which a company organization determines its future course of action. Planning provides solutions to issues pertaining to a bank as a whole, a specific branch, or a specific work division in the context of bank management. These inquiries may take the form of [9], [10].

- a. What function is a bank, branch, or work division to serve?
- b. In what ways does one work division support the initiatives of other work divisions?
- c. What kinds of activities does the bank conduct?
- d. Does the bank provide any standout services?

Establishing both long-term and short-term objectives is the second stage in planning. One thing that has to be kept in mind is that we are not discussing separate long-term and short-term planning here. Here, a strategy that combines and coordinates the body's long-term and short-term objectives is taken into consideration.

- a. The long-term objectives of banks outline a few broad objectives that may be met in the future. For instance
- b. What will the bank's ideal reach and size be at some point in the future?
- c. What steps would be taken to create new market niches?
- d. What kind of loan assets will make up banks' future loan portfolios?
- e. How big will a certain work division be in the future?

Planning's short-term objectives extensively outline the aims that can be reached soon. To this aspect of the planning is a budget. A few methods and resources are useful for planning. One of them is management by goal MBO. Planning cannot be done automatically using MBO. However, it functions as a powerful and distinctive instrument in the hands of a capable bank management.

Planning is the process through which a company organization determines its future course of action. Planning leads to the creation of a strategy for using a company's resources in the context of its anticipated environment in order to achieve its overarching goals. Many banks have planning divisions with technical experts because they recognize how important this job is. Others just occasionally do it.

## Objectives

All operations are focused on achieving the objectives, which are the aims. Although objectives are seen as definite and enforceable agreements once they are created, they may alter over time. Bank goals are often confined to ten to twelve elements and written in short, clear sentences. Following are a few goals from one bank's list:

- a. Financial services are sold by our company in Oregon as well as a few other regional, international, and national markets. We will expand our firm into sectors that provide reliable chances for growth and satisfy predefined profit standards.
- b. We'll work to maintain a steady rate of income development while obtaining top-notch investments and using smart, creative business strategies. We will actively diversify our sources of revenue while maintaining cost control via strategic planning and capable management.
- c. Our main marketing goal is to enhance our market share via excellent service and suitable goods that are compatible with long-term company strategies.
- d. The management shall maintain consistency in its policies and directives. Changes will be made swiftly and in a way that takes both the requirements of the person and the company into account.
- e. Promoting employees inside the company is our goal. However, the necessity for specialized skills and the development into new industries could necessitate acquiring employees from other sources.
- f. We are cognizant of social and economic issues and understand our obligations as corporate citizens. We support initiatives aimed at improving social and economic circumstances and take part in them.

## Policies

Naturally, the formation of bank policies comes after the goals are determined. Policies are broad expressions of understanding intended to prompt consideration and action throughout the decision-making process. Pricing might be an illustration of a bank policy. People who are concerned with planning benefit from policies. Without understanding of the overarching policies, it is impossible to imagine creating a budget. Additionally, policies act as a general direction or set of restrictions for bank officials and committees. The bank has a policy or a predetermined course of action that it may go to for advice if a certain set of circumstances occurs.

The policy serves as a coordinating mechanism to mobilize collective activity. Policies may be found in the board of directors' minutes, the reports of standing committees, or the organization's handbook.

## Rules

Rules and policies are two different things. According to a regulation, specified and unambiguous actions must be done in a certain circumstance or not at all.

A resolution written by the company's board of directors approving specified people to sign cheques and borrow money may be requested by a bank from a business establishing an account. That would be the law.

## Strategy

The next phase is to develop a plan of action to carry out the bank's aims and objectives once its objectives and policies have been established. The strategy a bank uses to achieve its goals is different from objectives, which are a subjective decision about the enterprise's quality, direction, and speed.

## CONCLUSION

The introduction to bank management offers a fundamental grasp of the fundamental ideas, roles, and difficulties involved in successfully running and managing a bank. In order to successfully negotiate the complexity of the financial business, maintain regulatory compliance, manage risks, and provide meaningful financial services to clients, individuals in the financial sector must have a thorough grasp of bank management. Successful bank management in the dynamic and competitive financial environment will continue to depend on ongoing education and adaptability to changing industry trends. It is a challenge for any commercial organization, including banks, to effectively communicate its goals, policies, and operating procedures to those parties that need them.

Due to the many rules and regulations set out by bank regulatory agencies, rules of operation are crucial in banking. Senior bank employees often communicate frequently on a daily basis, therefore being aware of different events does not pose a serious issue. The same is true for lending officers who collaborate often and focus on certain categories of lending, such consumer and business loans. In branch and group banking institutions, as well as among the various clerks, tellers, bookkeepers, computer operators, and other widely scattered personnel, communication channels must be kept open.

## REFERENCES:

- [1] D. Wulandari, S. H. Utomo, and B. S. Narmaditya, Waste bank: Waste management model in improving local economy, *Int. J. Energy Econ. Policy*, 2017.
- [2] I. A. Akinwumi, E. J. Micheal, and A. Raymond, Liquidity management and banks performance in Nigeria, *Issues Bus. Manag. Econ.*, 2017.
- [3] D. Wulandari, S. Hadi Utomo, and B. S. Narmaditya, International Journal of Energy Economics and Policy Waste Bank: Waste Management Model in Improving Local Economy, *Int. J. Energy Econ. Policy* 1, 2017.
- [4] M. M. Alhadab And B. A.- Own, Earnings Management and Banks Performance: Evidence from Europe, *Int. J. Acad. Res. Accounting, Financ. Manag. Sci.*, 2017, doi: 10.6007/ijarafms/v7-i4/3444.
- [5] D. Bassey Edem, Liquidity Management and Performance of Deposit Money Banks in Nigeria 1986 – 2011: An Investigation, *Int. J. Econ. Financ. Manag. Sci.*, 2017, doi: 10.11648/j.ijefm.20170503.13.
- [6] R. Luburić, Strengthening the Three Lines of Defence in Terms of More Efficient Operational Risk Management in Central Banks, *J. Cent. Bank. Theory Pract.*, 2017, doi: 10.1515/jcbtp-2017-0003.

- [7] S. Zakaria, The use of financial derivatives in measuring bank risk management efficiency: A data envelopment analysis approach, *Asian Acad. Manag. J.*, 2017, doi: 10.21315/aamj2017.22.2.8.
- [8] D. Publik, Pengaruh Pengetahuan Dan Sikap Terhadap Partisipasi Masyarakat Pada Pengelolaan Bank Sampah Di Kecamatan Batu Aji – Kota Batam, *Dialekt. Publik J. Adm. Negara Univ. Puter. Batam*, 2017, Doi: 10.33884/Dialektikapublik.V2i1.223.
- [9] N. Nurdin, The Roles of Information Technology in Islamic Bank Knowledge Management: A study of Two Syariah Banks in Palu, *HUNafa J. Stud. Islam.*, 2017, doi: 10.24239/jsi.v13i2.444.181-217.
- [10] S. M. Hamza, Impact of Credit Risk Management on Banks Performance: A Case Study in Pakistan Banks, *Eur. J. Bus. Manag.*, 2017.

## CHAPTER 2

### **BANKS: MAINTAINING THE ECONOMICS AND FINANCIAL DYNAMICS**

---

Dr Shashank M Hiremath, Associate Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-dr.shashank\_hiremath@cms.ac.in

#### **ABSTRACT:**

In contemporary economies, banks play an essential intermediary role that supports economic activity, facilitates the movement of cash, and helps maintain financial stability. The main responsibilities of banks are outlined in this study, along with how crucial they are to maintaining economic growth and development. Beginning with an explanation of banks' core duties, which include receiving deposits, making loans, and offering other financial services, the study moves on to more complex topics. It looks at how banks are essential for directing savings from people and companies into profitable investments, which promotes capital creation and economic growth. The study also explores the idea of money production, emphasizing how banks function as money makers via their lending operations. It describes how banks are able to leverage their deposits and offer credit thanks to the fractional reserve system, which helps to boost economic activity.

#### **KEYWORDS:**

Bank, Business, Deposit, Economic, Financial Stability, Withdrawal.

#### **INTRODUCTION**

A bank is a legitimate business that takes deposits that may be withdrawn immediately. Banks are organizations that assist the general public in managing their finances. The public puts their savings with banks with the guarantee that they may withdraw funds as needed. Banks receive deposits from both the general public and the corporate sector, and they provide the depositors two guarantees. Banks provide interest on deposits, which increases the amount deposited initially and provides a significant incentive for the depositor. This encourages people to save money. The bank also makes loans based on deposits, which contributes to the nation's economic growth and the overall welfare of the populace. With this size, it is critical to comprehend the primary duties of a bank [1]–[3].

#### **Banks' economic significance**

Due to the variety of financial services they provide to both consumers and businesses, banks play a crucial role in economies.

A variety of account types, such as checking or savings accounts, may be used to conduct routine banking operations such as deposits or withdrawals. But banks also provide access to loans to borrowers for both personal and corporate purposes. Long-term debt, including credit cards and mortgages, is lent using deposits made by people. Like any other business, the ultimate goal of a bank is to maximize its profit. Banks do this by imposing greater interest rates on loans and other forms of debt than are charged on deposits.



## Financial facilitating

Financial intermediation is the process of accepting money from a depositor and then lending it to a borrower. Banks convert assets into liabilities through the process of financial intermediation. By transferring money from people who have extra money to others who don't have enough to make desired investments, we may encourage economic development. By enabling depositors to store their money securely reducing the danger of theft and robbery and earning interest on the same deposit, the bank likewise serves as a risk mitigator. The bank offers services including demand deposits and savings account deposits, which let depositors take money out immediately and give liquidity which is equivalent to storing cash with security.

## A need for regulation

Government rules have been created to prevent bank collapses and the resulting panic, which is a significant public policy problem. Most nations need banks to have a charter in order to conduct banking operations and qualify for government backstop services, such as express guarantees to safeguard bank deposits up to a specific level and emergency loans from the central bank. The laws of the nation where the bank is located govern it, and it is usually regularly inspected. Banks that operate internationally could also be subject to host country regulation. In order to minimize disruptions, regulators have extensive authority to intervene in problematic banks. Regulations are often created to reduce the exposure of banks to overall solvency risk as well as credit, market, and liquidity risks. To cushion losses, banks are now obliged to keep more and higher-quality equity than they did before the financial crisis, such as retained profits and paid-in capital. To account for the possible effect of their collapse on the integrity of the global financial system, large global banks must keep much more capital. Regulations also dictate solid, long-term financing sources and minimum liquid asset requirements for banks. Regulators are considering possibilities for regulating so-called shadow banks, which are entities that perform duties similar to those of banks but are not subject to the same regulations as banks. These organizations, which include finance corporations, investment banks, and money market mutual funds, have become more important to the financial system as a result of the current financial crisis [4], [5].

## Function of banks

Banks do a variety of tasks. The crucial ones are as follows:

- a. **Safety deposits:** Depositing money and securing valuables in banks may be done while receiving interest on the deposits.
- b. **Interest on deposits:** Depending on the kind of account, commercial banks charge different rates of interest on deposits. When compared to savings accounts, this rate on current accounts might be much lower. Interest rates play a critical role in preserving the actual value of your investments during periods of inflation. A 4% inflation rate, for instance, will make your money less valuable. The true worth of your money will rise if banks are offering 6% interest, however.
- c. **Loans:** A significant portion of a bank's revenue comes from lending money. Deposits are used by banks to provide loans to deserving people and companies for investments or company growth. For instance, if a bank pays 4% on deposits but charges 8% for loans, the profit is made up of the difference. In order to accommodate consumer requests to withdraw money, banks must maintain an adequate amount of liquidity.



- d. Credit creation:** In accordance with certain regulatory criteria, banks may advance client deposits as loans in order to control the money supply or generate credit. Additional services: Banks also provide a variety of extra services to its clients, including ATMs, financial counseling, foreign money transfers, and a number of other services, as well as insurance and safety deposit boxes for safeguarding physical assets like jewelry, vital papers, and other valuables.

### **UK banking laws and regulations**

The UK's central bank places a high priority on maintaining a strong and stable financial system. In addition to guaranteeing that people's funds are safeguarded, their objective is to build a trustworthy and effective financial system. Imagine being unable to access your checking accounts' money because credit card payments were rejected owing to the bank's insolvency. Preventing banks from taking significant risks is one of the fundamental objectives of banking regulation. Examples include the need for reserves and restrictions on the amount of investment a bank may make. Banks are required to hold a minimum amount of their deposits in reserves to cover withdrawal requests from depositors. Financial regulators also use the distinction between a bank's assets and liabilities, or bank capital, to control banks. A bank must have a positive net value in order to stay in business. otherwise, it would be unable to repay its depositors. According to the law, banks must maintain a particular amount of net value to protect its clients and other creditors. The Financial Conduct Authority FCA is one of the key regulatory agencies in the UK. It makes certain that financial institutions in the UK abide by the laws and standards that establish a productive financial environment [6]–[8].

### **Bank profitability, liquidity, and risk**

The capacity of banks to convert reserve assets into cash is known as liquidity. Liabilities are due and payable immediately, thus banks need to have cash on hand and liquid assets in order to be profitable. However, preserving liquidity or concentrating on profitability is a common challenge for banks. Because increased liquidity produces lower profitability, this is the case. Therefore, it's crucial to establish a balance between the two goals. Different assets in commercial banks have varying degrees of liquidity. Deposits are the second most liquid asset after cash. The least liquid investments are loans and long-term bonds. Banks are inclined to hold less liquid assets if they can borrow money rapidly and inexpensively. The likelihood of maintaining liquid assets increases with the cost and difficulty of obtaining a loan. In order to pay interest on deposits, pay employees, and preserve working capital, banks must continue to be profitable. Holding cash implies that profits are constrained. However, banks often have to put liquidity and safety above profits, and it is seen of as a supplement for the bank's existence.

## **DISCUSSION**

### **Important Bank Functions**

Banks may do two different kinds of tasks:

1. Functions that are primary are also referred to as banking functions.
2. Secondary Purposes

Below is a detailed explanation of both sorts of bank functions:

## Principal Purposes of a Bank

Mobilizing public money, guaranteeing secure custody of deposits, and paying interest to depositors on savings are all very fundamental but crucial functions of all commercial banks. The public may deposit many sorts of money at the bank, including:

1. **Savings Deposits:** Promotes the public's practice of saving. Salary and wage earners may use it. Low interest rates are prevalent. The quantity and frequency of withdrawals are not limited. One person's name or two names may be used to start the account for saving deposits. The only requirement for depositors is to have a minimum balance, which varies amongst institutions. Additionally, the bank offers checkbooks, debit cards for ATMs, and internet banking. On the linked website, candidates may learn more about the many types of checks.
2. **Fixed Deposits:** Term deposits are another name for fixed deposits. Deposited funds have a set tenure. No cash withdrawals are permitted at this time. Banks charge depositors a fee for early withdrawal in the event that they withdraw their funds prior to maturity. The rate of interest is high but fluctuates depending on the length of the deposit since a lump sum payment is made all at once for a certain period.
3. **Current Deposits:** Businessmen open them. On this account, the account holders have access to an overdraft facility. These deposits serve as an emergency short-term loan. In order to keep a reserve for unforeseen overdraft requests, the bank charges a high interest rate in addition to the fees for the overdraft facility.
4. **Recurring Deposits:** A particular amount of money is consistently placed in the bank. Only when a specific amount of time has passed may money be withdrawn. Recurring deposits get a higher rate of interest since they provide the advantage of compounded interest and allow depositors to amass a sizable quantity of money. Petty merchants and people on salaries manage this sort of account.

## Granting of Advances & Loans

Banks use the public deposits they receive as funding for loans to people and companies to help them weather tough times. Bank pays a greater interest rate on deposits than it does on loans and advances. Bank profit is the difference between the interest rate on loans and the interest rate on deposits.

**Bank Overdraft:** Current account holders are only eligible for this option. It permits owners to withdraw money at any time up to the specified amount but not more than is permitted by the bank balance. Collateral security is required in order to get an overdraft facility. Only the borrowed amount for the time period for which the loan is taken is subject to overdraft interest payments. A short-term credit facility up to a predetermined, defined amount is known as a Cash Credit. Banks let their clients to get loans secured by mortgages on specific properties physical assets and guarantees.

All types of account holders and people without bank accounts are eligible for cash credit. The amount removed in excess of the cap is subject to interest. A greater loan is authorized via cash credit than through an overdraft and for a longer duration. Banks lend money to customers for brief or moderately long periods, such as 1 to 5 years, in exchange for tangible assets. These days, banks do make long-term loans. The borrower may choose to pay back the money in one big sum or via monthly payments spread out over a certain time frame. No matter whether the

loan is withdrawn or not, the bank charges interest on the actual amount sanctioned. Compared to overdraft and cash credit facilities, the interest rate is lower [9], [10]. Discounting the Bill of Exchange is a sort of short-term loan in which the seller pays a charge in exchange for a discount on the bank bill.

By buying or discounting the bills of exchange, the bank advances money. By subtracting the customary discount fees, it pays the bill amount to the drawer on behalf of the drawee. When the bill is ready to be paid, the bank hands it to the drawee or acceptor.

### **Additional Purposes of a Bank**

Banks serve as the representatives for their clients, hence they must carry out the following duties:

- a. Moving money from one location to another.
- b. On behalf of the customers, collect dividends, salaries, pensions, and similar recurring payments.
- c. Making recurring payments on the client's behalf for things like rent and utilities.
- d. Similar to how banks collect money from bills of exchange, they do it via their clients' clearing departments.
- e. Banks look after their customers' portfolios. It carries out the task of buying and selling the customers' shares and debentures while debiting or crediting the account.

In addition, this bank may advocate its customers' interests before other institutions. It serves as the client's executor, trustee, administrators, advisors, etc.

### **Useful Activities of a Bank**

- a. Issuing traveler's checks, letters of credit, etc.
- b. Assuming secure custody of valuables, crucial records, and securities via the provision of safe deposit boxes or lockers.
- c. Offering consumers the ability to conduct currency exchange transactions
- d. Shares and debentures underwriting
- e. Trading with foreign currencies

### **Social Welfare initiatives**

- a. Project summaries
- b. A standing assurance on its customers' behalf, etc.

### **Dedicated Banks**

In addition to the sorts of banks mentioned above, other banks were developed to meet the unique demands of their clientele. These institutions are known as specialist banks. These are what they are:

#### **The Indian Small Industry Development Bank SIDBI**

Loans are made available by the SIDBI for small-scale industries and companies. Customers come to the SIDBI for financial support when they need to finance the purchase of cutting-edge machinery and technology for their small enterprises.

**Export-Import Bank EXIM Bank**

The financing of foreign nations' exports and/or imports is the responsibility of the EXIM Bank. It is governed as an export credit provider under the Export-Import Bank of India Act of 1981, which reflects the international Export Credit Agencies.

**Bank for Agriculture and Rural Development NABARD**

The NABARD offers many forms of financial support for rural, village, agricultural, handicraft, etc. development. As a result, it is regarded as India's top regulatory authority for overseeing the supervision of RRBs and cooperative banks. The Ministry of Finance has control over the NABARD.

**Banks with Small Finances**

These are yet another significant category of banks that provide services to support small businesses, subsistence farmers, and independent craftspeople. Small finance institutions lend money and provide other forms of support to those in need in the unorganized sector of society. The RBI is in charge of policing these banks. AU Small Finance Bank, Suryoday Small Finance Bank, Capital Small Finance Bank, Northeast Small Finance Bank, and Jana Small Finance Bank are a few of the small finance institutions that are now operating in the nation.

**Banking Payments**

A recent innovation in banking is the Payments Bank, which the RBI conceived. Customers cannot apply for credit cards or loans at these banks since they need deposits up to INR 1 lakh. Online banking, debit cards, mobile banking, and other services are provided by payment banks. There are several prominent payment banks in India, including Airtel Payments Bank, NSDL Payments Bank, Jio Payments Bank, Fino Payments Bank, and others.

**Relevant Information About Scheduled Commercial Banks**

- a. Public sector banks predominate in Indian banking in terms of business.
- b. PSB is responsible for over 50% of total assets, 70% of deposits, and nearly 70% of advances.
- c. SBI and its Associates has the most branches out of all the public-sector banks.
- d. The creation of RRBs for the aim of providing rural credit was advocated by the committee on regional rural banks, which was led by M. Narasimhan.
- e. A Public-Sector Bank sponsors an RRB and contributes to its share capital. Examples include the Himachal Gramin Bank, which is sponsored by the Punjab National Bank, and the Maharashtra Gramin Bank, which is sponsored by the Bank of Maharashtra. RRBs were established to replace co-operative banks and other unorganized financial organizations like money lenders.
- f. Of the overall banking assets, private commercial banks account for around one-fourth.

**CONCLUSION**

In conclusion, banks provide a wide range of crucial services that support economic development and stability, acting as important cornerstones of the contemporary financial and economic systems. These duties include facilitating the transfer of money between savers and borrowers, giving depositors a safe setting, and facilitating effective payment and settlement systems. Banks

are essential in mobilizing funds and directing them toward profitable investments, which supports economic growth. The wise allocation of resources is ensured by their capacity to evaluate and manage a variety of risks, including credit and market risks. Additionally, banks support financial inclusion by giving loans to people and enterprises, encouraging innovation and entrepreneurship. Banks enable cross-border commerce and investment via their worldwide connections and global transactions, strengthening economic interdependence. In addition, banks meet a variety of consumer demands by providing a range of financial goods and services, which helps with wealth management and personal financial development. Overall, the roles played by banks highlight how crucial they are to preserving monetary stability, fostering economic growth, and supporting societal well-being.

## REFERENCES:

- [1] H. A. R. A. Alazeez, The Influence Of Internal Audit Function On Promoting Effective Corporate Governance By Using The Management Support In Commercial Iraqi Banks, *Int. J. Account. Bus. Soc.*, 2017, Doi: 10.21776/Ub.Ijabs.2017.25.2.8.
- [2] T. Naas *Et Al.*, Beta-Lactamase Database Bldb–Structure And Function, *J. Enzyme Inhib. Med. Chem.*, 2017, Doi: 10.1080/14756366.2017.1344235.
- [3] D. Grigat And F. Caccioli, Reverse Stress Testing Interbank Networks, *Sci. Rep.*, 2017, Doi: 10.1038/S41598-017-14470-1.
- [4] H. H. Rau *Et Al.*, Importance-Performance Analysis Of Personal Health Records In Taiwan: A Web-Based Survey, *Journal Of Medical Internet Research*. 2017. Doi: 10.2196/Jmir.7065.
- [5] A. N. Kalyvas And E. Mamatzakis, Do Creditor Rights And Information Sharing Affect The Performance Of Foreign Banks?, *J. Int. Financ. Mark. Institutions Money*, 2017, Doi: 10.1016/J.Intfin.2017.07.001.
- [6] W. Wulpiah, Urgensi Penerapan Kepatuhan Syariah Pada Perbankan Syariah Telaah Konseptual-Analitis, *Asy Syar'iyah J. Ilmu Syari'ah Dan Perbank. Islam*, 2017, Doi: 10.32923/Asy.V2i1.593.
- [7] B. K. Joshi, Biotechnology for Conservation and Utilization of Agricultural Plant Genetic Resources in Nepal, *J. Nepal Agric. Res. Counc.*, 2017, doi: 10.3126/jnarc.v3i1.17276.
- [8] G. Shamas, Z. Zainol, and Z. Zainol, The Moderating Role of Staff Efficiency in the Relationship between Bank's Specific Variables and Liquidity Risk in Islamic Banks of Gulf Cooperation Council GCC Countries, *Int. J. Econ. Financ.*, 2017, doi: 10.5539/ijef.v9n12p278.
- [9] T. P. Da Silva, M. Leite, J. C. Guse, and V. Gollo, Desempeño financiero y económico de las principales cooperativas de crédito brasileñas, *Contaduría y Adm.*, 2017, doi: 10.1016/j.cya.2017.05.006.
- [10] T. P. Da Silva, M. Leite, J. C. Guse, and V. Gollo, Financial and economic performance of major Brazilian credit cooperatives, *Contaduría y Adm.*, 2017, doi: 10.1016/j.cya.2017.05.006.

## CHAPTER 3

### **TYPES OF BANKS: COMMERCIAL, CENTRAL AND COOPERATIVE**

---

Dr Sireesha Nanduri, Assistant Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-sireesha\_n@cms.ac.in

#### **ABSTRACT:**

Banks are a variety of organizations that play certain functions in the financial environment. The three main categories of banks—commercial banks, central banks, and cooperative banks—are briefly discussed in this study. It investigates their special traits, responsibilities, and contributions to the financial system. Commercial banks, who are at the forefront of retail and business banking services, are discussed in the study's opening paragraphs. It emphasizes their function in receiving deposits from both people and companies, making loans, and offering a variety of financial products including credit cards, mortgages, and savings accounts. The study goes into detail on how they facilitate lending and capital allocation to boost economic development. The foundation of the financial system, central banks, is then studied. Their responsibility for monitoring monetary policy, preserving price stability, and controlling the money supply is emphasized in the study. It clarifies their power to issue money, serve as a lender of last resort to other banks, and advise governments on important financial matters. Their crucial role in safeguarding financial system stability via regulatory monitoring is also covered in the study.

#### **KEYWORDS:**

Cooperative Bank, Commercial Bank, Economic Development, Financial System, Monetary Policy, Price Stability.

#### **INTRODUCTION**

A bank is a kind of financial organization that loans money, makes demand deposits, and takes public deposits. Central banks, cooperative banks, commercial banks, local area banks LAB, regional rural banks RRB, specialized banks, small finance banks, and payments banks are some of the many types of banks. Because they provide essential services to both consumers and companies, banks are essential to the economy. Banks provide credit to both individuals and corporations. We will learn about the two main categories of banks in this article: cooperative and commercial banks. A commercial bank is one that was founded with the main objective of making money from its banking activities. In contrast, cooperative banks are owned and managed by their members with the common objective of providing financial services to farmers and small business owners. It is founded on cooperative principles including inclusive membership, democratic decision-making, and reciprocal aid. A commercial bank's primary responsibility is to accept public deposits and provide loans to individuals and businesses. In contrast, a cooperative bank provides loans to farmers and small business owners while also accepting deposits from its members and the broader public. Figure 1 shows the difference between commercial bank and cooperative bank diffzy.com] [1]–[3].



Parameters	Commercial Bank	Cooperative Bank
<b>Customers</b>	General public and businessmen, traders, importers, and exporters.	People engaged in Agriculture and rural small businesses.
<b>Entity</b>	Could be both public and private.	Cooperative banks can only be private entities.
<b>Motive</b>	Commercial banks are engaged in the financial activities that drive profits.	Cooperative banks operate on a smaller scale and their motive is to help small businesses and not to earn profits. (service motive)
<b>Rate of interest</b>	Lower rate of interest on the deposits.	Higher rates of interest are provided.
<b>Area of operation</b>	Commercial banks operate in comparatively larger areas.	Cooperative banks cover a limited area.
<b>Incorporation</b>	Banking Regulation Act, 1949	Cooperative Societies Act, 1965.
<b>Voting power</b>	Account-holders borrow from these banks and have no voting power.	Members have the voting power and they can influence the credit policy.
<b>Services and products</b>	Commercial banks offer more services and products to increase profits.	Cooperative banks offer comparatively lesser services and products.
<b>Governed By</b>	Reserve Bank Of India	RBI and registrar of Cooperative society
<b>Functions</b>	Accepting deposits and granting loans to any eligible customer.	Accept deposits from members and grant loans to farmers and small businesses.

**Figure 1: Difference between commercial bank and cooperative bank [diffzy].**

### **Commercial Bank: What is it?**

A commercial bank is a kind of financial institution that accepts public deposits and offers loans for investment and consumption. The primary duty of commercial banks is to provide financial services to individuals and companies in order to maintain social and economic stability and long-term economic growth. The Bank of Calcutta is the oldest commercial bank in India. It was started in the year 1806, when. Later, the Bank of Bengal underwent a name change. The State Bank of India is the name used at the moment.

## Commercial Banks by Types

The three main categories of commercial banks are public sector banks, private sector banks, and foreign banks.

**1. Banks in the public sector:** The Ministry of Finance of the Government of India or the State Ministries of Finance of numerous Indian states possess a majority stake i.e. more than 50% in Public Sector Banks PSBs, a notable category of government-owned banks in India. There are now 12 active public sector banks in India. Public sector banks in India include State Bank of India, Bank of Baroda, Canara Bank, Punjab National Bank, and Bank of India.

**2. Banks in the private sector:** Commercial banks are financial institutions that are mostly owned and managed by wealthy people and companies in the private sector. On the other hand, government agencies own and run public sector banks. There are now 22 private banks in India. Currently operating private banks in India include HDFC Bank, ICICI Bank, Federal Bank, IDBI Bank, and Kotak Mahindra Bank.

**3. Foreign bank:** A foreign bank is an international financial institution with branches in India and a corporate office in a different nation. A foreign bank is required to adhere to the laws of both its home country and the host country. In India, there are around 46 international banks. The international banks that have branches functioning in India right now include HSBC Bank, Dohra Bank, Bank of America, and Citi Bank [4], [5].

## What a commercial bank does

Typically, banks carry out their core duties, which include receiving deposits, disbursing loans and credits, facilitating money transfers, and performing other ad hoc duties. Here are a few roles that commercial banks play:

### Primary purposes

Accepting public deposits is commercial banks' main duty. Banks offer current, savings, and fixed deposit accounts. Since these accounts allow for frequent deposits and withdrawals of funds, the majority of current deposit account customers are traders or businesspeople. Because the bank must always have funds available to be taken from this account, it offers no interest or very little interest. There are no time or frequency restrictions on when money may be placed or withdrawn.

Depending on the bank's limit, account holders of these types of accounts may deposit up to a particular amount. There are limitations on withdrawal, including how often money may be taken out, how long it may take, and how much may be taken out. People love this since it promotes the habit of saving in people. These are deposits made for a certain period of time. Deposits maintained for more than a year are referred to as long-term deposits. Banks often pay a greater rate of interest on these deposits because they may use them for a longer period of time without being concerned about their removal. Providing credit to both consumers and corporations while earning interest Instead of providing liquid cash, banks create a line of credit and send the loan to a company or commercial entity all at once. Overdraft Banks use overdrafts to provide their clients loans up to a certain amount when there are no deposits in the current account. Banks demand security from its customers and impose excessive interest rates as a result.



**Secondary purposes**

Customers may keep their valuables or critical documents in a bank's locker room. Customers of banks are charged yearly fees for this service. For the protection of their customers' valuables, including gold, silver, and legal documents, banks erect lockers. When possessions are stored at home, there is a risk of theft or loss, but this risk is reduced by locker facilities. The most popular and significant method of giving traders short-term funding is this one. It is a written contract that details the sum of money to be paid in return for goods that will be acquired at a later time. Commercial banks' discounting approach might be utilized to pay the debt before the deadline. This enables businesspeople to get loans based on their bills of exchange before they mature. Commercial banks offer the foreign currency that importers and exporters need. However, only a limited number of institutions with a license for foreign currency trading are allowed to carry out such transactions. You have the choice to sell and buy securities from the bank. Bonds, securities, and other products are traded by commercial banks, and clients may purchase or sell products directly from the bank.

**A cooperative bank, what is it?**

Cooperative banks are owned and run by the members of the cooperative group. These individuals have the ability to affect credit policy. In other words, a co-operative bank's clients are also its owners. These financial institutions provide a comprehensive selection of financial and banking services. The cooperative banking system was designed to promote saving and investing among people, especially in rural parts of the nation. The States Cooperative Societies Act in India governs cooperative banks. The Reserve Bank of India RBI is in charge of regulating them under two statutes, which presents the issue of dual regulation.

**Cooperative bank types include:**

Most cooperative banks fall into one of four categories. These are what they are:

**Bank of Central Cooperation**

At the district level, these banks are run. These might be further separated under the Cooperative Banking Union and Mixed Control groups. Bank for cooperatives. The central cooperative banks provide the majority of the funding for the connected primary societies, with loans typically having maturities of one to three years. Only cooperative society members are eligible to join Co-operative Banking Union as bank members. Cooperative banks with mixed control allow both cooperative society members and other people to join as members. An Indian cooperative bank that does business at the district level is known as a District Co-operative Central Bank DCCB.

**Banks run by state cooperatives:**

As the state's custodian of the cooperative banking system, the state cooperative bank is a federation of the central cooperative bank. Its funding comes from the social capital, deposits, loans, and overdrafts of the Reserve Bank of India. State cooperative banks in India include Saraswat Co-operative Bank, Cosmos Co-operative Bank, TJSB Bank, and Abhyudaya Bank. Primary C-operative Banks: Under the State Cooperative Societies Act of the relevant state or the Multi State Cooperative Societies Act of 2002, primary cooperative banks, sometimes referred to as Urban Cooperative Banks UCBs, are registered as cooperative societies.

### **Banks for Land Development**

A quasi-commercial bank in India known as a land development bank, or LDB for short, provides services including accepting deposits, setting up business loans, and providing fundamental investment products. The main objectives of the land development bank are to promote agricultural growth and increase agricultural output. The Central Land Development Bank at the state level and the Primary Land Development Bank at the district or Taluka level make up the Land Development Bank [6]–[8].

### **Indian Land Development Bank Examples**

Gujarat State Cooperative Agriculture and Rural Development Bank, Progoti Co-operative Land Development Bank Limited, National Co-operative Agriculture & Rural Development Banks Federation Limited.

### **Regional Bank**

A bank tasked with administering and regulating the nation's banking industry is known as the central bank of that nation. This kind of bank doesn't do business with regular people. It acts as the government's banker, managing the deposit accounts of all other banks and providing cash advances as necessary. The Central Bank provides help to other banks when they encounter problems. It is hence known as the banker's bank. The Reserve Bank of India is the name of the national bank of our nation. Another important responsibility of the Central Bank is to issue currency notes and control how they are circulated throughout the nation. The Central Bank alone has the power to print money.

### **The role of the central bank**

Common duties of a central bank include:

- a. Monetary Policy: controlling the money supply and determining the official interest rate.
- b. The administration of a nation's foreign currency, gold, and government bond reserves is a component of reserve management. Financial stability is achieved by acting as a banker for both the government and the bankers.
- c. Financial supervision: the procedure for policing and observing the financial sector.
- d. Payments system: monitoring or directing bank-to-bank payments and clearing operations.

### **The primary distinctions between cooperative banks and commercial banks are points**

- a. Commercial banks are operated for profit-making commercial purposes. Cooperative banks, on the other hand, are managed with the intention of assisting individuals and small enterprises, particularly those involved in agriculture.
- b. While cooperative banks are managed jointly by their cooperative society and the Reserve Bank of India, all commercial banks are rigidly regulated by the Reserve Bank of India. Commercial banks provide its clients with a wide range of services and goods, including foreign exchange, overdraft options, different kinds of credits, exchange of assets, etc. Cooperative banks do not provide services with a business motive.
- c. Bonds and trading are activities of commercial banks. clients may purchase or sell securities from the bank directly. Bonds and trading are not operations of cooperative

banks. The Banking Regulation Act of 1949 allowed for the incorporation of commercial banks. Under the Cooperative Societies Act of 1965, cooperative banks were first established in 1965.

**Compared to cooperative banks, commercial banks give a lower rate of interest on deposits.**

- a. Commercial banks receive deposits from both individuals and organizations, lending money to those who qualify and providing credit to others. Members of the cooperative society of the cooperative bank have voting rights and may change the credit policy. Cooperative banks receive deposits from its members and lend money to farmers and small enterprises. Commercial bank clients are not entitled to this.
- b. Public and private commercial banks are both possible. A group of cooperative banks, however, is always private.

## **DISCUSSION**

### **Regulatory Framework**

Another important aspect to take into account while analyzing the Difference between Commercial and Cooperative Banks is the regulatory environment. These two different sorts of banks are subject to different laws and regulations, which has an effect on how they operate and what services they provide.

### **Environmental Regulations for Commercial Banks**

The nation's central banking body oversees commercial banks. Protecting depositors and ensuring the stability of the financial system are the main responsibilities of the regulatory agency. The following are some of the important regulatory considerations: o Minimum capital requirements

- a. Prudent standards for provisioning and asset categorization.
- b. Requirements for risk management.
- c. Standards of corporate governance.
- d. Environment of Regulation for Cooperative Banks.

The central banking authority also controls cooperative banks. However, they often fall under extra laws that regulate cooperative groups.

These rules seek to safeguard these banks' democratic operation and safeguard the members' interests. Cooperative banks have certain regulatory requirements that include:

- a. Membership rules and regulations.
- b. Rules for board member elections
- c. Standards for member profit sharing.

### **Economic development role**

Although they do so in various ways, cooperative and commercial banks both play significant roles in economic growth.

### Commercial banks' role in economic growth

Commercial banks are essential to a country's economic growth because they:

- o Mobilize public savings and direct them toward profitable investments, promoting capital formation.
- o Support entrepreneurship and job creation by providing credit facilities to businesses.
- o Facilitate international trade by offering trade financing services.

### Cooperative banks' contribution to economic growth

Cooperative banks play a significant role in rural development by providing credit to small farmers and rural businesses. They also promote financial inclusion by providing banking services to underserved segments of the population. As community-based institutions, they support local economic development initiatives [9], [10].

## CONCLUSION

Finally, the division of banks into commercial, central, and cooperative categories emphasizes the variety of functions these organizations perform in influencing financial systems and fostering economic development. The most prevalent kind of banks, commercial banks act as middlemen between depositors and borrowers, offering crucial services that keep commerce running smoothly. Their importance is highlighted by their role in promoting economic growth, providing loans, and overseeing financial activities. On the other hand, central banks have a distinctive and crucial role within the financial environment. Central banks have a significant impact on a nation's economic stability since they are responsible for managing the entire money supply, issuing currency, and controlling monetary policy. They control inflation, protect the value of the national currency, and make sure the financial markets are operating properly via their activities. Due to their focus on providing financial services to the local community, cooperative banks stand apart. Their structure, which is member-owned and member-controlled, encourages inclusion and community involvement. Cooperative banks support financial inclusion and social advancement, especially in underserved regions, by meeting the financial requirements of certain groups or communities.

## REFERENCES:

- [1] C. Nwagbara, Relevance of Cooperative Societies to the Nigerian Economy – A Legal Approach., *Int. J. Innov. Leg. Polit. Stud.*, 2018.
- [2] A. Jamaludheen and V. R. Kiresur, Delivery and Transaction Costs of Agricultural Credit in Central Dry Zone of Karnataka, *Indian J. Econ. Dev.*, 2018, doi: 10.5958/2322-0430.2018.00080.x.
- [3] J. R. S. Palacio and V. C. Climent, Economy for the common good and ethical finances I Economía del bien común y finanzas éticas, *CIRIEC-Espana Rev. Econ. Publica, Soc. y Coop.*, 2018.
- [4] M. Nurhayati, Peran Tenaga Medis Dalam Pelayanan Kesehatan Masyarakat Di Puskesmas Pembantu Linggang Amer Kecamatan Linggang Bigung Kabupaten Kutai Barat, *ejournal Adm. Negara*, 2018.
- [5] World Bank, Public Expenditure and Financial Accountability PEFA Assessment, 2018, *Sustain.*, 2018.

- [6] S. Anas, Hasanuddin, and B. Badaru, Survei Tingkat Kesegaran Jasmani Terhadap Kemampuan Menggiring Bola Pada Permainan Sepakbola Siswa Sman 6 Sidrap, *Sustain.*, 2018.
- [7] Kemenkes, Strategi Komunikasi Perubahan Perilaku Dalam Percepatan Pencegahan Stunting, *Kementeri. Kesehat. RI*, 2018.
- [8] X. Xu, Wire + Arc Additive Manufacture of new and multiple materials, 2018.
- [9] Mibanco, Mibanco, Banco De La Microempresa S.A., 2018.
- [10] B. I. Becerra, M. I. Ramírez, And M. I. Rejas, ‘Valorización De Empresa Mibanco, Banco De La Microempresa S.A.,’ 2018.

## CHAPTER 4

### CENTRAL BANKS IN BANKING SYSTEM: NATIONAL FINANCIAL SYSTEM

---

Dr Sireesha Nanduri, Assistant Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-sireesha\_n@cms.ac.in

#### ABSTRACT:

A nation's financial system depends heavily on the stability and efficiency of its central banks. In-depth discussion of central banks' varied roles in monetary policy, financial stability, and banking sector regulation is provided in this study. The study begins by examining the essential role played by central banks in developing and carrying out monetary policy. It emphasizes how central banks manipulate the money supply and regulate inflation by using instruments including interest rates, open market operations, and reserve requirements. The study also emphasizes how crucial pricing stability is to promoting long-term economic development. The abstract also highlights central banks' function as commercial banks' last-resort lenders during financial crises. It explains how emergency liquidity is provided by central banks to preserve banking system trust and avoid systemic failures. It emphasizes their capacity to provide as a calming influence during turbulent times.

#### KEYWORDS:

Banking Sector, Banking System, Central Banks, Financial Stability, Financial System.

#### INTRODUCTION

In a nation's financial system and broader economy, central banks are essential players. They are primarily government organizations in charge of controlling a country's money supply, interest rates, and currency. Numerous tasks carried out by central banks contribute to the stability and efficient operation of the financial system. Some of their crucial jobs are: Central banks create and carry out monetary policy, which entails regulating the money supply and interest rates to accomplish certain economic goals. This might include encouraging price stability inflation management, fostering economic expansion, and making sure there is full employment.

- a. **Issuance of Money:** A nation's money is only ever issued by its central banks. They are in charge of creating and manufacturing coins and money, as well as ensuring the security and integrity of both [1]–[3].
- b. **Commercial Bank Banker:** Central banks often serve as commercial banks' bankers. They manage these banks' accounts and provide services including check clearing, enabling interbank transfers, and acting as a lender of last resort.
- c. **Lender of Last Resort:** When commercial banks are experiencing a liquidity crisis, central banks serve as their last-resort lenders. Central banks offer emergency money during financial panics or disruptions to stabilize the banking sector and avert widespread collapses. Central banks often have regulatory and oversight power over the banking and financial industries. They provide guidelines and norms that banks must follow to maintain their security, soundness, and adherence to financial laws.

- d. **Management of Foreign currency Reserves:** A nation's foreign currency reserves are managed by its central banks. These reserves, which are stored in a variety of currencies and assets, are intended to fight against currency volatility, boost foreign commerce, and sustain the value of the home currency.
- e. **Open Market Operations:** Government securities are bought and sold by central banks in open market operations. This instrument is used to affect the economy's money supply and interest rates.
- f. **Data gathering and analysis:** To identify trends and formulate wise policy choices, central banks compile economic and financial data. This involves keeping an eye on indices like unemployment, GDP growth, and inflation. Central banks are responsible for monitoring and ensuring that all payment systems, including electronic financial transfers, clearinghouses, and settlement systems, operate without hiccups.
- g. **Financial Stability:** The upkeep of overall financial stability is the responsibility of central banks. This entails keeping an eye on systemic risks, spotting financial system weaknesses, and taking action to avert disasters.

Central banks often do research on a range of economic and financial themes. They provide research and reports that aid in better understanding economic trends and guide governmental actions. In order to retain credibility and make impartial choices on monetary policy, central banks act independently of political pressures. The overall objective is to create a sound and stable financial system that promotes economic development and stability, while their precise tasks and responsibilities might differ from nation to nation. The Federal Reserve USA, the European Central Bank Eurozone, the Bank of England UK, and the Bank of Japan Japan are a few examples of well-known central banks.

### The Work of Central Banks

As the lender of last resort, a central bank is in charge of financing the country's economy in the event that commercial banks are unable to fill a funding gap. In other words, the central bank guards against the collapse of the nation's financial system. However, central banks' main objective is to keep inflation under control in order to maintain the value of the national currencies. The only producer and printer of notes and coins used in circulation, the central bank also oversees the nation's monetary policy. Time has shown that the central bank can perform these functions most effectively when it is free from the fiscal policies of the government and, therefore, from the political considerations of any regime. Also, all commercial banking holdings should be entirely sold off by a central bank.

### The Development of Central Banks

Some can claim that since the Bank of England was founded in 1694, the central bank's function has grown historically. However, it is widely acknowledged that the modern central bank idea did not emerge until the 20th century, in reaction to issues with commercial banking systems. Because there was a finite supply of gold between 1870 and 1914 when international currencies were tied to the gold standard GS, maintaining price stability was much simpler. As a result, it was simpler to manage inflation since monetary growth could not be caused by a political decision to simply print more money. At that time, the central bank, which produced notes based on a country's gold holdings, was in charge of ensuring the convertibility of gold into currency. The GS was abandoned with the start of World War I, and it soon became clear that in times of



crisis, governments with budget deficits because fighting a war costs money and a need for extra resources would order the printing of more money. Governments ran into inflation as they did this. Many governments chose to return to the GS after the war in an effort to balance their economies. As a result, the significance of the central bank's independence from any political party or government increased.

A return to a central bank that was reliant on political decision-making was largely supported by global governments during the tumultuous periods of the Great Depression and the years after global War II. This viewpoint developed mostly as a result of the necessity to regain control over economy that had been devastated by war. In addition, newly independent nations chose to maintain control over every element of their country as a reaction to colonialism. Government intervention in the macroeconomy expanded as controlled economies proliferated in the Eastern Bloc. In Western nations, however, the central bank's autonomy from the government eventually regained popularity and emerged as the best strategy for establishing a liberal and stable economic system [4], [5]. Globally, central banks are charged with a number of significant duties. The first and maybe most obvious job is the creation of money. Central banks produce money, which is subsequently used by individuals, families, and corporations to conduct transactions and, basically, monitor where money is being spent.

Additionally, central banks are responsible for ensuring the stability of the financial systems in their respective economies. To do this, they must continuously monitor lending standards across the economy and guarantee that credit is available when needed. In such situation, they also serve as the government and commercial banks' last-resort lenders. Therefore, the central bank may act as the government's lender of last choice when there is no other option or avenue for the government to get the cash it needs.

One of the main tasks of central banks is to watch and monitor economic data, and economists utilize this role to find out what the leading expert on the subject will have to say. For instance, the Bank of England publishes its quarterly inflation report, which includes comments on current macroeconomic trends as well as other information on GDP, growth predictions, and inflation forecasts. The Federal Reserve, the central bank of the United States, also achieves this by using a dot plot, or an economic prediction chart with forward-looking dots, to depict where the Federal Reserve anticipates interest rates will go.

And that brings us to the last duty of central banks everywhere, which is to formulate monetary policy. Setting interest rates is the most important weapon in the arsenal of monetary policy's many separate instruments. For consumers, corporations, and any other sector of the economy that requires a loan, lower interest rates represent greater access to credit. Higher interest rates have the opposite effect, making credit more costly and difficult to get. Central banks must cut interest rates during difficult economic times and periods of slower economic development to ensure that the economy has easier access to credit. In the present November 2018, two instances of such are the UK maintaining low interest rates as Brexit uncertainty develop, and the US central bank beginning to raise interest rates due to the strong economic performance. Additionally, we see the Chinese central bank lowering the interest rate in China to maintain the country's economy in response to slower global commerce and higher export duties worldwide. As a result, central banks from all over the globe are operating in various macroeconomic conditions and will respond in a certain manner to ensure that their own economies are doing as they would want. Due to the many economic data that central banks create, they are able to



monitor inflation and price stability in order to determine the appropriate interest rate. Many central banks have mandates or objectives, the majority of which involve price stability, which is inflation.

### **What Effect the Central Bank Has on the Economy**

In order to control inflation and maintain price stability, a central bank performs macroeconomic tasks. It also performs microeconomic activities by acting as a lender of last resort.

#### **The macroeconomic environment**

The central bank, which is in charge of maintaining price stability, must manage the amount of inflation by limiting the supply of money via monetary policy. Their activities immediately affect the mood of the market. The amount of inflation is directly impacted by the central bank's open market operations OMO, which either provide liquidity to the market or absorb surplus money. The central bank may purchase government bonds, notes, or other forms of currency in order to boost the quantity of money in use and lower borrowing costs. However, this purchasing may also result in rising inflation. The central bank will sell government bonds on the open market when it needs to absorb funds to lower inflation, which raises interest rates and deters borrowing. A central bank's primary tools for managing the money supply, prices, and inflation are open market operations.

#### **Microeconomic Factors**

The necessity for central banks' independence from commercial banking has been pressed by their formation as lenders of last resort. Money is made available to customers by a commercial bank on a first-come, first-served basis. Commercial banks may resort to the central bank to borrow more money if they do not have enough liquidity to satisfy their customers' requests. Commercial banks often do not keep reserves equivalent to the requirements of the whole market. As a result, the system is objectively stable since central banks are unable to favor any one commercial bank. As a result, many central banks will maintain commercial-bank reserves that are calculated as a percentage of the deposits of each commercial bank. So, a central bank may mandate that all commercial banks maintain, say, a reserve/deposit ratio of 1:10 at all times. Another way to manage the market's money supply is to enforce a policy of commercial bank reserves. However, not all central banks demand reserves from commercial banks [6]–[8].

The discount rate, which is determined by the central bank and serves as a benchmark for interest rates, is the cost at which commercial banks and other lending institutions may get short-term cash from it. It has been suggested that in order for open market transactions to become more efficient, the banks should be prevented from borrowing money indefinitely by the discount rate. If they did, the market's money supply and the central bank's monetary policy would be disrupted. The commercial bank will be pumping additional money into the system by taking on excessive debt. It is possible to limit the usage of the discount rate by making it undesirable when applied frequently.

#### **Temporary Economies**

Today's emerging nations must deal with problems like the transition from controlled to free market economies. Controlling inflation is often the key priority. Given that many emerging countries wish to keep control of their economy, this may result in the establishment of an

independent central bank, although it may take some time. Government interference, however, whether direct or indirect via fiscal policy, may impede the growth of central banks. Unfortunately, civil unrest or conflict plague many emerging countries, forcing governments to redirect resources away from the expansion of the national economy. The need for a stable currency whether achieved through a fixed or floating exchange rate is nevertheless one factor that appears to be confirmed. However, central banks in both industrial and emerging economies are dynamic because there is no certain way to run an economy, regardless of its stage of development.

### **Are government banks central banks?**

Many central bank posts may be chosen by the government, and they are obligated to adhere by the law, just as they are protected by it. Central banks are often not government institutions and function independently of the government.

### **What Are the Central Bank's Primary Functions?**

A central bank's primary responsibilities are to influence monetary policy, act as the lender of last resort, and regulate the banking sector. Interest rates are established by central banks, who also manage the money supply and lend to other banks.

### **How Does the Federal Reserve Get Its Money?**

Interest on the securities it holds provides the Fed with the majority of its funding. Additionally, it is financed by fees for services like check clearing, cash transfers, and automated clearing house ACH activities that are offered to depository institutions at a cost. It is not supported by funds from Congress.

### **The inference**

Along with a host of other duties, central banks have control over a country's or a group of countries' monetary system. These duties vary from monitoring monetary policy to carrying out particular objectives including achieving currency stability, low inflation, and full employment. Over the last century, the central bank's position has become more significant. The central bank should be the governing body and authority in the banking and monetary systems in order to maintain the stability of a nation's currency. Although they are controlled by the government, modern central banks are independent of their nation's ministry or department of finance. Political choices should not have an impact on central bank activities, despite the fact that the central bank is commonly referred to as the government's bank since it handles the buying and selling of government bonds and other securities. It goes without saying that the nature of the connection between the central bank and the governing regime differs from nation to nation and changes with time.

## **DISCUSSION**

### **Why is monetary policy essential and what does it entail?**

To control economic turbulence and attain price stability, central banks use monetary policy, which results in low and steady inflation. In many developed economies, central banks have clear inflation objectives. A lot of emerging nations are using inflation targeting as well. By changing the amount of money available, central banks modify their monetary policy. Typically,

they do this by purchasing or selling assets on the open market. Short-term interest rates are impacted by open market activities, which in turn affect longer-term rates and the economy. The monetary policy is loosening when central banks reduce interest rates. Monetary policy tightens when interest rates are increased.

### **How has recent monetary policy been applied?**

Following the global financial crisis that began in 2007, central banks in industrialized nations relaxed monetary policy by lowering interest rates until they almost reached zero, restricting the scope for further reductions. In order to further reduce long-term rates, certain central banks used unorthodox monetary measures, purchasing long-term bonds. Some even used short-term rates that were negative. In response epidemics, central banks made steps to loosen monetary policy, provide markets with liquidity, and keep credit flowing. Many central banks in developing nations employed asset purchase programs and foreign exchange interventions for the first time to reduce the stress in the currency and bond markets. Recently, central banks throughout the globe have tightened monetary policy by raising interest rates in reaction to fast rising inflation.

### **Inflation and exchange rates**

The exchange rate regime of a nation is intimately related to its monetary policies. Interest rates have an impact on a country's currency's value, hence nations with fixed exchange rates will have less latitude for independent monetary policy than those with flexible exchange rates. An effective inflation-targeting system is supported by a completely flexible exchange rate regime [9], [10].

### **The purpose of macroprudential policy in nations.**

The global financial crisis of 2007–2009 demonstrated the necessity for nations to recognize and control threats to the whole financial system. To ensure financial stability, several central banks accepted the use of prudential instruments and created frameworks for macroprudential regulation. Building buffers and controlling vulnerabilities that expose the financial system to shocks are done using macroprudential techniques. This lowers the likelihood that financial system shocks would interrupt the delivery of financial services and have major detrimental effects on the economy. Because they can assess systemic risk and are often relatively independent and autonomous, central banks are in a good position to implement macroprudential regulation. Because the institution in charge of macroprudential policy must be able to resist political pressures and resistance from business organizations, independence and autonomy are crucial.

### **What role does the IMF play in central banking and monetary policy?**

IMF policy recommendations, technical support, and data gathering help central banks operate more effectively. The IMF often communicates with national central banks to provide bilateral policy advice, sometimes known as Article IV consultation. It could provide guidance on creating efficient macroprudential and monetary policy frameworks as well as monetary policy measures. The Financial Sector Assessment Program FSAP of the IMF rates member nations' financial systems and offers guidance on mitigating the risks to financial stability as part of its financial surveillance. Technical notes, such as those for Finland, the Netherlands, and Romania, often include the evaluations. Countries that get technical aid are able to build stronger

institutions, legal systems, and capacities. It could include macroprudential policies, exchange rate regimes, or monetary policy. Additionally, it may assist nations in implementing inflation targeting or enhancing central bank activities like open market trading and foreign currency management.

As a requirement for central bank independence, the IMF's Central Bank Transparency Code CBT assists central banks in directing their transparency activities. The IMF staff's CBT assessments provide insight into central bank transparency and help to improve communication between the central bank and its many stakeholders. The IMF collaborates with its members to produce and maintain datasets that may be used for research and policy formation. For instance:

- a. The IMF keeps track on monetary policy agreements AREAER, the regulatory environment for central banks CBLD, and monetary operations and instruments MOID in various countries.
- b. An annual survey by the IMF provides information on macroprudential institutions and policies, allowing for cross-national and time-based comparisons.
- c. The most recent survey data is included into the IMF's extensive historical database of macroprudential measures iMaPP. The database is used by IMF economists to assess the impact of policies. Additionally, researchers have free access to it.

## CONCLUSION

In order to provide the framework on which economies and financial markets function, central banks play a crucial role in the banking system. As the guardians of monetary policy, central banks have a tremendous impact on the strength and stability of a country's economy. Central banks aggressively regulate the money supply, interest rates, and currency issue to combat inflation, promote economic expansion, and preserve the stability of the financial system. Being lenders of last resort and acting as a safety net in times of financial difficulty is one of the key roles of central banks.

Central banks maintain the stability of the banking system by providing emergency liquidity to financial institutions experiencing a crisis. Additionally, central banks supervise and regulate the activities of commercial banks and other financial institutions. They safeguard the stability of the banking system, improve consumer protection, and reduce risks that might lead to the spread of financial instability via sensible regulation.

## REFERENCES:

- [1] J. F. Houston, J. Lee, and F. Suntheim, Social networks in the global banking sector, *J. Account. Econ.*, 2018, doi: 10.1016/j.jacceco.2017.11.006.
- [2] G. Gopinath and J. C. Stein, Trade Invoicing, Bank Funding, and Central Bank Reserve Holdings, *AEA Pap. Proc.*, 2018, doi: 10.1257/pandp.20181065.
- [3] S. Fernández de Lis, Central Bank Digital Currencies: Features, Options, Pros and Cons, *Do We Need Cent. Bank Digit. Currency? Econ. Technol. Institutions*, 2018.
- [4] B. Geva, Banking in the Digital Age - Who is Afraid of Payment Disintermediation?, *SSRN Electron. J.*, 2018, doi: 10.2139/ssrn.3153760.

- [5] A. Gupta and C. Xia, A paradigm shift in banking: Unfolding asia's fintech adventures, in *International Symposia in Economic Theory and Econometrics*, 2018. doi: 10.1108/S1571-038620180000025010.
- [6] M. Y. Mohd Isa, Y. Voon Choong, D. Yong Gun Fie, and M. Z. H. Abdul Rashid, Determinants of loan loss provisions of commercial banks in Malaysia, *J. Financ. Report. Account.*, 2018, doi: 10.1108/JFRA-03-2015-0044.
- [7] C.-M. Apostoaie, Green Banking: A Shared Responsibility Between Financial Regulators and Banking Institutions, *SEA – Pract. Appl. Sci.*, 2018.
- [8] R. Rokhim And N. Wulandary, Pengaruh Penjaminan Simpanan, Car, Dan Npl Pada Tingkat Deposit, Risiko Moral Hazard, Dan Nim, *Ekuitas Jurnal Ekon. Dan Keuangan*, 2018, Doi: 10.24034/J25485024.Y2013.V17.I4.115.
- [9] A. Arize, E. U. Kalu, and N. N. Nkwor, Banks versus markets: Do they compete, complement or Co-evolve in the Nigerian financial system? An ARDL approach, *Res. Int. Bus. Financ.*, 2018, doi: 10.1016/j.ribaf.2017.07.174.
- [10] R. Deeptha and R. Mukesh, Extending OpenID connect towards mission critical applications, *Cybern. Inf. Technol.*, 2018, doi: 10.2478/cait-2018-0041.

## CHAPTER 5

### A REVIEW: BANKING REGULATIONS AND SUPERVISION

---

Dr Shalini R, Associate Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id- dr.shalinir@cms.ac.in

#### ABSTRACT:

A secure and resilient financial system must have strict banking laws and oversight. This study examines the crucial part that rules and oversight play in preserving the integrity, safety, and soundness of banking operations. The objective of banking laws is explained in the study's opening paragraph. This purpose is to provide a framework that encourages responsible banking operations, protects depositor money, and reduces systemic risks. In order to minimize excessive risk-taking and preserve financial stability, it is discussed how laws establish requirements for capital sufficiency, risk management, and operating practices. The study also explores the function of regulatory agencies in ensuring that banks are abiding by these rules. It discusses how regulatory organizations keep an eye on banks' operations, evaluate their risk profiles, and ensure that set standards are followed. The study highlights the significance of independent regulatory oversight and strong governance.

#### KEYWORDS:

Bank Operations, Banking Regulations, Banking Supervision, Economy, Financial Stability, Financial System.

#### INTRODUCTION

Banks are subject to a number of conditions, limitations, and rules under banking regulation. Banking laws aim to reduce systemic risk by, for instance, making it difficult for banks to trade or by preventing bank fraud, even if national legal requirements vary. Setting and enforcing regulations for banks and other financial organizations is known as bank regulation. A bank regulation's primary goals are to safeguard customers, guarantee the stability of the financial system, and stop financial crime. By ensuring that banks have sufficient capital to cover their risks, barring them from participating in unfair or deceptive tactics, and ensuring that customers have access to information about their rights and alternatives, banking rules also aim to encourage safe and sound banking practices [1]–[3]. Regulations could, for instance, prohibit certain fees or set a ceiling on how much interest banks can charge for loans. Regulation of banks encourages competition, which keeps costs low for customers and encourages innovation in the banking industry. Additionally, bank regulators keep an eye on the operations of banks and enforce rules compliance. By doing this, bank regulators contribute to ensuring that banks run securely and prudently and that customers are protected from fraud and abuse.

#### Who oversees bank regulation?

Bank regulation differs from country to country since it is a highly regulated business globally, but all nations have some kind of regulation in place to guarantee the stability of their financial systems. Typically, each nation has more than one regulatory body. Usually, central banks and governmental organizations jointly create regulations. Four federal agencies are primarily in

charge of overseeing bank regulation in the United States: the Consumer Financial Protection Bureau, the Federal Reserve System, the Federal Deposit Insurance Corporation, which insures deposits, and the Office of the Comptroller of the Currency. Similar organizations that regulate financial systems are present in other nations. For instance, the Office of the Superintendent of Financial Institutions oversees bank regulation in Canada, but the Prudential Regulation Authority and the Financial Conduct Authority, two divisions of the Bank of England, are responsible for it in the United Kingdom. It is BaFin's duty in Germany.

### **What is regulation so crucial?**

Bank regulation is a crucial instrument for guaranteeing the stability and effectiveness of the banking sector since banking is a crucial component of the global economy. By requiring banks to maintain sufficient capital levels, disclose risks associated with their business operations, and implement solid risk management procedures, bank regulation protects customers. Regulation also helps to maintain financial stability by preventing banks from taking part in activities that can trigger a systemic crisis. Additionally, bank regulation ensures that banks can act as trustworthy providers of credit for consumers and enterprises. In general, bank regulation is essential for guaranteeing the stability and safety of the banking industry.

### **Why is banking so tightly regulated?**

Many factors contribute to the tight regulation of banks. The fact that banks deal primarily with big sums of money makes them a target for criminality. Additionally, banks are essential to the economy and their collapse might have disastrous repercussions. In addition, banks serve as a middleman between borrowers and lenders, assisting in the allocation of money to its most advantageous uses. Banking institutions would be unconstrained in their ability to engage in hazardous activity that may result in bank collapses and a financial catastrophe. Regulators must keep an eye on bank activity to make sure it is sound and steady in order to stop this. The bank's financial viability, compliance with anti-money laundering regulations, and lending procedures are a few of the items that are observed. Authorities can avert bank collapses and safeguard the economy by regulating banks [4], [5].

### **What are a few instances of banking laws?**

The process through which a government or other entity controls the operations of banks is known as bank regulation. Reserve requirements, which specify the minimum amount of cash that banks must have on hand, capital requirements, which specify the maximum amount of money that banks may lend, and liquidity requirements, which specify the ease with which banks may convert their assets into cash, are common bank rules. Bank authorities also often put constraints on bank operations, such as bans on lending to linked parties or investments in certain asset classes. Bank regulators contribute to depositor protection and banking system stability by making sure banks abide by these and other rules.

### **Bank Regulation**

Banking supervision is to lower the likelihood of collapse and make sure that risky and unsound banking practices are not allowed to continue. A supervisory role known as bank supervision is in charge of making sure the banking system as a whole is safe and sound. Every licensed insured institution's books and affairs are audited as part of the organization's supervision duties.



The books and operations of the banks are examined both on-site and off-site to carry out this function. Exceptions are noted and suggestions are made for how the flaws can be fixed, and the implementation of these suggestions is tracked through regular post-examination visits to the affected banks. On the other side, regulation include giving feedback on the creation and interpretation of laws and rules, the issuance of directives, and the approval of requests from regulated financial institutions. Transaction Based, Consolidated, and Risk Based Supervision are the three primary forms of supervision.

### **Bank supervision types**

A supervisory role known as bank supervision is in charge of making sure the banking system as a whole is safe and sound. Every licensed insured institution's books and affairs are audited as part of the organization's supervision duties. The books and operations of the banks are examined both on-site and off-site to carry out this function. Exceptions are noted and suggestions are made for how the flaws can be fixed, and the implementation of these suggestions is tracked through regular post-examination visits to the affected banks. On the other side, regulation include giving feedback on the creation and interpretation of laws and rules, the issuance of directives, and the approval of requests from regulated financial institutions.

### **Type of Supervision Based on Transactions**

This supervisory strategy emphasizes certain group entities. According to the capital criteria set by each regulator, each organizations are overseen alone. A broad qualitative evaluation of the group as a whole and, often, a quantitative group-wide assessment of the sufficiency of capital are added to the transaction-based kind of supervision of individual entities.

### **Comprehensive Supervision**

Consolidated supervision is a group-wide approach to supervision in which the supervisory process takes into consideration all of the risks taken on by a group of enterprises. This will require determining the risks to which the organization's constituent parts are exposed as well as how these risks affect the operational operations of the company. Consolidated supervision is the procedure by which the supervisor ascertains the viability of the operations of the whole group, which may include financial affiliates, bank and non-bank firms, as well as branches and subsidiary companies. These are the goals of combined supervision:

1. To uphold the idea that no financial activity, or the risk connected with it, is exempt from regulation.
2. Double counting is used to avoid capital overleveraging.
3. To determine the power of a group to which a bank with a license belongs in order to determine the possible effects of other group members on the licensed bank.
4. To use a quantitative technique to consolidate the financial returns, or the accounts of the licensed institution, while making sure that the qualitative approach analyses any significant risks to the licensed bank's financial condition.

Following are some aspects of consolidated supervision:

- a. Sufficient understanding of a group's structure and associated hazards.
- b. The group-based measurement of the capital's sufficiency or lack thereof.
- c. Group-based measurement of bigger exposures.



Instead of being substituted for individual bank monitoring, consolidated supervision should be considered as an addition to it. The different supervisory authorities must work together to guarantee that the financial operations of the group are thoroughly overseen while taking into account a variety of risks that may have an impact on both the individual entities' and the group's overall health [6]–[8]. The following procedures were advised in Consolidated Supervision. Managing the Risks in a Diversified Financial Services Industry June 2001 by the International Monetary Fund IMF:

1. Solo supervision must be supplemented by consolidated supervision. it cannot be a replacement for it.
2. Depending on the nature of certain assets and operations carried out in other areas of a company, consolidated supervision may be quantitative or qualitative.
3. Consolidation techniques include:
  - a. Complete line-by-line.
  - b. Equity approach.
  - c. Proportionate consolidation with the use of pertinent I.A.S. 27, 28, 31, 25 and 39.
4. A program for consolidated supervision has to be developed.
5. Consolidated Supervision minimal standards creation
6. Establishing home and host supervisors' cooperation in Consolidated Supervision.

Following are some possible kinds of consolidated supervision:

### **1. Consolidated Quantitative Supervision QCS**

Based on consolidated returns, which indicate an accounting consolidation of the parent bank with some or all of the group to which it belongs, this is determined. To monitor the parent bank and the group, particular capital ratios are defined at both the single and consolidated levels during QCS. On a standalone as well as consolidated basis, large exposures and associated loans are likewise monitored and regulated.

### **2. Consolidated Quality Supervision**

A qualitative consolidated supervision should be carried out in cases when accounting consolidation is not relevant due to the nature of specific assets and activities carried out in other areas of the group such as when an industrial or insurance firm is involved. In order to assess serious threats to the parent bank's reputation or financial soundness, the supervisor will pay particular attention to the group's overall business operations, the environment in which it works, as well as its controls, organization, and management.

### **3. Consolidation of the Accounts**

According to the authority relationship, prudential reports must be submitted that include consolidated financial statements for the parent bank and other pertinent financial entities within the group. The manager need to use the entire line-by-line consolidation method. This entails the netting off of balances across firms as well as the consolidation of all entities within the group, covering all assets and liabilities, in accordance with traditional accounting rules. This method should take into account the relevant international accounting standards IAS, such as IAS 27 on subsidiaries, IAS 28 on associates, IAS 31 and 25 on joint ventures and investments, etc. Risk-Based Supervision The dynamism of the global economic climate calls for more powerful tools and abilities to reduce risks brought on by the financial sector's quick expansion. A more efficient

strategy is necessary in response to the shifting financial environment, advancements in, and widespread usage of information/communications technology. Effective risk management has always been essential to safe and sound banking operations, but for two key reasons, it has become much more crucial. First, the nature of banking has evolved as a result of new technology, product innovation, and the scale and speed of financial transactions. Second, a supportive atmosphere must be created in order to execute the New Capital Accord and completely comply with the Basel Core Principles on Supervision.

The need of adopting the RBS Framework was predicated, among other things, by the aforementioned. A bank's risk profile serves as the foundation for RBS, a strong, proactive, and sophisticated supervisory approach. By allocating resources to banks with high-risk profiles, it allows the regulator to organize efforts and concentrate on pressing problems. RBS evaluates a bank's effectiveness in identifying, measuring, monitoring, and controlling risks. For each bank, it creates a unique supervisory program and pays more attention to the institutions that are thought to have a high potential for systemic effect. Banks are inescapably engaged in risk-taking due to the very structure of the banking industry. Among the many risks that banks confront on a daily basis are credit, market, liquidity, operational, legal, and reputational threats. Depending on the type and extent of the specific activity, a bank's commercial operations in actuality provide different combinations of these risks. Risks are defined by the regulatory and supervisory bodies for the financial industry as elements that threaten or indicate hazard for the accomplishment of statutory goals.

### **The Rules That Regulate Banking in India**

The Banking Regulation Act of 1949 contains regulations that the Reserve Bank of India RBI uses to control the Indian banking sector. The following discussion will focus on a few key elements of the laws that control banking in this nation as well as relevant RBI circulars.

## **DISCUSSION**

### **Restrictions on exposure**

A single borrower may only get loans totaling 15% of the bank's capital funds tier 1 and tier 2 capital, however this restriction may be increased to 20% for infrastructure projects. Lending to group borrowers is restricted to 30% of capital funds of the bank, with the potential to increase it to 40% for infrastructure projects. The board of directors of the bank may authorize an additional 5% increase in the lending limits. Both fund-based and non-fund-based exposure is a part of lending.

### **Statutory Liquidity Ratio SLR and Cash Reserve Ratio CRR**

In India, banks are obliged to deposit at least 4% of their net demand and time liabilities NDTL with the RBI in cash. These do not presently pay interest. Every two weeks, the CRR must be maintained, and daily maintenance must equal at least 95% of the necessary reserves. In the event of a daily maintenance default, the penalty is equal to the amount that falls short of the required level multiplied by the number of days in default, plus 3% over the bank rate. A minimum of 22% and a maximum of 40% of NDTL, also known as the SLR, must be kept in the form of gold, cash, or other recognized securities in addition to the CRR. The extra SLR holdings may be utilized to overnight borrow money from the RBI via the Marginal Standing

Facility MSF. The maximum amount that may be borrowed under MSF is 2% of NDTL, and the interest rate is 100 basis points higher than the repo rate. Think about reading more about who sets interest rates to understand more about how rates are set, especially in the U.S.

### **Provisioning**

Substandard, questionable, and loss are the three categories used to classify non-performing assets NPA. In the case of a term loan, an asset is considered non-performing if there haven't been any interest or principle payments for over 90 days. Substandard assets are those that have had an NPA classification for less than 12 months before becoming questionable assets. A lost asset is one that is often written off the books because the bank or auditor anticipates no return or recovery [9], [10]. For secured loans, a provision of 15% of the outstanding loan amount and for unsecured loans, a provision of 25% of the outstanding loan amount must be made for poor assets. For doubtful assets, provisioning for the secured portion of the loan ranges from 100% for the unsecured portion for NPAs with a duration of more than three years to 25% of the outstanding loan for NPAs that have been in existence for less than one year, 40% for NPAs that have been in existence for one to three years, and 40% for NPAs that have been in existence for less than one year. Standard assets also need to be provisioned. Provisioning for small and medium-sized businesses, housing, and agriculture is 0.4%, whereas it is 1% for commercial real estate and 0.75% for housing. To calculate net NPAs, the provision for standard assets cannot be subtracted from gross NPAs. Loans made to businesses with unhedged foreign currency risk need additional provisioning over and beyond the usual provisioning.

### **Financing to priority sectors**

Micro and small businesses, as well as efforts in the areas of agriculture, education, housing, and lending to low-income or underprivileged individuals known as weaker sections, make up the priority sector. For domestic commercial banks and foreign banks with more than 20 branches, the lending target has been set at 40% of adjusted net bank credit ANBC, which is defined as outstanding bank credit less certain bills and non-SLR bonds, or the credit equivalent amount of off-balance-sheet exposure, whichever is higher. For foreign banks with fewer than 20 branches, the target has been set at 32%. The credit equivalent of off-balance-sheet exposure or 18% of ANBC, whichever is larger, should be used to determine how much money is loaned to the agricultural sector. 20% of the total amount lent is to be advanced to micro-enterprises with plant and machinery valued at just above 500,000 rupees to a maximum of a million rupees and equipment valued at or above 200,000 rupees. Of the amount loaned to micro-enterprises and small businesses, 40% should be advanced to those enterprises with equipment that has a maximum value of 200,000 rupees and plant and machinery valued at a maximum of half a million rupees.

Depending on which is greater, the total amount of loans made to weaker sections should not exceed 10% of ANBC or the credit equivalent amount of off-balance sheet exposure. Particular castes and tribes that fall within this classification, such as small farmers, are weaker portions. No particular goals have been set for international banks with less than 20 branches. Up until recently, India's private banks have been hesitant to provide direct loans to farmers and other vulnerable groups.

One of the key causes is the disproportionately greater percentage of defaults on loans to the priority sector, which, according to some estimates, accounts for 60% of all defaults. They satisfy

their quota by investing in the Rural Infrastructure Development Fund RIDF and purchasing loans and securitized portfolios from other non-banking finance firms NBFC to reach their quotas.

### **Norms for new bank licenses**

According to the new regulations, organizations requesting a license must have a successful track record spanning at least 10 years, and the bank must be run by a non-operative financial holding company NOFHC that is entirely controlled by the promoters. Five billion rupees must be set aside as the required minimum paid-up voting equity capital, of which the NOFHC must hold at least 40% before progressively reducing its ownership to 15% over a 12-year period. Within three years of the bank's activities beginning, the shares must be listed. For the first five years of operation, the foreign ownership is restricted to 49%. After that, RBI clearance would be required to raise the interest to a maximum of 74%. The bank's board must adhere to the previously agreed priority sector lending objectives and must consist mostly of independent directors. The bank is not permitted to own any financial assets owned by the NOFHC, and neither is the NOFHC permitted to own any securities issued by the promoter group. 25% of the branches must be established in rural communities that have never had access to banking services, according to the new laws.

### **Blatant defaulters**

Willful default occurs when a loan is not returned despite the availability of resources, when funds are borrowed and utilized for reasons other than those intended, or when a property used as collateral for a loan is sold without the bank's knowledge or consent. A group of firms may be considered a wilful defaulter if one of the group companies fails and the other group companies that have provided guarantees fail to uphold their commitments. Willful defaulters including the directors are not eligible for financing and might face legal action. Recently, the RBI amended the rules to include non-group corporations to the list of intentional defaulters in the event that they breach a guarantee made to a different non-group company.

### **The inference**

In some ways, how a nation governs its banking and financial sectors provides a glimpse of its priorities, objectives, and the kind of financial environment and society it hopes to create. In India's example, the reserve bank's policies provide a window into its approaches to financial governance and demonstrate how highly it values both economic inclusion and banking sector stability. Despite having a rather conservative regulatory framework, India's banking sector must be seen in light of the fact that it is a nation with few banks.

While the priority lending targets are necessary to provide financial inclusion to those to whom the banking sector would not typically lend given the high level of NPA's and small transaction sizes, the excessive capital requirements that have been set are necessary to increase trust in the banking industry. The public banks are left with that duty since, in practice, private banks do not directly lend to the priority industries. It might also be argued that the priority sector definition should be changed in light of the fact that agriculture is accorded a high priority even though its GDP share has been declining.

## CONCLUSION

In conclusion, strict banking laws and oversight are crucial pillars of a secure and robust financial system. These controls are intended to protect the interests of investors, depositors, and the economy as a whole. Regulators make ensuring that banks operate with honesty, caution, and openness by enforcing rules, standards, and monitoring. In addition to risk management, consumer protection, and preserving financial stability, banking laws also serve other functions. They mandate that banks maintain sufficient capital reserves, control a variety of risks, and follow anti-money laundering and counter-terrorism funding regulations. In order to minimize excessive risk-taking that can trigger financial crises, these rules provide a framework that encourages safe lending practices and prudent financial conduct. In addition to regulations, supervision also requires constant monitoring of bank operations to make sure that set norms are being followed. Regulatory agencies evaluate the internal controls, risk management plans, and financial stability of banks. Supervisors are essential in spotting new hazards, stepping in to stop infractions, and implementing corrective action as required to safeguard the interests of all parties involved.

## REFERENCES:

- [1] C. Pereira Pedro, J. J. S. Ramalho, and J. V. da Silva, The main determinants of banking crises in OECD countries, *Rev. World Econ.*, 2018, doi: 10.1007/s10290-017-0294-0.
- [2] The Core Principles for Islamic Finance Regulations and Assessment Methodology, *Policy Pap.*, 2018, doi: 10.5089/9781498308496.007.
- [3] A. Khan, A Behavioral Approach to Financial Supervision, Regulation, and Central Banking, *IMF Work. Pap.*, 2018, doi: 10.5089/9781484372289.001.
- [4] L. N. Krasavina, Russia's Participation in the Globalization of Banking Regulation and Supervision and its Interests in an Economic Growth Strategy, *Econ. taxes law*, 2018, doi: 10.26794/1999-849x-2018-11-4-30-35.
- [5] D. Igan and T. Lambert, Bank Lobbying: Regulatory Capture and Beyond, *SSRN Electron. J.*, 2018, doi: 10.2139/ssrn.3128829.
- [6] E. V. Kruglikova, T. K. Blokhina, and O. A. Karpenko, Current problems of banking supervision and regulation: A new evidence, *Eur. Res. Stud. J.*, 2018, doi: 10.35808/ersj/1102.
- [7] W. Berger And Y. Nagase, Banking Union In Europe: How Much Centralisation Is Needed?, *Bull. Econ. Res.*, 2018, doi: 10.1111/boer.12126.
- [8] L. Marlina, A. Rusydiana, and M. Athoillah, Malmquist index to measure the efficiency and productivity of indonesia islamic banks, *Pridobljeno*, 2018.
- [9] M. T. Kartal and N. Ç. Çelikdemir, Evaluation of Internal Control in Turkish Banking Sector in the View of Turkey Legislations and International Internal Control Models, in *Contributions to Management Science*, 2018. doi: 10.1007/978-3-319-77622-4\_22.
- [10] U. Kalsum, Otoritas Pengawasan Perbankan Syariah Di Indonesia, *Li Falah J. Stud. Ekon. dan Bisnis Islam*, 2018, doi: 10.31332/lifalah.v3i2.1196.

## CHAPTER 6

### **BANK CAPITAL AND SOLVENCY MANAGEMENT: LEGAL SYSTEM**

---

Dr Batani Raghavendra Rao, Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-brr@cms.ac.in

#### **ABSTRACT:**

The stability and resiliency of banks are fundamentally supported by capital sufficiency and solvency. This study examines the crucial role that bank capital plays in guaranteeing solvency, mitigating risks, and maintaining shareholder confidence. The definition of bank capital and its relevance as a financial safety net that absorbs losses and serves as a buffer against unforeseen shocks are presented at the beginning of the study. It addresses how having enough capital allows banks to function amid recessions and other challenging circumstances, maintaining financial stability. The study also explores the legal systems that control bank capital needs. The Basel Accords, in particular Basel III, are described, along with how they set minimum capital requirements, risk-weighted assets, and leverage ratios to safeguard the health of banks. The significance of matching capital requirements with a bank's risk profile is emphasized in the study.

#### **KEYWORDS:**

Bank, Business, Financial Crisis, Lenders, Solvency Capital, Solvency Management.

#### **INTRODUCTION**

Basel III, also known as the Third Basel Accord or the Basel Standards, is an international regulatory agreement from 2009 that brought about a number of changes intended to enhance the regulation, supervision, and risk management within the global banking system. Banks were mandated by Basel III to maintain appropriate leverage ratios and to have a certain amount of reserve capital. The financial crisis of 2007–2008 exposed flaws in financial regulation, which led to the introduction of this framework. A leverage ratio is a metric used in finance to determine how much money is borrowed and to determine a company's capacity to pay its debts. The capital reserves that banks must set up in order to satisfy regulatory requirements are referred to as reserve capital. A bank's capital is measured in proportion to its risk-weighted assets using the capital adequacy ratio [1]–[3].

#### **The Solvency Ratio: What Is It?**

Prospective business lenders often use the solvency ratio as a critical statistic to assess a company's capacity to repay its loan. The solvency ratio shows if a corporation has enough cash flow to cover both its short-term and long-term obligations. The minimal amount of common stock that banks must keep on their balance sheets is determined by the solvency ratio. The regulatory capital is divided by the risk-weighted assets to get the solvency ratio, sometimes referred to as the risk-based capital ratio. Assets that have been weighted based on their risk, such as off-balance-sheet exposures, are known as risk-weighted assets. Under the terms of the Basel III final regulation, the denominator in the computation to derive the solvency ratio is risk-weighted assets.



$$\text{Total Risk-Based Capital Ratio} = \frac{\text{Capital}}{\text{Risk-Weighted Assets}}$$

**Figure 1: Representing the Formula for the Solvency Ratio [Investopedia].**

### **Basel III Increased Common Equity Requirements**

The minimum amount of common stock that banks must keep rose under Basel III. For instance, Basel III mandates that banks keep a minimum of 4.5% of their common stock in risk-weighted assets together with a 1.5% buffer. In contrast to Basel II, which only needed 2%, the common equity requirement rose. Basel III expands on Basel I and Basel II, with a focus on strengthening the banking industry's capacity to handle financial crisis, enhancing risk management, and fostering openness. In a broader sense, Basel III was designed to stop further economic collapses. The adoption of Basel III aimed to enhance risk management for financial institutions in the aftermath of the 2008 credit crisis. Basel III altered the formula used to compute risk-weighted assets. Residential mortgages that are not backed by the U.S. government are weighted between 35 and 100% under Basel III, but U.S. government debt and securities are granted a risk weight of 0%. Residential mortgages formerly had a flat risk weighting of 100% or 50% under Basel II. For some bank trading operations, particularly swap trading, Basel III raised the risk weighting. Basel III is criticized for supposedly subjecting banks to excessive requirements for these trading operations and for purportedly lowering their profitability. Basel III promotes swap trading on centralized exchanges in an effort to lower counterparty default risk, which is often recognized as a key contributor to the 2008 financial crisis. Many banks have responded by drastically reducing their trading activity or selling off their trading desks to non-bank financial firms.

### **A Solvency Capital Requirement SCR is what?**

The total amount of money that insurance and reinsurance businesses in the European Union EU are obliged to retain is known as a solvency capital requirement SCR. The SCR is a formula-based number that is calibrated to guarantee that all measurable risks are taken into account, including counterparty, market, credit, and operational risks as well as non-life, life, and health underwriting.

Both current company operations and anticipated new business over the next 12 months are covered by the solvency capital need. It has to be updated at least once a year. Figure 1 shows formula for the solvency ratio [4], [5].

### **Workings of Solvency Capital Requirements**

The Solvency II Directive, one of more than a dozen current EU regulations, was released by the EU in 2009 and includes the criteria for solvency capital. The directive intends to harmonize the insurance industry-related legislation and regulations of the 28 EU countries. The capital requirement may be increased if the supervising authorities believe that it does not sufficiently represent the risk associated with a certain form of insurance.

The SCR is established at a level that reduces the likelihood of financial disaster to fewer than once in 200 instances and guarantees that insurers and reinsurers can pay their commitments to



policyholders and beneficiaries during the next 12 months with a 99.5% probability. The formula adopts a modular strategy, which means that each individual's exposure to each risk category is evaluated before being combined.

### **Three Foundations of the Solvency II Regulation**

Three pillars or levels are specified for capital requirements in the EU Solvency II legislation. The quantitative requirements, or the amount of capital an insurer should have, are covered in Pillar I. Pillar II specifies standards for insurer governance, efficient oversight, and risk management. Pillar III specifies the criteria for disclosure and openness. Solvency II's strict requirements have drawn criticism. The new regulation places complicated and severe compliance requirements on many European financial firms, claims data services company RIMES. For instance, 75% of businesses indicated in 2011 that they were unable to meet Pillar III reporting obligations.

### **Amount of Minimum Capital Necessary**

A minimum capital requirement MCR, in addition to the SCR capital need, must be computed. The amount shown above is the threshold below which a national regulatory body would step in. Over the course of a year, the MCR is supposed to reach a level of 85% likelihood of sufficiency. The SCR and MCR statistics should be seen as soft and hard floors, respectively, for regulatory reasons. In other words, once the reinsurance company's capital holdings fall below the SCR, a tiered intervention procedure is in effect, with the intensity of the intervention increasing as the capital holdings go closer to the MCR. Regional regulators have a number of measures under the Solvency II Directive to handle MCR violations, including the forced closure of the business and the entire revocation of the right to offer new insurance.

### **Risk management is essential to bank solvency.**

In India, banks are crucial to the process of loan intermediation. Business expansion, asset quality, and asset management effectiveness all have an impact on a company's capital requirements. The banking industry is one that is continuously experiencing both possibilities and dangers [6]–[8]. The business of taking on, changing, and managing risk is what banks do. Due to the fact that they run their company by receiving deposits, they are likewise heavily indebted. By establishing a structure where the supervisory agency may keep an eye on the financial sustainability of banks, the regulatory agency is responsible for fostering a sound financial environment since banks are required to take on greater risk by nature. To protect their financial resources and subsequently the interests of the liability holders, banks must create an effective and efficient risk management strategy.

### **Safety of depositors**

As a safeguard against prospective losses, bank capital. To protect the security of depositors, banks must run their operations with a targeted goal solvency level. The deposit is a debt the bank owes to the depositors. The provided chart demonstrates how changes in value may affect the bank's debtors. The shareholders may see immediate negative effects from the first returns, and the bank's market value may decline. The standard deviations or volatility of a bank's profits will be substantial for higher level shocks resulting from business risks, however, and may negatively impact junior creditors before senior unsecured creditors. Therefore, in order to

protect themselves against a bank run, banks must carefully consider the critical level of economic capital EC. Banks must establish appropriate internal definitions and quantitative risk measurements in order to preserve solvency and provide adequate protection to depositors. With an example, this has been shown below.

A successful investment will result in a favorable return for the bank. The risk manager will choose a confidence level of 99 percent, but to calculate the tail risk, the matching  $z$  number must be multiplied by the standard deviation of portfolio returns. The ' $z$ ' values may be calculated from a statistics table's areas under the normal curve. Let's say that over the course of a trading year, the portfolio's actual daily standard deviation is predicted to be 4%. The 99 percent's ' $z$ ' score is 2.326. As a result, the portfolio's VaR at a degree of confidence of 99 percent is -9.304 percent -2.326 percent. This is the amount of internal capital the bank needs to sustain losses brought on by business risks. The negative sign results from the fact that risk causes significant negative returns to occur in the tail of the return distribution. As a result, there is a 1% chance that the portfolio loss will reach 9.304% during the specified time frame.

### **A second cushion**

However, since portfolio returns can deviate from the expected distribution owing to anomalous returns, banks must maintain a larger Tier-I capital reserve. As capital may absorb the bank's business risks credit, market, and operational, frequent capital injection and planning are essential for sustaining the appropriate solvency level. Examining the internal capital needs of banks and improving corporate governance, audit, and internal control procedures are crucial when determining if a company's capital is enough. Numerous mergers are taking place as the Indian banking industry goes through a period of consolidation, particularly in the public sector. Even while combining businesses may provide scale advantages, poor asset quality in the loan books of troubled banks may lead to significant variances and raise concentration risk in the combined organization. Therefore, it is important to evaluate the effects of these mergers in terms of risk-adjusted performance and value generation for shareholders.

Depending on whether the additional market power overcomes the efficiency savings, bank mergers may result in an increase or drop in loan spreads. Studies have shown that concentration risk is responsible for two-thirds of the total unexpected variability of losses, even for the largest acquiring banks with well-diversified portfolios. By maintaining loan connections with high-quality obligors and terminating those with hazardous borrowers, combined banks may lower the concentration risk and unexpected unpredictability of losses.

## **DISCUSSION**

### **Why is capital required of banks?**

Here are some reasons why capital is a crucial component of secure and strong institutions. Banks assume risks and might experience losses if the dangers come to pass. Banks must have the capacity to take on such losses and continue operating during good times and bad in order to remain secure and safeguard depositors' money. That is the purpose of bank capital. How much capital, however, should a bank maintain? The risks it takes are the key to the solution. It requires more cash as the hazards get greater. Banks must thus constantly evaluate the dangers to which they are exposed and the potential losses they may sustain. Banking supervisors verify and

contest their conclusions. Checking the capital levels of banks is a crucial aspect of the supervisors' job of keeping an eye on the financial soundness of such institutions.

### **Capital is what?**

Simply put, capital refers to the funds that a bank has raised from its shareholders, other investors, and any profits that have been generated but not yet distributed. Because of this, a bank may increase its capital base by, for instance, issuing additional shares or keeping earnings rather than delivering them as dividends to shareholders. In general, capital and debt are the two main sources of funding for banks. Debt is the sum of money that an entity owes its lenders after borrowing it. Debt encompasses, among other things, client deposits, newly issued debt instruments, and bank loans [9], [10]. The bank uses the money from these two sources in a variety of ways, such as for consumer loans or other investments. The bank's assets include the money kept in cash as well as these loans and other investments.

### **How does capital maintain bank security?**

A financial buffer called capital protects against losses. The bank will suffer a loss and, in the absence of capital reserves, may even go bankrupt when, for instance, a large number of borrowers find themselves unexpectedly unable to repay their debts or when the value of some of the bank's assets declines. If it does, it will utilize its strong financial basis to absorb the loss while continuing to run its business and provide for its clients.

### **How much capital must banks possess?**

First, the European regulation that sets the minimum overall capital requirement also known as the Pillar 1 requirement at 8% of banks' risk-weighted assets must be followed by all banks that are subject to European banking supervision. How do risk-weighted assets work, though? They are the sum of a bank's assets times the corresponding risk factors risk weights. Risk indicators indicate the perceived riskiness of a certain asset class. Less hazardous assets have lower risk-weighted asset amounts, which means a bank requires less capital to retain to cover them. For instance, a mortgage loan that is secured by property a home or apartment is less dangerous than an unsecured loan since the risk factor is smaller. Because of this, a bank requires less capital to cover a mortgage loan than it does an unsecured loan.

The second is the increased capital requirement also known as the Pillar 2 requirement established by the supervisors. This is where European financial regulation enters the picture. Each bank is closely examined by supervisors from the ECB and the member countries' regulatory bodies, who also determine the risks to which each bank is exposed. A yearly Supervisory Review and Evaluation Process SREP is used to accomplish this. If the bank's supervisors come to the conclusion that the minimum capital requirements do not adequately cover its risks, they demand that the bank retain more capital. The failure to comply with the minimum and extra capital requirements will have legal repercussions. The severity of these effects is determined by the breach. The supervisor can, for instance, request that the bank create a plan outlining how it intends to get back in compliance with the capital requirements. Or, if the violation is very severe, the bank risked losing its banking license. The third capital requirement for banks is that they hold extra reserves for a variety of reasons, including general capital preservation and protection against cyclical and noncyclical systemic risk.

## Management of risk

It is important to take seriously how a merger may affect the danger of system-level concentration. A conglomerate's failure to manage risk might have an impact not just on one institution but also on the whole financial industry. In order to foster healthy competition among financial institutions, which benefits consumers of financial services, and to maintain depositors' faith in the monetary system as a whole, it is the central bank's duty to offer a financial system. The bank will be able to manage its business risk and protect the depositors' money if risk adjusted performance-based utilisation of limited capital RAROC is implemented successfully.

## CONCLUSION

In conclusion, the fundamental foundations of a strong and robust banking system are bank capital and solvency management. A sufficient amount of capital protects banks from possible losses, enabling them to weather economic downturns and unanticipated shocks without risking their ability to remain solvent. To balance risk and return, the capital structure must always be optimum. High capital requirements may limit lending and impede economic development, even when greater capital levels improve a bank's capacity to absorb losses. The risk profile, business strategy, and regulatory requirements of a bank must all be carefully taken into account in order to strike the correct balance. Capital management and solvency management go hand in hand. The long-term capacity of a bank to fulfill its financial commitments is shown by its solvency. In addition to keeping enough capital, sensible risk management procedures, strong internal controls, and a thorough knowledge of the asset quality and liquidity of the bank are all necessary for effective solvency management.

## REFERENCES:

- [1] U. Ubaidillah, Pembiayaan Bermasalah Pada Bank Syariah: Strategi Penanganan Dan Penyelesaiannya, *El-Jizya J. Ekon. Islam*, 2018, Doi: 10.24090/Ej.V6i2.2042.
- [2] D. Pratiwi And B. Kurniawan, Pengaruh Penerapan Manajemen Risiko Terhadap Kinerja Keuangan Industri Perbankan, *J. Akunt. Bisnis*, 2018, Doi: 10.30813/Jab.V10i1.988.
- [3] A. Docherty, How Should Banks Manage The Strategic Risks Associated With New Regulations And New Sources Of Competition?, *J. Risk Manag. Financ. Institutions*, 2018.
- [4] T. Poufinas And P. Tsitsika, An Assessment Of The Market Risk Solvency Capital Requirement Simplifications For Insurance Undertakings, *Theor. Econ. Lett.*, 2018, Doi: 10.4236/Tel.2018.811153.
- [5] Ubaidillah, Jurnal Ekonomi Islam | Islamic Economics Journal V Ol. 6 No. 2 Juli-Desember 2018 El-Jizya, *J. Ekon. Islam*, 2018.
- [6] O. Ke And J. Rb, The Role Of Internal Auditing In Enhancing Good Corporate Governance Practice In An Organization, *Int. J. Account. Res.*, 2018, Doi: 10.4172/2472-114x.1000174.
- [7] S. Wulandari, Pengaruh Perputaran Piutang Dan Solvabilitas Terhadap Kondisi Financial Distress Perusahaan Manufaktur Sektor Garmen Dan Tekstil Di Bursa Efek Indonesia, *J. Pengemb. Wiraswasta*, 2018, Doi: 10.33370/Jpw.V19i2.128.

- [8] N. A. Rahmah and A. Kusbandiyah, Effect of Banks Performance to the Islamic Banks Profitability, *Adv. Sci. Lett.*, 2018, doi: 10.1166/asl.2018.11945.
- [9] R. R. Kumar, P. J. Stauvermann, A. Patel, and S. S. Prasad, Determinants of non-performing loans in banking sector in small developing island states: A study of Fiji, *Account. Res. J.*, 2018, doi: 10.1108/ARJ-06-2015-0077.
- [10] F. Amalia, P. Dewi, and A. Wahyuati, Analisis Laporan Keuangan untuk Menilai Kinerja Keuangan Perusahaan Pada PT. Bank Negara Indonesia, Tbk, *J. Ilmu dan Ris. Manaj.*, 2018.

## CHAPTER 7

### A BRIEF OVERVIEW OF RISK MANAGEMENT IN BANKING

---

Dr Vinoth S, Associate Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-dr.vinoth@cms.ac.in

#### ABSTRACT:

Sound banking practices are built on effective risk management, which ensures the financial sector's stability, resiliency, and sustainable development. The diverse nature of risk management in banks, its essential components, and its vital role in preserving the soundness of financial institutions are all explored in this study. In the first paragraphs of the study, many hazards that banks are exposed to are listed, including credit risk, market risk, operational risk, liquidity risk, and more. It draws attention to these hazards' dynamic character and the difficulties they provide for the stability of banking operations. The study also explores the value of risk management systems in recognizing, evaluating, and reducing these risks. It talks about how risk management approaches help banks foresee possible problems and create efficient mitigation plans, such risk mapping, stress testing, and scenario analysis.

#### KEYWORDS:

Banks, Credit Risk, Financial Systems, Risk Management, Sustainable Development.

#### INTRODUCTION

The New Deal, the most comprehensive piece of legislation the United States has ever tried, was born out of the Great Depression. As a result of the New Deal, the federal government began to take on responsibilities for a number of concerns that were previously handled by citizens, states, and local governments. Numerous bureaucratic organizations were established as a consequence of the exceptional growth in government activities. The acronyms of the names of these many organizations made it notoriously difficult to determine who was in charge of what. Americans began referring to these regulatory organizations as alphabet soup as a result of this. The term alphabet soup is now often used to describe a profusion of illogical language that contains abbreviations. Most businesses nowadays are required to abide by the regulations set out by different regulatory agencies. However, other businesses, like the banking sector, have stricter regulations that must be followed. In order to encourage financial stability, competition, and consumer protection, banks are subject to strict regulations.

Banks must have plans in place to keep everything in order given the tightly regulated environment in which they operate [1]–[3] The control of risks is crucial to banking operations. This article will give an overview of risk management in banking, go over the different types of risk management that commercial banks use, detail risk management procedures, go over the process of risk management in banks, and explain how to use enterprise risk management software for banks to show why. Banks are subject to several hazards, just like any other firm. The risks are larger than they are for most other businesses because of the significance of the banking industry and the government's interest in controlling hazards. A bank may encounter a variety of threats, thus it's critical to comprehend how banks handle risk.

### Risk Management Methods Used by Commercial Banks

1. **Credit risk:** Banks often make loans. Credit risk is the likelihood that a loan receiver may not repay the loaned sum. This may cause a disruption in cash flows, higher collection expenses, and other problems.
2. **Market risk:** This is the risk that an investment may lose value due to market circumstances like a recession. This is often described as systematic risk.
3. **Operational Risk:** These are possible causes of losses from any kind of operational incident, such as inadequately trained staff, a technology malfunction, or data theft.
4. **Reputational Risk:** Let's imagine press reports surface concerning leadership wrongdoing at a bank. This might harm business connections with customers, lower the share price, favor rivals, and more.
5. **Liquidity Risk:** Any financial organization has the danger of not being able to meet its obligations on time due to unforeseen claims or the need to sell long-term assets for less than they are worth.

### Important Elements of Risk Management

- a. By examining their operations, markets, and external variables, banks must proactively identify and analyze possible risks.
- b. Banks utilize quantitative methods to assess the likelihood and possible consequences of certain risks. Prioritizing risks and assigning resources for mitigation are both aided by this.
- c. Risk reduction techniques include diversification, hedging, establishing risk ceilings, and creating backup plans. Effective credit screening and loan structuring may reduce credit risk.
- d. Continuous risk exposure and performance monitoring aids in the early detection of deviations from anticipated results. This facilitates speedy remedial action.
- e. Strong governance frameworks, defined roles and duties, and adherence to legal requirements are necessary for effective risk management.
- f. Encouraging staff members at all levels to quickly identify and disclose hazards requires the development of a culture inside the business that is conscious of risks. Technology advancements have changed how risk management is handled in banks. Using machine learning, artificial intelligence, and data analytics, hazards may be predicted and reduced more successfully. Automation improves fraud detection and streamlines compliance operations [4], [5].

### Why banks control risk

Banks manage risks for a variety of reasons, such as to avoid loss, guarantee survival, maintain their reputation, defend the interests of stakeholders, comply with rules and laws, and protect the bank's credit ratings. However, since banks and the financial system are so crucial to both the domestic and global economies, inadequate risk management has far-reaching effects. This was made clear during the financial crisis of 2007–2008, when governments had to band together to save the banks. Because a bank's operation revolves upon the generation of money, it may limit or even halt lending if it runs into problems, even on a smaller scale. This has an impact on how readily available money is to businesses and inhibits economic development. For this reason, both domestically and globally, banks and financial institutions are regulated.



## **Bank Risk Management Procedures**

In order to remain on top and ahead of the myriad significant risks they encounter every day, banks must prioritize risk management. In addition to compliance, risk management in the banking industry also includes monitoring reputational, operational, and pricing, liquidity, and strategic risks. A strong and adaptable bank risk management program is necessary to keep track of these risks. Since 2011, the number of distinct regulatory changes that banks and financial institutions must monitor globally has more than quadrupled. Organizations must abide by the many proposed regulations and enforcement measures that exist across several jurisdictions. Because of this, regulatory change management must be a key component of every bank's risk management strategy. The simplest definition of regulatory change management is managing regulatory, policy and or procedures applicable to your organization for your industry. It is crucial that companies have the right systems in place to detect changes to current rules as well as new regulations that effect the organization's capacity to accomplish goals. Financial institutions might find regulatory compliance to be a taxing and expensive undertaking. It is similarly crucial that businesses be notified of any possible penalties or repercussions if they fail to comply with the law. Organizations must decide how they will execute the necessary adjustments to their present policies, procedures, and training sessions after a regulation change has been implemented. Organizations should start monitoring compliance with the new legislation going forward when modifications are implemented [6]–[8].

## **DISCUSSION**

### **Process of Risk Management in the Banking Sector**

A codified, well-defined risk management strategy adds more transparency to the equation. Simplifying risk management makes it easier to spot systemic problems that impact the whole bank. The optimal risk management strategy for a bank identifies important dependencies and control efficiency to act as a road map for performance improvement. Banks should eventually be able to better devote time and resources to what matters most with appropriate plan execution. The risk management strategy of a bank will be determined by its size, brand, market share, and many other factors. Having stated that, every strategy has to be standardized, useful, and implementable. You may use the same method anywhere to define the phases in your risk management plan:

#### **Identification of Risk for Banks**

For banks to construct an effective risk management program, they must implement a risk identification process throughout the whole business. It should be noted that the most efficient risk detection strategies concentrate on underlying cause rather to merely identifying what occurred.

This makes it possible to identify systemic problems so that controls may be created to cut down on the expense and time of duplicating work.

#### **Evaluation and Analysis Methodology**

A strong risk management system is characterized by consistent risk assessment. The ability to gather and evaluate data is crucial for figuring out the possibility of any given risk and, therefore, for prioritizing remedial actions.

**Mitigate**

The practice of lowering risk exposure and decreasing the possibility of an occurrence is known as risk mitigation. To guarantee that the bank is completely safeguarded, top risks and issues need to be regularly addressed.

**Monitor**

Risk management should be a proactive, continuing effort. To confirm that the controls are effective, testing, metric gathering, and incident response are required. It also enables the discussion of new trends to assess whether or not particular efforts are making progress.

**Connect**

A comprehensive image of the bank may be painted by establishing connections between risks, business divisions, mitigation initiatives, and more. This enables the identification of systemic hazards, the discovery of upstream and downstream linkages, and the construction of centralized controls. Silos reduce the likelihood of missing important bits of information.

**Report**

Giving clear and interesting updates on the risk management program's performance shows its success and may win the support of different bank stakeholders. Create a risk report with information centralization and a dynamic representation of the bank's risk profile.

**Software for ERM in Banks**

Using enterprise risk management software is the best method to start the process of creating a solid banking risk management strategy. We at LogicManager change the way you perceive risk. Our software is intended to make your bank's ERM procedures less painful so you can concentrate on setting and accomplishing operational and strategic objectives. The risk-based framework and methodology offered by LogicManager's risk management software for banks and expert advice services enables you to complete all of your governance tasks while also illuminating the relationships between those tasks and the objectives they influence. For banks, risk management is essential because it enables them to recognize and reduce possible threats to their reputation, financial stability, and consumer confidence. Among the top reasons why risk management is so crucial in banking are:

**Monetary stability**

By recognizing, evaluating, and managing possible risks that might result in losses, effective risk management methods assist banks in maintaining financial stability. Banks may avoid unforeseen losses and retain their financial stability, which is necessary for their long-term existence, by managing risks.

**Regulatory Conformity**

Banks must adhere to a number of regulatory obligations, and good risk management strategies aid in this compliance. Regulation adherence aids banks in avoiding fines, legal action, and reputational harm, all of which may negatively impact their business operations [9], [10].

## **Management of Reputation**

Banks depend largely on their standing and clientele's confidence. By minimizing possible hazards that might harm their brand name, effective risk management procedures assist banks in maintaining their reputation. For banks, reputational harm may have serious repercussions, including a loss of clients and income. Therefore, to successfully manage risks and avoid any reputational harm, banks must adopt strong risk management systems and continuous control monitoring.

## **Customer Safety**

Effective risk management procedures aid banks in defending their clients from threats like fraud and identity theft. Banks can protect the interests of their clients and maintain their confidence by putting in place strong risk management systems.

## **Competitive Benefit**

The capacity to manage risks and preserve financial stability may provide banks a competitive edge via effective risk management procedures. Customers, investors, and business partners may be attracted and kept by doing this.

## **Difficulties banks have while controlling risk**

Risk management is not without challenges. The way that financial businesses manage risks has changed as a result of developments in business models, disruptive technology, cultural transformations, and regulatory adjustments.

To be prepared for the future, risk management teams in banks and financial institutions must keep current on the most recent market events and regulatory outlooks. They must also traverse a number of significant obstacles, such as:

- a. Today's consumers accomplish several things on their mobile devices, including banking. Banks struggle with security threats and platform design difficulties as a result of their customers' need for solutions that are just as useful as their banks' branch operations or online platforms.
- b. Public opinion, political unrest, and other variables are taken into account while creating new rules or altering current ones. Banks must adhere to regulations or run the danger of breaking them.
- c. The banking and financial services sector, which is becoming more and more tech-based, is always under assault from malware, phishing, and other threats.
- d. These have a negative impact on bank operations, present security threats to banks and their clients, and have an overall negative impact on consumer satisfaction, ultimately costing banks more money.
- e. Internet banks and IT businesses entering the financial services sector are raising competition for local and regional banks.
- f. To reduce business or liquidity risks, banks spend a lot of money on operational expenses. Without strict procedures in place, these expenses may rapidly mount up, posing hazards to credit, operations, and compliance.

### How banks may overcome challenges in risk management

To meet these challenges and manage risks, banks and other financial institutions must advocate change and embrace it. Organizations that adopt new technology, manage governance, risk, and compliance, and become adaptable will grow. Among the rapid actions banks may take are:

- a. This minimizes expenses and the negative effects of frequently enforcing new regulations on banking operations.
- b. Investing in customer-centric technologies. To reduce company risk and stay competitive, acquire solutions that provide the amount of personalisation and technology clients want.
- c. Using intelligent technologies to tackle cybersecurity problems: Artificial intelligence AI and other intelligent technologies quickly pinpoint and address fraud and identity theft issues while simplifying security operations and conserving resources.
- d. Making use of cloud computing. Cloud computing brings about efficiencies that help banks save money. For instance, using analytics may cut down on the time and expense associated with promoting new items.

Rethink customer interaction tactics to connect with consumers and satisfy their expectations. • Refresh current offers.

### CONCLUSION

In conclusion, risk management is the cornerstone of a robust and long-lasting banking industry. Due to the complexity and interdependence of financial systems, proactive steps must be taken to detect, evaluate, and reduce risks that might jeopardize the stability and reputation of banks. Banks can navigate shaky economic conditions, protect their assets, and fulfill their fiduciary duties to stakeholders by implementing comprehensive risk management techniques. Credit risk, market risk, liquidity risk, operational risk, and new risks like cyberthreats and geopolitical uncertainty are just a few of the factors that make up effective risk management. Each of these risks requires a specific strategy that combines cutting-edge analytical tools, solid governance frameworks, and a risk-awareness and responsibility culture.

The 2008 global financial crisis brought home how crucial risk management is. It exposed the destructive effects of poor risk assessment and loose lending standards, which result in systemic collapses and economic unrest.

As a consequence, banks and regulators shared a stronger commitment to improving risk management frameworks, which led to tighter regulatory requirements and stress testing procedures.

### REFERENCES:

- [1] E. Agwu, Credit Risk Management: Implications on Bank Performance and Lending Growth, *SSRN Electron. J.*, 2018, doi: 10.2139/ssrn.3122501.
- [2] A. A. Rehman, A. Benamraoui, and A. M. Dad, A comparative study of Islamic and conventional banks' risk management practices: Empirical evidence from Pakistan, *J. Bank. Regul.*, 2018, doi: 10.1057/s41261-017-0046-z.
- [3] R. Kamarulzaman, A. Ali, Z. A. Z. Azim, and J. Mohamed, A case study on the risk management of Islamic banks in Malaysia, *Opcion*, 2018.

- [4] A. Ahmadyan, Measuring Credit Risk Management and its Impact on Bank Performance in Iran, *Mark. Brand. Res.*, 2018, doi: 10.33844/mbr.2018.60427.
- [5] R. Liff and G. Wahlstrom, Usefulness of enterprise risk management in two banks, *Qualitative Research in Accounting and Management*. 2018. doi: 10.1108/QRAM-11-2016-0084.
- [6] N. N. Rahma and L. S. Almilia, The Effect of Public Ownership, Risk Management Committee, Bank Size, Leverage, and Board of Commissioners on Risk Management Disclosures Empirical Study in Banking Sector Companies Listed on the Indonesia Stock Exchange for the Period 2011-2015, *Indones. Account. Rev.*, 2018, doi: 10.14414/tiar.v8i1.1577.
- [7] I. I. Vasiliev, P. A. Smelov, N. V. Klimovskih, M. G. Shevashkevich, and E. N. Donskaya, Operational risk management in a commercial bank, *Int. J. Eng. Technol.*, 2018, doi: 10.14419/ijet.v7i4.36.24130.
- [8] A. M. Soliman, A. Mukhtar, and M. F. Shubita, The long-term relationship between enterprise risk management and bank performance: The missing link in Nigeria, *Banks Bank Syst.*, 2018, doi: 10.21511/bbs.131.2018.12.
- [9] M. Y. A. Basah *et al.*, Risks in Islamic Banks: Challenges and management, *J. Eng. Appl. Sci.*, 2018, doi: 10.3923/jeasci.2018.2081.2085.
- [10] N. C. Jonathan and A. J. Michael, An analysis of the relationship between credit risk management and bank Performance in Nigeria: A case study of Fidelity Bank Nigeria PLC, *Int. J. Res. Rev.*, 2018.

## CHAPTER 8

### LIQUIDITY MANAGEMENT IN BANKING: A REVIEW

---

Dr Chaya Bagrecha, Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-dr.chayabagrecha@cms.ac.in

#### ABSTRACT:

A key component of banking operations is liquidity management, which makes sure that financial institutions have enough liquid assets on hand to satisfy their short-term commitments and navigate volatile market circumstances. This study examines the crucial significance of liquidity management in the banking industry, as well as its difficulties and methods for reducing liquidity risks. The definition of liquidity and its importance in preserving a bank's solvency, reputation, and general stability are presented at the beginning of the study. It describes how liquidity risk develops when a bank finds it difficult to quickly convert its assets into cash to satisfy withdrawal requests or pay commitments, possibly resulting in dire financial circumstances. The study also explores the significance of assessing liquidity risk. It goes on how banks assess their liquidity levels by looking at their cash flows, financing sources, and possible stress scenarios. The use of scenario analysis and stress testing in order to foresee liquidity issues and create workable solutions is emphasized. The function of liquidity buffers in risk mitigation is also covered in the study. In order to fulfill abrupt liquidity needs, it examines how banks keep liquid assets including cash, government securities, and highly marketable assets. The study highlights the necessity to reconcile keeping sufficient liquidity with maximizing profits.

#### KEYWORDS:

Bank's Solvency, Banking, Financial Institutions, Liquid Assets, Liquidity Management, Liquidity Risk.

#### INTRODUCTION

The services your bank offers to its corporate clients known as liquidity management enable them to maximize the interest on their checking and current accounts and pool money from several accounts. As a result, your corporate clients may effectively manage the daily liquidity of their companies. The 'account structures' that serve as the foundation for liquidity management must be defined by the customers. The account structure represents both the business tactics used to organize account connections and the hierarchical relationship between the accounts [1]–[3]. Sweeping is the act of moving actual money inside an account structure from a kid to a parent or from a parent to a child. Pooling, in which money is not transferred physically between accounts. Instead, the account balances are 'interest calculations' on such notional balances and the notional balances are consolidated notionally. A multi-branch, multi-currency liquidity management framework utilizing the System Accounts architecture is supported by the Oracle Banking Liquidity Management application. This gives the system the ability to monitor account balances inside the structure, compute interest on those accounts, and trace the history of the sweep/pool structure.

**What is management of liquidity?**

A company's cash reserves are positioned via the process of liquidity management to achieve its objectives while maximizing interest income. Liquidity management may be a challenging balancing act since, in many circumstances, having cash accessible at a particular moment and optimizing profits are mutually exclusive objectives.

**Why is managing liquidity crucial?**

A company's ability to fulfill its commitments is guaranteed by effective liquidity management, which is essential to the health of any enterprise. If a business has enough liquid assets, it can make timely payments to creditors, employees, and suppliers without jeopardizing its long-term investments. On the other side, ineffective liquidity management may result in loan defaults, problematic vendor relationships, a poorer credit rating, and insolvency. These unfavorable results were especially clear in Silicon Valley Bank's [SVB] most recent collapse. Due in large part to massive investment in long-term Treasury securities, SVB encountered a liquidity crisis. The quality of the investments was not a concern since they are fully supported by the U.S. government. The issue really developed because the investments lacked the required liquidity. The value of the bank's bonds decreased as interest rates increased. The bank was therefore compelled to liquidate its bond assets at a \$1.8 billion loss as a result of an inflow of withdrawal requests from faltering internet businesses. Depositors scrambled to get their money out of the bank as the media started to report on its problems. The bank run caused SVB to go bankrupt. In retrospect, a solid liquidity management strategy may have avoided a lot of the issues Silicon Valley Bank had [4], [5].

**How to Create a Successful Liquidity Management Plan**

Companies must strike a balance between their accessibility demands and their return requirements when developing an effective liquidity management strategy. This often entails categorizing financial reserves according to when they are required.

**Running Cash**

Operating cash, sometimes referred to as cash required to satisfy immediate commitments, is frequently maintained in an account that is simple to access. This money might be used for a number of things, including paying rent, mortgages, utilities, staff wages, and loan repayments. Although there are many ways to invest working capital, a deposit account like a checking account is one of the most popular. Due to the high liquidity of these accounts, fluctuations in the stock market do not affect their value. Each institution's deposit accounts are covered up to the \$250k FDIC / NCUA maximum. Up to the appropriate cap, this government insurance guards against bank failure for the principle and accumulated interest. These accounts often pay less interest than long-term options because of how they are designed. Fintech, or financial technology advancements, have enabled businesses to provide extended government insurance and nationally competitive returns on these accounts.

**Long-term and Medium-Term Cash**

Companies may have cash reserves in addition to operational funds that are not immediately required. This kind of cash may consist of monies set aside for future endeavors or cash meant to assist the business in seizing chances as they present themselves. To maximize profits, medium-



and long-term cash might be invested. The most popular investment option for medium- and long-term cash reserves is a certificate of deposit CD. Without compromising on security, these investments often provide a better rate of return than bank accounts. Similar to bank accounts, government insurance covers the principle and interest invested in CDs up to a maximum of \$250k per financial institution. Fintech allows businesses to gain additional government protection over the minimum need. Because the firm promises to keep the cash in the investment for a certain period of time, banks often offer much higher rates for CDs than deposit accounts. Businesses may lock in high rates while interest rates are high and preserve those profits even when market interest rates decrease since CD rates are fixed. Additionally, companies now have access to nationwide competitive CD rates thanks to fintech.

Businesses may need access to funds on a predetermined timeframe in order to finish a project or benefit from shifting interest rates. A CD ladder in this situation may aid in maximizing returns while ensuring that assets mature when required. Finance and risk management departments often work together to create a liquidity management strategy. A seasoned deposit management company that utilizes cutting-edge fintech may also assist firms in optimizing assets to fulfill their liquidity demands. For money that are not immediately required, we also provide CDs and CD ladders in addition to highly liquid accounts. We have access to a vast network of financial institutions that compete for deposits, so whether our clients invest in CDs or more liquid options, they will obtain returns that are competitive nationally.

### **RBI's Liquidity Management Challenges**

The Covid-19 outbreak and its aftermath provide the Reserve Bank of India RBI with the dual problem of controlling inflation and promoting growth. The aim of the RBI is to maintain a balance between short-term and long-term growth in order to maintain economic growth and adhere to inflation targets. But among the difficulties the RBI faces are those related to the ineffective transmission of monetary policy and the inherent inadequacy of the inflation targeting strategy [6]–[8]. The main tools to address this issue are the monetary policy stance and liquidity management framework of the RBI.

The inflation-growth dynamic must be balanced, and this can only be done by controlling liquidity and funding the budget deficit. The RBI's work is made more difficult by the liquidity management conundrum since it requires careful navigation of liquidity circumstances to encourage growth while controlling inflation.

### **What is the liquidity management dilemma facing the RBI?**

In order to balance its goals of maintaining price stability, economic growth, and financial stability while dealing with the excess liquidity position and the government's borrowing needs, the Reserve Bank of India RBI faces a liquidity management conundrum. Aspects of this conundrum include:

### **The Trade-Off between Growth and Inflation**

- a. The RBI must keep inflation within its target range while also maintaining an acceptable amount of liquidity in the banking sector to facilitate the expansion of credit and economic recovery.

- b. To affect the cost and accessibility of money in the economy, the RBI must employ its policy instruments, including the repo rate, the reverse repo rate, the marginal standing facility, the cash reserve ratio, and the statutory liquidity ratio.

However, depending on the current economic circumstances and expectations, these instruments may have varying impacts on inflation and growth.

### **The Integration of Fiscal Policy**

- a. In the context of greater capital expenditure 3.32% of GDP allocated in the Union Budget, which intends to increase public investment and assist economic recovery, the RBI must support the financing of the fiscal deficit.
- b. In addition to participating in the main and secondary markets for government securities, the RBI is responsible for managing the government's debt and cash reserves.

However, these actions could have an impact on market stability, the transmission of monetary policy, liquidity management, and central bank independence. To maintain consistency and efficacy, the RBI and the government must coordinate and work together on their respective policies and activities.

### **The Growth of the Financial Markets**

To remove excess liquidity from the banking sector, the RBI must use market-oriented tools such variable rate reverse repo auctions, open market sales, and central bank debt securities. For these instruments to be used successfully, a financially stable and well-developed market is necessary. However, the breadth and efficacy of market-oriented devices may be constrained by the undeveloped, fragmented, or volatile nature of the financial markets.

### **How Can RBI Solve the Problem of Liquidity Management?**

**Standing Deposit Facility SDF Active Use:** The standing deposit facility may be actively used by the RBI to remove excess liquidity from the banking sector. The RBI can avoid inflationary pressures on the economy by doing this, which will limit the amount of money in circulation.

**Instrumental Use:** The RBI may use a variety of tools, including variable rate reverse repo VRRR auctions, open market sales, and modifications to the standing deposit facility, to manage liquidity efficiently. These instruments may be used to absorb extra liquidity from the system and balance inflation and growth goals.

### **Checking Cash Balances**

- a. The RBI should keep a careful eye on the government's cash holdings at the central bank.
- b. To do this, it is necessary to examine the trends in government cash flows, deposits, investments, and ways and means advances WMA use.
- c. By keeping an eye on these variables, the RBI may spot any imbalances and take the necessary action to efficiently control liquidity.

### **Improving Cash Management**

To prevent persistent surplus or deficit cash situations with the RBI, the government must strengthen its cash management procedures. This involves making sure that WMA is used for

brief cash flow imbalances rather than as a means of funding the budget deficit. The government may lessen the effect on RBI's liquidity management and overall monetary management by improving cash management [9], [10].

### **How Difficult Is It to Manage Liquidity Using Market-Oriented Instruments?**

#### **Depend on the Depth and Availability of the Financial Markets**

In order to operate efficiently, market-oriented instruments like variable rate repo/reverse repo auctions, open market sales, and central bank debt securities need a developed and liquid financial market. Market-oriented instruments, such as interest rates, exchange rates, credit ratings, and market sentiment, entail transactions in financial assets that are vulnerable to price swings owing to changes in market circumstances. These changes might have an impact on the asset values and returns, resulting in profits or losses for the financial institutions and the central bank. Market-oriented instruments must be governed by a system of regulations and oversight that is explicit and consistent in order to promote responsibility, transparency, compliance, and risk management. To monitor and manage their liquidity situations and risks, the central bank and financial institutions must have proper policies, processes, systems, and controls. The authorities responsible for enforcing the laws and regulations must have the necessary authority, equipment, and funding.

## **DISCUSSION**

### **What is RBI's Liquidity Management?**

One of the Reserve Bank of India's RBI primary responsibilities is liquidity management, which helps to ensure the financial system runs smoothly and that monetary policy is effectively communicated. The operational framework, the drivers of liquidity, and the management of liquidity are the three components of liquidity management.

#### **The Overarching Structure**

- a. The Liquidity Adjustment Facility LAF corridor, a collection of policy tools that affect the overnight interest rates in the money market, serves as the operational framework for RBI's liquidity management.
- b. There are three rates in the LAF corridor:
  - i. The policy repo rate PRR, which serves as the RBI's primary policy rate for bank loans.
  - ii. The marginal standing facility MSF rate, which is the maximum rate at which banks may borrow money from the RBI in exchange for public obligations. and
  - iii. The rate for the standing deposit facility SDF, which serves as the minimum amount that banks must deposit with the RBI in order to do so without providing any kind of security.

To achieve:

- a. The LAF corridor's goal is to maintain equilibrium between the WACR, the operational aim of the RBI's monetary policy, and the PRR.
- b. The WACR is the average interest rate that banks in the overnight interbank market lend and borrow at.

- c. The PRR affects the price and availability of money in the economy and indicates the direction of monetary policy.

### **The Liquidity Drivers**

#### **1. Money currently in use**

- a. This is the total quantity of cash that the general people keeps outside of banks. The amount of money in circulation grows and decreases in proportion to bank deposits and reserves as consumers withdraw money from ATMs or spend less cash.
- b. The financial system has a liquidity imbalance as a result.
- c. The amount of money in circulation falls and bank deposits and reserves rise when consumers deposit cash in banks or spend more money.
- d. The banking system has a liquidity excess as a result.

#### **2. RBI's net foreign exchange purchases and sales**

- a. This is the total net amount of foreign currency purchased or sold by RBI in the market.
- b. The RBI enhances bank reserves and liquidity when it purchases foreign currency from exporters or other sources and pays them in rupees.
- c. The RBI obtains rupees when it sells foreign currency to importers or other sources, which lowers bank reserves and liquidity.

#### **3. Cash held by the government at the RBI**

- a. This is the sum of money that the government has deposited with the RBI for its use in paying bills and collecting taxes.
- b. The government reduces its cash balances with the RBI and injects liquidity into the banking sector when it spends more than it receives in taxes or other payments.
- c. When the government raises more revenue than it spends, it builds cash balances with the RBI and depletes the banking system's liquidity.

#### **4. Additional reserves held with the RBI**

- d. The amount of money that banks voluntarily maintain with the RBI in addition to the statutory requirement of the cash reserve ratio CRR is referred to here. CRR is the portion of deposits that banks must keep with the RBI on a mandatory basis as a prudential precaution.
- e. When banks maintain more excess reserves with the RBI, they limit the amount of money available for lending and contribute to the banking system's liquidity imbalance.
- f. Banks that hold less excess reserves with the RBI make more money available for lending and boost the amount of liquidity in the banking system.

### **What should the next step be?**

### **Fiscal Deficit Financing and Liquidity Position Monitoring**

- 1. The RBI must continue to be flexible and nimble in the management of liquidity via two-way operations.

- a. A tighter eye on fiscal deficit finance and liquidity management will assist balance the goals of inflation and growth.
- b. Building a Stable Monetary-Fiscal Interface
- c. It is crucial that the government and RBI closely monitor the government's financing of the budget deficit.

2. Improving the monetary-fiscal link will require addressing the problems of excessive borrowing and poor cash management.

### **Assessing Liquidity Management Tools**

To maintain stability, the RBI should regularly assess the efficiency of tools for managing liquidity, such as VRRR and SDF.

### **Fiscal policy and monetary policy coordination**

- a. The government would be far better served to concentrate on reducing its own budget deficit if it actually intends to lower lending rates in India in a significant and lasting way.
- b. It would be wise to separate debt management from monetary management in order to increase the independence of the central bank.

## **CONCLUSION**

In conclusion, managing liquidity is of utmost importance in the banking industry since it forms the basis for both operational and financial resiliency. For the financial system to remain stable and retain depositor confidence, banks must be able to satisfy their short-term financial commitments while preserving a responsible cushion against unforeseen shocks. The 2008 global financial crisis brought home how crucial it is to have good liquidity management. Institutions with insufficient liquidity reserves found themselves in trouble, which set off a chain reaction that destabilized the financial environment. In order to reduce systemic vulnerabilities, regulators and banks alike realized the necessity for effective liquidity risk management procedures. The problem that banks always face is finding the ideal balance between profitability and liquidity. Although investing extra liquidity in profitable ventures is crucial, it must be done without jeopardizing the bank's ability to fulfill its commitments, particularly in times of crisis.

### **REFERENCES:**

- [1] S. K. Rizkiah, Liquidity Management In Islamic Banking: Issues And Challenges, *Tazkia Islam. Financ. Bus. Rev.*, 2018, Doi: 10.30993/Tifbr.V12i2.148.
- [2] A. Riyan Puteri, The Influence Of Firm Size, Capital Adequacy, And Profitability On Liquidity Risk Management Of Indonesia Islamic Banking, *J. Bus. Econ.*, 2018, Doi: 10.35760/Eb.2018.V23i2.1817.
- [3] U. S. A. Rashid, A. A. Rahman, And R. Markom, The Regulatory Framework On Liquidity Risk Management Of Islamic Banking In Malaysia, *Int. J. Bus. Soc.*, 2018.
- [4] Sinarti And F. Rahmadany, Effect On Profitability Liquidity Management Of Banking Companies In Indonesia Stock Exchange, *J. Appl. Account. Tax. Artic. Hist.*, 2018.

- [5] N. A. B. Samail, N. A. B. Zaidi, A. S. B. Mohamed, And M. N. Bin Kamaruzaman, Determinants Of Financial Performance Of Islamic Banking In Malaysia, *Int. J. Acad. Res. Accounting, Financ. Manag. Sci.*, 2018, Doi: 10.6007/Ijarafms/V8-I4/5182.
- [6] C. Adhim, Pengaruh Risiko Kredit, Risiko Likuiditas, Efisiensi Manajemen Terhadap Profitabilitas Melalui Permodalan, *J. Bisnis Dan Manaj.*, 2018, Doi: 10.26905/Jbm.V5i1.2323.
- [7] A. Abdul-Rahman, A. A. Sulaiman, and N. L. H. Mohd Said, Does financing structure affects bank liquidity risk?, *Pacific Basin Financ. J.*, 2018, doi: 10.1016/j.pacfin.2017.04.004.
- [8] S. Rafiullah, A. Khan, and F. R. Mumtaz, Liquidity Management by Islamic Banks in Pakistan: An Econometric Analysis, *J. Islam. Bus. Manag.*, 2018, doi: 10.26501/jibm/2018.0801-004.
- [9] N. Morozko, N. Morozko, and V. Didenko, Unbalanced liquidity management evaluation of the Russian banking sector, *J. Rev. Glob. Econ.*, 2018, doi: 10.6000/1929-7092.2018.07.45.
- [10] U. Yaqoob and U. Khalid, Liquidity risk management and its impact on performance of the banks: A comparative study between islamic and conventional banks of Pakistan, Malaysia and Indonesia, *J. Internet Bank. Commer.*, 2018.

## CHAPTER 9

### ASSET AND LIABILITY MANAGEMENT ALM: IMPROVING BANK FINANCIAL STATE

---

Dr Vinoth S, Associate Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-dr.vinoth@cms.ac.in

#### ABSTRACT:

Asset and Liability Management ALM is a strategic method used by banks to improve their financial performance, manage risks, and optimize their balance sheets. The core tenets of ALM, its function in maintaining a sound financial position, and the methods used to efficiently align assets and liabilities are examined in this study. The definition of ALM in the study's first sentence is that it is a framework that allows banks to coordinate their asset and liability portfolios in order to accomplish certain financial goals. It emphasizes how crucial ALM is for controlling interest rate risk, liquidity risk, and financing risk all of which have an effect on a bank's stability and profitability. Additionally, the study explores the main goals of ALM. It highlights how ALM tries to achieve a balance between increasing asset returns and reducing liabilities' expenses. It also underlines how crucial it is to keep a bank's assets and liabilities in line when they approach maturity, reset, or re-price in order to avoid imbalances.

#### KEYWORDS:

Asset Liability Management, Bank Loan, Banking, Insurance Sectors, Liquidity Risk, Rate Risk.

#### INTRODUCTION

The technique of controlling the use of assets and cash flows to lessen the firm's risk of loss from failing to pay an obligation on time is known as asset/liability management. Assets and liabilities that are properly handled boost a company's earnings. Pension plans and bank loan portfolios are two common examples of when the asset/liability management approach is used. The economic worth of equity is also a factor. A key idea employed across a number of businesses, notably in the banking and insurance sectors, is asset liability management. For instance, through raising net interest revenue, a sound asset management regulatory framework may boost banks' profitability [1]–[3]. A better perspective may be thought of as an organized process of adding the appropriate balance sheet components to the proper combination. The main idea behind the strategy is that businesses need to have enough assets to cover their obligations. Asset liability management is a methodical technique that helps guard against the dangers brought on by the mismatch between assets and liabilities. Its goal is to reduce risk, not eliminate it.

By balancing assets and liabilities, it is the process of selecting how to manage risks and stabilizing the system. Companies should have enough assets to cover their obligations whenever they become due. Asset Coverage Ratio and Gap analysis are two tools that businesses may use to measure this management. It tackles the risk of asset-liability mismatch in the banking sector due to interest rate or liquidity risk. As a result, the goal of the asset liability management process is to make sure that the time, quantity, and interest rate variations of the enterprise's



assets and liabilities are appropriately matched with one another. This will aid in containing mismatches and result in the best possible utilization of resources and financial performance.

### **Acquiring knowledge about asset/liability management**

Because business managers must make plans for the payment of obligations, the asset/liability management approach puts a strong emphasis on the timing of cash flows. Assets must be accessible to pay debts when they become due, and the procedure must guarantee that assets or profits may be turned into cash. On the balance sheet, there are many asset types that are subject to the asset/liability management process. Asset and liability management, at its heart, is a strategy used by financial institutions to mitigate risks brought on by a mismatch between assets and obligations. The mismatches are often brought about by changes to the financial environment, such as shifting interest rates or liquidity needs. By maintaining the necessary levels of liquidity, monitoring credit quality, and providing enough operational capital, a holistic ALM framework places a strong emphasis on long-term stability and profitability. ALM is a coordinated process that employs frameworks to control an organization's complete balance sheet, unlike other risk management techniques. Long-term obligations are reduced and assets are invested as efficiently as possible. According to the kind of risk involved, financial institutions have traditionally handled risks individually. But since the financial environment has changed, it is now seen as an obsolete strategy. Macro-level asset management and risk reduction are the main focuses of ALM procedures, which include things like market, liquidity, and credit concerns. ALM is an ongoing process that continually examines risks, in contrast to conventional risk management techniques, to make sure that a business is staying within their risk tolerance and abiding by regulatory frameworks. ALM procedures are being used by businesses including banks, insurance firms, pension funds, and asset managers across the financial industry.

### **Taking Defined Benefit Pension Plans into Account**

When an employee retires under a defined benefit pension plan, they will get a fixed, predetermined pension benefit, and the employer assumes the risk that the assets invested in the pension plan won't be enough to provide all benefits. Forecasting is necessary for businesses to determine how much money will be available to pay benefits under a defined benefit plan [4]–[6]. Consider the scenario where a group of workers must start receiving pension payments in 10 years for a total of \$1.5 million. Before the first payments start in ten years, the employer must calculate an estimated rate of return on the money invested in the pension plan and establish how much it needs contribute annually.

### **Interest Rate Risk Examples**

In banking, asset/liability management is also used. A bank is required to charge interest on loans as well as pay interest on deposits. Bankers monitor the net interest margin, or the difference between interest received on loans and interest paid on deposits, to control these two factors.

Consider the scenario where a bank earns an average of 6% on loans with a term of three years and pays 4% on certificates of deposit with a term of three years. The bank makes an interest rate margin of  $6\% - 4\% = 2\%$ . Customers seek greater interest rates on their deposits to maintain assets with the bank because banks are vulnerable to interest rate risk, or the chance that interest rates may rise.

### Ratio of Asset Coverage

Asset coverage ratio, which determines the value of assets available to pay a firm's obligations, is a crucial ratio used in managing assets and liabilities. Asset Coverage Ratio and how the ratio is calculated. Equipment and machinery are examples of tangible assets that are valued at their book value, which is the asset's original cost minus cumulative depreciation. Since intangible assets are more difficult to value and sell, such as patents, they are excluded from the calculation. Short-term debt is defined as debt due in less than 12 months, and such obligations are also deducted from the calculation. Although it could be difficult to determine the liquidation value of certain assets, including real estate, the coverage ratio calculates the assets available to meet debt obligations. Since computations differ by industry, there is no general definition of what a good or bad ratio is.

### Acquiring knowledge about asset and liability management

- a. Companies utilize the asset and liability management method to assist resolve any risks brought on by a mismatch between obligations and assets. These differences may appear as a result of changes to the economic environment, such as altered interest rates or liquidity needs.
- b. The main goals of a comprehensive ALM framework are long-term stability and profitability. They do this through controlling credit quality, liquidity needs, and raising enough operational capital. ALM is a collaborative approach that employs frameworks to look at an organization's whole balance sheet, unlike other risk management techniques. Long-term obligations are reduced and assets are spent as efficiently as possible thanks to it.

### ALM Risk Mitigation Examples

Despite the fact that ALM frameworks vary greatly amongst organizations, they always entail the reduction of a variety of risks. Interest rate risk and liquidity risk are two of the most fundamental hazards that ALM addresses.

- a. Interest Rate Risk: This category includes risks related to fluctuating interest rates and how unstable interest rates impact future cash flows.
- b. Loans and deposits are two examples. A mismatch between assets and liabilities may result from changing interest rates since both are impacted by them. The capacity of a financial organization to liquidate its assets is known as liquidity risk. Its financial situation would suffer if it were unable to do so.
- c. Other Risks - ALM also reduces capital market risk and exchange rate risk.

### Examples

Here are some illustrations of several industries. Let's use the examples given below to attempt to comprehend the idea of asset liability management solutions.

#### Banking sector

Banks act as a financial bridge between clients and upcoming projects. Customers provide banks a deposit that requires them to pay interest on. They issue loans using these deposits, and they

are paid interest on such loans. In order to secure net interest revenue and the capacity to repay client deposits at any moment, banks must employ good asset-liability management.

### Insurance providers

Life and non-life insurance are both offered by insurance firms. Property and auto insurance fall under non-life insurance. Insurance firms are paid by other parties, but they are also compelled to provide lump sum payments if and when they are needed. They must make sure they have the money on hand to cover these responsibilities at any moment [7]–[9].

### Benefits

Benefit programs like future retirement plans deduct money from workers' paychecks and pay it back in the future at the appropriate rate when the employee retires. These organizations must thus make sure they have the resources necessary to cover these responsibilities. The aforementioned circumstances and examples clearly demonstrate how the procedure is used in various situations and how successfully it aids in managing and maintaining a balance between assets and liabilities to promptly satisfy corporate demands.

### Objectives

Below is a list of the process's main goals. Let's examine them in further depth.

- a. **Risk management:** This method aids organizations in controlling different asset liability management risks, such as liquidity risk and interest rate changes. Capital and profitability are both impacted by interest rates. It's critical to monitor and attempt to reduce changes in asset and liability values brought on by interest rate fluctuations. Another significant element that has negative effects is liquidity risk. Insufficient liquidity makes it difficult to fulfill financial commitments. To determine if there are enough liquid assets to meet the obligations, it is required to evaluate the assets and liabilities. Profit optimization is a concept that directs businesses in the right use and management of assets and liabilities in order to minimize resource waste and maximize profit.
- b. **Capital adequacy:** Assessing a company's capital needs and developing strategies to meet them are terms used to describe capital adequacy. The organizational structure of the firm should allow it to preserve financial stability by securing suitable capital sources as and when required.

In order to maximize profit at the lowest possible expense, it is essential to keep the aforementioned goals in mind while creating asset liability management risk management strategies.

### Benefits

The advantages of asset liability management techniques are as follows:

It assists businesses in measuring and managing risk. Businesses are able to resolve discrepancies between assets and obligations and point out any gaps with effectiveness. Liquidity risk management is ensured through effective asset-liability management.

As a result, there will always be enough liquid assets available to cover short-term obligations. An ALM that is effective preserves and increases a company's earnings and net value. Instead of leaving the assets unused, the corporation may utilize them effectively, improving resource availability and boosting revenue and profitability.

- i. It raises the financial institution's net interest revenue.
- ii. The organization uses ALM to quantify the different types of risks.
- iii. The asset liability management system aids in completing a company's short- and long-term planning. Assets and liabilities should be properly tracked and recorded to enable the firm plan future development and growth opportunities based on the resources at hand.
- iv. It assists in planning the launch of new items into the market.

### Limitations

The restriction is below point:

- a. In addition to asset-liability management, other factors should be considered to evaluate a company's risks. In addition to asset and liability value, factors such as changes in market circumstances, natural catastrophes, economic and political instability, currency fluctuations, etc., have a significant influence in amplifying risks in a corporation.
- b. On sometimes, it may be deceptive. When managing or keeping track of assets and liabilities, it is essential to exercise extreme caution and possess the appropriate knowledge and skills. The company could be misled if the calculations and assessment are flawed.
- c. There are occasions when taking a risk is preferable since the rewards are bigger. For the firm to be able to limit risk and increase profits, it has to have effective risk management strategies. In order to adopt a financial concept of asset liability management system in the company and use it to the fullest extent possible to produce the best results, it is crucial to understand both the advantages and the limits of such a system [10].

## DISCUSSION

### Asset and liability management: Advantages and Drawbacks

Many firms might benefit from using ALM frameworks since it's crucial for them to completely comprehend their assets and liabilities. An organization may manage its liabilities strategically to better position itself for upcoming uncertainty, which is one of the advantages of adopting ALM. An organization may identify and quantify the risks on its balance sheet and lessen the risks brought on by a mismatch between assets and liabilities by using ALM frameworks. Financial organizations may increase efficiency and profitability while lowering risk by carefully aligning assets and liabilities. The difficulties involved in putting in place a suitable framework are one of ALM's drawbacks. There is no universal framework that can be used by all organizations due to the stark disparities between them. Companies would thus need to create a special ALM framework to record certain goals, risk levels, and legal limitations. ALM is a long-term plan that incorporates forecasts and datasets that are prospective. Not all businesses will have easy access to the information, and even then, it has to be translated into quantitative statistical metrics. Last but not least, ALM is a coordinated procedure that manages the overall balance sheet of a business. It calls for extensive departmental cooperation, which may be difficult and time-consuming.

## **RBI Guidelines for Financial Institutions' Asset Liability Management ALM Systems**

A natural occurrence of the asset-liability shift is that FIs are subject to credit and market risks. The risks, especially the market risks, connected with the operations of FIs have grown to be complex and significant as a result of the recent liberalization of the Indian financial markets and the increasing integration of local markets with global markets. This requires strategic management. FIs must dynamically decide interest rates on a variety of products in their portfolios of obligations and assets, in both local and international currencies, since they operate in a relatively unregulated environment. The management of FIs is under pressure to maintain a healthy balance between spreads, profitability, and long-term viability due to intense competition for business involving both assets and liabilities and rising domestic interest rate and foreign exchange rate volatility. These demands need institutionalizing an integrated risk management strategy via systematic and comprehensive procedures rather than sporadic activity. The fact that the FIs are subject to a number of significant risks over the course of their operations generally categorized as credit risk, market risk, and operational risk underscores the need of having efficient risk management systems in FIs. The FIs must take a methodical approach to managing these risks by improving the caliber of their risk management and using more extensive ALM procedures than they have in the past. By measuring, monitoring, and managing a FI's liquidity, exchange rate, and interest rate risks that must be tightly linked with the FIs' business strategy the proposed ALM system aims to provide a formalized framework for managing market risks. This paper sets forth general principles for FIs with regard to systems for managing interest rate, exchange rate, and liquidity risks, all of which are a component of the ALM role. The market risk management discipline, i.e., would be the first emphasis of the ALM function. Managing operations after determining the market hazards present. A solid risk management system should aim to develop into a tactical device for efficient management of FIs.

### **Three pillars support the ALM process**

#### **1. Information system for ALM**

- i. Administration Information System.
- ii. Information accessibility, correctness, sufficiency, and timeliness.

#### **2. Organization ALM**

- i. Structure and obligations.
- ii. Participation of top management.

#### **3. Process ALM**

- i. Hazard factors.
- ii. Identification of risks.
- iii. Risk assessment.
- iv. Management of risk.
- v. Policies and tolerance levels for risk.

## **CONCLUSION**

The discipline of asset and liability management ALM, which ensures a harmonic balance between the risks and benefits connected with a bank's assets and obligations, is crucial within

the banking sector. To successfully traverse the intricacies of the financial environment, the dynamic interaction between these two sides of the balance sheet requires careful planning, strategic vision, and constant monitoring. A proactive strategy to reduce risks and improve performance, ALM goes beyond a technical activity. The consequences of poor ALM procedures were brought to light by the global financial crisis, which presented banks with serious liquidity and solvency issues. As a result, ALM became well-known as a foundational element of risk management and financial security. Aligning the term, interest rate, and currency characteristics of assets and liabilities is necessary for effective ALM. Even in the face of economic changes, this equilibrium guarantees that a bank may fulfill its commitments while maximizing its revenue. Achieving these goals depends on the prudent management of interest rate risk, liquidity risk, and market risk.

## REFERENCES:

- [1] K. Erwin, E. Abubakar, and I. Muda, The relationship of lending, funding, capital, human resource, asset liability management to non-financial sustainability of rural banks BPRs in Indonesia, *J. Appl. Econ. Sci.*, 2018.
- [2] B. Rifuddin and S. A. Dwiyantri, Pengaruh Asset Liability Management Terhadap Kinerja Bank Study Komparatif Pada PT Bank Rakyat Indonesia, Tbk. dan PT BRISyariah, *J. Inst. Sharia Financ.*, 2018.
- [3] I. M. D. P. Mulyungi, Influence of Asset Liability Management on Financial Performance of Commercial Banks in Rwanda: Camel Model Approach, *Int. J. Sci. Res.*, 2018.
- [4] K. M. Pragathi and K. P. Veena, An Analysis of Asset-Liability Management in Banking Sector□: A Case Study of Kotak Mahindra Bank, *J. Bus. Manag.*, 2018.
- [5] J. Pan, Z. Zhang, and X. Zhou, Optimal dynamic mean-variance asset-liability management under the Heston model, *Adv. Differ. Equations*, 2018, doi: 10.1186/s13662-018-1677-9.
- [6] J. L. Fernández, A. M. Ferreira-Ferreira, J. A. García-Rodríguez, and C. Vázquez, GPU parallel implementation for asset-liability management in insurance companies, *J. Comput. Sci.*, 2018, doi: 10.1016/j.jocs.2017.05.010.
- [7] Naning Fatmawati, Peranan Manajemen Risiko Dengan Pendekatan Alma Asset And Liabilities Management Pada Perbankan Syariah, *Wadiah*, 2018, Doi: 10.30762/Wadiah.V2i2.2996.
- [8] D. Li, Y. Shen, and Y. Zeng, Dynamic derivative-based investment strategy for mean-variance asset-liability management with stochastic volatility, *Insur. Math. Econ.*, 2018, doi: 10.1016/j.insmatheco.2017.11.006.
- [9] H. Albrecher *et al.*, Asset-liability management for long-term insurance business, *Eur. Actuar. J.*, 2018, doi: 10.1007/s13385-018-0167-5.
- [10] J. S. Jahera, Bank Asset-Liability Management Theory Revisited, *J. Bank. Financ. Manag.*, 2018.



## CHAPTER 10

### CREDIT RISK ASSESSMENT AND MANAGEMENT: SUSTAINING FINANCIAL STABILITY

---

Dr Gopalakrishnan Chinnasamy, Associate Professor  
Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India  
Email Id-dr.gopalakrishnan\_c@cms.ac.in

#### ABSTRACT:

The evaluation and mitigation of the possibility of loan default are key objectives of responsible banking practices, which include credit risk assessment and management. The relevance of credit risk, its methods of evaluation, and the techniques used by banks to manage credit-related vulnerabilities are all covered in this study. Starting out, the study defines credit risk as the possible loss resulting from a borrower's inability to make their repayment commitments. The soundness of bank loan portfolios and overall financial stability are maintained, which emphasizes the need of appropriate credit risk assessment. The study also explores the techniques used to determine credit risk. It explains how lenders evaluate borrowers' creditworthiness by looking at their credit histories, financial documents, available collateral, and ability to repay. In this process, both quantitative tools like credit scoring models and qualitative evaluations are essential.

#### KEYWORDS:

Banks, Borrowers, Collateral, Credit History, Credit Risk Assessment, Financial Stability, Loan Terms.

#### INTRODUCTION

Credit risk is the likelihood that a borrower would default on a loan, causing a financial loss. Credit risk essentially refers to the possibility that a lender won't get the principle and interest that is due, which would disrupt cash flows and raise collection expenses. By examining a borrower's creditworthiness variables, such as their present debt burden and income, lenders may reduce credit risk. Even while it's hard to predict who precisely may miss payments, correctly evaluating and managing credit risk can decrease the impact of a loss. Lenders and investors are compensated for taking on credit risk by receiving interest payments from borrowers or debt obligation issuers. There is a chance that the borrower won't be able to return the debt when lenders give mortgages, credit cards, or other sorts of loans. Similar to that, there is a chance that a consumer won't pay their bills if a business extends credit to them. The borrower's general capacity to repay a loan in accordance with its original conditions is used to determine credit risks. Lenders often consider the five Cs of credit: credit history, repayment ability, capital, loan terms, and connected collateral when determining the credit risk of a consumer loan. Some businesses have departments set up to evaluate the credit risks of their present and future clients. Businesses may now swiftly assess the data needed to establish a customer's risk profile thanks to technology [1]–[3].

Municipalities and corporate bond issuers are rated for their credit risks by bond credit-rating organizations like Moody's Investors Services and Fitch Ratings. An investor will often look at



the bond's credit rating before making a purchase decision. A bond with a low grade BBB or below has a relatively significant default risk for the issuer. Conversely, the risk of default is smaller if it has a higher rating BBB, A, AA, or AAA.

### **Interest rates against credit risk**

A borrower that the creditor deems to be excessively risky may have their loan request rejected. For instance, a borrower with a strong credit score and consistent income would probably be seen as having a low risk of default and hence be offered a low interest rate on their mortgage. A candidate with a bad credit history, however, may need to deal with a subprime lender to get financing. Increasing one's credit score is the greatest option for a high-risk borrower to get reduced interest rates. Consider dealing with a credit restoration business if your credit is bad. The interest rates charged by bond issuers with subpar credit ratings are also greater than those charged by issuers with excellent credit ratings. High returns are used by issuers with lower credit ratings to persuade investors to accept the risk involved with their products.

### **Exactly how do banks handle credit risk?**

Credit risk may be managed by banks using a variety of techniques. They may establish certain criteria for lending, such as calling for a particular credit score from potential customers. After that, companies may keep an eye on their loan portfolios, evaluate any changes in the creditworthiness of their customers, and make any necessary modifications. Capacity, capital, conditions, character, and collateral are the five Cs of credit. These are the aspects of a borrower that lenders might examine in order to lower credit risk. An analysis based on these variables may assist a lender in determining the risk that a borrower would miss a payment on a loan [4]–[6].

### **The Five Cs of Credit: How Are They Measured by Lenders?**

The five Cs of credit—capacity, capital, conditions, character, and collateral—are evaluated differently by each lender. Lenders often place emphasis on a prospective creditor's capability, or their income level in relation to the debt they are already holding.

## **DISCUSSION**

### **The 5 Cs of Credit: What Are They?**

Lenders look at the five Cs of credit when deciding whether to accept you for a financial product, thus they are crucial. These five Cs—character, capacity, capital, collateral, and conditions—are also used by lenders to determine the interest rate and other terms of your loans. Lenders employ a technique known as the five Cs of credit to evaluate prospective borrowers' creditworthiness. The algorithm attempts to evaluate the likelihood of default and, subsequently, the risk of a financial loss for the lender by weighing five borrower attributes and loan terms. Character, capacity, capital, collateral, and conditions make up the five Cs of credit.

### **Knowing the Five Cs of Credit**

When assessing a borrower, the five Cs of credit technique takes into account both qualitative and quantitative factors. The credit reports, credit scores, income statements, and other records pertaining to the borrower's financial status may be examined by lenders. They also take into account details about the loan itself. The process each lender uses to evaluate a borrower's

creditworthiness is unique. Most lenders evaluate individual or corporate credit applications using the five Cs: character, capacity, capital, collateral, and conditions.

### **Character**

Character, the first C, more precisely relates to a borrower's credit history, which is their track record of on-time loan repayment. The three main credit bureaus Equifax, Experian, and TransUnion provide the borrower's credit reports, which include this information. Credit histories provide specific information on how much a potential borrower has borrowed in the past and whether or not they made on-time payments. These reports also include information on bankruptcies and collection accounts, and they keep the majority of the information for seven to ten years. Lenders may assess the borrower's credit risk using the information from these reports. For instance, FICO generates credit scores using data from consumer credit reports, which is a tool used by lenders to get a rapid picture of a borrower's creditworthiness before reviewing credit reports.

A borrower's chance of timely loan repayment is predicted by their FICO Score, which ranges from 300 to 850. Lenders may also get information from other companies, such as VantageScore, a rating system developed by Equifax, Experian, and TransUnion. Before approving a borrower for a new loan, many lenders have a minimum credit score requirement. Every lender has a different minimum credit score requirement, as does every loan type. The basic guideline is that a borrower has a better chance of approval the higher their credit score. Credit scores are often used by lenders to determine lending rates and conditions. The effect is that applicants with high to exceptional credit often get more enticing loan offers. Given how essential having a strong credit score and clean credit reports are to getting a loan, you should think about using one of the top credit monitoring services to keep this information private [7]–[10].

### **Increasing Character in Your 5 Cs**

Prospective borrowers should check that their credit report has accurate information about their credit history. Your credit history and credit score might suffer from negative, inaccurate differences. To guarantee that future commitments are paid on time, think about instituting automated payments on recurring billings. Your credit score is boosted by making monthly payments on recurring obligations and establishing a history of timely payments.

## **2. Capacity**

By evaluating the borrower's debt-to-income DTI ratio and comparing income to recurrent obligations, capacity calculates the borrower's capacity to repay a loan. DTI is determined by multiplying the borrower's gross monthly income by the sum of all monthly debt payments. The applicant's chances of being approved for a new loan are greater the lower their DTI is.

Before granting an application for fresh financing, many lenders like an applicant's DTI to be about 36% or below. However, every lender is different. It's important to remember that lenders may have restrictions on giving loans to customers with higher DTIs.

For instance, the Consumer Financial Protection Bureau CFPB states that in order to be eligible for a new mortgage, a borrower's debt-to-income ratio DTI must be 43% or less in order to demonstrate that the borrower can make the loan's monthly payments comfortably.

### Capacity: Improving Your 5 Cs

By raising your pay or income or reducing your debt, you may increase your capability. A lender will probably want to see proof of consistent income in the past. Even if changing jobs could result in a greater salary, the lender might want to make sure that your employment is secure and that your income will remain constant. Lenders could take into account supplementary income from gigs, freelancing, or other sources. For greatest consideration and advantage, revenue must, however, often be consistent and recurrent. Your capability could be increased by securing more reliable revenue sources. Paying down bills will keep enhancing your ability to handle debt. The strain on your debt-to-income ratios may be momentarily relieved by refinancing debt with lower interest rates or smaller monthly payments, but these new loans can end up costing more in the long term. Be aware that lenders may often be more interested in scheduled monthly payments than total loan sums. Therefore, paying off a debt in its whole and getting rid of that monthly payment will increase your ability.

### 3. Capital

Lenders also take into account any funds that the borrower contributes to a possible venture. The likelihood of default is reduced if the borrower makes a significant capital contribution. For instance, borrowers who can afford a down payment on a house often find it simpler to get a mortgage even specialized mortgages designed to open up homeownership to more people. For instance, down payments on loans insured by the Federal Housing Administration FHA and 90% loans from the United States may both be 3.5% or more. The Department of Veterans Affairs VA does not demand any kind of down payment. Contributions to the capital show the borrower's degree of investment, which might reassure creditors about providing loans. The amount of a down payment may also have an impact on the interest rate and loan conditions. Better rates and terms are often obtained with higher capital commitments or down payments. For instance, with mortgage loans, a borrower should be able to avoid the need for extra private mortgage insurance PMI by making a down payment of 20% or more. Building up a higher down payment for a significant purchase could need a little more perseverance since capital is often acquired over time. You may want to make sure that your down payment funds are producing growth, such as via investments, depending on when you want to buy. Some individuals who have a lengthy investment horizon could think about investing their money in exchange-traded funds ETFs or index funds for prospective growth at the risk of capital loss. The timing of the significant purchase is another factor. The decision to go with a large purchase now rather than waiting to accumulate funds could be more profitable. The asset's value may increase under numerous circumstances such as when home prices are rising. Spending time accumulating cash would be less advantageous under these circumstances.

### 4. Collateral

A borrower may use collateral to obtain loans. It guarantees the lender that, in the event of a borrower fail, they will be able to recover part of their investment by seizing the collateral. In many cases, the item for which the money is being borrowed serves as the collateral. For example, auto loans and mortgages both use residences as collateral. Because of this, loans secured by collateral are sometimes known as secured debt or secured loans. In general, they are seen as being less hazardous for lenders to provide. As a consequence, compared to other unsecured types of financing, loans that are secured by some kind of collateral are often provided

at lower interest rates and with better conditions. You may just sign into a certain kind of loan arrangement to strengthen your collateral. To guarantee that they have the legal right to recoup damages in the case of your failure, a lender will often put a lien on certain kinds of assets. Your lender might impose this collateral agreement as a condition. Other loan kinds could call for outside collateral. Your automobile, for instance, could need to be pledged as collateral for private, personal loans. Make sure you have assets you can deposit for these kinds of loans, and keep in mind that the bank will only be able to seize these assets if you fail.

## **5. Conditions**

Lenders take into account the general loan requirements in addition to income. This might include how long a candidate has been working at their present position, the state of their industry, and the prospect of future employment security. The terms of the loan, such as the interest rate and the principle amount, affect the lender's willingness to lend money to the borrower.

Conditions might describe the borrower's intended method of use for the funds. Better terms may be available for business loans that might provide future cash flow than for home renovations in a depressed housing market if the borrower has no intention of selling. Lenders may also take into account circumstances that are beyond of the borrower's control, such as the status of the economy, market trends, or impending governmental changes. These uncontrolled factors may include the future financial stability of important suppliers or customers for businesses looking to get a loan.

### **Making Your 5 Cs: Conditions Better**

Of the five Cs, conditions have the lowest likelihood of being within our control. Numerous factors, such as general macroeconomic, international, political, or financial situations, could not directly apply to a borrower. Instead, these can be limitations that every borrower must deal with. Some factors can be under the borrower's control. Make sure your justification for taking on debt is compelling and that you can demonstrate how your financial situation supports it. Businesses, for instance, would need to show that they have promising futures and sound financial predictions.

### **What are the credit's five Cs?**

Character, capacity, collateral, capital, and circumstances make up the five Cs of credit.

### **Why are the five Cs crucial?**

The five Cs are used by lenders to establish a loan applicant's creditworthiness as well as the associated interest rates and credit restrictions. They help in assessing a borrower's riskiness or possibility of timely and complete repayment of the loan's principle and interest.

### **Which of the five Cs is most crucial?**

Each of the five Cs has a distinct significance and should be given consideration. Depending on the current situation, certain lenders may be given more consideration for certain categories than others.

Character and ability are often the deciding factors for whether a lender would provide credit. These two groups are often taken into consideration by banks using debt-to-income DTI ratios, household income thresholds, credit score minimums, or other indicators. Even while they may influence loan conditions, down payments and collateral are often not the main considerations for lenders when deciding whether to provide credit.

### **Which of the five Cs describes a person's credit history?**

Character is the sum of a borrower's financial history and current financial situation. Character includes a borrower's credit history, payment record, credit score, and connections to previous debtors.

### **What are the guiding principles of the five criteria for credit that banks use?**

The five Cs' principal goal is to evaluate the risk of giving a borrower credit. A lender must consider who they are lending money to, why the borrower needs the money, and their chances of getting their money back. Determine how credit is priced is another one of the five Cs. superior terms, lower rates, and cheaper payments may be offered to borrowers with superior five C scores. Riskier borrowers who have lower five Cs may be subject to disadvantageous conditions. The five Cs are also used by lenders to decide if they want to work with a borrower. The lender may refuse to provide credit if the borrower's five Cs are subpar.

### **Obstacles to effective credit risk management**

Data management that is ineffective. Problematic delays are brought on by the inability to get the appropriate data when it's required.

1. There is no system for modeling group risk. Without it, banks are unable to produce intricate, useful risk measurements and get a comprehensive picture of group-wide risk.
2. Ongoing revisions. The inability of analysts to quickly alter model parameters causes excessive effort duplication, which hurts a bank's efficiency ratio.
3. Inadequate risk management tools. Banks can't discover portfolio concentrations or regrade portfolios often enough to manage risk effectively without a strong risk solution.
4. Time-consuming reporting. Analysts and IT are overworked by manual, spreadsheet-based reporting methods.

### **Best methods for managing credit risk**

Gaining a thorough grasp of a bank's total credit risk by looking at risk at the individual customer and portfolio levels is the first step in successful credit risk management. While banks strive to have a comprehensive picture of their risk profiles, a lot of data is often dispersed throughout business divisions. Banks have no means of knowing if capital reserves appropriately represent risks or whether loan loss reserves sufficiently cover anticipated short-term credit losses without a comprehensive risk assessment. Regulators and investors closely monitor vulnerable banks, and they also expose them to crippling losses. By implementing an integrated, quantitative credit risk solution, loan losses may be decreased and capital buffers can be made sure to represent the risk profile. This technology should enable banks to swiftly implement simple portfolio measurements. As requirements change, it should also provide a route to more advanced credit risk management techniques. The answer must incorporate:

- a. More effective model management that covers the whole modeling life cycle.
- b. Monitoring of limitations and real-time scoring.
- c. Powerful stress-testing tools.
- d. Tools for business intelligence and data visualization that put crucial information in the hands of people who need it at the right time.

### CONCLUSION

To sum up, credit risk assessment and management are essential components of good banking procedures since they protect financial institutions and the whole economy from any losses due to loan defaults. The key to responsible lending and long-term development is the capacity to effectively assess and reduce credit risk. The destructive effects of careless credit risk assessment were brought to light by the global financial crisis, underscoring the need for strict guidelines and vigilant supervision. A complex strategy that includes extensive borrower appraisal, risk calculation, and ongoing monitoring throughout the loan lifecycle is required for effective credit risk management. Credit risk assessment has been transformed by technology and data analytics, allowing banks to access huge data sources and make more educated lending choices. These developments improve risk model accuracy, enabling improved forecasts and prompt responses in the event of worsening borrower situations.

### REFERENCES:

- [1] A. A. Odonkor, An Assessment of Credit Risk Management Practices of Adansi Rural Bank Limited, *Int. J. Econ. Financ.*, 2018, doi: 10.5539/ijef.v10n11p110.
- [2] M. Sarfraz, W. Qun, L. Hui, and M. I. Abdullah, Environmental risk management strategies and the moderating role of corporate social responsibility in project financing decisions, *Sustain.*, 2018, doi: 10.3390/su10082771.
- [3] R. Asllanaj, Does Credit Risk Management affect the Financial Performance of Commercial Banks in Kosovo?, *Int. J. Financ. Bank. Stud.*, 2018, doi: 10.20525/ijfbs.v7i2.902.
- [4] S. Win, What are the possible future research directions for bank's credit risk assessment research? A systematic review of literature, *International Economics and Economic Policy*. 2018. doi: 10.1007/s10368-018-0412-z.
- [5] T. Anagnostopoulos, A. Skouloudis, N. Khan, and K. Evangelinos, Incorporating sustainability considerations into lending decisions and the management of bad loans: Evidence from Greece, *Sustain.*, 2018, doi: 10.3390/su10124728.
- [6] Q. Zhang, J. Wang, A. Lu, S. Wang, and J. Ma, An improved SMO algorithm for financial credit risk assessment – Evidence from China's banking, *Neurocomputing*, 2018, doi: 10.1016/j.neucom.2017.07.002.
- [7] A. A. Rehman, A. Benamraoui, and A. M. Dad, A comparative study of Islamic and conventional banks' risk management practices: Empirical evidence from Pakistan, *J. Bank. Regul.*, 2018, doi: 10.1057/s41261-017-0046-z.

- [8] N. Kunitsyna, I. Britchenko, and I. Kunitsyn, Reputational risks, value of losses and financial sustainability of commercial banks, *Entrep. Sustain. Issues*, 2018, doi: 10.9770/jesi.2018.5.417.
- [9] B. Muhammad, S. Khan, and Y. Xu, Understanding risk management practices in commercial banks: The case of the emerging market, *Risk Gov. Control Financ. Mark. Institutions*, 2018, doi: 10.22495/rgcv8i2p3.
- [10] Q. Chen *et al.*, An empirical research on bank client credit assessments, *Sustain.*, 2018, doi: 10.3390/su10051406.



## CHAPTER 11

### INTEREST RATE RISK MANAGEMENT: VARIABLES INFLUENCING THE FINANCIAL LANDSCAPE

---

Dr Premalatha K P, Assistant Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-dr.premalatha\_kp@cms.ac.in

#### ABSTRACT:

In order to reduce the possible negative impacts of interest rate changes on a bank's financial performance and stability, interest rate risk management is a critical component of responsible banking operations. The relevance of interest rate risk, its sources, evaluation techniques, and tactics used by banks to successfully manage this risk are all covered in this study. Interest rate risk is introduced in the study as the possible effect of shifting interest rates on a bank's profits and capital. It emphasizes the impact of interest rate changes on a bank's earnings, asset valuations, and obligations, emphasizing the need of proactive risk management. The study also explores the origins of interest rate risk. It goes through how a bank's revenue from interest rate-sensitive assets and liabilities might be impacted by changes in market interest rates. As important elements of exposure to interest rate risk, repricing risk, basis risk, and yield curve risk are examined.

#### KEYWORDS:

Assets, Banking Operations, Financial Performance, Interest Rate, Liabilities, Risk Management.

#### INTRODUCTION

An interest-bearing asset, such as a loan or a bond, is subject to interest rate risk because there is a chance that the fluctuation in interest rates may affect the asset's value. The management of interest rate risk has grown in importance, and a variety of instruments have been created to do so. The use of different interest rate derivative products by both corporations and consumers to manage interest rate risk is examined in this article. Risk associated with changes in interest rates' absolute levels is known as interest rate risk.

The value of fixed-income assets is directly impacted by interest rate risk. Due to the inverse relationship between interest rates and bond prices, when interest rates increase, bond prices decrease and vice versa. Interest rate risk affects bond investors more directly, especially those who invest in long-term fixed-rate bonds [1]–[3].

Consider a \$10,000 investment in a 30-year fixed-rate bond. Through maturity, this bond will pay out \$300 annually. Assuming a \$10,000 investment, new bonds issued during this period will pay \$350 annually until maturity if interest rates increase to 3.5%. The 3% bondholder will miss out on the chance to get a higher interest rate if they stick onto their bond until it matures. Alternatively, they may sell their 3% bond on the market and purchase the bond with the higher interest rate. However, by doing this, they would get less money for their 3% bonds since investors would prefer the newly produced 3.5% bonds, which are now also available. In contrast, while less directly than bond investors, stock investors are likewise impacted by

fluctuations in interest rates. This is so that, for instance, if interest rates rise, so does the cost of borrowing money for the firm. This can cause the company to put off borrowing, which might lead to decreased expenditure. This cutback in investment might impede company expansion, reduce profits, and eventually drop stock prices for investors.

### **The Risk of Interest Rates Must Not Be Ignored**

There is always the option of doing nothing, as with every risk-management evaluation, and that is what many individuals choose to do. yet, in unpredictable situations, sometimes failing to hedge is devastating. Yes, hedging has a price, but how much would a significant shift in the wrong direction cost? To demonstrate the dangers of disregarding the issue of interest rate risk, one simply has to look to Orange County, California, in 1994. In a nutshell, Robert Citron, the treasurer of Orange County, used a combination of borrowing at lower short-term rates and lending at higher long-term rates. The early success of the plan was due to the decline in short-term rates and maintenance of the regular yield curve. However, things changed as the curve started to turn and approached the condition of an inverted yield curve. The municipality filed for bankruptcy as a consequence of losses to Orange County and the roughly 200 public organizations for which Citron handled money that were estimated to be worth close to \$1.7 billion. For disregarding interest rate risk, that's a heavy price to pay.

### **Financial Products**

There are several options available for those who wish to insure their assets against interest rate risk.

#### **Forwards**

The most fundamental interest rate control instrument is a forward contract. The concept is straightforward, and many of the other items covered in this article are built around the notion of a current agreement for a future exchange of goods.

#### **FRAs Forward Rate Agreements**

The concept of a forward contract, where an interest rate determines income or loss, is the foundation of a forward rate agreement FRA. A reference rate-equivalent variable interest rate is provided in exchange for a fixed interest rate paid by one party. The notional principal amount serves as the basis for calculating the real payments, which are made at intervals decided by the parties.

Only a net payment is made, so to speak, the loser pays the winner. Cash is always used to settle FRAs. FRA users are often lenders or borrowers who are exposed to interest rate risk on a single future date. A swap described below and a series of FRAs are similar in that all payments are made at the same rate. Except when the term structure is flat, each FRA in a series is priced at a different rate.

#### **Futures**

A futures contract is comparable to a forward contract, but it offers the counterparty less risk than a forward contract, namely a lower risk of default and liquidity risk since an intermediary is included.

## Swaps

A swap is a trade, just as it sounds. In further detail, an interest rate swap entails an agreement between counterparties to exchange sets of future cash flows and resembles a combination of FRAs. In a simple vanilla swap, one party pays a fixed interest rate and receives a floating rate, while the other side pays a floating rate and receives a fixed rate. This is the most typical kind of interest rate swap.

## Options

Options with a debt obligation as the underlying security are known as interest rate management options. These tools are helpful in safeguarding the parties engaged in floating-rate loans like adjustable-rate mortgages ARMs, which have variable interest rates. An interest rate cap is a collection of interest rate call options, while an interest rate floor is a collection of interest rate put options. A cap is often compared to a call, and a floor to a put. A swaption, also known as a swap option, is only the choice to engage in a swap. Through embedded options, interest management derivatives are often encountered by investors. You are a member of the club if you have ever purchased a bond with a call provision. Your callable bond's issuer is ensuring that they can call in your bond and issue new bonds with a lower coupon if interest rates fall [4]–[6].

## Caps

A call option on an interest rate is referred to as a cap, sometimes known as a ceiling. A borrower going long, or paying a premium to acquire a cap, and getting cash payments from the cap seller the short, when the reference interest rate is higher than the cap's striking rate, would be one example of its use. The payments on a floating-rate loan are intended to counteract rises in interest rates.

The seller must pay the difference between the strike and the interest rate times the notional principal if the real interest rate is higher than the strike rate. This option will cap, or set a maximum for, the holder's interest costs. For each time period when the interest rate cap is in effect, a set of component alternatives, or caplets, make up the interest rate cap. A caplet is intended to act as a hedge against an increase in the benchmark interest rate for a certain time period, such as the Secured Overnight Financing Rate SOFR.

## Floors

The floor is the opposite of the cap, much as a put option is thought of as the mirror image of a call option. Whoever is long, the floor is paid at maturity of the floorlets if the reference rate is lower than the floor's strike price. The interest rate floor is a series of component options, similar to the cap, except that they are put options and the series components are referred to as floorlets. This is used by a lender to hedge against rate declines on an active floating-rate loan.

## Collars

Another tool for managing interest rate risk is a protective collar. As a collar protects an investor who is long a stock, collaring is done by simultaneously purchasing a cap and selling a floor or vice versa. A zero-cost collar may be set up to reduce the cost of hedging, but doing so reduces the potential benefit you might get from an increase in interest rates since you have now set a limit on your prospective gain.

### **Interest Rate Risk: What Drives It?**

Interest rate risk, which is largely a problem with fixed-income products, is the drop in an asset's interest rate, which would result in a lower return for an investor. Interest rate risk is a result of declining interest rates, which is more of an issue for securities with longer maturities. Interest rate risk is a kind of market risk, yes. An economy's interest rates may fluctuate, which will have an effect on the interest rate on fixed-income securities. A fixed-income security's interest payment might go down, which would mean a reduced return for the investor [7], [8].

### **What Takes Place If Interest Rates Increase?**

The price of borrowing money increases as interest rates rise. As the price of products, such as a house or automobile, rises as a result, people purchase less. Demand falls as customers spend less, and when demand falls, businesses ultimately reduce their supply of products and services. They create less, which necessitates employing fewer workers or perhaps firing some of them, which reduces consumer spending even more, reinforcing the cycle. The general rise in interest rates causes the economy to slow down.

### **Definition of interest rate risk and its effects on bond prices**

#### **What Is Risk of Interest Rates?**

Interest rate risk is the possibility of investment losses brought on by an increase in the going rates for brand-new debt instruments. For example, if interest rates increase, the secondary market value of a bond or other fixed-income investment would decrease. The duration of a bond is the variation in price that results from a change in interest rates. By purchasing bonds with varying durations, as well as by hedging fixed-income assets using interest rate swaps, options, or other interest rate derivatives, interest rate risk may be mitigated.

### **Knowledge of Interest Rate Risk**

Changes in interest rates may have an influence on a variety of assets, but they most directly affect the value of bonds and other fixed-income products. As a result, bondholders keep a close eye on interest rates and base their judgments on how they seem to evolve over time. As interest rates increase, the value of fixed-income assets decreases and vice versa. This is due to the fact that keeping such bonds has a higher opportunity cost when interest rates rise, meaning there is a larger risk of losing out on a superior investment. As interest rates increase, bonds' yields lose attractiveness. For example, if a bond paying a fixed rate of 5% is selling at its \$1,000 par value while market interest rates are similarly 5%, it becomes much less appealing to earn the same 5% when rates elsewhere start to climb, say to 6% or 7%.

Because no one will want to hold a bond with a 5% interest rate when they can obtain one with a 7% interest rate, the value of these bonds must decrease in order to make up for this competitive disadvantage. Therefore, when interest rates increase to a certain level over that predetermined level for bonds with a fixed rate, investors migrate to investments that reflect the higher interest rate. Only by lowering their prices can securities that were issued prior to the interest rate adjustment compete with new issuance. Hedging or diversification methods that shorten the effective length of a portfolio or neutralize the impact of rate fluctuations may be used to manage interest rate risk.

### **An illustration of Interest Rate Risk**

Take the case of a buyer of a \$500, five-year bond with a 3% yield. Interest rates then increase to 4%. When fresh bond offers with more enticing yields hit the market, the investor will find it difficult to sell the bond. Lower prices on the secondary market are partly a result of the decreased demand. The bond's market value might fall below its initial cost of purchasing. The opposite is also accurate. If interest rates fall below this line, the value of a bond earning 5% increases since the bondholder is guaranteed a favorable fixed rate of return compared to the market.

### **Price Sensitivity of Bonds**

When market interest rates increase, the value of existing fixed-income instruments with various maturity dates decreases to differing degrees. The tenure of the bond serves as a gauge for this phenomena, which is known as price sensitivity. Consider two fixed-income securities, one of which matures in a year and the other of which matures in ten years. After holding onto the bond with the lower return for no more than one year, the owner of the one-year security may reinvest in a security with a higher yield when market interest rates increase. But for nine more years, the owner of the 10-year security must pay a lesser rate. This validates the longer-term security's lower price value. In relation to a given rise in interest rates, a security's price decreases more the closer it gets to maturity [9], [10]. Keep in mind that this price sensitivity decreases with time. While a 20-year bond is just somewhat less sensitive than a 30-year bond, a 10-year bond is noticeably more sensitive than a one-year bond.

### **Mature Risk Premium**

In order to make up for the additional risk of interest rate fluctuations over time, a long-term bond often includes a maturity risk premium in the form of a higher built-in rate of return. Longer-term securities have more interest rate risk due to their longer tenure. The projected rates of return on longer-term assets are often greater than rates on shorter-term securities in order to reward investors for taking on more risk. The maturity risk premium is the name for this. Rates given on bonds may be influenced by additional risk premiums, such as default risk premiums and liquidity risk premiums.

## **DISCUSSION**

### **Explaining Interest Rate Risk**

The idea of managing interest rate risk entails addressing the potential for loss in corporate or personal portfolios as a result of changes in interest rates on the financial market. The value of investments made in fixed incomes or bonds diminishes on the secondary market if interest rates increase. As a result, the values of the current bonds will decline, balancing the new high rates. Because the price of one asset is offset by the price increase of another, diversifying a portfolio is a particularly efficient approach to defend against rate fluctuations. In order to comprehend market movements and their effects on the wider financial market, security holders and analysts continuously monitor and analyze these developments. Changes in rates, which also depend on the kind of interest, which may be fixed or floating, have varying effects on the duration of financial instruments like bonds. Long-term bond interest rate risk, however, is often greater, thus they have higher interest rates to make up for losses from interest rate volatility. There are

several strategies for mitigating these hazards, and the market for these items is quite liquid and effective. Although there are expenses associated with hedging interest rate risk, such as brokerage fees and premiums, in most cases the advantages may exceed the disadvantages.

### **Bonds' Response to Interest Rate Change**

Bonds with varying maturities are affected by changes in interest rates to varying degrees. With increasing age, there is a higher link between changes in interest rates and changes in price. This is the case because a bond with a longer maturity will experience a lower rate of interest for a longer period of time than a bond with a shorter term. As a result, buying bonds with varying maturities is used as a hedging strategy to reduce the risk associated with changing interest rates. Coupon bonds and zero-coupon bonds are both affected differently by changes in interest rates. The price of zero-coupon bonds will decrease more quickly than the price of a coupon bond owing to an increase in interest rates if we take into account both forms of bond interest rate risk with the same duration. This is due to the fact that, in the event of a zero-coupon bond, the whole sum will be collected at the end of the predetermined time. As a result, the effective duration is lengthened. In contrast, coupon bonds' returns are created on a regular basis, which shortens the actual payback time. The coupon rate has an effect on interest rate risk as well. In comparison to a bond with a higher interest rate, the bond with a lower coupon rate has a larger interest rate risk. This is the case because even a modest change in the market interest rate may readily offset the reduced coupon rate and decrease the bond's market price.

### **Types**

The following two interest rate risk categories:

- 1. Price risk:** It is the risk that the security's price may fluctuate, which might cause an unforeseen gain or loss when the investment is sold.
- 2. Reinvestment Risk:** It refers to the danger that the interest rate may change, thus making it impossible to reinvest at the existing investment rate. It is further broken down into two sections:
  - a. Duration Risk:** This risk relates to the potential for unintentional prepayment or an extension of the investment beyond the intended time frame.
  - b. Basis Risk:** This refers to the chance that assets having inverse characteristics may not behave exactly when interest rates fluctuate.

### **Duration and Price Change**

The degree to which a change in interest rates will affect the price is directly related to the security's tenure. It is distinct from adulthood. It determines the anticipated price change due to a 1% change in interest rates. It roughly represents the demand-price elasticity. It is determined by multiplying the cash flow time period by the corresponding weights, which are determined based on the cash flow present value.

## **CONCLUSION**

In conclusion, banks must adopt the crucial discipline of interest rate risk management in order to successfully negotiate the challenging landscape of changing interest rates. In order to properly manage the possible effects of interest rate variations on the bank's financial health and general stability, proactive tactics are required due to the financial landscape's dynamic character.



The fallout from the financial crisis of 2008 has highlighted the need of careful interest rate risk management. Institutions with insufficient strategy found themselves exposed to sudden changes, which had detrimental effects on both them and the larger financial system. As a consequence, the banking industry is putting more emphasis on mitigating this risk. The management of interest rate risk requires a thorough strategy that goes beyond compliance. Banks must thoroughly analyze their balance sheets, determine how sensitive assets and liabilities are to rate fluctuations, and create mitigation plans that are consistent with their risk tolerance and corporate objectives. For banks to simulate probable outcomes and make wise choices, robust modeling, stress testing, and scenario analysis are essential tools.

## REFERENCES:

- [1] L. Bretscher, L. Schmid, and A. Vedolin, Interest rate risk management in uncertain times, *Rev. Financ. Stud.*, 2018, doi: 10.1093/rfs/hhy039.
- [2] F. Déléze and T. Korkeamäki, Interest rate risk management with debt issues: Evidence from Europe, *J. Financ. Stab.*, 2018, doi: 10.1016/j.jfs.2018.01.003.
- [3] J. Oberoi, Interest rate risk management and the mix of fixed and floating rate debt, *J. Bank. Financ.*, 2018, doi: 10.1016/j.jbankfin.2017.09.001.
- [4] S. Y. Yang and E. Onur, Interest rate swap market complexity and its risk management implications, *Complexity*, 2018, doi: 10.1155/2018/5470305.
- [5] A. M. Mohamed and & Onyiego, Effect of Risk Management on Financial Performance of Commercial Banks in Kenya: a Case Study of Commercial Banks in Mombasa County, *Strateg. J. Bus. Chang. Manag.*, 2018.
- [6] M. Gubareva and M. R. Borges, Rethinking economic capital management through the integrated derivative-based treatment of interest rate and credit risk, *Ann. Oper. Res.*, 2018, doi: 10.1007/s10479-017-2438-y.
- [7] R. N. Markellos and D. Psychoyios, Interest rate volatility and risk management: Evidence from CBOE Treasury options, *Q. Rev. Econ. Financ.*, 2018, doi: 10.1016/j.qref.2017.08.005.
- [8] M. F. Wamalwa and C. Mukanzi, Influence of Financial Risk Management Practices on Financial Performance of Commercial Banks in Kenya, A Case of Banks in Kakamega County, *Int. J. Bus. Manag. Econ. Rev.*, 2018.
- [9] Q. Burke and T. Warfield, Bank Interest Rate Risk Management and Valuation of Earnings, *SSRN Electron. J.*, 2018, doi: 10.2139/ssrn.2467698.
- [10] M. Gubareva and M. R. Borges, Binary interest rate sensitivities of emerging market corporate bonds, *Eur. J. Financ.*, 2018, doi: 10.1080/1351847X.2017.1400452.



## CHAPTER 12

### OPERATIONAL RISK IN BANKING: A COMPREHENSIVE STRATEGY

Dr Gopalakrishnan Chinnasamy, Associate Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-dr.gopalakrishnan\_c@cms.ac.in

#### ABSTRACT:

Operational risk, which includes a range of possible disruptions resulting from internal processes, systems, human factors, and external events, is a major worry for the banking industry. The relevance of operational risk, its sources, evaluation techniques, and tactics banks use to improve operational resilience are all covered in this study. Operational risk is introduced in the study as the potential for losses resulting from weaknesses in internal processes, people, systems, or outside events. It highlights the need for proactive risk management by underlining how operational errors may affect a bank's financial stability, reputation, and customer confidence. The study also examines operational risk's origins. It covers how these risks may result from fraud, mistakes, technological breakdowns, compliance violations, and outside disturbances. Operational risks must be identified and mitigated using a comprehensive strategy due to their dynamic and ever-evolving character.

#### KEYWORDS:

Banking, Business, Customer, Financial Loss, Financial Stability, Operational Risk, Risk Management.

#### INTRODUCTION

The risks and uncertainties a firm encounters while attempting to conduct its regular business operations in a particular area or industry are summed up as operational risk. It is a kind of business risk that may be brought on by flaws in internal policies, practices, and systems, as opposed to issues brought on by outside influences, such political or economic events, or issues that are intrinsic to the whole market or a specific market sector, known as systemic risk. Operational risk is another kind of unsystematic risk that is particular to a certain business or sector. Operational risk is more concerned with how tasks are completed inside an organization than it is with the products or inherent risks of an industry. These risks are often connected to active choices made about the priorities and operations of the company. Although failure, decreased productivity, or greater total costs are not certain outcomes of the risks, they are seen as higher or lower based on a variety of internal management choices [1]–[3].

Operational risk, or the chance that corporate operations may fail as a result of human mistake, can be summed up as a human risk since it represents man-made procedures and thought processes. It varies from sector to industry and should be taken into account when considering prospective investment choices. Operations risk is probably lower in sectors where there is less involvement with people. Operational Risk Factors People, processes, systems, or external events are the typical four sources of operational risk. Companies must simply attempt to reduce operational risk in each category as much as they can for many elements, while realizing that some operational risk will probably always exist.

## **People**

Personnel issues, such as shortages or shortcomings, may lead to operational risk. An organization can, for instance, lack the personnel with the expertise required to address a particular issue. On the other side, a business could not have enough staff on hand to adequately handle peak season or the busiest periods of the year. Companies may easily seek to markets for staffing to reduce these kinds of risks. However, this creates additional operational risks that are focused on people, such as finding the right individuals to recruit, training personnel, and making sure employee retention is strong. Operations risks brought on by people are closely related to financial consequences since each of these factors requires a lot of time and resources.

## **Processes**

Every business has unique procedures. Comparing a service-only legal practice to a more complicated manufacturing company such as a car factory, the methods used will be different. In either scenario, every business has procedures that must be followed in the correct sequence in order to avoid negative results. Many times, particularly in organizations with a high turnover rate, businesses may not have completely developed their processes or recorded all of the procedures. Additionally, certain procedures run the danger of being exploited via collaboration and ineffective internal controls, which might expose the business to financial loss due to theft.

## **Systems**

Systems and software are being used by businesses more and more to run their operations. The possibility that these systems are old, insufficient, or improperly put up is a component of operational risk. Performance factors are also taken into account, since operational risk involves the possibility that a company's systems won't be as effective as those of a rival [4], [5]. With regard to a system's technological components, there exist operational hazards. Systems may include flaws or other technological issues that increase their vulnerability to criminality. Systems have capacity limits as well, thus by placing excessive demands on their capabilities, a business may run the danger of raising its risk.

## **External Factors**

Operational risk often comes from sources outside the firm. This might include anything from natural catastrophes that hinder a company's shipping procedure to governmental developments that limit the company's ability to function. Some of these risk categories like geopolitical risk might be categorized independently. Others are just a fact of doing business, like a third party breaching a contract.

## **Operational Risk's Seven Categories**

Expanding on the four reasons mentioned above, there are seven major kinds of operational risk. These seven major categories in no particular order are as follows:

1. Internal fraud is when workers conspire and often work together to circumvent internal safeguards and misuse business funds.
2. External fraud refers to independent third parties seeking to bribe, steal, falsify, or cyberattack the business.

3. Failures due to technology include issues with computer hardware, software, or the way any of its parts interact.
4. Process execution. Management's failure to correctly appraise a situation, implement the appropriate strategy, or carry out a successful approach.
5. Safety any physical, mental, or other workplace safety precautions that have been violated or are at danger of being violated.
6. Natural catastrophes, such as bad weather, fires, or severe winter conditions, may endanger physical assets and make it hard for workers to carry out their regular duties.
7. Business practices are operational actions that endanger clients, provide false information, encourage neglect, or unintentionally violate rules.

### **Assessing Operational Risk: A Guide**

The two main components of operational risk assessment are data and key risk indicators KRIs. KRIs are metrics that a business may choose to use as the standard for measuring risk. For instance, a business can specify that it only wishes to collaborate with the most reliable suppliers. As a result, it establishes the KRI that no more than three suppliers may breach a contract. The business may determine if the KRI objective is being fulfilled as the year goes on, identify any reasons why it is not, and take the necessary action to manage that risk. KRIs are often quantitative. Having something that a corporation can really monitor and measure is most helpful. Data is the second essential component because of this. Without data, a business cannot determine if its KRIs are adequate or not. Businesses may strive to develop effective information-gathering procedures via automation, outside surveys, financial data, or market research. Some businesses may already have operational risk areas worth watching specified for them in terms of KRIs and data. For instance, banks may be required by banking regulations to have certain procedures in place, cash on hand, or systems that function in a particular manner. In these situations, the company's standards have already been established, making it considerably simpler to evaluate operational risk since the KRIs have already been decided upon.

### **Management of Operational Risk**

When it comes to controlling operational risk, there are a number of broad methods and overarching concepts. There are four main methods that businesses manage risk, however each one may select how to do so.

#### **Avoid Taking Needless Risks**

It should go without saying that businesses should constantly assess whether they are taking on risk with little to no meaningful payoff. Think about the aforementioned vendor situation with probable contract defaults. Working with subpar suppliers might put the firm at danger if there are as good or even better vendors the company could deal with that have a better credit history. Risk and returns typically have a positive connection, as is the case with many aspects of investment.

Companies should be adequately paid with higher returns as they take on more risk. As a result, businesses may reduce operational risk by eliminating activities that do not benefit the organization and instead just involve unneeded risk.

### **Cost-benefit calculations**

Businesses may control risk by continuously analyzing and weighing cost-benefit scenarios. Companies must manage risk in a manner similar to the idea presented above by contrasting the risk they assume with the rewards they stand to gain. This phase requires paying attention to the advantages for the organization as well as the danger. A business could decide, for instance, that it wishes to enter a foreign market. With this decision, there may be significant operational risk. However, the benefits of growing the firm may exceed the operational risk if the market is underserved and enough research has been done. Companies sometimes need to realize that risk is important in order to manage risk [6]–[8].

### **Decision-making authority to higher management**

It's often ideal for higher management to make judgments on how to tackle operational risk for businesses to make the best choices. These team members often possess the deepest understanding of a firm and are aware of far more comprehensive methods that may be combined. Using the aforementioned example as a guide, a senior member of the management group should be designated as the person in charge of making decisions on that global growth. To better grasp the risks associated with logistics, law, procurement, and shipping, that executive should collaborate with members of various firm teams. A lower level individual contributor is not equipped for this kind of responsibilities.

### **Consider the Risk**

Understanding when danger is coming and preparing for its effects may be among the most crucial components of risk management. By doing this, businesses may decide in advance whether to accept, reduce, or avoid risk. In the aforementioned case study of international growth, a business may simply do extensive quantities of research to better comprehend geographic constraints, political hazards, or variations in customer preferences in this new market. Understanding potential future events and having a strategy in place to deal with them are the first steps in accepting risk or managing it.

### **Compared to other types of risk, operational risk**

#### **Financial risk vs operational risk**

Financial risk in a business setting refers to the potential that a company's cash flow won't be sufficient to satisfy its commitments, such as loan repayments and other debts. Financial risk is seen as different from operational risk, even though this issue may be related to or the outcome of actions taken by management particularly business finance experts or the performance of the firm goods. Instead of the ongoing attempts to make the firm a lucrative organization, it is often associated with the company's use of financial leverage and debt financing.

#### **Market risk vs operational risk**

The risk of price changes for a financial instrument is known as market risk. These price variations often reflect how investors feel about a stock and a firm, interest rates, or other economic issues. Operational risk is generally focused on a company's internal operations, its resources, and its employees, as opposed to market risk, which is mostly focused on investments and securities.

### Strategic risk vs operational risk

Although these two categories of risk may overlap in certain circumstances, the biggest difference between them is that strategic risk often lasts longer and may include more third parties. Strategic risk is a new rival entering a market. Operational risk is how the business responds to it on a day-to-day basis. The rival may have chosen to join the market because they believed their operational risk would be lower than that of other businesses.

### Various Operational Risk Examples

The upkeep of essential systems and apparatus is one area that could contain operational risk. The operational risk changes depending on which system is left in disrepair if two maintenance actions are necessary but it is decided that only one can be completed at the moment. The consequences of a system failure are directly related to the operational risk. Other situations that fall under the category of operational risk often include the human element inside the company. Because of its reduced pay expenses or for any other reason, a sales-oriented company may decide to keep a mediocre sales crew, which is seen as taking an operational risk. The same is true when a staff is not kept up to date correctly to reduce dangers. An example of an operational risk in a manufacturing firm would be deciding not to have a certified mechanic on staff and having to depend on outside contractors. This not only affects a system's efficient operation, but it also causes significant delays [9], [10]. Operational risk may also be thought of as when staff knowingly take part in fraud. The risk here is the potential for consequences if the action is discovered. It is seen as a risk related to how the firm runs since people actively choose to commit fraud.

### What Are the Five Risk Levels?

Determine whether an event will occur based on its likelihood: very probable, likely, possible, unlikely, or extremely unlikely in order to assess risk. While probable encompasses a range that is always over 50%, very likely is often given a percentage of higher than 90%. When weighing the cost of mitigation versus the cost of a negative result, management employs these percentages to decide the optimal course of action.

## DISCUSSION

### How Can Operational Risk Be Spotted?

Finding operational risk involves analyzing what may go wrong in a company's daily operations. When determining operational risk, management often asks hypothetical questions such, What if a certain system broke down? or What if a certain supplier was unable to deliver goods on time? Operations risk may take many different forms, and it is up to management to choose which ones to accept and which ones to minimize.

### The Four T's of Risk Management: What Are They?

These are the four T's of risk management:

- a. The management chooses to accept a certain operational risk and takes no effort to mitigate it.
- b. Management chooses to end a certain activity because it does not accept any degree of risk associated with it.

- c. Management takes measures to lower the overall possible danger.
- d. When management wishes to carry out an action, they look for a third party to take on the risk by purchasing insurance, for example.

### **Who Has Responsibility for Operational Risk Management?**

By being aware of the risks present and the methods for avoiding them, senior management is often in charge of controlling operational risk. Despite the fact that lower-level field managers are more engaged in the day-to-day operations, senior management should monitor their actions to ensure that the operational risk management plans are being implemented correctly.

### **The top operational risks in the financial and banking sectors**

In recent years, banks have faced operational risks that are unknown due to new business models, complicated value chains, regulatory issues, and growing digitalization. These consist of:

#### **Risk of Cybersecurity**

Financial institutions' operational continuity is impacted by the increased frequency and influence of cyber hazards like ransomware and phishing, despite their increased cybersecurity measures. This is particularly true in the post-pandemic environment, as threat actors use security flaws in businesses' IT infrastructure to launch significant and lucrative cyberattacks.

#### **Risk to Third Parties**

Financial institutions must recognize, assess, and manage third-party risks throughout the lifetime of their interactions with these businesses since they are increasingly dependent on third-party suppliers. Banks, however, must also be concerned about the fourth parties that do business with their third parties in light of the growing digitalization and hyper-connectivity. These risks must also be discovered, assessed, and managed.

#### **Fraud both within and outside**

One poll found that in 2020, fraud increased in over 40% of mid-sized and big digital financial services firms. Internal fraud operational risk losses may be caused by asset misappropriation, forgeries, tax evasion, bribery, or theft. Check fraud, theft, hacking, system breaches, money laundering, and data theft are all examples of fraud done by outside parties. Numerous reasons, such as the enormous increase in transaction volumes, the accessibility of sophisticated fraud tools, and the security weaknesses brought on by growing automation and digitalization, contribute to the danger of both internal and external fraud.

### **CONCLUSION**

In summary, operational risk management has become a pillar of ethical and durable banking operations. The need of efficiently managing operational risks has never been higher than it is now, in a digital environment that is rapidly changing and where technology breakthroughs are changing how banks function. The worldwide financial crisis and the ensuing high-profile operational failures served as a reminder of the serious repercussions of poor risk management in this area. These instances have compelled financial institutions and regulatory organizations to underline the need of strong operational risk frameworks in order to safeguard clients, preserve



market trust, and guarantee the stability of the financial system. Operational risks include a broad range, from technical hiccups and cybersecurity risks to employee mistakes and regulatory violations. A holistic strategy that incorporates cutting-edge risk assessment techniques, durable technical infrastructures, thorough personnel training, and stringent monitoring systems is needed for effective operational risk management.

## REFERENCES:

- [1] C. P. Cheng, M. T. Phung, C. L. Hsiao, D. B. Shen, And B. S. Chen, Impact Of Operational Risk Toward The Efficiency Of Banking-Evidence From Taiwan's Banking Industry, *Asian Econ. Financ. Rev.*, 2018, Doi: 10.18488/Journal.Aefr.2018.86.815.831.
- [2] S. Rhanoui And K. Belkhoutout, Operational Risk In Both Conventional And Islamic Banking Perceptions: Differences And Similarities, *Eur. Sci. Journal, Esj*, 2018, Doi: 10.19044/Esj.2018.V14n13p110.
- [3] H. P. A. De Melo And C. R. S. Leitao, Disclosure Of The Operational Risk In Banking Institutions Listed On Bm&Fbovespa, *Rev. Ambient. Contab.*, 2018.
- [4] M. Farhan, Operational Risk Management In Islamic Banking. A System Thinking Approach, *J. Islam. Bus. Manag.*, 2018, Doi: 10.26501/Jibm/2018.0802-007.
- [5] A. Syarifuddin And L. P. Resmi, Faktor Penentu Kinerja Perbankan Di Dalam Perubahan Keuangan Di Indonesia, *J. Akunt. Manajerial Managerial Account. Journal*, 2018, Doi: 10.52447/Jam.V2i2.929.
- [6] D. P. Alsyahrin, A. D. R. Atahau, And . R., The Effect Of Liquidity Risk, Financing Risk, And Operational Risk Toward Indonesian Sharia Bank's Financing With Bank Size As A Moderating Variable, *J. Econ. Bus. Account. Ventur.*, 2018, Doi: 10.14414/Jebav.V21i2.1181.
- [7] N. F. A. Rahim, E. R. Ahmed, And M. K. Faeq, Internal Control System And Perceived Operational Risk Management In Malaysian Conventional Banking Industry, *Glob. Bus. Manag. Res. An Int. J.*, 2018.
- [8] O. E. Olalere, I. Aminul, W. S. Yusoff, And Z. Shamsuddin, An Investigation Into Operational Risk In Commercial Banks: Empirical Evidence From Nigeria, *Int. J. Account.*, 2018.
- [9] L. Sloboda, N. Dunas, And A. Limański, Contemporary Challenges And Risks Of Retail Banking Development In Ukraine, *Banks Bank Syst.*, 2018, Doi: 10.21511/Bbs.131.2018.09.
- [10] M. Y. Rasheed, A. Saeed, And A. A. Gull, The Role Of Operational Risk Management In Performance Of Banking Sector: A Study On Conventional & Islamic Banks Of Pakistan, *Pakistan J. Humanit. Soc. Sci.*, 2018, Doi: 10.52131/Pjhss.2018.0601.0029.



## CHAPTER 13

### GREEN BANKING: CONSUMER SERVICES AND GREEN INVESTMENTS

---

Dr Selvi S, Associate Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-dr.selvi@cms.ac.in

#### ABSTRACT:

With the introduction of new possibilities, difficulties, and consumer experiences, technology and innovation have completely transformed the banking industry. The significant influence of technology on banking operations, the creation of creative solutions, and the methods banks use to capitalize on technological breakthroughs are all explored in this study. The study opens by emphasizing how technology may revolutionize banking procedures and consumer relationships. It goes on how data analytics, automation, and digitization have improved productivity, simplified processes, and given clients easy, tailored services. The study also explores how cutting-edge financial solutions are emerging. It examines how fintech firms have transformed conventional financial services and offered cutting-edge methods of handling transactions, investments, and payments using disruptive technologies including peer-to-peer lending platforms, mobile banking applications, and blockchain.

#### KEYWORDS:

Banking Industry, Businesses, Fintech Firms, Governance, Interest Rates Peer-To-Peer Lending.

#### INTRODUCTION

The banking industry has seen significant changes recently and is still experiencing them. The use of cutting-edge digital technologies that offer improvements in both fundamental procedures and the customer experience is a crucial component of growing innovation in banking. Investments in technology now appear to be the most efficient response to a present rife with contradictions while still being rich in possibilities, from the need to manage the macroeconomic and geopolitical repercussions of events of global magnitude to the inevitable awareness of the risks associated with climate change. Innovation in the banking industry not simply technology, but particularly cultural innovation involves taking proactive steps to develop new business models that are more accountable and long-lasting. By examining the primary manifestations of innovation in banking, we will attempt to pinpoint the investment sectors that banks will pursue in the near future in this article [1]–[3].

#### What are the main forces behind banking innovation? An outline

Higher interest rates, sustainability, and technology are the three structural factors that banks must address in order to not only outcompete their rivals but also to speed up change by seeing and seizing new growth opportunities. One of the main events that is reshaping the banking industry is the increase in interest rates. This will encourage businesses to continually reinvent themselves and drive product innovation. Businesses and homes have had access to cost-effective resources because to the macroeconomic system's long period of low and unchanging interest rates, while banks and account holders have only seen modest gains. The banks that

project their products out of the silos they have kept them in and merge them into an integrated offering tailored to suit the whole of individual client demands will be successful in the next year.

- a. Sustainability, environmental, social, and governance ESG is another subject that is of utmost concern to all financial service providers. Businesses and governments that integrate sustainability into their operations from the shift to a zero-carbon economy to the concern for rights, inclusion, and diversity participate in the advancement of communities while also achieving significant commercial results.
- b. Lastly, businesses that can understand the context are investing in data management systems, automation tools, and artificial intelligence applications to digitally alter every aspect of their operations. The usage of technology is significantly assisting in bridging the informational silos that keep data flows apart throughout the value chain as part of a larger effort to revolutionize how banks function and interact. Business operations will be more interconnected than ever before and able to better serve consumers if businesses are given access to alternative business models to the outmoded standard business model.

### **When interest rates rise**

Banks have long operated in the absence of one of their primary sources of revenue. as a result, they have had to shift their focus from the totality of customers' financial needs to isolated products that have continued to generate fees. When rates were close to zero and even negative, we could say that for many years money has been free. This change in emphasis strengthened the existing product silos within the majority of banks. Customers have discovered that in order to develop their own financial journey, they must diversify their service provider portfolio by combining the finest goods from different silos. During this period, the fintech industry boomed. Numerous new companies entered the market, flooding it with cheap money and putting the scalability of their operations ahead of financial returns while basing their business models on the opportunities provided by digital technology. Fintechs have chosen to focus primarily on certain sectors of the value chain while ignoring conventional business models, which has had a significant impact on how the user experience is designed [4], [5].

### **For banks, what do higher interest rates mean?**

Accenture claims that one of the factors changing markets at this time in history is the rise in interest rates, which is contributing to the collapse of entry barriers and the liquefaction of industry borders. Thus, increasing rates would seem to be the spark that ignites innovation. Rising rates improve banks' profits, and many of them are likely to opt to spend the resources accumulated on new projects, offers, and initiatives. This has immediate and severe ramifications for the whole financial services business. However, rising rates can also put borrowers at a disadvantage, making banks wonder how to handle the ensuing demands.

### **Spending money on sustainability**

Banks are essential in promoting a new corporate sustainability culture. Sustainability is now the new strategic goal for the sector since it is well positioned to solve the problems caused by climate change. Banks are being asked to take concrete action, proving that they can meet strict standards when it comes to monitoring risks to the environment and acting accordingly, based on increasingly accurate analyses, in the face of the real possibility of catastrophic environmental

damage and dire macroeconomic consequences. Pressure from a variety of sources on the banking industry has accelerated highly innovative processes in a number of application areas, including data management, green banking, modernization of IT infrastructure, and steadfast adherence to ESG principles. It has also increased corporate adherence to social responsibility principles. Let's take a closer look at each of these areas of activity.

### **Data gathering, interpretation, and usage**

To track development and get insight into their organization's performance, from the supply chain to product manufacture to the provision of services to clients, all institutions, including banks, require reliable data. This implies that in order to make the best operational choices, it's crucial to have high-quality, readily measurable, and immediately available information, especially in the case of financial institutions. The amount of information available to banks today regarding the environmental and social effects of their actions and processes has grown significantly, but there is still much room for improvement in terms of management, which digital transformation can streamline and enhance from collection to categorization and interpretation to use.

## **DISCUSSION**

Green banking includes all investments in renewable energy, green bonds, and sustainable infrastructure finance to mention a few, which would otherwise be achieved with significantly longer lead times or not at all if they were the exclusive domain of governmental institutions. For instance, decarbonization requires significant private sector investment to be feasible. Net zero for banks entails more than just lowering the emissions brought on by their operations. It also entails assisting customers in reevaluating their lifestyles, as well as their purchasing and consumption choices, and guiding them toward improved financial security, increased efficiency, and increased savings. The process of funding a new green economy involves an innovation strategy that might lessen the disparity between fiscal policies and sustainability-related ones.

### **Streamlining IT infrastructure while lowering costs and carbon footprint**

Another area where innovation investments are put to use to create business sustainability is banking IT infrastructure. Utilizing a cloud-based infrastructure lowers carbon footprint and emissions and considerably lowers operational expenses for businesses. Additionally, banks become more responsive and efficient as a result of digital transformation. The advantages for banks updating their IT infrastructure grow as cloud service providers enhance their offerings and make the transition simpler and more secure: from a general reduction in maintenance costs and risks to the creation of tools to support collaboration, to name just a few examples.

### **The use of fintechs as part of an ESG approach**

Banks must maintain their commitment to environmental, social, and governance ESG principles in order to satisfy customers, shareholders, workers, and regulators. ESG criteria implementation in banking is challenging and demands a high degree of knowledge. To comprehend the data points that must be recorded, choose metrics to communicate internally, adhere with laws and compliance processes, and manage risks, it is crucial to have cutting-edge technology and knowledgeable employees. Additionally, banks must put an emphasis on automated processes and spend money on a strong data and analytics platform. Fintechs will be able to implement a

formal ESG strategy more readily than conventional banking institutions since their business models are centered on environmental and social advancement climate change, diversity, financial inclusion. This includes governance actions and controls, evaluations, and KPIs.

### **Technologies that enhance staff engagement and customer connections**

What's Going On in Banking, a new study by Cornerstone Advisors, reveals what technologies banks and other financial organizations will be placing their bets on in what is proving to be a profoundly uncertain, not just due to economic conditions but also due to the volatile organizational and technological environments in which banks operate. As live operators may assign the most monotonous and low-value activities to chatbots, banks are rapidly using conversational AI technology to build chatbots that are not only helpful for customer service but also crucial in direct staff assistance. In order to become more lifelike and conversational, chatbots are developing into intelligent digital assistants that use machine learning algorithms [6]–[8].

### **Online banking**

While demand is undoubtedly there and not minor in comparison to many other sorts of apps and systems, formal loan applications and creating checking accounts are still not totally digital transactions. Although 23% of banks intended to deploy an app for digital account opening, only 10% of consumers actually made use of this feature. Although there is a great demand for self-service modalities, there are still certain issues to be solved, particularly organizational ones, as seen by the difference between expectations and execution.

### **Communications and customer relationship management CRM and CMM**

When a bank invests in digital technology intended to improve the UX, it might set the following goals: managing their customers' data, customizing communications, and creating relevant offers that are founded on the data. CRM and CCM will be progressively implemented into digital banking platforms to improve processes like online account creation, loan origination, and other specialized applications such health and financial wellbeing in order to meet these aims.

### **Instantaneous payments**

B2B payments, account-to-account transfers, and expedited payroll payments are a few examples of real-time payment use cases. Account-to-account transfers, last-minute consumer payments, and recurring bill payments will be the key sources of return on investment for banks as non-interest revenue diminishes, claims McKinsey Consulting.

### **APIS**

With the introduction of fintechs to the market that utilize APIs to extract data from banks, establish and fund accounts, and give value-added services to their consumers, open banking has become a hot issue in the banking sector. The potential of partnerships with fintechs is slowly becoming more acceptable to banks, which at first were wary of open banking since it was seen to be a factor in profit erosion, around 70% of banks plan to integrate partnerships in their strategy. For banks, innovation fundamentally means taking advantage of any chance to change their current position in the near future. Traditional banking practices have shown to be unable to keep up with changing consumer and staff preferences and demands. Customers, particularly

those who are younger, want far more from businesses than simply a limited range of financial resource management services. They expect that their bank look after them and assist them in making sound financial decisions.

On the other hand, employees work to ensure that a value system is internalized that is in line with the concerns they value most, such as sustainability, honesty, innovation, and flexibility. Banks cannot afford to be out of touch with these two stakeholder groups, and if there is a discrepancy between the present and desired corporate culture, a deliberate innovation program will be required. In order to stay competitive, they will need to make the following changes: attract and retain skilled talent, meet customer expectations by fostering more human relationships, optimize operations to improve quality and efficiency, fully utilize cloud capabilities, and use data more intelligently to create personalized experiences.

### **Innovations in Banking Technology**

FINCA International is allowing access to responsible financial services for low-income customers as the originator and principal stakeholder of FINCA Impact Finance, a worldwide network of community-based microfinance institutions and banks spread across five continents. The FINCA Impact Finance network is using advances in banking and financial technology also known as fintech to transform finance in underserved markets all over the world and expand financial inclusion to populations that are typically excluded in order to reach more people, increase efficiency, and lower costs.

### **Network-Wide Fintech Innovations and Solutions**

#### **Cellular Banking**

Mobile phone adoption is increasing, despite the fact that financial services are still not widely available in underdeveloped nations. The poor have easier access to financial services thanks to mobile credit, savings, payment, and e-wallet options. They can do secure transactions anytime, anyplace, and it saves them time. Mobile banking innovations are opening up new doors to financial inclusion, from a savings product in Tanzania to a free-to-use digital payment service in Pakistan.

#### **Banking agencies**

Banking representatives assist in extending the accessibility of responsible financial services in places without physical branch presence. A local businessperson hired to handle customers' financial transactions is known as a banking agent. The proprietor of the neighborhood hardware store, grocery store, or corner shop might be an agent. Each agent works using a point-of-sale POS terminal that is linked to the customer accounts and subsidiary banking network.

A customer may pay bills, make deposits, withdraw or transfer money, see account balances, and complete other activities when they go to a banking agent. In the DR Congo, agency banking by FINCA debuted in 2012. By the end of 2018, FINCA DR Congo had a network of over 1,000 agents who handled more than 80% of the financial transactions for its customers. FINCA Zambia, Comic Relief, and Jersey Overseas Aid have joined together to change agency banking in Africa in order to help the rural poor.

Banking representatives use POS machines with fingerprint scanners or other biometric identification technology. Customers may securely and safely access their FINCA accounts thanks to this technology. Additionally, it provides individuals protection and financial management without having to worry about identity theft [9], [10].

### **Rating Credit**

The absence of a documented borrowing history prevents the 1.7 billion adult unbanked people from accessing financing to expand their small companies. In countries like Guatemala, alternative credit scoring techniques are being tried. These techniques may use mobile or psychometric data to precisely determine a person's credit worthiness with the aim of enhancing financial inclusion.

### **DFA Digital Field Automation**

With a tablet in their hands, credit officers may receive and send client loan applications electronically. As a result, data collecting is made quicker, cleaner, and more trustworthy. Automating the credit score and loan application procedures is made possible by cloud computing.

## **CONCLUSION**

In conclusion, technology and innovation have sparked a revolutionary change in the banking sector that has altered how financial institutions function, provide services, and engage with clients. Along with increasing convenience and effectiveness, the digital revolution has also created new possibilities and challenges that need for proactive adaptation and strategic planning. Banks have been able to improve client experiences through streamlining operations, automating jobs, and integrating technology. Clients now have access to convenience never before possible thanks to online banking, smartphone applications, and digital payment solutions. At the same time, banks are able to reach clients outside of their traditional geographic areas. Blockchain and distributed ledger technologies have the potential to completely transform the banking industry as well as the whole financial ecosystem. These developments redefine how assets are maintained, monitored, and traded by enhancing transactional efficiency, security, and transparency.

### **REFERENCES:**

- [1] W. Porselvi, D. Jublee, and G. Sivanesan, A study on factors influencing adoption of technology and innovation in banking industry, tamilnadu, India, *Int. J. Mech. Eng. Technol.*, 2018.
- [2] M. Bhaskaran and J. S. Sudhir, A study on latest trends in Banking Technology & Innovation, *Int. J. Manag. Stud.*, 2018, doi: 10.18843/ijms/v5i43/06.
- [3] C. Lehrer, A. Wieneke, J. vom Brocke, R. Jung, and S. Seidel, How Big Data Analytics Enables Service Innovation: Materiality, Affordance, and the Individualization of Service, *J. Manag. Inf. Syst.*, 2018, doi: 10.1080/07421222.2018.1451953.
- [4] L. Sloboda, N. Dunas, and A. Limański, Contemporary challenges and risks of retail banking development in Ukraine, *Banks Bank Syst.*, 2018, doi: 10.21511/bbs.131.2018.09.

- [5] N. Kamboj and G. Singh, Customer Satisfaction with Digital Banking in India: Exploring the Mediating Role of Demographic Factors, *Indian J. Comput. Sci.*, 2018, doi: 10.17010/ijcs/2018/v3/i2/123214.
- [6] J. Aron, Mobile money and the economy: A review of the evidence, *World Bank Res. Obs.*, 2018, doi: 10.1093/wbro/lky001.
- [7] B. J. Drasch, A. Schweizer, and N. Urbach, Integrating the ‘Troublemakers’: A taxonomy for cooperation between banks and fintechs, *J. Econ. Bus.*, 2018, doi: 10.1016/j.jeconbus.2018.04.002.
- [8] A. A. Harefa And P. S. J. Kennedy, Financial Technology, Regulation And Banking Adaptation In Indonesia, *Fundam. Manag. J.*, 2018.
- [9] L. B. Alubisia, W. Githii, And M. Mwangi, Effect Of Technology Based Financial Innovations on Non-Interest Income of Commercial Banks in Kenya, *Eur. Sci. Journal, ESJ*, 2018, doi: 10.19044/esj.2018.v14n7p337.
- [10] BCBS, Implications of fintech developments for banks and bank supervisors, *Sound Pract.*, 2018.



## CHAPTER 14

### DIGITAL BANKING AND ONLINE SERVICES: A COMPREHENSIVE OVERVIEW

---

Dr Krishna B Koppa, Associate Professor  
Department of Marketing, Jain (deemed to be University), Bangalore, Karnataka, India  
Email Id- krishnakoppa@cms.ac.in

#### ABSTRACT:

With its ease, accessibility, and cutting-edge solutions, internet banking and other digital services have completely changed how clients engage with financial institutions. The revolutionary effects of digital banking are examined in this study along with its essential elements, advantages, and difficulties. Additionally, the tactics used by banks to improve the online customer experience are discussed. The study starts out by highlighting the paradigm change that digital banking has brought about in the financial industry. It examines how digital platforms have made it possible for users to receive a variety of financial services while relaxing on their gadgets, removing distance restrictions and improving convenience. The study also explores the essential elements of online services and digital banking. It looks at digital payment systems, mobile banking applications, online account management, and robo-advisory services as leading examples of technologies that let users perform transactions, keep track of accounts, and make wise financial choices electronically.

#### KEYWORDS:

Blockchain, Digital Banking, Digital Payment Online Banking, Net Banking.

#### INTRODUCTION

Although the coverage, security, and technology of digital banking and net banking are different, each provide certain service benefits to banks. Internet banking and digital banking are not the same, despite the terms being used interchangeably. Web banking, net banking, and online banking are some of the various names for internet banking, which largely refers to front-end consumer transactions carried out via an internet browser on desktop and mobile devices as well as on mobile applications. It is the practice of conducting client banking operations using an internet-connected device [1]–[3]. Let's examine what digital banking is now that we have summarized what internet banking is. Internet banking is only one aspect of what is referred to as digital banking, which is a larger concept.

#### Digital banking vs online or internet banking

Let's examine the details of the distinction between digital and online banking:

- a. **Internet or online banking:** When banks first began using internet technology to move banking operations to the digital realm, online banking was born. Customers may access their bank accounts using IDFC FIRST Bank internet banking on any internet-connected device and do transactional tasks including checking balances and statements, adding beneficiaries, making online payments, paying bills, etc.

- b. Online banking:** The banking sector is undergoing a transition thanks to digital banking. It is a comprehensive ecosystem that incorporates a digitized ecosystem to improve both the front-end and the back-end of banking in terms of speed, accuracy, and convenience. It includes a variety of intermediates, interfaces, and technologies that aid banks in improving their systems and procedures, advancing automated operations, and making greater use of machine learning and artificial intelligence for a seamless experience that is accessible electronically. In the end, digital banking reduces reliance on conventional banking by digitally reproducing it, including by providing e-KYC procedures, improving ATM experiences, and leveraging Debit and Credit Cards.

### **Security**

The two-factor authentication of your online bank accounts is often ensured via net banking using your login information and an OTP one-time password. The security protections are more layered across transactions in digital banking. This is partially due to the handling of sensitive information by mobile digital banking applications, including the IDFC FIRST Bank mobile banking app. Throughout a digital banking transaction, additional levels of biometric and password verification are implemented.

### **Technology**

A framework that is more or less constant is internet banking. The user interface is straightforward but sometimes not mobile-friendly. Technology is employed in online banking to enhance the transactional experience. Blockchain, cloud computing, artificial intelligence, robots, and other cutting-edge technology are used by digital banking to broaden its service offering.

These advancements in banking technology allow you to create and manage an IDFC FIRST Bank digital savings account solely from your smartphone. An initial investment is far less necessary for online banking. Since many consumers no longer visit physical locations, the demand on the current personnel is reduced. Although it needs a larger initial investment, digital banking has the potential to drastically alter the employment market in the banking sector. When completely implemented, digital-only banks will employ more IT and digitisation professionals and fewer tellers and clerks [4], [5].

### **Impact on consumers**

With online banking, users may do routine financial activities with fewer trips to bank locations. On the other hand, personalization techniques used in digital banking allow for the mapping of consumer preferences and the inclusion of tools like chatbots and online help. Over time, these elements raise client satisfaction with financial services.

### **What are the distinctions between online banking and new-age banking?**

The primary distinction between digital banking and online banking is that the former is a general word that refers to the cutting-edge technological developments we are making in the banking industry. Using a bank's web-based services is more specifically referred to as online banking.

## **Online banking vs digital banking**

### **Banking online**

The word online banking often refers to accessing a bank's or financial service provider's website, such as an NBFC. To do any specified operation, such as a transaction, see balances, or see payments that are overdue, etc. You might accomplish this using the mobile or laptop web.

### **Online banking**

Every action involved in banking that is carried out electronically is referred to as digital banking. This could not just apply to a bank's website. Online banking is thus a component of digital banking. These consist of SMS banking, digital wallets, and mobile banking. The usage of chatbots, virtual assistants, and other innovation targeted at improving customer experience is another aspect of digital banking that sets it apart from internet banking.

### **Advantages of online banking**

It goes without saying that the advantages of moving toward a more technologically advanced manner of doing things much outweigh the disadvantages. Similar to this, digital banking is a technology byproduct that strives to simplify life for bank clients. Whether a senior citizen who is sick of standing in line, a working-class professional who is swamped with work, or a regular person who does not want to go to the bank's branch to run a single errand, digital banking enables customers to perform banking functions from the comfort of their homes. Also included is convenience. Speaking more specifically about the convenience provided, digital banking gives a user access to banking services around-the-clock. The excessive emphasis on paper in conventional banking was one of its main flaws. With the advent of digital banking as a service, banking has gone paperless. To see records, a user may log onto their account at any time. A user of digital banking may set up automated payments for recurring expenses including credit card, phone, and utility bills. The consumer is no longer required to actively recall the due dates. The consumer has the option to get reminders about forthcoming payments and unpaid balances. Due to the seamless integration of payment methods with online shopping platforms, online buying has become a piece of cake. Online payments have benefited greatly from internet banking. The expansion of digital banking to rural regions would appear to be a step toward overall development. The rural populace may benefit the most from digital banking services because to smartphones that are available for a reasonable price and widespread internet connection. Fund transfers made possible by digital banking lessen the danger of fake money [6]–[8]. A user may report and block lost credit cards with the aid of digital banking by simply clicking a button. This advantage significantly improves the level of security and privacy that a bank's clients may expect. Digital banking encourages a cashless culture, which limits the flow of illicit money since the government can monitor payment transfers. Digital banking is anticipated to eventually reduce the need for money minting.

### **Various digital banking payment methods**

**Banking cards:** These cards allow for the use of additional digital payment methods in addition to cash withdrawals. Cards are accepted at point of sale PoS terminals and online. Banks may also offer prepaid cards. these cards are not tied to a bank account and instead operate using the funds that have been put onto them.

**Unstructured Supplementary Service Data USSD:** Mobile transactions may be completed without an application or an internet connection by dialing 99. The figure has national application and encourages more widespread financial inclusion. The caller may use the service to browse an interactive audio menu and choose their preferred choice on a mobile device. The only exception is that the caller's cell number has to be the same as the one associated with the specific bank account.

**Aadhaar Enabled Payment System AEPS:** After the Aadhaar number has been successfully verified, AEPS enables the customer to begin banking instructions.

**Unified Payments Interface UPI:** UPI is now the most popular method of digital banking. By using a virtual payment address VPA, UPI enables users to send money without providing their bank account information or an IFSC code. The programs' ability to allow you to combine all of your bank accounts into one location is another impressive aspect of UPI. There are no time constraints on the 24/7 transmission and receipt of funds. BHIM, PhonePe, and Google Pay are UPI-based applications available in India. The BHIM application allows users to transfer money to other bank accounts and virtual addresses in addition to other Aadhaar numbers. To learn more about the digital payment project the RBI launched in September, [click here](#). More significantly, payments made through UPI are free of charge. If you want to learn more about credit cards connected to UPI, [go here](#). Mobile wallets have made it unnecessary to carry loose currency or input CVV codes or recall four-digit card pins. Mobile wallets save bank account and card information so users may simply add money to their wallets and pay for goods and services from other businesses that provide compatible apps. Paytm, Freecharge, MobiKwik, and others are well-known mobile wallets. However, there is often a limit on the amount that may be placed into mobile wallets. The process of transferring money from the mobile wallet back to the bank account could potentially incur a minor cost [9], [10].

**PoS terminals:** These are typically small, mobile devices that read cards to approve and finish transactions. Both supermarkets and petrol stations use this payment option. PoS terminals have developed into more than just physical PoS devices, however, as the world of digital banking has flourished. There are now virtual and mobile PoS terminals that enable payments by using the NFC capability of mobile devices and web-based apps.

**Internet and Mobile Banking:** Also referred to as e-banking, internet banking is the practice of using the internet to access certain banking services, such as making financial transfers and establishing and cancelling accounts. Because Internet banking only includes fundamental tasks, it is a subset of digital banking. Similar to online banking, mobile banking involves using mobile-based apps to access financial services. Additionally, thanks to mobile banking, there is an increase of banks without actual branches.

## DISCUSSION

### Banking online

Most of us are most acquainted with this kind of banking. It may cover a lot of ground and even includes what is now referred to as mobile banking. Any kind of personal banking that we undertake online is referred to as online banking. Checking our balance and prior statements, setting up direct debits, paying payments, and moving funds to an individual's other account are all examples of this. For many years, using a laptop or desktop computer to conduct online

banking was the only option. However, because to the enormous strides made in smartphone technology, an increasing number of individuals can now do many essential banking tasks using mobile applications. Customers may now apply for loans online, transfer money abroad with a few clicks of a button, and even get payments early via their online bank accounts as internet banking has matured and expanded the services it offers. Although the phrase digital banking may be used in a variety of contexts online and off, it effectively unifies online and mobile banking services under one heading. Online banking refers to using your computer to access banking functions and services from your bank's website.

To check your balance or pay your power bill, log into your account. With many banks, your online banking site gives you access to extra financial services like applying for a loan or credit card. The family pet is probably most appreciative of online banking since it allows you to sit down at your computer and handle many of your personal financial issues without ever leaving your house. Mobile banking refers to utilizing an app on a mobile device, such as a smartphone or tablet, to access many of the same banking capabilities. The bank with whom you have an account issues these proprietary applications, and they often need the same login details as your online banking interface. Mobile banking applications often come with the most popular banking services, such mobile check deposit, money transfers, and bill payment, since they are made for those who are always on the move. Additionally, they often offer practical features like peer-to-peer payments through platforms like Zelle. Banks may also send their clients financial warnings through their mobile applications, such as fraud detection and low balance notifications. Here is a graphic equation that literally summarizes digital banking:

$$\text{Online Banking} + \text{Mobile Banking} = \text{Digital banking}$$

### **Differences between online and digital banking**

Online banking and digital banking are phrases that are sometimes used interchangeably. There is a thin boundary between the words' meanings, however. Daily necessities like examining transactions, checking balances, and moving money are all covered by online banking. With the aid of internet banking, the bank's primary business has been moved to an online presence. A means to an end is online banking. Digital banking, however, is a goal unto itself. The goal of digital banking is to digitize all bank activities, whether they are core or non-core. The main goal of digital banking is the customer onboarding process, account servicing, and account closure. The goal of digital banking is to eliminate the need for consumers to visit a bank office physically so that they may do their banking business wherever it is most convenient for them. Online banking is therefore a part of the larger category of digital banking.

### **Are there drawbacks to digital banking?**

Is online banking secure? Contrary to what is often believed, internet banking is really safer than conventional branch banking. Most readers will be astonished to learn this. While phishing, pharming, identity theft, and keylogging are common weaknesses and attacks in digital banking forums, financial organizations are heavily investing in their security measures. When selecting a service like digital banking, security is paramount. Banks would lose a key selling point if security were to be breached, and more so than exposing customer data and resources, financial institutions cannot afford bad press. You would be entitled to collect the whole amount of your bank balance in the unlikely event that banks did lose your money to a hacker, just because your

money is secure. Banks must thus make significant investments in bolstering the security of digital banking systems in order to avoid significant public liability and negative publicity.

However, a user of digital banking must contribute by adhering to certain procedures that serve as a safeguard: Follow the instructions to keep your passwords private and to change them often.

Avoid utilizing public networks and devices to access digital banking. If you must, delete the cache and browsing data on the device beforehand. Avoid letting the browser retain your login and password for your bank accounts. Banks never request personal information, so don't provide it to anybody who does. Computers that are antivirus-protected provide an additional degree of protection to your computers.

If the URL doesn't start with https, a padlock will be shown next to the website address. A security certificate is the lock. When the website is protected with an SSL certificate, the address bar becomes green, which is further confirmation of the website's security. Use the bank's URL instead of any other links, and avoid doing so. Banks often utilize SSL encryption with a minimum of 128 bits. Lastly, when the computer is left alone, unplug from the internet.

### **Indian digital banking**

#### **When did India's digital banking industry begin?**

With ICICI Bank being the first to provide the service to its retail customers, digital banking in India began to take form in the late 1990s. Only in 1999, when internet costs were cut and there was a rise in internet knowledge and trust, did digital banking become widely used. Banks only began offering a larger selection of items online once the internet evolved further and expenses decreased.

### **CONCLUSION**

In conclusion, the emergence of internet services and digital banking has completely changed the banking industry and the way that consumers engage with banks and use their services. This major change in the way banking is carried out has ushered in a new age of ease, efficacy, and creativity. Customers now have seamless access to a broad range of financial services wherever they are, thanks to digital banking. With only a few clicks, clients can complete transactions, manage accounts, and access information on online platforms, which provide exceptional ease. Mobile applications revolutionize the client experience by bringing banking into the palm of the hand. Additionally, the digitalization of banking procedures has greatly simplified financial organizations' operations. Transactions are now processed more quickly and accurately thanks to automation and digital processes, which also lowers operating expenses and human mistakes. Banks may now concentrate on value-added services and allocate resources more effectively as a result.

### **REFERENCES:**

- [1] M. Mujinga, M. M. Eloff, and J. H. Kroeze, System usability scale evaluation of online banking services: A South African study, *S. Afr. J. Sci.*, 2018, doi: 10.17159/sajs.2018/20170065.
- [2] A. Megargel, V. Shankararaman, T. P. C Fan, and T. Fan Ping-Ching, SOA maturity influence on digital banking transformation, *J. Bank. Technol.*, 2018.



- [3] R. K. Tolety, Digitalize or Die – The Road Ahead for Indian Banking, *Int. J. Res. Financ. Mark.*, 2018.
- [4] K. M. Orzech, W. Moncur, A. Durrant, and D. Trujillo-Pisanty, Opportunities and challenges of the digital lifespan: views of service providers and citizens in the UK, *Inf. Commun. Soc.*, 2018, doi: 10.1080/1369118X.2016.1257043.
- [5] V. Sardana and S. Singhanian, Digital Technology in the Realm of Banking: A Review of Literature, *Int. J. Res. Financ. Manag.*, 2018.
- [6] A. Riyanto, I. Primiana, Yunizar, and Y. Azis, Disruptive Technology: The Phenomenon of FinTech towards Conventional Banking in Indonesia, in *IOP Conference Series: Materials Science and Engineering*, 2018. doi: 10.1088/1757-899X/407/1/012104.
- [7] S. K. Gupta and A. Bansal, Young customer's attitude towards digital banking with special reference to public and private bank in Uttarakhand, *JIMS8M J. Indian Manag. Strateg.*, 2018, doi: 10.5958/0973-9343.2018.00030.3.
- [8] L. Lu, Decoding Alipay: Mobile Payments, a Cashless Society and Regulatory Challenges, *Butterworths J. Int. Bank. Financ. Law*, 2018.
- [9] G. W. Margaret and R. K. Njuguna, Effects of Online Interactivity on Customer Relationship in the Banking Industry in Kenya., *Int. J. Sales, Retail. Mark.*, 2018.
- [10] D. M. M. V. Jagtap, The Impact of Digitalisation on Indian Banking Sector, *Int. J. Trend Sci. Res. Dev.*, 2018, doi: 10.31142/ijtsrd18688.



## CHAPTER 15

### CUSTOMER RELATIONSHIP MANAGEMENT CRM IN BANKS

---

Dr Krishna B Koppa, Associate Professor

Department of Marketing, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-krishnakoppa@cms.ac.in

#### ABSTRACT:

Customer Relationship Management CRM has become a critical tool for banks to comprehend, interact with, and accommodate their clients' changing demands. This study explores the relevance of CRM in the banking industry, as well as its fundamental ideas, advantages, and techniques that banks use to build trusting relationships with their clients. The study opens by emphasizing the value of CRM in the competitive financial environment of today. It goes through how CRM helps banks to learn about consumer preferences, interactions, and behavior, enabling more individualized service and fostering client loyalty. The study also examines the fundamentals of CRM in banking. In order to customize services to specific consumer demands, it examines the usefulness of data analytics, customer segmentation, and cross-selling. As key components of a good CRM, developing trust, communication, and consistent service delivery are also emphasized.

#### KEYWORDS:

Banking, Clients, Customer Relationship Management, Customer Service, Financial Environment.

#### INTRODUCTION

Management of customer relationships is one of the most important factors for banks. It is important to cultivate good client interactions and maintain their satisfaction. In addition to focusing on this, banks have been attempting to enhance customer service. They have been using CRM Customer Relationship Management to do this. Customer relationship management is known as CRM. It is a procedure for establishing connections between clients and the bank. It puts a strong emphasis on enhancing customer happiness by using the finest technologies. The goal of CRM is to build enduring connections with clients by offering them top-notch service [1]–[3]. The fundamental goal of banks is to maintain their clients' satisfaction by offering them exceptional service. In order to achieve this, they must monitor their clientele and provide them the services they need. CRM has been used by banks to enhance customer satisfaction and customer service.

#### How Does CRM Aid Banks?

##### 1. CRM improves client retention.

It helps banks to monitor their clients and ascertain their needs. It helps in locating clients who are dissatisfied with the bank and have switched to other institutions. Then, banks may take the appropriate actions to keep them.

**2. By enhancing client retention and cross-sell possibilities, it aids in generating revenue growth.**

Customers are encouraged to spend more money on banking goods and services while also expanding their business with the bank as a result. By including new goods that the clients could need from the bank, it also aids in boosting revenues.

**3. Better understandings of consumer behavior and preferences are provided.**

It aids in understanding each customer's behavior, making it simpler for banks to provide individualized service to their clients. They may then provide packages tailored to their wants and requirements, better serving them.

**4. The consumer experience is enhanced.**

CRM enhances clients' entire experiences by providing them with high-quality services that they would want to get again. When banks have sufficient CRM, they can provide their customers what they want. It facilitates communication between bank employees and customers, which eventually enhances the customer experience.

**5. It helps banks to improve prospects for income generating.**

By finding new services that new or current clients need, it aids banks in enhancing revenue generation options and increases bank income. Additionally, it allows banks to explore new business prospects with both current and future clients, increasing banks' income. It helps banks to increase income since it gives them the ability to recognize new services that both current and potential consumers need.

**CRM's significance in banking**

Most of the time, bankers are aware of what CRM is and how it works. However, not everyone is aware of the significance of CRM in banking and does not include such systems in their organizations. It seems that your bank may be successful even without a CRM, but don't be fooled. customer-focused solutions dramatically enhance all aspects of the engagement process. Three crucial CRM features may be identified [4], [5]:

- a. To keep both new and current customers. After a successful promotional effort, it would be upsetting to ignore a consumer, wouldn't it? CRM makes it easier to manage and keep track of all leads, including calls, emails, and other user requests.
- b. To regulate personnel and establish standards. All-in-one solutions eliminate confusion and bring everything together, whereas personnel at banks without CRM manage different accounting techniques like Excel or even their own memory. The performance is improved by this.
- c. To compile data and combine it. Management tools provide integrated databases that group crucial data like contacts and orders. CRM makes it possible to more properly assess and organize the sales process.

A set of standards for bank owners is one of the advantages of CRM in the banking industry. Ready packages are appropriate if this is your first company and you have no experience dealing with customers. In this situation, you take inspiration from developers whose work is based on best global practices and CRM standards. For new managers and chief executives, however,

engaging with professional development teams is the ideal choice. We recommend all-in-one services to everyone who need sophisticated CRM in banking. We provide thorough analysis, advice, and full-stack creation of unique, individualized solutions.

### **CRM Use Cases in Banking**

An effective tool for firms of all sizes, a customer relationship management CRM system is a flexible solution that can be used in marketing, sales, and customer care. Banks must create strategies to draw in and keep consumers in addition to maintaining client data. With Banking CRM, these organizations can go beyond transactional data to learn more about their clients, predict their needs, and recognize their difficulties. Here are some examples of how CRM may help banks improve their marketing, sales, and customer service initiatives:

#### **Personalized Marketing**

How about that proverb? Getting a new client costs twice as much as keeping an old one, right? Customers may be divided up by banks using their CRM systems depending on their account information, engagement history, the services they use, etc. They are able to create campaigns with effective message. For current consumers to remain engaged with your institution in the face of fierce competition, relevant services and cross-sell possibilities are essential.

#### **Process Rethinking for Profit**

In order to comprehend how existing procedures effect profitability, banks that are having trouble maintaining their profitability must look beyond the near future. To create this new reality, a banking CRM may transform irrational decision-making into data-supported decision-making. Making reports in the CRM that show which services are lucrative and which are not would be one approach to do this. How many clients, for instance, are now using service A? Is it a project that should be saved, or will it end up costing the bank more money in the long run? If the bank urges employees to sign up clients for this service but they don't use it, is the approach effective? Would it make more sense to target certain account types at various points in the financial process? If you don't have the specific statistics to show these tendencies, it's difficult to say. A CRM may identify areas where operations are inefficient and assist the bank in unifying new, more efficient processes across all branches. For instance, banks may use an automated procedure to notify sales employees when a consumer reaches a certain threshold and is prepared to discuss further services. Repeatable procedures would enable the sales staff to save time while also improving the durability and profitability of the services they provide.

#### **Individualization and Fresh Possibilities**

Despite the advantages of online banking, nothing can compare to the strength of face-to-face communication, particularly when it occurs at the right moment. Using CRM, customer service agents may provide customers a sense of value while also creating new prospects. For instance, the bank may configure a CRM to notify customer care personnel of major life events. Have they just turned 65? They might be contacted by the salesperson to wish them a happy birthday and let them know that it's time to start taking retirement seriously. Has the client lately gotten hitched? The customer care representative may provide the mortgage department the information. Customer service may become more personalized and lucrative! by using the insights offered by banking CRM. Even digital personalization may be enhanced by the CRM.

Utilizing a CRM's features will enable you to start the digital transformation process and grow operations to meet client demand. This results in quicker banking, improved Web and mobile experiences, and overall happier clients.

### **CRM in Banking and Financial Services: Key Features**

#### **1. 360-degree views of each customer**

A unified view of each client account is made possible by the collaboration of various software programs and CRM in the banking and financial services industry. The CRM system keeps track of all transactions, including those involving cash withdrawals from ATMs and requests to issue demand drafts [6]–[8]. This makes it possible for bankers and financial advisers to quickly and thoroughly understand the habits and preferences of their clients. This may facilitate the introduction of goods and services that complement customers' financial objectives.

#### **2. Tracking interactions**

To maintain a trustworthy connection with their clients, banks must depend on prior conversations. Customer activity on the website, mobile app, chats, calls, and interactions with sales personnel may all be stored and accessed via interaction history. Managers may use this to monitor client retention and certain goods and services.

#### **3. Forecasting, analytics, and automation**

Effective sales and marketing plans may be created with the use of CRM's automation, analytics, and forecasting features. Sales operations may be made more efficient by automating actions like outbound calls and follow-ups. This frees up the time of sales representatives to focus on other crucial activities like analyzing sales statistics based on customer surveys, polls, and social media campaigns to identify the clients who are most likely to convert. Similar to this, CRM systems allow for forecasting and marketing automation, which results in stronger plans and efforts with better metrics. CRM enables marketers to assess campaign performance, conversion rates, and emerging market prospects.

#### **4. Integration**

Social media, automated systems, and outside services can all be connected with financial CRM systems. This function works well to enhance market communications. Using email marketing services, for example, to start email campaigns.

### **CRM's Advantages for Business Banking**

Meeting client expectations is one of the particular problems of commercial banking in a digital environment. You cannot just have favorable financing conditions or an excellent checking account, as most retail consumers can. You must provide wise financial counsel. And in the era of technology, it entails knowing every customer's industry inside and out, adopting a customized strategy, and doing the job quicker than before. Your business clients want individualized outreach, proactive insights, goal-based planning, and more. Business banks should imitate fintechs' smooth, simple, and tailored experiences for consumers in the banking industry if they want to stay ahead of the competition. A Customer Relationship Management CRM system is now necessary given everything that is demanded of banks. You need it if you want to succeed. Any organization may profit from a strong CRM's ability to attract new clients,

complete deals, and provide first-rate customer care, but the advantages for business banking are particularly rewarding. Here are some of those advantages and some tips on how, with the correct banking CRM system, you may develop into the bank that consumers adore.

### **What does CRM mean in the banking industry?**

CRM stands for customer relationship management in the banking sector, just as it does in other sectors like retail or business. Banking institutions may better manage their clients and comprehend their demands with the aid of a CRM system, enabling them to provide the appropriate solutions without delay. CRM in banking offers a variety of distinct advantages. Business banks lend 15 times as much money as consumer lenders do on average. If you want to get those large commercial customers, the stakes are high, and you need a superb CRM to put you ahead of the competition. Find leads, nurture them, and turn them into transactions before the competition even realizes what struck them [9], [10].

### **A higher lead conversion rate**

How often have you phoned a potential customer to introduce a new service only to discover that your own bank has already taken care of their needs? When a real estate client expands their manufacturing operations in a recently bought property, they may need to source and lease more equipment. Going for that new opportunity makes sense if your bank provides both services. Especially when you are aware that with each profitable transaction you both have under your belt, the likelihood that you will sell the same client another product or service improves. You'll convert between five and twenty percent of new consumers, as opposed to between sixty and seventy percent of current customers.

## **DISCUSSION**

### **CRM use in banking allows for richer, more personalized client interactions.**

With the use of CRM banking technology, each department may build up distinct triggers for providing extra services while having access to the same data across all client profiles. To find fresh possibilities to convert leads, staff members may consult detailed customer profiles built from marketing, sales, and service data. They will be able to build a seamless and customized experience for the consumer and a quick conversion process for you since they won't have to start over every time an interdepartmental lead enters the funnel.

### **Individualized Customer Experiences**

Customer retention is important, but you also need a steady stream of new customers to keep your bank expanding. How can you locate them? What's the most effective approach to contact them? How can your marketing be made better? You may find the answers to all of these questions with the aid of a CRM for financial services, which will enable you to continuously provide your institution with fresh leads that are prepared to buy. While bringing in a lot of clients is excellent, your employees may get overburdened if they have to keep track of and follow up with every single one. So how can you design focused, effective advertising campaigns without understanding who your target audience is and what they want? Okay, so you can't. You need as much data as you can, but you won't be able to identify patterns without good organization. A solid banking CRM enables you to produce reports and visual representations of significant data points and trends, making it simple to discuss them with your team, inform your

marketing plan, and maintain client satisfaction all at once. Salesforce Marketing Cloud gives you access to all the information you want for each client. Do you have any idea how many leads you can attribute to the social media effort from last month? Which page on your website receives the most traffic? What are people saying about you, and who is saying it? It is all present. The CRM technology of a bank may assist in monitoring client habits, forecast requirements, and then automatically recommend ways for the bank to meet those needs with a customized product offering.

### **Higher Productivity**

Seventy-nine percent 79% of all marketing leads never result in sales. Unbelievable, no? Say you have a whole sales staff. Would you bring on a second banker if, on average, he improved loan sales by 29% and provided a return on investment of 5.6 times his salary? This is obvious. What if you could achieve these objectives without hiring a new employee by using technological solutions? You can, as a CRM for financial services can do that for your bank. CRMs save expenses by optimizing proposals, reducing redundant administrative work, and quickly updating your sales staff. Bankers are able to handle more accounts in less time with the correct technology.

### **Greater Communication Efficiency**

The internet, Email promotion, website visitors, searching tools, compared to newspaper advertising and billboards, marketing has advanced significantly. Going digital has its advantages, including allowing banks to advertise more cheaply and reach more companies. The problems brought on by this reliance on technology are equally many. More swiftly and openly than ever, conversations about your brand are taking place, and it only takes one irate consumer to damage your company's reputation with a few keystrokes. If you don't come up with answers, you might be facing a PR crisis at any time since consumers are twice as likely to speak about their negative experiences as positive ones. You may use a CRM to keep an eye out for discussions about your brands and goods online. Additionally, it could be simpler for you to act fast and douse the fire rather than fan the flames.

### **Monitoring Data between Departments**

Today's marketing industry is data-driven. However, there are other types of data that might aid you with your marketing than likes, clicks, and visits. You must be aware of the proportion of those actions that result in profitable sales. What are the main issues that prospective customers raise with your bankers, and can you address them in your marketing to better prepare firms for the sale? What steps in the loan procedure frustrate consumers or stop them from falling in love with your bank? Before a prospective client ever speaks to a banker, the correct CRM can collect data from many departments, turning a call to customer support or a lost account into a chance to make them fall in love with banking with you.

### **Superior Service**

Offering features like mobile check deposits, fraud alerts, paperless statements, customer care chat, and more may be possible with the correct banking technology. Many of these digital services may already be available from you. Imagine what you could do if you combined them with an excellent CRM that could record all of your contacts with customers.



### Increased customer satisfaction

The president of a major US bank's Wholesale Service Group refers to the financial institution as a relationship bank and highlights the usage of Salesforce as essential to preserving client happiness despite having hundreds of branches nationwide and 300 different products. Since many Wells Fargo customers utilize a variety of Wells Fargo products, they often need assistance from many departments and are unsure of who to contact when they have particular inquiries.

Your bank's customer service relies on promptly responding to inquiries and resolving issues without referring the consumer to a variety of departments, even if it just offers a handful of different products. You can simply keep all departments on the same page and rapidly provide solutions to each client with a solid banking CRM.

### More devoted customers

What is the real indication of how highly you regard your clients? client service improves client retention. Although timely sales and providing items that address customer demands are crucial, 76 percent of customers think that a brand's level of customer service is what makes them appreciate it the most. The portion of the sales funnel that keeps your consumers coming back for more is great service. How can a CRM assist? By making it simple for you to obtain detailed client profiles. Asking your clients to rehash their problem or customer history each time they talk to a different person strains their patience and is a waste of both your and their time since they have companies to run. Instead, you can quickly access any service ticket, transaction, and piece of data whenever a client requests assistance, enabling you to step in and rescue the day. You can transform problems into opportunities for boosting loyalty and satisfaction when you utilize a CRM system to monitor customer support tickets and tailor your response.

## CONCLUSION

Customer Relationship Management CRM, which promotes meaningful relationships between banks and their clients, has developed into a pillar of effective banking operations. CRM enables banks to better understand consumer demands, improve service delivery, and forge durable connections at a time when customized experiences are crucial. Effective CRM strategies allow banks to provide specialized solutions that address the various client financial needs. Banks may predict preferences, provide relevant options, and ultimately increase customer satisfaction by using data analytics and consumer insights. This tailored strategy helps the bank maintain its competitive edge in a changing market while also increasing client loyalty. CRM also acts as a link between the human touch in banking and the digital change. Although technology promotes accessibility and ease, the human aspect is still crucial. Banks that effectively include these elements into their CRM operations build a customer ecosystem that resonates with them across a variety of media.

### REFERENCES:

- [1] A. M. Kebede and Z. L. Tegegne, The effect of customer relationship management on bank performance: In context of commercial banks in Amhara Region, Ethiopia, *Cogent Bus. Manag.*, 2018, doi: 10.1080/23311975.2018.1499183.



- [2] R. N. Mwirigi, S. Maina, and L. Kimencu, Value Based Customer Relationship Management and Satisfaction of Commercial Banks' Account Holders in Kenya, *Int. J. Acad. Res. Bus. Soc. Sci.*, 2018, doi: 10.6007/ijarbss/v8-i5/4168.
- [3] I. D. A. E. Yuliani, Penerapan Zachman Framework dalam Merancang Customer Relationship Management pada Bank Perkreditan Rakyat, *SISFOTENIKA*, 2018, doi: 10.30700/jst.v8i1.181.
- [4] I. D. Ayu and E. Yuliani, Penerapan Zachman Framework dalam Merancang Customer Relationship Management pada Bank Perkreditan Rakyat Implementation of Zachman ' s Framework in Designing Customer Relationship Management at Bank Perkreditan Rakyat, *J. Ilm. Sisfotenika*, 2018.
- [5] L. Darli and R. Vasanthagopal, Customer Relationship Management Practices and Customer Loyalty in Commercial Banks: An Empirical Study, *MUDRA J. Financ. Account.*, 2018, doi: 10.17492/mudra.v4i02.11448.
- [6] F. M. F. Aldaihani And N. A. Bin Ali, Effect Of Electronic Customer Relationship Management On Electronic Service Quality Provided By The Commercial Banks In Kuwait, *Int. J. Acad. Res. Accounting, Financ. Manag. Sci.*, 2018, Doi: 10.6007/Ijarafms/V8-I2/4239.
- [7] W. Octaviani, Y. Yulhendri, And R. Rahmidani, Pengaruh Customer Relationship Management Terhadap Loyalitas Nasabah Tabungan Pada Bank Nagari Cabang Aur Kuning Kota Bukittinggi, *J. Ecogen*, 2018, Doi: 10.24036/Jmpe.V1i1.4726.
- [8] F. M. F. Aldaihani And N. A. Bin Ali, Impact Of Social Customer Relationship Management on Customer Satisfaction through Customer Empowerment: A Study of Islamic Banks in Kuwait, *Int. Res. J. Financ. Econ.*, 2018.
- [9] D. Maylina and A. S. Mulazid, Analisis Pengaruh Service Quality, Customer Relationship Management Dan Keunggulan Produk Tabungan Terhadap Loyalitas Nasabah Pada Bank BRI Syariah, *J. Pemikir. Islam*, 2018.
- [10] N. P. Sari, H. K. Daryanto, and I. T. Saptono, Pengaruh Customer Relationship Management Terhadap Kepuasan dan Loyalitas Nasabah PT Bank BNI, *J. Apl. Bisnis dan Manaj.*, 2018, doi: 10.17358/jabm.4.1.129.

## CHAPTER 16

### RETAIL BANKING SERVICES: A COMPREHENSIVE OVERVIEW

---

Dr Rashmi Akshay Yadav, Assistant Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id- rashmiakshay\_yadav@cms.ac.in

#### ABSTRACT:

As a link between financial institutions and individual clients, retail banking services are crucial to the financial sector. These services have seen substantial changes over time as a result of technical development, legislative modifications, and shifting consumer preferences. This summary gives a thorough review of how retail banking services have changed over time, emphasizing important trends, problems, and possibilities. The study starts out by defining the essential idea of retail banking services, which include a variety of financial goods and services catered to the requirements of specific customers. The significance of retail banking as a major source of income for financial institutions and its contribution to financial inclusion are emphasized. The study then explores how retail banking services have changed in the digital era. It talks on how technology advancements like blockchain, artificial intelligence, and internet and mobile banking have changed how people engage with brands, improved how businesses run, and made it possible to create new goods. Additionally examined are the difficulties brought on by cybersecurity risks and the trend toward tailored experiences via data analytics.

#### KEYWORDS:

Artificial Intelligence, Blockchain, Businesses, Financial Institutions, Mobile Banking.

#### INTRODUCTION

Individual customers rather than corporations are served by retail banking, commonly referred to as consumer banking or personal banking. Retail banking gives individual customers a safe method to manage their finances, acquire credit, and deposit money. Checking and savings accounts, mortgages, personal loans, credit cards, and certificates of deposit CDs are among the services provided by retail banks. Many financial services organizations strive to provide their individual customers with a one-stop-shop for retail banking. Customers anticipate a variety of fundamental services from retail banks, including checking and savings accounts, personal loans, credit lines, mortgages, debit and credit cards, and certificates of deposit CDs [1]–[3]. The majority of customers utilize local branch banking services, which provide on-site support for all of a retail customer's banking requirements.

Financial professionals provide client support and financial guidance via nearby branch locations. The main point of contact for underwriting inquiries pertaining to credit-approved goods is a financial representative.

Although a customer may not utilize all of these retail banking services, a checking and savings account is the main service. People often and securely keep their cash in this manner. Additionally, it enables them to earn interest on their money. The Fed Funds Rate is the basis for most savings account rates. Debit cards are also provided with checking and savings accounts to make it simple to withdraw money and make purchases of products and services. Individuals

may get credit from retail banks as well. They provide customers loans to buy expensive products like mansions and vehicles. This credit extension, which may take the shape of mortgages, auto loans, or credit cards, is a crucial component of the economy because it gives regular people access to liquidity, which promotes economic expansion.

### **Initial Bank. Banking is one of four different service categories**

#### **How a Small Business Bank Makes Money**

A retail bank keeps its retail customers' cash deposits. It then makes loans to other consumers using these deposits. The reserve requirement is what is often referred to as a safety and liquidity precaution. This indicates that the remaining portion of the deposit may be loaned out. The interest rates the banks charge on these loans are greater than the interest rates they pay on client deposits, which is how the banks make money.

#### **Retail Bank Types**

Retail banks exist in many shapes and sizes, ranging from tiny, locally owned community banks to giant, multinational corporate banks like JPMorgan Chase and Citibank that provide retail banking services. The top five U.S. commercial banks by assets as of March 31, 2018, were:

- a. Chase JPMorgan.
- b. The Bank of America.
- c. The Citibank.
- d. Bank of America.
- e. U.S. Bank.

These banks all provide retail banking services, which contribute significantly to their income. Another sort of retail bank is a credit union, whose members pool their resources to provide loans and other financial services to other members as a non-profit cooperative. Due to the fact that credit unions are not for-profit corporations and are thus exempt from corporate taxes, they often offer their members higher interest rates [4], [5].

#### **Services in Retail Banking Expanded**

To provide a wider variety of services to its retail customers, banks are expanding their product lines. Banks have begun providing investment services like wealth management, brokerage accounts, private banking, and retirement planning in addition to providing basic retail banking accounts and customer service from local branch financial representatives. A shift toward online banking in the twenty-first century has greatly increased the options available to users of retail banking. In order to reduce the number of times a client must visit a local branch, many banks increasingly provide online services to consumers exclusively over the internet and mobile apps. In addition to conventional banks offering online services, a plethora of new fintech businesses have emerged, providing comparable services more easily and often at lower costs since they don't need to maintain traditional brick-and-mortar bank offices. These banks include N26, Monzo, and Chime, as examples.

#### **Corporate banking vs retail banking**

While corporate banking services are solely available to businesses and corporate entities, retail banking services are given to members of the general public as well. Retail banking is focused

on the needs of the client, while corporate banking is focused on the needs of the corporation. In comparison to retail banking, the financial value of transactions is considerably greater in business banking. In retail banking, the primary source of profit is the difference between the margins of interest of borrowers and lenders, but in corporate banking, the primary source of profit is the interest and fees levied on the services provided. Corporate banks provide the following services to businesses:

- a. Loans and other forms of credit.
- b. Cash management and treasury services.
- c. Lending of equipment.
- d. Commercial property.
- e. Trade financing.
- f. Services to employers.

Some corporate banks also have investment banking divisions that provide their corporate customers access to associated services like asset management and securities underwriting.

### **What Characteristics Characterize Retail Banking?**

By providing customers with access to fundamental banking services, a line of credit, and financial guidance, retail banking aims to assist them in managing their finances. A retail bank offers the general public access to a range of services, such as checking and savings accounts, mortgages, credit cards, foreign exchange and remittance services, and vehicle loans.

### **What Is a Retail Bank Example?**

Because they provide consumer banking services such checking and savings accounts, mortgages, personal loans, credit cards, and certificates of deposit CDs, U.S. Bank and Bank of America are two instances of retail banks.

### **What Distinguishes Retail Banking from Commercial Banking?**

Individuals may obtain deposit, access, and loan services via retail banking. Corporate banking, also known as commercial banking, provides financial services to organizations including enterprises, governments, and other organizations. Commercial banking caters to institutions, while retail banking provides its services to individuals for personal use.

### **Explaining Retail Banking**

Retail banking enables customers to interact directly with the bank to handle their daily needs, such as personal loans and mortgages. Additionally, consumers need to visit the bank's website or a physical location to go through its menu of retail banking services. Customers may undoubtedly get the needed services at the relevant branch or site thanks to it. Due to the need for digital banking services, retail banking employment has undoubtedly increased to a high level in recent years. Additionally known as personal banking, it makes it easier for lone customers to handle their finances. As a result, delivering personal banking services and accounts is part of the profile for employment in retail banking, such as those for product manager or customer advisor. To increase their profits, retail banks often levy monthly maintenance fees and service fees. Additionally, they impose minor costs to initiate wire transfers or print cashier's checks in addition to charging overdraft fees when customers spend more than what is available.

## **Retail Bank Types**

There are three different types of retail banks:

### **1. Small banks**

They operate on a limited scale via branch banking with almost all of the amenities provided by the big banks, and as a result, they are well-known among the general public. They do, however, have smaller market shares and deposits than they do [6]–[8].

### **2. Big Banks**

These well-known banks have multiple branches, operate in major cities, and unquestionably employ more people than tiny banks. Additionally, they are chosen by many retail customers due to their enormous popularity.

### **3. Online banks**

Online banks operate electronically, as the name would imply, and have no physical locations. Additionally, even the most distant regions of the globe may access their official website via which they do business. Since most individuals now choose to use banking services from the convenience of their homes, it is a profitable choice for those with busy schedules.

## **Consumer Banking Services**

Let's also review the list of services offered by personal banks:

### **1. Savings Accounts**

It is a pertinent retail banking example pertaining to fundamental deposit accounts to preserve money with a respectable interest rate, sometimes referred to as interest-bearing accounts. They set aside the money for immediate needs and often impose withdrawal and transfer restrictions on cash.

### **2. Checking Accounts**

These bank accounts provide quick and easy and sometimes limitless cash deposits and withdrawals for recurring payments. These accounts, sometimes referred to as Transactional accounts, provide debit cards for online bill payment and shopping. Though they provide less interest than savings accounts, they nevertheless exist.

### **3. Debit Cards**

These bank-issued payment cards, often known as ATM Cards, are used for cashless purchases by deducting funds right from the checking account. Customers may use them at Automated Teller Machines ATMs and they connect directly to the bank account.

### **4. Certificates of Deposit CDs**

This savings account maintains a fixed capital balance for a preset period of time and receives interest payments from the issuing bank. Consumers get both the principal amount and the interest when they cash their checks.

## 5. Credit Cards

Credit cards are instruments for borrowing money from banks for online purchases with a set credit limit. To prevent taking on credit risk, cardholders must pay back the whole balance plus any applicable interest until the payment due date or in a timely manner.

## 6. Mortgages

They represent the capital amounts that customers borrowed from banks or other financial organizations to purchase a house. Furthermore, second mortgages imply the use of home equity as security for a loan.

## 7. Loans to individuals

These loans undoubtedly include borrowing money to pay for expenses from banks, internet lenders, or credit unions. Additionally, the multiple-purpose unsecured loan is repaid in monthly installments over a period of months or years.

### How has retail banking been affected by digitalization?

Digitalization has had a tremendous impact on the retail banking industry recently, transforming how clients interact with their banks and the services they provide. We're going to discuss some of the effects of digitization on retail banking.

#### Mobile and online banking

Thanks to digitization, customers may now access their bank accounts and services via websites and mobile applications. By allowing customers to check their account balances, transfer money to someone else, pay bills, and apply for loans at any time and from any place, this has enhanced accessibility and convenience for banking.

#### Online Payment Methods

Peer-to-peer payment systems the electronic movement of money from one person's bank account to another, mobile wallets, and virtual currencies like Bitcoin have all been made possible by the growth of digitalization. These choices have made it easier for customers to make payments both offline and online.

#### Chatbots and AI

AI Artificial Intelligence and chatbots are also being used by retail banks to automate routine activities and provide specialized customer support. While chatbots can swiftly address consumer concerns and address problems, AI can analyze customer data to discover trends and provide personalized financial advice.

#### Online Marketing

Retail banks are also using digital marketing techniques, such as social media, email marketing, and search engine optimization, to connect with consumers and promote their products and services. Banks may now more easily target certain client categories and boost their marketing ROI thanks to this [9], [10].

With end-to-end digital journeys, banks and NBFCs provide consumers a smooth and easy experience. Without going to a bank office, customers may monitor their funds and conduct transactions online. Banks and NBFCs may now provide speedy loans with shorter turnaround times TAT, including online loan applications and immediate approvals with direct money transfers, thanks to digitalization.

### **Verification of identification online**

Services that employ biometrics and other technologies to verify clients' IDs have also been established as a consequence of digitalization. As a consequence, there is a lower chance of fraud and more security. In recent years, India's retail banking industry has seen a striking transformation towards digitization. The Reserve Bank of India reported that from 8.8 billion in 2016–17 to 34.3 billion in 2020–21, digital transactions surged in India. As more Indians grow tech-savvy and adopt digital financial services, this trend is anticipated to continue. To summarize, digitization has transformed retail banking, enabling banks to provide their customers with more convenient, customized, and efficient services.

## **DISCUSSION**

### **How are retail banks making money?**

Deposits made by clients at retail banks provide funding. These banks provide loans to customers who request loans at interest rates that are greater than the interest rates they give depositors on the principle amount by using the money that customers deposit with them. Retail banks earn money off of this disparity in interest rates. Along with their assets and services in the capital markets, retail banks also make money via fees for a variety of services, such as account opening fees, brokerage costs, loan processing fees, credit card fees, etc. All retail banks in India are subject to regulation by the Reserve Bank of India RBI. It has the authority to control the money that retail banks are obligated to keep on deposit with them, ensuring that withdrawals are open to everyone. Additionally, it gives banks the money they need to operate on a daily basis.

### **Corporate banking vs retail banking**

While corporate banks serve companies, retail banks focus on their customers. These two banks' numerous products have quite distinct offerings for their customers. Although it doesn't serve huge corporations, the retail bank offers services to individuals and small companies. Financial transactions at retail banks are substantially smaller than in corporate banks, and they generate the majority of their earnings by setting a margin between the interest they charge depositors and the interest they charge borrowers. Corporate banks, on the other hand, largely generate income from the interest and fees they charge for the services they provide to major firms. Along with asset management services, these banks also provide investment banking services to the general public.

### **Advantages of personal banking**

Here are a few advantages of using retail banking:

- a. Provides customized client services with the aid of a relationship manager.
- b. From deposits to loans, a variety of goods and services are offered under one roof.



- c. Deposits like FDs give returns that are guaranteed.
- d. Innovative goods that are conveniently accessible via netbanking
- e. Numerous banks and NBFCs may be found here.
- f. Access personal financial products at any time and from any location.

### **What impact has retail banking had on rural India?**

Retail banking services have increased in rural India as a result of the Internet and cellphones being more widely available. To handle low-value transactions in rural India, the government, NBFCs, and banks have established many financial inclusion initiatives. As a result, practical, cheap financial tools have been created, including the Kisan Credit Card or self-help groups. By expanding the use of ATMs like Indicash ATMs, which offer a variety of banking operations including cash withdrawals, balance enquiries, mini statements, and fund transfers, retail banking has also significantly improved the accessibility of money in rural India. The majority of these ATMs are found in India's rural and semi-urban regions, where access to financial services may be difficult. These ATMs are not affiliated with any one bank.

### **What is the retail banking industry's future?**

The future of retail banking is expected to be significantly impacted by technology and changing client preferences. Let's discuss some trends that will probably influence how retail banking develops in the future.

#### **Personalization**

As industry rivalry heats up, banks will aim to stand out by offering more customized services. This might mean using more targeted marketing and communication strategies together with consumer-specific products and services.

#### **AI and machine learning integration**

Artificial intelligence AI and machine learning ML will be used by banks more and more to automate procedures, boost productivity, and enhance the customer experience. This includes risk management, fraud detection, and chatbots for customer service. Predictive analytics is the use of data, statistical algorithms, and machine learning methods to estimate the likelihood of future events based on previous data.

#### **Cashless Transactions**

It's anticipated that cashless payments will spread even farther in the future as mobile payments and digital wallets grow in popularity. By providing additional payment methods and making sure their systems are trustworthy and safe, banks will need to adjust to these developments.

#### **Meta, VR, and AR use**

Virtual reality VR in retail banking employs computer-generated, realistic simulations of real-world locations to improve the client banking experience.

Customers may have a better experience thanks to augmented reality AR, which employs technology to superimpose digital components onto the actual environment. In retail banking, metadatadata that describes other datais used to increase the information's accuracy and

customer-relevantness. Meta, VR, and AR technologies have the potential to revolutionize retail banking in the near future by increasing the customer experience, boosting sales and marketing, improving training and education, and upgrading risk management.

### Account Consolidation

Clients and financial institutions in retail banking may benefit greatly from account aggregation platforms. They may promote financial inclusion, expedite loan procedures, and make it easier to share financial data. Account aggregators seem to have a promising future in retail banking, with advantages for both clients and institutions. Account aggregators are anticipated to play a big part in the future of retail banking because to the rising adoption of digital technology and the growing demand for individualized financial services.

### CONCLUSION

By offering both consumers and small companies a broad choice of financial goods and services, retail banking services play a crucial part in the financial ecosystem. Retail banks provide financial inclusion, economic stability, and individual financial well-being via their broad range of services. Retail banking services are crucial for promoting financial inclusion, economic growth, and a stable personal financial situation. The sector's capacity to adapt and dedication to satisfying the various demands of its clients are shown by how they have changed in response to technology developments and shifting consumer expectations. Finding a balance between innovation, client focus, and regulatory compliance will be essential for continued success in the business as retail banking continues to develop.

### REFERENCES:

- [1] H. T. Tsou and Y. W. Huang, Empirical study of the affecting statistical education on customer relationship management and customer value in hi-tech industry, *Eurasia J. Math. Sci. Technol. Educ.*, 2018, doi: 10.29333/ejmste/81295.
- [2] S. Yerpude and T. K. Singhal, Internet of things based customer relationship management - A research perspective, *Int. J. Eng. Technol.*, 2018, doi: 10.14419/ijet.v7i2.7.10860.
- [3] K. Kantorová and P. Bachmann, Social customer relationship management and organizational characteristics, *Inf.*, 2018, doi: 10.3390/info9120306.
- [4] A. Dalili and M. Beheshtifar, Exploring the Benefits of Customer Relationship Management Amir, *Spec. J. Knowl. Manag.*, 2018.
- [5] D. P. Sirait, Pengaruh Customer Relationship Management Dan Kualitas Pelayanan Terhadap Kepuasan Pelanggan The Effect Of Relationship Management And Service Quality On Customer Satisfaction, *J. Dig. Mark.*, 2018.
- [6] L. Arora and B. K. Sharma, Social customer relationship management: A literature review, *Eurasian Journal of Analytical Chemistry*. 2018.
- [7] R. Kanafi, Pengaruh Customer Relationship Management Terhadap, *J. Ilmu dan Ris. Manaj.*, 2018.

- [8] S. Diffley, P. McCole, and E. Carvajal-Trujillo, Examining social customer relationship management among Irish hotels, *Int. J. Contemp. Hosp. Manag.*, 2018, doi: 10.1108/IJCHM-08-2016-0415.
- [9] S. Pada *et al.*, Analisis Pengaruh Kualitas Layanan, Nilai Nasabah, Dan Customer Relationship Management Terhadap Kepuasan Nasabah Serta Loyalitas Nasabah, *Diponegoro J. Manag.*, 2018.
- [10] I. C. C. Chan, D. K. C. Fong, R. Law, and L. H. N. Fong, State-of-the-art social customer relationship management, *Asia Pacific J. Tour. Res.*, 2018, doi: 10.1080/10941665.2018.1466813.

## CHAPTER 17

### CORPORATE BANKING AND SERVICES: KEY CHALLENGES

---

Dr Rashmi Akshay Yadav, Assistant Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id- rashmiakshay\_yadav@cms.ac.in

#### ABSTRACT:

Corporate banking is essential for streamlining financial transactions and providing specific solutions to companies of all sizes and in a variety of sectors. This summary provides a general review of corporate banking and related services, highlighting its important roles, changing environment, difficulties, and prospects. The study starts out by describing corporate banking as a specialized subset of banking services designed to meet the specific financial requirements of companies, ranging from small firms to major corporations. It highlights the role played by corporate banks in delivering crucial financial services including risk management, cash flow optimization, and loans, among others. The study includes a sizable section on how corporate banking services have changed in response to technology development. It talks about the emergence of online platforms for transactional operations, the digitalization of corporate banking procedures, and the incorporation of data analytics and artificial intelligence to improve decision-making and customer experience.

#### KEYWORDS:

Artificial Intelligence, Businesses, Corporate Banking, Financial Solutions, Risk Management.

#### INTRODUCTION

In many big commercial and bulge bracket banks, the corporate banking section is a crucial connection between the commercial banking group and the capital markets/investment banking teams. Corporate banking departments provide major firms financial services such cash management, payment processing, credit products, and hedging techniques. The majority of these businesses are traded publicly. When discussing the supply of banking services to companies in general, non-finance persons often use the phrase corporate banking incorrectly. nevertheless, there is considerably more subtlety when it comes to banking for businesses [1]–[3]. Large enterprises' financial requirements are met through corporate banking, a sort of banking service. In the corporate commercial and industrial sectors, it seeks to assist lucrative expenditures for business installation, modernization, growth, and diversification. It is one of the key components of the growth of the national economy. One of the most specialized banking services is corporate banking. For both major enterprises and small and medium-sized organizations, corporate banking provides a range of financial solutions, including credit management, asset management, cash management, and underwriting.

#### The Range of Business Banking

There are typically three sections in a bank that provide financial services to corporate customers as opposed to individual, retail clients, as shown in the image above. These are the corporate banking team, the business banking team commonly referred to as small business, and the commercial banking team. The simplest approach to locate a potential customer on this graph is

based on their size and amount of intricacy. Corporate banking prospects are often very big and highly complicated enterprises which need sophisticated banking and credit solutions, while small businesses are typically characterized by substantially smaller revenues and relatively basic operations. A corporate banker has to be well-versed in their sector and experienced with the systems and procedures of their company in order to supply complicated banking products and credit solutions. Syndicated lending is one of the most popular complicated credit options offered to corporate banking customers.

### **Syndicated Lending: What Is It?**

A multilateral lending arrangement known as a syndicated loan brings corporate bankers from many financial institutions together to give credit and split the risk of funding a corporate borrower. Given that they are often big, publicly listed corporations, corporate banking customers frequently borrow money in very high dollar quantities. While some of this credit is provided directly by financial institutions or other private lenders such as private equity firms, pension funds, etc., other debt such as revolvers, CAPEX loans, and commercial real estate financing is issued via the corporate bond market. For instance, a bilateral loan agreement may allow a business or commercial banking division of an institution to cap credit to a single individual or group of a certain risk at \$10MM. Additionally, once its corporate hold limit is reached, the same bank's corporate banking section may get engaged in arranging multilateral lending through a syndicate. The hold limit amount is determined by concentration risk from any one name or group on the lending institution's balance sheet, which also affects a firm's participation in a syndicate [4], [5].

## **DISCUSSION**

### **Business and commercial banking vs corporate banking**

As was already said, the scale and complexity of the borrowing client's activities, as well as the kind of financial services and products it needs, are what distinguish business/commercial banking from corporate banking. Other significant variations include:

- a. **Portfolio size:** A corporate banker is more likely to have no more than 8–10 extremely big, highly complicated customers, while a business banker may have several hundred small company clients in their portfolio.
- b. **Lending structures:** Compared to corporate bankers, commercial bankers and small company bankers in particular have access to a variety of loan products that are far more uniform in character. As a result, underwriting the risk is simpler and less specialized. This implies that people with little to no expertise in the financial services industry or exposure to the capital markets may nonetheless efficiently arrange credit under the rigorous rules and regulations of the company. The percentage of secured credit Most small business and commercial lenders will also accept alternative recourse, also known as indirect security, like a personal guarantee from the business owners, in addition to loans that are senior first ranking and directly secured by specific collateral. The percentage of unsecured credit tends to rise dramatically as debtors are bigger and more complicated. For corporate debtors, security often depends on floating charges and the corporation's capacity to generate cash. The agreement between the company and companies in the syndication specifies priorities and waterfall. Large private enterprises and widely held public companies may get external remedies guarantees from other

linked corporations rather than from private people. This collateral's design is a component of the ring-fencing that establishes the total worth of the borrowing entity.

- c. **Lending vs. advisory relationships:** A commercial bank's primary business strategy is to make loans and earn net interest revenue on active loan assets. In order to get or keep higher margin investment banking business as the relationship and company expand, corporate bankers use loans as a stepping stone to become lead arrangers on syndicated projects. Fees for advisory services, such as underwriting potential M&A deals, public debt and stock issues, etc., are significant and often surpass the value of the relationship with the corporate bank.

### What Services Are Offered by Corporate Banking?

Corporate banking is concerned with addressing the ongoing operational requirements of businesses, organizations, and institutions, as well as their treasury management. As a result, it provides services that other institutions, including commercial banks, do not. The following services provided by corporate banking should be emphasized: Solutions for controlling the company's money are provided by cash management.

- a. **Trade Finance:** Services geared at international business enterprises.
- b. **Working Capital:** Targeted approaches to short-term working capital and liquidity management for businesses.
- c. **Securities Services:** Asset management for money.
- d. **Supply Chain Finance:** Tools for maximizing businesses' working capital.
- e. **PSD2:** A mechanism to securely conduct transactions and payments on digital platforms.
- f. **Personal manager:** A personal financial adviser controls client-bank communication.
- g. **Preferred treatment:** They get preferred treatment in order to skip lines and wait periods.
- h. **Payment gateways and POS:** Tools for accepting credit card payments for products and services.

### Business Model for Corporate Banking

Corporate banking's business strategy is centered on developing tight, strategic relationships with its customers while offering them worldwide solutions tailored to their needs while taking into consideration the unique characteristics of their industry and the marketplaces in which it competes. Such banks' value-adding is supported by a number of pillars, including the cooperation of teams with diverse geographic locations and economic activity specializations, as well as the assistance and input of specialists in fields like Structured Financing, Treasury, etc.

### Features of Corporate Banking

The following are the characteristics of corporate banking. Information regarding how your business account has been used or handled is included in the company's credit history. It influences things like the market price of the firm's shares and the interest rates levied on loans to the company, among other things. Authority: The board of directors must provide its consent before a company may open corporate bank accounts. This indicates that they must have consent by a formal vote or corporate decision. The treasurer often sets up corporate banking for a company.

A bank's commercial banking section often provides assistance to both medium-sized and big businesses. The information in corporate accounting belongs to the company as a whole rather than to any particular board members as private property. This is so that businesses may be treated as distinct legal entities under the law. It suggests that the accounting procedures used by the business have some level of independence. It also means that a corporation's board of directors' personal creditors have no claim to the funds in the corporate account [6]–[8].

### **Corporate Banking Benefits**

Corporate banking is a fantastic choice for businesses of all sizes because of all its benefits. The following are the advantages:

#### **1. Enables your company to grow**

Your company may easily grow with the assistance of corporate banking. Your account may be used to collaborate with other companies or make bulk payments, which is useful when you need to set aside extra money for staffing. Additionally, they provide more transparent information so you can see how your business is doing.

#### **2. Streamlines loan procedures**

A corporate bank account gives prospective investors knowledge about your company's financial standing, which may assist them in making a more knowledgeable investment choice. If your business has a corporate account, your chances of getting funding from a financial institution or investment capital from an individual investor increase.

#### **3. Encourages your business to project a more upscale image**

People will see a business account as a sign of authenticity, therefore having one is crucial. Having a business account has the extra advantage of allowing you to handle all of your funds under one name rather than under many ones. How skillfully you handle your company's financial matters strongly affects how others see your business.

#### **4. Provides thorough financial strategies and processes**

Corporate banks provide thorough reports on the operations of businesses, enabling them to determine which expenditures should be cut, which industries need more investment, and which revenue streams are the greatest. This is crucial for startup companies.

#### **5. An easy tax audit**

To benefit from the higher level of transparency that comes with owning one, your company has to set up a corporate account. Based on your company's net income, it may assist you in precisely calculating the percentage of your business that is taxed.

### **The Loss Leader in corporate banking?**

Corporate banking, which acts as the center of a financial institution's larger capital markets operations, is often situated inside the investment bank division. Corporate banking is closely related to an investment bank's M&A advice and capital markets sections.



This implies that corporate banking often serves as a loss leader inside the investment bank to strengthen overall investment banking ties. Because they might be cross-sold on extra banking services or because they want to establish a long-term connection, banks often make sweetheart loan offers to big, sophisticated clientele. In order to support company operations, clients often need corporate banking products such term loans, revolving credit facilities, and cash management solutions. When a large corporation decides to access the capital markets and must distribute and fees, or wallet to the capital markets teams of various banks with which they have done business, they frequently take into account the prior support corporate bankers provided them when determining how much to allocate to each bank.

### **What Separates Corporate Banking from Commercial Banking?**

The fundamental operating principle of commercial banks is really rather similar to that of corporate banks, however unlike corporate banking, commercial banking is a separate business line with the primary objective of making money via its lending activities. For instance, a corporate bank might accept a pitiful 8% lending return if the investment bank considers those returns acceptable given the potential for future interest rate derivatives, debt capital markets, or equity capital markets business, whereas the commercial bank will only lend to a small business if it clears lending returns of, say, 20%. Therefore, corporate banking transaction committees consider prior investment banking revenues and the possibility of longer-term connections when deciding whether or not to offer credit.

### **What is corporate digital banking?**

Corporate banking services including account onboarding, account setup, account administration and maintenance, and transaction management are all provided via online digital channels and are referred to as digital corporate banking. By offering integrated account services in a simple, self-serve format, digital corporate banking improves convenience, experience, and access for corporate customers.

### **What are the advantages of digital corporate banking for businesses?**

The advantages of digital corporate banking for banks include simpler and quicker client acquisition, improved customer experiences and thus increased customer loyalty, and a quicker time to market for new and cutting-edge goods and services. Additionally, it lowers operating expenses, directs sales and operations toward value-added services as opposed to routine administrative duties, and decreases expenditures in physical assets.

### **Corporate Banking and Services: Promoting Economic Development**

Corporate banking is essential for meeting the financial requirements of companies of all sizes, from major corporations to mid-sized firms. It encompasses a range of financial products and services designed specifically to satisfy the intricate and varied needs of corporate customers. These services are created to aid companies in attaining their expansion goals, controlling their financial difficulties, and streamlining their financial processes [9], [10].

### **The Principal Services Provided by Corporate Banking**

Corporate banks provide short-term lending options to assist firms manage their ongoing operating expenditures including payroll, inventories, and overhead.

- a. **Term Loans:** These loans have a longer repayment period and help companies finance capital expenditures, growth plans, and other strategic activities.
- b. **Commerce Finance:** Corporate banks promote global commerce by providing services such as documentary collections, export and import finance, and letters of credit. These services aid in reducing the risks involved in international business transactions.
- c. **Cash Management:** It's critical for firms to effectively manage cash flows. Corporate banks provide cash management options that improve working capital efficiency, payment process efficiency, and liquidity optimization. Services for managing investments, foreign currency exposure, and interest rate risk are provided by treasury to corporate customers. These services aid in capital preservation and profit maximization. Risk management services provided by corporate banking assist organizations in hedging against a variety of financial hazards, including interest rate and foreign currency risk. Risk reduction often involves the usage of derivative goods. Corporate banks provide organizations engaged in mergers, acquisitions, or divestitures with advice services, funding choices, and assistance with their due diligence.
- d. **Syndicated Loans:** Corporate banks provide syndicated loans involving numerous lenders for greater financing requirements, enabling enterprises to access significant capital.
- e. **Project Finance:** Corporate banks provide assistance in arranging loans for significant infrastructure and development projects, which often need the use of intricate cash flow models and risk analyses.
- f. **Employee Benefit Services:** Corporate banks provide benefits administration services such as processing employee payroll, retirement planning, and other related services.

### Services for Corporate Banking Advantages

- a. **Solutions That Fit:** Corporate banking services are tailored to the unique requirements and financial goals of each company customer.
- b. **Knowledge:** Corporate bankers have in-depth knowledge of their respective industries and financial skills, which enables them to provide customers with insightful counsel and direction.
- c. **Financial Efficiency:** Through corporate banking solutions, businesses may streamline their financial processes, save expenses, and improve cash flow management.
- d. **Access to money:** Corporate banking gives companies access to a variety of money sources, which enables them to finance development and growth activities.
- e. **Risk management:** By using the risk management services and products provided by corporate banks, businesses may reduce their exposure to financial risks.
- f. **International Reach:** Corporate banks provide the resources and experience required for companies doing international commerce to negotiate foreign markets and handle cross-border transactions.

### CONCLUSION

In order to meet the intricate financial demands of enterprises, organizations, and institutions, corporate banking and services are essential elements of the financial landscape. These services go beyond simple transactional functions and include a variety of specialized solutions that promote growth, control risks, and streamline financial activities. In conclusion, corporate banking and services are crucial contributors to the expansion and stability of the economy.

Corporate banks enable organizations to effectively negotiate the complexity of contemporary commerce by providing specialized financial solutions, risk management know-how, and strategic direction. Corporate banks must continue to adapt, develop, and work with their customers to achieve success as the business environment changes and sustainability becomes more important.

## REFERENCES:

- [1] N. Abd Aziz, The influence of coproduction's factors and corporate image toward attitudinal loyalty: Islamic financial banking services delivery in Malaysia, *J. Islam. Mark.*, 2018, doi: 10.1108/JIMA-10-2016-0080.
- [2] O. I. Moisescu, From perceptual corporate sustainability to customer loyalty: A multi-sectorial investigation in a developing country, *Econ. Res. Istraz.*, 2018, doi: 10.1080/1331677X.2017.1421998.
- [3] W. W. P. Ming, N. E. Tee, and C. C. Hua, Transformational Leadership, Motivation, and Organizational Commitment towards Corporate Social Responsibility in Banking Service Industry, Sarawak., *Glob. Bus. Manag. Res.*, 2018.
- [4] S. M. Setyawati and M. C. Raharja, Trust dimensions model in creating loyalty stage for service consumers of Sharia rural banking, *Eur. Res. Stud. J.*, 2018.
- [5] M. Hafez, Measuring the impact of corporate social responsibility practices on brand equity in the banking industry in Bangladesh: The mediating effect of corporate image and brand awareness, *Int. J. Bank Mark.*, 2018, doi: 10.1108/IJBM-04-2017-0072.
- [6] K. Andrzejuk, Non-Interest Income and Profitability in Private Banking. Evidence from Liechtenstein, *Int. J. Synerg. Res.*, 2018, doi: 10.17951/ijsr.2017.0.6.175.
- [7] H. M. Awan, S. Hayat, and R. Faiz, Antecedents and consequences of corporate image: Conventional and islamic banks, *RAE Rev. Adm. Empres.*, 2018, doi: 10.1590/S0034-759020180407.
- [8] N. Sari, Service Quality, Company Image, Trust and Its Influence On Customers' Satisfaction and Loyalty at Bank Shariah Mandiri BSM Meulaboh Branch Office, *J. Ilm. Peuradeun*, 2018, doi: 10.26811/peuradeun.v6i2.221.
- [9] L. Miletić, M. Ilić, and E. Kastratović, The role of financial institutions from the aspect of innovated banking products and services as the reply of banks in Serbia to the changes in the environment, *Int. Rev.*, 2018, doi: 10.5937/intrev1802111m.
- [10] Z. A. Mohiuddin, R. Begum, and F. Z. Rizvi, Ineffective Awareness of Islamic Banking Products as A Root Cause of Reluctance for the Same by Corporate Customers: A Case Study of MCB – NIB Merger in Pakistan, *Eur. Sci. Journal, ESJ*, 2018, doi: 10.19044/esj.2018.v14n13p134.

## CHAPTER 18

### INVESTMENT BANKING AND CAPITAL MARKETS: GLOBAL FINANCIAL ECOSYSTEM

---

Dr Chaya Bagrecha, Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-dr.chayabagrecha@cms.ac.in

#### ABSTRACT:

The global financial ecosystem is not complete without investment banking and capital markets, which enable capital flow, business development, and economic progress. This summary provides a thorough review of the activities of the capital markets, the role of investment banking, changing trends, problems, and the complex interactions between these vital industries. The study begins by describing investment banking as a field focused on offering a variety of financial services, such as mergers and acquisitions M&A counseling, underwriting, securities issuance, and strategic financial consulting. It emphasizes the crucial role that investment banks play in bringing together investors and companies who are looking for possibilities and financing. The study's main subject is how capital markets work in the context of investment banking. It examines how capital markets act as venues for the creation, exchange, and trading of a range of financial products, including derivatives, bonds, and stocks. The relevance of effective capital markets in setting the cost of financing for firms and promoting economic activity is highlighted in the study.

#### KEYWORDS:

Business Development, Financial Ecosystem, Financial Products, Investment Banking, Mergers Acquisitions.

#### INTRODUCTION

Investment banking is a branch of banking that coordinates massive, intricate financial transactions like mergers or the underwriting of initial public offerings IPOs. In addition to underwriting the issuing of new securities for a company, municipality, or other entity, these banks may generate money for businesses in a number of other ways. They could oversee an IPO for a business. Additionally, investment banks provide guidance throughout mergers, purchases, and reorganizations. Investment bankers are professionals who are acutely aware of the state of the market for investments. They assist their customers in navigating the difficult high finance industry [1]–[3]. Investment banks deal with the selling of securities, mergers and acquisitions, reorganizations, and broker transactions for institutions and individual investors. They also underwrite new debt and equity securities for all kinds of firms. Investment banks advise issuers on the offering and placement of shares as well. The biggest include Goldman Sachs, Morgan Stanley, JPMorgan Chase, Bank of America Merrill Lynch, and Deutsche Bank. Numerous significant investment banking systems are subsidiaries or affiliates of bigger financial organizations.

Investment banks often support significant, complex financial transactions. If the investment banker's client is contemplating an acquisition, merger, or sale, they could provide guidance on

how much a firm is worth and the best way to organize a transaction. The duties of investment banks may also include preparing the paperwork for the U.S. Securities and Exchange Commission SEC required for a firm to go public and issuing securities as a method of obtaining capital for the client groups. Businesses and institutions turn to investment banks for advice on how to best plan their development because, in theory, investment bankers are experts who have their finger on the pulse of the current investing climate. Investment bankers can tailor their recommendations to the current state of economic affairs. Banking Regulation and Investment.

After the 1929 stock market crisis caused several bank failures, Congress implemented the Glass-Steagall Act in 1933. The legislation was designed to keep commercial and investment banking distinct. It was thought to be very dangerous to combine commercial and investment banking activity, which may have made the 1929 catastrophe worse. This is due to the fact that investors hurried to withdraw their money from banks in order to fulfill margin calls and for other reasons when the stock market plummeted, but some banks were unable to comply since they had also invested their customers' money in the stock market. Prior to the passage of Glass-Steagall, banks had the ability to use regular depositors' money for speculative ventures like trading in the stock market. Banks increased their speculative holdings as these businesses got more profitable, ultimately placing the money of depositors at danger. The Glass-Steagall Act was finally repealed by Congress in 1999 because some in the banking industry thought its requirements were too onerous. Thus, the distinction between commercial and investment banks was abolished by the Gramm-Leach-Bliley Act of 1999. Most large banks have resumed combining investment and commercial banking activities after the repeal [4], [5].

### **Underwriting for initial public offerings IPOs**

When a business wishes to issue stock or bonds, investment banks essentially act as a middleman between the firm and the investors. The investment bank offers assistance in managing regulatory requirements and pricing financial products to optimize profit. Investment banks often purchase all or a large portion of a business's shares straight from the firm when it conducts its first public offering IPO. The investment bank will then sell the shares on the market in place of the firm undertaking the IPO. The firm itself has it much simpler as a result since the IPO is essentially contracted off to the investment bank. Furthermore, the investment bank will earn since it will often markup the price of its shares above what it originally bought for them. It also assumes a significant degree of risk by doing so. The investment bank might lose money on the purchase if it turns out that it overpriced the company since in this scenario, it will often have to sell the shares for less than it originally paid for it. Experienced analysts utilize their skills to appropriately price the stock as best they can.

### **Investment banking example**

Imagine that a hardware and paint supply chain called Pete's Paints Co. wants to go public. Owner Pete contacts José, an investment banker who works at a bigger investment banking business. José on behalf of his business and Pete come to an agreement wherein José on behalf of Pete agrees to purchase 100,000 shares of Pete's Paints for the company's initial public offering IPO at a price of \$24 per share, a number that the investment bank's analysts arrived at after considerable deliberation. After submitting the necessary papers, the investment bank purchases the 100,000 shares for \$2.4 million and starts selling the stock at a price of \$26 per share. The investment bank must lower the price to \$23 a share in order to sell the remaining shares since it

is unable to sell more than 20% of the shares at this price. The investment bank has earned \$2.36 million for the IPO agreement with Pete's Paints [ $20,000 \times \$26 + 80,000 \times \$23 = \$520,000 + \$1,840,000 = \$2,360,000$ ]. In other words, since Pete's Paints was overpriced, José's company lost \$40,000 on the sale. Investment banks often face competition from one another for IPO projects, which may lead them to raise the amount they are ready to pay to close the transaction with the firm that is going public. The majority of the time, however, more than one investment bank will be underwriting securities in this manner. Each investment bank will have less to earn from this, but they will also be at lower risk.

### **Investment Banks: What Do They Do?**

Investment banks often support significant, complex financial transactions. If the investment banker's client is contemplating an acquisition, merger, or sale, they could provide guidance on how much a firm is worth and the best way to organize a transaction. In essence, they assist with the selling of securities, mergers and acquisitions, reorganizations, and broker transactions for both institutions and individual investors, in addition to underwriting new debt and equity securities for all kinds of firms. Additionally, they could issue securities to raise money for the client groups and provide the paperwork required by the US Securities and Exchange Commission SEC for a firm to go public.

### **What Function Do Investment Bankers Serve?**

Investment banks employ professionals that assist businesses, governments, and other organizations in the planning and management of significant projects. By detecting project hazards before the client goes ahead, these professionals help their customers save time and money. Theoretically, investment bankers ought to be industry specialists with a pulse on the state of the market for investments. Investment banks are consulted by businesses and organizations for guidance on how to effectively plan their future growth. Investment bankers use their knowledge to customize their advice for the current economic climate.

### **An Initial Public Offering IPO is what, exactly?**

An initial public offering IPO is the process of selling new shares of a private company to the general public.

A business may raise funds from the general public by issuing public shares. For a company to do an IPO, the SEC and exchange standards must be met. To underwrite their IPOs, businesses use investment banks. Every step of the IPO process, including due diligence, document preparation, filing, marketing, and issuance, is handled by the underwriters.

### **A Capital Markets Group: What is it?**

A section inside a bigger corporation known as a capital markets group leverages its knowledge of the financial markets to provide financial services to certain clientele. Capital markets organizations may assist businesses in achieving a broad range of financial objectives, including the conception and implementation of share offerings and the issuance of debt [6]–[8]. A capital markets group may provide financial services such as investment management, loans, stock sales and trading, research, consultancy, and a wide range of other financial services.



## **Recognizing Capital Markets Sectors**

A capital markets group may provide a broad range of services, depending on the demands of its clients and the company's overall priorities. Examples include aiding a healthcare organization in leasing or financing pricey equipment, assisting a startup in finding investors, assisting an established business in expanding or even in providing financing for clients of the business, and other operational chores like corporate restructuring. Capital markets groups successfully support businesses in operating their operations and remaining competitive in the face of shifting or unpredictable circumstances by addressing increasingly complex sets of problems and possibilities. The ensuing collaboration gives a firm an improved capacity to negotiate the complex economic and commercial environment by offering analysis, guidance, and top-notch execution that supports a business' success. The goal of capital markets teams is to strengthen these kinds of strategic connections in order to get a thorough grasp of customers' requirements and provide advice and solutions that will significantly impact their business.

## **Areas of Expertise and Services Provided by Capital Markets Groups**

### **Services for Investment Banking**

Capital markets organizations provide comprehensive, strategic advice and solutions that significantly improve the prospects of their customers, from syndicated loans to import solutions and integrated receivables.

### **Acquisitions and Mergers**

With their most important and complicated business concerns, such mergers and acquisitions, capital markets groups assist customers. This kind of knowledge often comes from seasoned, senior bankers who can use their deep industry connections and specific knowledge to make sure that every merger or acquisition deal is carried out perfectly.

### **Capital Markets for Debt**

Through a variety of sophisticated solutions, capital markets firms assist businesses in raising funds and putting together finance. These teams assist businesses in structuring and implementing finance solutions. They are often led by senior bankers with extensive industry experience.

### **Capital Markets for Equity**

The creation and implementation of stock offers, such as initial public offerings IPOs, follow-on offerings, and convertible notes, are assisted by capital markets organizations. Potential issuers may get guidance and instruction from capital markets organizations on transaction size, timing, structure, execution options, and underwriter selection.

## **Knowing the Capital Markets**

### **Different Capital Markets**

The two forms of capital markets are primary and secondary. The primary market is where fresh shares or securities are traded. A primary market is one where a business issues fresh securities in return for money from a buyer who is an investor. It is concerned with the exchange of newly



issued stocks and other assets that are offered to investors. Investors swap current or previously-issued securities in the secondary market. An effective method for their resale must be available once fresh securities have been offered in the main market. Investors may trade or sell their current shares in secondary markets. The stock market and bond market represent another significant divide in the capital market based on the kind of securities traded or purchased [9], [10].

## DISCUSSION

### The Function of Capital Markets: Promoting Capital Allocation and Economic Growth

A key element of the financial system, capital markets are crucial for promoting economic expansion, facilitating capital allocation, and allowing effective risk management. They act as marketplaces for the exchange of different financial products, bringing together lenders and borrowers in a sophisticated network that facilitates both short-term trade and long-term investing. Here are a few crucial functions that the capital markets perform:

1. **Money Formation:** Facilitating the raising of money is one of the capital markets' main purposes. Financial instruments such as stocks and bonds are issued by businesses, governments, and other organizations to generate money for a variety of goals, such as growth, R&D, and infrastructure projects. Organizations may use this procedure to get the funding they need to develop and innovate.
2. **Creation of Liquidity:** Capital markets create liquidity by making it simple for investors to acquire and sell financial products. For investors to be able to exit their holdings when necessary and for the market to remain stable, this liquidity is crucial.
3. **Effective Resource Allocation:** Capital markets assist in directing money to its most beneficial use. Capital markets use the price mechanism to distribute resources to businesses and projects with the best prospects for development and ROI, promoting economic efficiency.
4. **Investment Opportunities:** Individuals, institutional investors, and funds may all participate in the capital markets. Depending on their desired rate of return and tolerance for risk, investors may choose from a variety of financial instruments.
5. **Price Discovery:** Market prices for various financial instruments are established as a result of trading activity on capital markets. These prices represent the general opinions of market players on the worth and risk of certain securities.
6. **Access to Diverse Financial products:** Stocks, bonds, options, futures, and derivatives are just a few of the many financial products that may be accessed via capital markets. As a result, investors may create diverse portfolios that are suited to their financial objectives.
7. **Risk Management:** The capital markets provide methods for managing risk, such as derivatives, that allow investors and businesses to protect themselves against conceivable negative changes in interest rates, currency rates, and commodity prices.
8. **Mergers and Acquisitions M&A:** By giving businesses a platform to acquire funds for funding such operations, capital markets support mergers, acquisitions, and other corporate transactions.
9. **Wealth Creation:** Businesses build value for their shareholders when they raise money, grow, and prosper. Wealth accumulation and economic success are aided by this.

10. **Openness and responsibility:** Regulators have obligations that encourage openness and responsibility for listed firms. Investors will feel more secure knowing that correct information is accessible to make wise decisions. Global capital markets are becoming more integrated, enabling investors to explore opportunities and diversify their portfolios beyond national boundaries.

Capital markets are essential for fostering economic expansion, effective capital allocation, and risk management. They provide a framework for interaction between investors and issuers, resulting in the most effective use of resources and the creation of value. Capital markets provide for the financing of firms, the discovery of investment possibilities for investors, and the promotion of economic growth.

### **Investment banking's function**

By enabling diverse financial operations for businesses, governments, and other organizations, investment banking contributes significantly to the development of the global financial system. Its main duties consist of:

1. By issuing stocks, bonds, and other instruments on the capital markets, investment banks assist businesses in raising funds. They advise on the best timing, price, and offering structure before facilitating the sale of these securities to investors.
2. Investment banks provide assistance to businesses that are purchasing, selling, or merging with other businesses through mergers and acquisitions M&A. They carry out complex financial parts of the transaction, negotiate terms, organize transactions, and provide value research.
3. Investment banks often take on the role of underwriters when issuing new securities. They promise to purchase from the issuer a certain amount of shares or bonds, which they then sell to investors. This assists issuers in reducing the chance that they won't be able to sell every security they offer.
4. Investment banks provide customers with strategic financial assistance on issues such company strategy, capital allocation, financial restructuring, and risk management. To reach their company objectives, they assist customers in optimizing their financial processes.
5. Investment banks carry out extensive research on a range of businesses, markets, and sectors. Investors and customers who depend on the insights to make wise financial choices would benefit from this study.
6. In order to make money, certain investment banks engage in trading operations that include the purchase and sale of financial assets such as stocks, bonds, derivatives, and commodities. They could also take on the role of market makers, arranging deals between buyers and sellers to provide liquidity to the markets.
7. Investment banks help their customers manage a variety of financial risks, such as interest rate risk, currency risk, commodity price risk, and others. They provide customers with derivative solutions that let them insure against these risks.
8. Financial instruments that are structured, such as asset-backed securities, mortgage-backed securities, and collateralized debt obligations CDOs, are produced by investment banks. These bundles create investable securities by combining different financial assets.

9. Initial Public Offerings IPOs: Investment banks facilitate IPOs for private firms, assisting them in becoming publicly traded. They provide direction on the listing procedure, regulatory compliance, and investor marketing.
10. Investment banks help businesses raise money via private placements, which entail selling securities to a small number of investors directly as opposed to through public markets.
11. Investment banks provide their customers strategic assistance on a variety of financial issues, such as cost reduction, cost restructuring, and other activities to enhance overall financial performance.

## CONCLUSION

Investment banking and capital markets are crucial foundational elements of the world financial system, allowing capital flows and promoting economic expansion. These industries provide a variety of services that let businesses raise money, investors invest, and governments manage debt and support public initiatives. In conclusion, the capital markets and investment banking are essential elements of the global financial ecosystem. In addition to generating funds, they facilitate transactions, manage risk, and provide insightful information. The vitality and resilience of the financial markets and the larger economy are facilitated by these sectors, which also support company strategy and enable effective capital allocation. For them to continue to succeed, they will need to keep up with changing investor tastes and technology improvements while upholding moral and legal norms. Investment banking is crucial for fostering economic expansion, enabling capital allocation, and preserving the stability of financial markets. It acts as a link between businesses in need of funding and investors looking for investment options while also offering customers in many sectors helpful financial insights and services.

## REFERENCES:

- [1] E. M. E. Abdullah, A. A. Rahman, and R. A. Rahim, Adoption of financial technology Fintech in mutual fund/ unit trust investment among Malaysians: Unified Theory of Acceptance and Use of Technology UTAUT, *Int. J. Eng. Technol.*, 2018, doi: 10.14419/ijet.v7i2.29.13140.
- [2] Hartono, Perbandingan Hasil Return Investasi Emas, Deposito, Reksadana, Obligasi dan Saham Sektor Perbankan Periode 2013 - 2018, *J. Ekon.*, 2018.
- [3] N. Nurmala, Analisis Pengembalian Keputusan Investasi Saham Dengan Pendekatan Capital Asset Pricing Model CAPM pada Perusahaan Perbankan Terdaftar di Bursa Efek Indonesia, *Balanc. J. Akunt. dan Bisnis*, 2018, doi: 10.32502/jab.v2i2.1173.
- [4] R. Waldron, Capitalizing on the State: The political economy of Real Estate Investment Trusts and the 'Resolution' of the crisis, *Geoforum*, 2018, doi: 10.1016/j.geoforum.2018.02.014.
- [5] H. A. Wahab, Revisiting the role of bank's capital, loan loss provisioning and risky assets to credit risk in Malaysia: An application of dynamic heterogenous panel technique, *J. Soc. Sci. Res.*, 2018, doi: 10.32861/jssr.spi6.466.471.

- [6] D. Wulansari And P. Prihantoro, Pengaruh Kinerja Keuangan Terhadap Harga Saham Yang Terdaftar Di Bursa Efek Indonesia, *J. Bus. Econ.*, 2018, Doi: 10.35760/Eb.2018.V23i1. 1815.
- [7] D. Wójcik, E. Knight, P. O'Neill, and V. Pažitka, Economic Geography of Investment Banking Since 2008: The Geography of Shrinkage and Shift, *Econ. Geogr.*, 2018, doi: 10.1080/00130095.2018.1448264.
- [8] A. Z. Nagimova, Raising arab capital: Experirnces of Russian regions, *World Econ. Int. Relations*, 2018, doi: 10.20542/0131-2227-2018-62-2-57-61.
- [9] Y. Bayar, M. D. Gavriletea, and Z. Ucar, Financial sector development, openness, and entrepreneurship: Panel regression analysis, *Sustain.*, 2018, doi: 10.3390/su10103493.
- [10] D. Busch, E. Avgouleas, and G. Ferrarini, Capital Markets Union in Europe, *Http://Www.Brookings.Edu/Research/Papers/2015/02/23-Capital-Markets-Union-Elliott*, 2018.

## CHAPTER 19

### ISLAMIC BANKING PRINCIPLES AND PRACTICES: A COMPREHENSIVE OVERVIEW

---

Dr Chaya Bagrecha, Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-dr.chayabagrecha@cms.ac.in

#### ABSTRACT:

Islamic banking, which is governed by rules derived from Shariah law, has evolved as a distinctive and quickly expanding subset of the global financial system. With an emphasis on Islamic banking's distinctive ethical framework, operational modalities, difficulties, and contributions to financial inclusion, this study provides an incisive review of the underlying concepts and practices that support the industry. The study opens with a description of the fundamental tenets of Islamic banking, such as the outlawing of interest *riba*, speculation *gharar*, and unjust enrichment. The idea of risk-sharing and ethical investment are emphasized, which are features of Islamic financial operations. It is investigated if incorporating Islamic principles into financial operations may advance economic equity and community wellbeing. The study places a lot of emphasis on the practical mechanisms of Islamic banking. It explores the many Islamic financial mechanisms that support transactions while upholding Shariah principles, such as *Murabaha* cost-plus financing, *Mudarabah* profit-sharing, and *Ijarah* lease. Also covered is the idea of *takaful*, an Islamic kind of insurance that places a strong focus on shared risk and collaboration.

#### KEYWORDS:

Gharar, Ijarah, Islamic Banking, Islamic Financial Operations, Mudarabah, Riba.

#### INTRODUCTION

Financial operations that follow Shariah Islamic law are known as Islamic banking, also known as Islamic finance or Shariah-compliant finance. Sharing in profits and losses and forbidding lenders and investors from collecting and paying interest are two key tenets of Islamic banking. In Islamic banking, creditors' interest payments are not collected by the banks. Instead, they partake in earnings and losses and make money via equity participation systems. Islamic finance is used in many Muslim nations and is very well-liked by Islamic populations since certain traditional banking procedures may be in conflict with Sharia. Around the globe, there are more than 1,900 mutual funds and more than 560 banks that adhere to Islamic values. According to a 2020 research by the Islamic Corporation for the Development of the Private Sector ICD and Refinitiv, the value of Islamic financial assets increased from \$2.17 trillion in 2015 to over \$4 trillion in 2020, and it is anticipated that this value would increase to approximately \$5.9 trillion by 2026. This expansion is partly attributable to the strengthening economy of Muslim nations, particularly those that have profited from increased oil prices [1]–[3]. Islamic banking is based on the principles of the Islamic religion as they apply to business dealings. The Quran, Islam's primary holy scripture, is the source of the concepts of Islamic finance. All transactions in Islamic banking must adhere to Shariah, the Islamic legal system based on the Quran's teachings. The *fiqh al-muamalat* are the regulations that govern business dealings in Islamic banking.

Employees of organizations that adhere to Islamic banking are trusted to do business while adhering to the core values of the Quran. Islamic bankers consult learned scholars when additional information or direction is required or they apply their own independent judgment based on research and customary practices. Usury and speculation are two major elements of conventional banking systems that are not permitted in Islamic banking.

Any kind of speculation or gambling, known as *maisir*, is categorically forbidden by shariah. Shariah forbids lending with interest as well. It is also forbidden to invest in anything that involves gambling, pork, alcohol, or any other thing that the Quran forbids. This makes Islamic banking a unique cultural expression of ethical investment. Islamic banks use equity participation mechanisms to generate income instead of the conventional practice of charging interest. If a bank loans money to a company, the firm will repay the loan without interest and instead give the bank a cut of its earnings. This is referred to as equity participation. The bank also loses out if the company fails or doesn't turn a profit. Islamic financial firms in general have less risk-taking investing methods. They thus often steer clear of transactions that could be connected to economic bubbles [4], [5]

The origins of Islamic banking can often be attributed to Middle Eastern businessmen who began transacting financially with European counterparts in the Middle Ages. They initially followed the same financial rules as the Europeans. However, as trading systems advanced and European nations began opening Middle Eastern local branches of their banks, some of these institutions eventually adopted regional traditions, particularly no-interest financial systems that operated on a profit-and-loss sharing system. These European banks were able to meet the demands of Muslim local entrepreneurs by using these strategies. In the early 1980s, Islamic banks also began to operate in Western Europe, even though the bulk of these institutions were created in Muslim nations. In addition, the governments of Iran, Sudan, and to a lesser degree Pakistan have created national interest-free banking institutions.

### **Islamic Banking Example**

The earliest known instance of Islamic banking in the contemporary era was the Mit-Ghamr Savings Bank, which was founded in Egypt in 1963. Mit-Ghamr used a profit-sharing approach for lending money to companies. Political considerations forced the closure of the Mit-Ghamr project in 1967, although during that year of operation, the bank was very cautious, only granting roughly 40% of its loan requests. However, the bank's default percentage was reportedly nil during prosperous economic times.

### **What Constitutes Islamic Banking's Foundation?**

Islamic banking is based on the principles of the Islamic religion as they apply to business dealings. The Quran, Islam's primary holy source, serves as the foundation for Islamic banking's tenets. All financial transactions in Islamic banking must adhere to Shariah, the Islamic legal system based on the Quran's teachings. The *fiqh al-muamalat* are the regulations that govern business dealings in Islamic banking.

### **What Are the Differences Between Western and Islamic Banking?**

Usury and speculation are two major elements of conventional banking systems that are not permitted in Islamic banking. Any kind of speculation or gambling, known as *maisir*, is

categorically forbidden by shariah. Shariah forbids lending with interest as well. Additionally, any investments involving things or substances that are banned by the Quran are also forbidden, including alcohol, gambling, and pork.

### How are Islamic Banks Profitable?

Islamic banks employ equity participation methods, which are akin to profit sharing, to generate income without the usual practice of charging interest. If a bank loans money to a company, the firm will repay the loan without interest and instead give the bank a cut of its earnings. This is referred to as equity participation. The bank also won't be reimbursed if the company fails or doesn't turn a profit. The growth of Islamic banking may be traced to several conventional banking ideas and practices that are in opposition to and hurtful to the Muslim community. As a result, Sharia-compliant procedures were invented to create Islamic finance. The precepts of the Quran are found in sharia, which is Islamic law. Many Muslims are enticed to pursue banking by the development of methods that are compatible with their culture and values. Since Islamic money is so rigorously adhered to, banks consult religious authorities for advice. The basic goal of Islamic banking and finance is for all members of society to prosper financially. In traditional banking, some parties often gain at the cost of others. The evident exception to this is the Islamic banking system.

### Principles

Let's now talk about the tenets of Islamic finance.

- a. **Based on Sharia:** The Quran, the sacred book of Islam, serves as the foundation for Sharia, or Islamic law. Therefore, it is against the law to engage in traditional banking operations like collecting interest from debtors, or *riba*.
- b. **Sharing in profits and losses:** Because banks do not collect interest, their source of income comes from the profits provided by their customers. Additionally, the bank is also harmed when the customers do not generate a profit or lose money.
- c. **Trade:** Sharia regulations pertaining to trade are somewhat less severe. Gambling and other high-risk business dealings and investments are not permitted. In Islamic finance, speculation is also prohibited.
- d. **Investing:** Banks investigate the Sharia compliance of companies before making an investment. As a result, they avoid investing in businesses that engage in restricted or criminal activities.

### Types

Islamic banking comes in six different varieties.

**1. Murabaha:** A sort of finance or contract known as a *murabaha* is one that the bank acquires on the client's behalf. The customer uses the asset they bought and consents to delayed payments. The customer guarantees the bank a certain profit as well. When the charges are paid in full, the bank gives the customer complete ownership.



**2. Ijarah:** Ijarah is a kind of lease in which the bank buys real estate or other capital items, such as machinery or equipment, and then rents them to the customer. The customer pays the bank rent. Alternately, the bank largely invests in the company and takes a cut of the profits.

**3. Istisnaa:** Similar to Murabaha, Istisnaa differs in that the customer may only use the property that the bank has acquired when all outstanding debts have been paid in full. The bank also gets a portion of the client's earnings in this situation.

**4. Mudarabah:** Investors that get into this form of arrangement divulge their intentions to the bank. The bank then examines the strategy and determines if it conforms to Sharia. The bank presents the monies if the proposal is authorized. Investment gains are given to the bank as a Mudarabah charge.

**5. Musharaka:** A Musharaka is a legal agreement between a bank and its customer to engage in business together.

They first raise the money as a team while working as partners. After that, they work together and divide earnings according to a predetermined percentage. Before forming an alliance with the customer, the bank often confirms the venture's adherence to Islamic law [6]–[8].

**6. Tawarruq Tawarooq:** Tawarruq is a sort of contract where the customer contacts the bank to make a purchase and buys the property from the bank. It is sometimes referred to as the reverse Murabaha. The customer then purchases the asset from the bank, utilizes it, and then sells it to the bank. The original seller is then bought back by the bank.

## Examples

Let's examine a few instances of Islamic finance to better comprehend the idea.

### Instance 1

Think about the fictitious case of Islamic banking in Dubai. Bank X adheres to Sharia-compliant standards. There are around 20 outlets in Dubai, and there are plans to open up shop elsewhere in the United Arab Emirates UAE.

Sukuk, Murabaha, Istisnaa, and other financial products are some of the ones the bank offers. The banks' adherence to Islamic principles and provision of interest-free banking have made them a preferred source of funding for religious groups.

### Instance 2

Here are some recent Bloomberg news items. The Sukuk Sharia-compliant bonds market, particularly in Saudi Arabia, is thriving while the global bond markets are propelled by inflation and recession worries.

Sukuk sales soared 185% from \$14.4 billion the previous year. The Saudi crown prince Mohammed bin Salman's Vision 2030 initiative, which he unveiled six years ago, includes a boom in Islamic banking. The initiative intends to boost the economy and reduce reliance on the country's oil supplies.

## DISCUSSION

### Investment Tools

Many traditional investment instruments, including bonds, options, and derivatives, are prohibited in Islamic finance due to the many restrictions imposed by Sharia. Islamic finance's two main investment vehicles are:

**1. Equities:** Investment in corporate stock is permitted under Sharia. However, the businesses cannot engage in any activity that are against Islamic law, including lending with interest, gambling, the manufacture of alcohol, or the raising of pigs. Private equity investments are also permitted in Islamic financing.

**2. Fixed-income securities:** Islamic finance does not use traditional bonds since lending with interest payments is against the law according to Sharia. Sukuk, often known as Sharia-compliant bonds, are an alternative to bonds that reflect a portion of an asset rather than a financial obligation.

### Islamic vs Traditional Banking

Although the Islamic and conventional banking systems have a similar scope, they vary in their goals and methods of functioning.

### Financial Islam

With a compound annual growth rate of 17% since 2009, Islamic finance, also known as Shariah compliant financing SCF, is one of the areas of the global financial system that is expanding the quickest. The industry's worldwide assets as of 2015 were at least \$1.9 trillion. Islamic finance has acquired systemic relevance in a number of Asian nations, including Brunei, Bangladesh, and Malaysia, where it has attained at least 15% market share in the domestic banking sector as a consequence of the industry's ongoing development. Additionally, nations without a significant Muslim population are starting to welcome Islamic money. There is a significant market for SCF internationally, as seen by the introduction of sovereign sukuks in Luxembourg, Hong Kong, China, the United Kingdom, and South Africa. All of these issuances were at least twice oversubscribed. Significantly, 5 of the 10 nations with the largest Muslim populations worldwide are members of the ADB, which includes 14 nations with a majority Muslim population. To maintain its economic trajectory, Asia needs to spend an estimated \$747 billion annually in infrastructure. ADB understands the potential role of Islamic finance in promoting inclusive growth and achieving sustainable development in the region, through funding infrastructure and making ethical and green investments, given the demographic makeup of its member countries and realizing the region's vast investment needs [9], [10]. ADB will continue to play a prominent role in important advances in Islamic finance, including the following:

- a. Helping via technical assistance TA and collaboration with standard-setting bodies like the Islamic Financial Services Board in the creation of regulatory and supervisory frameworks and the implementation of best global standards.
- b. Helping and advising financial institutions on capital market developments via TAs and loans.
- c. Collaborating with cofinanciers and emerging member nations to foster financial innovation.

### Working Group on Islamic Finance

The Islamic Finance Working Group at ADB is in charge of directing the organization's overall strategy with regard to its Islamic finance activities. The committee is made up of representatives from several ADB departments, including economists, procurement experts, and financial sector and investment professionals. This cross-functional group's special mandate is to operationalize and mainstream Islamic finance inside ADB, as well as to include Islamic finance into ADB's financial strategy in the organization's major developing member countries. In order to identify ADB's prospective involvement in these transactions, the group looks at which projects and industries would be most suited for financing that complies with Shariah. To investigate possibilities for cooperation on strategic initiatives, the organization also maintains active communication with important worldwide Islamic institutions, such as the Islamic Development Bank and the Islamic Financial Services Board. The group makes ensuring that ADB keeps up with the changing and varying needs of developing member countries for finance that complies with Shariah within the context of attaining equitable growth and fostering sustainable development.

### CONCLUSION

Islamic financial practices and principles provide a distinctive and moral method of handling money that is consistent with the principles and ideals of the Islamic religion. Islamic banking places a strong emphasis on fairness, justice, risk-sharing, and abstaining from illegal operations. It is based on the principles of Sharia Islamic law. In conclusion, Islamic banking practices and concepts provide an alternate method of handling money that puts moral considerations first and complies with Sharia law. Islamic banking helps create a more equitable and sustainable financial system by encouraging justice, risk-sharing, openness, and inclusion. For the industry to maintain its development and influence on the global financial environment as it continues to change, it will be crucial to solve issues while adhering to its basic ideals.

### REFERENCES:

- [1] A. Jan, M. Marimuthu, M. P. Bin Mohd, And M. Isa, Sustainability Practices And Banks Financial Performance: A Conceptual Review From The Islamic Banking Industry In Malaysia, *Int. J. Bus. Manag.*, 2018, Doi: 10.5539/Ijbm.V13n11p61.
- [2] M. N. Qomar, Mudharabah Sebagai Produk Pembiayaan Perbankan Syariah Perspektif Abdullah Saeed, *Malia J. Islam. Bank. Financ.*, 2018, Doi: 10.21043/Malia.V2i2.4890.
- [3] A. H. Abd Razak, Centralisation Of Corporate Governance Framework For Islamic Financial Institutions: Is It A Worthy Cause?, *Isra Int. J. Islam. Financ.*, 2018, Doi: 10.1108/Ijif-08-2017-0020.
- [4] N. Fithriah, Innovation Of Islamic Banking Industry As An Alternative Islamic Economic Development In Indonesia, *J. Jurisprud.*, 2018, Doi: 10.23917/Jurisprudence.V7i2.4838.
- [5] M. Abubakar, Determinants Of Customers ' Engagement With Islamic Banking Management Of Islamic Finance□: Principle , Practice , And Performance, *Int. Financ. Rev.*, 2018.

- [6] T. Suripto and A. Salam, Analisa Penerapan Prinsip Syariah dalam Asuransi, *JESI Jurnal Ekon. Syariah Indones.*, 2018, doi: 10.21927/jesi.2017.72.128-137.
- [7] M. L. Hamidi and A. C. Worthington, Islamic social banking: The way forward perbankan sosial Islam: Langkah kedepan?, *J. Ekon. Malaysia*, 2018.
- [8] A. Hassan-Bello, Riba and Islamic Banking, Examining the Practices of Jaiz Bank PLC, Nigeria, *Ahkam J. Ilmu Syariah*, 2018, doi: 10.15408/ajis.v18i1.9818.
- [9] A. Novitarani and R. Setyowati, Analisis Crowdfunding Syariah Berdasarkan Prinsip Syariah Compliance serta Implementasinya dalam Produk Perbankan Syariah, *Al-Manahij J. Kaji. Huk. Islam*, 2018, doi: 10.24090/mnh.v12i2.1759.
- [10] M. T. Majeed and A. Zainab, Sharia'h practice at Islamic banks in Pakistan, *J. Islam. Account. Bus. Res.*, 2018, doi: 10.1108/JIABR-03-2015-0011.

## CHAPTER 20

### MICROFINANCE AND FINANCIAL INCLUSION: PROMOTING THE ECONOMIC GROWTH

---

Dr Chaya Bagrecha, Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-dr.chayabagrecha@cms.ac.in

#### ABSTRACT:

As a potent instrument for advancing financial inclusion and empowering marginalized groups worldwide, microfinance has recently come to the fore. The notion of microfinance, its role in promoting economic growth, problems encountered, and its substantial contribution to expanding financial inclusion are all thoroughly explored in this study. The study starts out by describing microfinance as a financial service model created to meet the requirements of people with low incomes and small-business owners who don't have access to standard banking services. It highlights how microfinance has the power to break down barriers and provide these underprivileged populations access to crucial financial resources. One major area of attention is the crucial role that microfinance plays in promoting economic growth. The study focuses on the ways that microfinance organizations provide microloans, savings accounts, and other financial services that let people engage in income-generating ventures, enhance livelihoods, and build long-term economic paths out of poverty.

#### KEYWORDS:

Banking Services, Economic Growth, Financial Inclusion, Financial Resources Microfinance.

#### INTRODUCTION

Women, low-income families, and MSMEs, who are among the economically disadvantaged segments of society, often encounter a number of barriers to obtaining inexpensive financing. Due to their lack of collateral and precarious financial situation, they are often seen as high-risk borrowers, making credit extension expensive for lenders. Additionally, the demand for small loans makes the dynamics of lending costs even worse. Microfinance, on the other hand, has helped level the playing field by offering borrowers in remote areas individualized, affordable loans. However, what exactly is microfinance and how does it advance financial inclusion? Let's investigate. Microfinance, often known as microcredit, is a kind of financial service offered to unbanked and underserved people and companies in the form of small loans. Microfinance loans are uncollateralized loans given to households having an annual income of up to Rs. 3 lakhs in accordance with RBI rules [1]–[3].

These loans may be utilized for a variety of things, such as generating revenue and covering personal needs including home construction, education, and healthcare costs. In addition to providing lending, certain microfinance institutions MFIs may also provide additional financial services including insurance, remittance, and pensions. As a result, microfinance gives credit-challenged families and MSMEs access to loans, streamlines cash flows, and spurs development. It also acts as a support system for surviving and recovering from financial crises. According to the most recent MFIN Micrometer report Q2FY23, India's gross loan portfolio GLP for

microfinance has surpassed Rs. 3 lakh crores as of September 30, 2020, an increase of 23% from a year earlier. Even the average loan size, which now stands at Rs. 40,571, has increased by 12% from the previous year. By 2025, it is anticipated that this demand for microcredit would soar to between Rs. 17 and Rs. 20 lakh crores.

### **The development of microfinance**

#### **But what has fueled India's boom in microfinance?**

As was already said, it may be challenging for low-income households and small businesses to acquire reasonable loans and stay out of debt traps. In order to provide loans to persons living in rural hinterlands, the Indian government founded the SEWA Bank in 1974 as a branch of the Self-Employed Women's Association SEWA. The government then adopted two different microfinance schemes as a result. Bank Linkage Program SHG-BLP for Self Help Groups SHG. Model headed by specialized MFIs. While the SHG-BLP plan used a community-based method to increase rural credit penetration, MFIs prioritize making modest loans directly to borrowers with flexible terms and no need for collateral. The YH Malegam committee of the RBI made various recommendations for changes to the microlending environment, including the establishment of NBFC-MFIs in 2011. Numerous financial organizations, including cooperative banks, regional rural banks, small financing banks, Section 8 corporations, scheduled commercial banks, non-banking financial companies, and microfinance institutions MFIs provide microloans at the moment [4], [5].

### **Microcredit: The facilitator of financial inclusion**

#### **In what ways does microfinance promote financial inclusion then?**

Financial inclusion, as the name implies, refers to having access to suitable, affordable, and responsible financial solutions that have been catered to the requirements of the borrower. It prevents access to the complete range of financial services, including loans, insurance, deposits, and electronic payments. Low-income families and MSMEs were compelled to depend on unofficial lenders who imposed excessive interest rates due to historically low credit penetration. The constraints to formal lending and economic loan products have been broken, nevertheless, as microfinance becomes more popular.

### **Electronic microfinance**

Microfinance has received a fresh lease of life because to the exponential growth of smartphones, inexpensive data, and the merging of technology and finance. Lenders have maintained the pace of microfinance and financial inclusion by providing digital payments, mobile banking, cash flow-based loans, prepaid instruments, etc. In order to determine a client's creditworthiness, some conventional lenders have begun working with financial firms that mine consumer data based on their digital footprint and transaction history.

Lenders are now in a better position to approve loans that are specifically suited to the demands of the borrowers after further evaluating these findings using models that are based on artificial intelligence AI. They then started cross-selling items, such as providing loans together with insurance and pension options. This has significantly increased the general public's financial literacy.

### **Microloan for Resilient Companies**

Microfinance has played a crucial role in the economy as a means of expanding loan availability and fostering financial inclusion. It has not only made last-mile connection possible by making loans available to borrowers in the most rural areas of the nation, but it has also contributed to the empowerment of disadvantaged groups, the reduction of poverty, and the improvement of living conditions.

### **Financial inclusion is being promoted via microfinance**

The RBI originally proposed the idea of financial inclusion as a program in India in 2005. The goals of financial inclusion are to provide everyone, particularly the poor, access to a basic, no-frills bank account for sending and receiving money as well as other financial products including credit, remittance, insurance, and pensions. But financial accounts have received most of the attention.

The RBI's first strategy for financial inclusion was to provide banking facilities closer to the public and promote account opening. However, the government began to place more of a focus on everyone having a bank account under the Pradhan Mantri Jan Dhan Yojana PMJDY from 2014. As a result of the program's enormous success, approximately 48 crore new bank accounts with a combined balance of 1.77 lakh crore were established in the next eight years.

Additionally, the government introduced insurance and pension programs such the Atal Pension Scheme, Pradhan Mantri Suraksha Bima Yojana, and Pradhan Mantri Jeevan Jyoti Bima Yojana. Despite not gaining as much popularity as PMJDY, they are nonetheless effective programs for financial inclusion. However, it may be inferred from the 77th round of the NSSO's All India Debt and Investments Survey that about three-quarters of rural and four-fifths of urban India remain outside the official financial system.

The poor continue to have trouble getting credit, and policymakers have had a difficult time closing the credit gap. Microfinance Institutions MFIs were one of the many projects that were started in the nation as a part of offering loans. Nearly seven crore impoverished families are served by more than 250 MFIs now. Additionally, the bank linkage initiative for self-help groups SHG has enrolled 14.5 crore of the world's poorest families. Although there may be some overlaps, it is plausible to infer that nearly half of the population is served by microfinance programs, and that both streams combined provide more than 4.5 lakh crore, or 10% of the country's priority sector credit.

Through MFIs, microfinance has arrived to the doorsteps of the underprivileged and in remote locations. Microfinance is a popular product because it is simple to do business with MFIs, even if the cost of loans is greater. However, it is not as expensive as local moneylenders, who charge usurious interest rates. For individuals, particularly those working in the informal sector, it also aids in developing a credit history. MFIs were seen to be important partners when the government launched the Pradhan Mantri Mudra Yojana in 2015 to help micro-enterprises. MFIs contributed to over 60% of the credit provided under the Shishu category of Mudra loans. A significant portion of the balance is funded by banks through co-lending and banking correspondents, who mostly use the microfinance platform. Three avenues exist for the government to support the microfinance movement. One, foster a climate that is suitable for MFI operation. in a number of cases, entrenched interests tainted the micro lending environment.



Two, an incentive program, such as tax breaks, subsidized financing, or even a credit guarantee, will encourage MFIs to expand into less-tapped regions. Third, a program to convert current development organizations into a functional financial intermediary that offers microcredit in its area of operation may be started.

## DISCUSSION

### Microfinance Institutions' Contribution to Financial Inclusion

- a. Microfinance is a banking service that is given to jobless or low-income people or organizations that would not otherwise have access to financial services. Why People may get fair small business loans via microfinance in a secure way that complies with moral lending principles.
- b. Muhammad Yunus created Grameen Bank of Bangladesh in the 1970s, during the development of which the phrase microfinancing was first used.
- c. Nearly 85% of Indian districts now provide microfinance, and more than two lakh frontline staff members disperse loans and related services.

### Microfinance Needed

- a. To protect the interests of those not part of the official financial system.
- b. The rural poor have no choice but to borrow money from local moneylenders at exorbitant interest rates since conventional banking institutions refuse to lend to them because they cannot provide collateral or evidence of legal employment when requesting for loans.
- c. MFIs are helpful in providing credit facilities to such people.

### The advantages of microfinance

Microfinance has become one of the most crucial strategies for promoting financial inclusion.

- a. It helps women acquire assets, have an influence in decision-making, and enjoy dignified lives, emulating the idea of a common good.
- b. It helps the poor and low-income households escape poverty.

**1. Equitable development:** By making loans accessible at the last mile and serving as a safety net for individuals at the base of the economic pyramid, microfinance plays a crucial role in supporting equitable development. Microfinance loans provide the poorest people access to money, enabling many of them to launch new enterprises, expand current ones, protect themselves against unforeseen expenses like sickness and bad weather, and manage their spending [6]–[8].

**2. Using Technology:** MFIs microfinance institutions are increasingly using technology to increase operational effectiveness, streamline underwriting processes, and save costs while maintaining a customer-centric emphasis. A lot of audio-visual material in regional languages is used to consistently spread financial literacy.

**3. Enhance Underwriting Models:** A microfinance-specific credit bureau was formed around ten years ago. A credit bureau report is now a crucial component of underwriting due to the MFIs' and credit bureaus' intense efforts in building up their databases.

**4. Microfinance's Expanding Reach:** 28 States and 9 Union Territories UTs are covered by microfinance activities in terms of reach. In terms of geographical distribution, the country's eastern and north-eastern areas account for 37% of the total, followed by the south 27%, and the west 15%. Thus, microfinance continues to play a significant role in influencing people's lives and means of subsistence. While microloans are available practically everywhere in the nation, 82% of the loan portfolio is concentrated in only 10 states, according to geographical distribution.

**5. Effective client safety:** The RBI microfinance laws provide a strong foundation for client safety.

- a. The RBI-recognized self-regulatory organization SRO is in favor of this approach.
- b. The SRO assists the MFIs in carrying out the rules, makes efforts to develop capacity, enhances governance via routine oversight and counseling, and offers a forum for dealing with issues on a sectoral level.

**6. Digitalization activities:** These measures have been in line with the quick spread of smartphones and borrowers' increased comfort levels with online payment methods. Nearly all loans are being distributed online nowadays, going straight into the bank accounts of the borrowers, and more and more repayments are also being made digitally.

#### Issues facing small-scale financial institutions

- a. **Fragmented Data:** Despite an increase in total loan accounts, it is unclear how these loans would really affect the customers' poverty levels since there is inconsistent data on the relative poverty-level improvement of MFI clients.
- b. **Covid-19's effects** have been seen in the MFI sector, where disbursements have not yet experienced a significant uptick and collections have initially suffered.
- c. **Social aim Ignored:** In their pursuit of development and profitability, MFIs seem to have been slowly losing sight of their social aim, which is to enhance the lives of society's disadvantaged groups.
- d. **Loans Used for Non-Income Generating Purposes:** The percentage of loans used for non-income generating purposes may be significantly greater than the RBI's limit of 30% of all MFI loans. These loans have a short term, and given the borrowers' financial circumstances, it is possible that they will quickly find themselves in a vicious cycle of debt where they will need to take out another loan in order to pay off the first.

#### Primary Ideas

The goal of these regulations' formulation was to safeguard customers. In order to do this, the framework has included five key principles:

- i. Addressing regulatory arbitrage via the adoption of activity-based regulations that are lender agnostic, allowing all regulated microfinance businesses to seek client protection within a well-tuned and unified framework.
- ii. Protecting microloan borrowers from over-indebtedness brought on by loans that were extended to them beyond their ability to repay them, which might later result in forceful collection tactics.

- iii. Facilitating the competitive forces' ability to lower interest rates via increased transparency measures.
- iv. Improving client protection measures by making them more robust and applying to all regulated firms.
- v. Enabling flexibility in the creation of goods and services to fully satisfy the requirements of microloan borrowers.

#### **Important provisions**

- i. The central bank has expanded the market for microfinance institutions MFIs by classifying families earning up to 3 lakh yearly as eligible for microloans.
- ii. It also lifted the ceiling on loan prices, facilitating both entrance into new markets and further market penetration.
- iii. Microfinance loans are exempt from prepayment penalties.

#### **Significance**

MFIs predict that these actions, together with the increased demand for loans in rural India, would propel NBFC-MFI expansion. These rules might enhance the credit culture. The evaluation of a household's credit is particularly advantageous for long-term sustainability. The uniform regulatory framework for various lenders will promote healthy competition and provide consumers the information they need to make an educated decision about their credit requirements [9], [10].

#### **Steps to Take**

In India, the microfinance program has grown astronomically during the last ten years. However, the majority of microfinance service providers have continued to place a strong emphasis on growing the reach of their programs, paying little attention to the breadth, excellence, and profitability of their financial offerings. All institutions should be encouraged by the RBI to use a social impact scorecard to track their social effect.

#### **Financial inclusion explained**

In order to counteract financial exclusion, a variety of financial and non-financial goods and services are made accessible to the underprivileged. Microinsurance inclusive insurance, which covers all insurance-related possibilities such as mortality and climate risk. Various credit options Education in governance, risk management, and business management, for example. Software for supporting decisions SIMFI, Microfact, etc. Assistance and technical knowledge. Financial literacy and education initiatives. Financial inclusion attempts to increase access to inexpensive and ethical non-banking and non-financial goods and services, much like microfinance see the definition of microfinance.

A variety of products and services have been created, with microcredit being the most well-known, in order to guarantee that the greatest number of individuals are able to participate in the financial system and benefit from suitable banking services. Money transfers, microsavings, microinsurance, and micropension plans are additional financial services. These goods have a lot of growth potential since they are well developed and are in the hands of strong, trustworthy individuals.

## CONCLUSION

Microfinance and financial inclusion are effective strategies for reducing poverty, strengthening underprivileged groups, and promoting economic development. These ideas are centered on giving people and companies that have historically been shut out of conventional financial systems access to financial services and resources. In conclusion, financial inclusion and microfinance are essential for promoting economic growth, eradicating poverty, and strengthening neglected communities.

By giving people access to the financial resources they need to realize their full potential, these projects have the power to impact lives. The road to a more equal and inclusive global financial environment becomes clearer through solving issues, using technology, and encouraging responsible finance. Poor individuals may fund their activities, save money to sustain their families, and defend themselves from everyday threats thanks to financial inclusion.

Various financial organizations, including banks, cooperatives, microinsurance companies, and microfinance institutions MFIs, assure their availability on the market. To fulfill the main goal of financial inclusion fighting poverty these distributors must take a responsible and social attitude to their operations. These distributors nonetheless face a number of difficulties, including the need to promote the needs of the underprivileged while maintaining their own financial stability.

## REFERENCES:

- [1] T. Lopez and A. Winkler, The challenge of rural financial inclusion—evidence from microfinance, *Appl. Econ.*, 2018, doi: 10.1080/00036846.2017.1368990.
- [2] P. Mader, Contesting Financial Inclusion, *Dev. Change*, 2018, doi: 10.1111/dech.12368.
- [3] F. A. Anyanwu, A. C. Ananwude, and A. I. Nnoje, Financial Inclusion: Nigeria's Microfinance Model Effect Assessment on Women Empowerment, *Eur. J. Hum. Resour. Manag. Stud.*, 2018.
- [4] D. Gahlawat, Microfinance as a Tool for Financial Inclusion in Rural Areas of National Capital Region, *Univers. Res. Reports*, 2018.
- [5] H. Maulana and K. Umam, Identifying Financial Exclusion and Islamic Microfinance as An Alternative to Enhance Financial Inclusion, *Int. J. Islam. Bus. Econ.*, 2018, doi: 10.28918/ijibec.v1i2.1004.
- [6] Felicia, A. Akujinma Anyanwu, Chijindu, F. Akujinma, A. Chijindu Ananwude, And A. Izuchukwu Nnoje, Financial Inclusion: Nigeria's Microfinance Model Effect Assessment On Women Empowerment European Journal Of Human Resource Management Studies Financial Inclusion: Nigeria's Microfinance Model Effect Assessment On Women Empowerment, *Eur. J. Hum. Resour. Manag. Stud.*, 2018.
- [7] U. Hussaini And I. C. Chibuzo, The Effects Of Financial Inclusion On Poverty Reduction: The Moderating Effects Of Microfinance, *Int. J. Multidiscip. Res. Dev.*, 2018.
- [8] S. Parwez, R. Patel, And K. C. Shekar, A Review Of Microfinance-Led Development: Evidence From Gujarat, *Glob. Soc. Welf.*, 2018, Doi: 10.1007/S40609-017-0095-3.

- [9] M. G. Kanake And D. R. Mahesh, The Impact Assesment Of The Micro Finance To Financial Inclusion And Bisuness Growth: A Study Of The Micro, Small And Medium Enterprises In Igembe South Kenya, *Am. J. Financ.*, 2018, Doi: 10.47672/Ajf.323.
- [10] M. Malhotra, Role of Microfinance in Financial Inclusion in India, 2018. doi: 10.4018/978-1-5225-5213-0.ch018.

## CHAPTER 21

### FOREIGN EXCHANGE OPERATIONS IN BANKS: EXPLORING MARKET DYNAMICS

---

Dr Selvi S, Associate Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-dr.selvi@cms.ac.in

#### ABSTRACT:

Involving the exchange of currencies and risk management for currency-related issues, foreign exchange forex operations are a crucial component of banking activity. This study provides a thoughtful analysis of foreign currency operations in banks, including their core duties, operating procedures, difficulties, and the part they play in supporting global commerce and financial transactions. The study begins by describing foreign exchange operations as the procedures by which banks enable currency conversion in order to meet the demands of organizations, people, and enterprises involved in international trade. It highlights how essential currency operations are to facilitating smooth international commerce and investment. The study's main topic is the complexity of foreign currency trading and dealing. It goes on how banks manage currency swings and reduce risks for both themselves and their customers by engaging in spot, forward, and swap transactions. The study also explores the influence of market players on currency dynamics, including market makers and speculators.

#### KEYWORDS:

Banking, Foreign Currency, Foreign Exchange, International Commerce, Investment.

#### INTRODUCTION

A market where buyers and sellers exchange foreign currency is known as the foreign exchange market. A foreign exchange market is, to put it simply, a market where the currencies of other nations are purchased and exchanged. A financial network that enables international trade is the FOREX market. The most important and obvious aspect of the foreign exchange market is the transfer of cash foreign currency for payment settlement from one nation to another. The primary activity of FOREX is to transfer buying power from one nation to another, therefore it basically entails the exchange of one currency for another. For instance, online FOREX trading would make it easier to convert the rupee to the dollar if an Indian exporter were to buy products from the United States and the payment had to be made in dollars. The transfer objective is carried out through credit instruments such bank drafts, foreign currency bills, and telephone transfers [1]–[3]. For the smooth movement of goods and services from one nation to another, FOREX provides importers with a short-term credit. An importer may use credit to pay for goods made abroad. An Indian corporation may purchase American equipment by issuing a bill of exchange with a three-month maturity on the foreign currency market. Hedging foreign currency risks is the third function of a foreign exchange market. Participants in foreign exchange markets are also worried by changes in exchange rates, or the cost of one currency relative to another. The party impacted by the exchange rate fluctuation might make money or lose it. Therefore, in exchange for forward contracts, FOREX trading online provides services for hedging anticipated or present claims/liabilities. A 12-week agreement known as a forward contract allows parties to

buy or sell foreign exchange for another currency at a price determined today but at a later date. Therefore, there is no exchange of money throughout the contractual procedure.

### **Inference**

There are several dealers in the foreign currency markets, with banks being the most well-known. Exchange banks are banks with locations throughout the globe that help in currency exchange. After learning about the many roles played by Indian foreign exchange markets, it's time to put your knowledge to use. The financial marketplaces known as money markets are where short-term financial assets are purchased and traded. By definition, the financial assets traded in these markets, such as stocks and bonds, will mature in a year or less. These marketplaces see daily transactions worth more than a billion dollars. Institutions of finance, businesses, governments, and the U.S. As they make changes to their short-term holdings, Treasury is active in the money markets. The conversion of one foreign currency for another is made easier by foreign exchange markets. The majority of transactions use U.S. dollars and include bank deposits. Foreign exchange traders manage the majority of the daily deals, which total more than a trillion dollars. The foreign exchange markets are used by companies, financial institutions, governments, investors, and individuals to modify their currency holdings.

### **National Money Markets**

An essential tool for moving short-term cash from lenders to borrowers is provided by money markets. These markets provide an effective way for businesses, governments, and financial institutions with short-term surplus capital to lend to other businesses, governments, and people who short-term need money. Money markets, where assets with maturities of a year or less are exchanged, constitute the short-term spectrum of the financial markets.

#### **Important money market traits**

- a. Generally characterized by a high degree of safety of principal.
- b. The majority of marketplaces are telephone informal markets with negligible transaction costs.
- c. Large denominations, often \$1 million or more, are frequently used to issue assets.
- d. The majority of money market instruments may be easily changed into cash assets without suffering a substantial loss since they are liquid.

The money markets conduct daily trades for several billions of dollars. The following is a list of many significant money market instruments:

- a. U.S. Treasury notes.
- b. Federal agencies' short-term securities.
- c. Business paper.
- d. Federal resources.
- e. Net borrowings in Eurodollars by local banks from their own overseas subsidiaries.
- f. Certificates of deposit with a high denomination \$100,000 or more.

### **Foreign Exchange Markets Have a Major Impact**

In order to facilitate cross-border commerce, investment, and financial activities, the foreign currency markets are essential. These marketplaces enable companies conducting foreign exchange transactions to change their existing currency or deposit into the desired currency or



deposit. Foreign exchange dealers handle the majority of transactions. on an average day, they deal with nearly a trillion dollars' worth of trades involving just U.S. dollars. With growing worldwide economic activity, trade, and investment as well as technology that enables real-time information transmission and trading, the significance of foreign currency markets has expanded [4], [5].

### **Exchange Rate Movements: Factors**

The following variables, as listed by Rose 1994, may have an impact on foreign exchange rates:

- a. Position of the balance of payments. The foreign currency rate of a nation with a trade imbalance often experiences downward pressure.
- b. Future currency value speculation. Currency speculators purchase or sell when they see lucrative possibilities.
- c. Domestic political and economic circumstances. Foreign currency rates often suffer from worsening economic circumstances and inflation.

Intervention by the central bank. To alter the value of their own currency, central banks may purchase or sell other currencies.

### **Exchange rate interventions**

- a. Either a single or coordinated action. The Eurosystem may choose to carry out foreign currency interventions as required even in the absence of any explicit agreements or general principles. The Eurosystem has the option to carry out such interventions either independently i.e. unilaterally or in collaboration with other central banks i.e. concerted action.
- b. Either centrally or decentralized. The ECB may carry out interventions directly i.e., in a centralized fashion or via NCBs functioning as the ECB's disclosed agency i.e., in a decentralized manner. From the perspective of the operation's overall goal, it makes little difference how the intervention is carried out centrally or decentrally.

Any intervention involving a different EU currency is carried out by the Eurosystem in close collaboration with the relevant non-euro area NCB, especially with respect to the funding of the intervention, and is done so without compromising the ECB's fundamental goal of preserving price stability.

## **DISCUSSION**

### **Understanding Foreign Exchange**

The market where foreign currencies, like the yen, euro, or pound, are exchanged for reserve currencies, such the U.S. dollar, is known as the foreign exchange market. This market is a decentralized network that is well connected thanks to contemporary INFORMATION and TELECOMMUNICATIONS technologies, rather than being at a centralized place. The average daily worldwide turnover i.e., the amount traded in the conventional foreign currency markets was \$1.9 trillion in April 2004 according to a triennial study.

Additionally, derivatives like futures and options were traded for \$1.2 trillion. In the spot market, participants agree that the foreign currency will be delivered right away. They make contracts for delivery at a future date, say three months from now, in the forward market. In the option market, they sign a contract that permits, but does not oblige, one party to purchase or sell foreign

currency in the future thus the name option. The majority of trade takes place between banks, either on behalf of clients or for the firms' own accounts. The transaction's counterparty might be a different dealer, a different financial institution, or a nonfinancial client. According to the poll, the dollar was engaged in 89 percent of trades on one side or the other. The dollar's high trading volume can be attributed to its use as a vehicle currency. For example, someone traveling from the Malaysian ringgit to the South African rand must pass through the dollar. The euro accounted for 37% of all foreign exchange transactions, followed by the yen 20%, the British pound 17%, the Swiss franc 6%, the Australian dollar 5%, and the Canadian dollar 4%. With 31% of the total worldwide volume, London is the leading hub for foreign currency trading. Tokyo is next with 8%, followed by New York with 19%, Tokyo with 8%, Singapore with 5%, and Frankfurt with 5%. A foreign currency's price is determined by the exchange rate. For instance, the dollar's value is depreciated when the exchange rate between the British pound and the U.S. dollar, which is often expressed in dollars per pound sterling  $\$/\pounds$ , rises from, say, \$1.80 to \$1.83. The Japanese yen to dollar exchange rate is often expressed in yen per dollar  $\yen/\$$ . A rise in this exchange rate from, say, 108 to 110 is an indication of the dollar's strengthening. Some nations float their exchange rates, which implies that instead of the country's central bank the monetary authority buying or selling foreign currency, the price is set by the private market. The supply and demand factors in this example, the supply and demand for foreign currency determine the exchange rate, just as they do for other market values [6]–[8].

Some nations fix their currency rate, at least temporarily, as opposed to allowing it to float. This indicates that the government's central bank is a frequent trader in the foreign exchange market. To do this, the central bank buys or sells foreign currency, depending on what is required to peg the currency to the selected foreign currency at a stable exchange rate. If the MONEY SUPPLY is not reduced by the monetary authorities via what are referred to as sterilization activities, a rise in foreign currency reserves would raise the MONEY SUPPLY and potentially cause INFLATION. Sterilization refers to the central bank's response to increases in reserves by maintaining the same level of the overall money supply. Selling BONDS on the open market is a popular approach to do this. Raising the reserve requirements for commercial banks is a less popular one. Other nations adhere to a system that straddles the line between fixed and floating economies. Examples include bands or target zones, basket pegs, crawling pegs, and adjustable pegs. Many central banks engage in managed floating, which involves intervening in the foreign currency market by leaning against the wind. To accomplish this, a central bank sells foreign exchange when the exchange rate is rising, so controlling its increase, and purchases foreign exchange when it is down.

The goal is to lower the exchange rate's fluctuation. Similar stabilizing speculation buying low with the intention of selling high can be carried out by private speculators. This strategy is beneficial if the speculators accurately predict the course of future exchange rates. Up to the 1970s, the primary sources of supply and demand for foreign currency were goods exported and imported. Financial transactions predominate in today's world. When the exchange rate increases, it usually happens because investors bought assets denominated in the currency in the hopes that it would appreciate further. In the long run, according to economists, currency rates are determined by macroeconomic fundamentals. For instance, a rise in an economy's growth rate, an improvement in its trade balance, a decline in its inflation rate, or a rise in its real interest rate—that is, its interest rate adjusted for inflation—are considered to have a positive impact on a nation's currency's value. The quantity theory of money serves as the foundation for one

straightforward model for calculating the long-run equilibrium exchange rate. A one-time increase in the money supply is rapidly reflected as a commensurate rise in the domestic price level, according to the domestic application of the quantity theory.

According to the international translation, a proportional rise in the exchange rate also results from an increase in the money supply. The demand for money domestic compared to foreign, which is impacted both favorably and adversely by the pace of real economic development, is what determines the exchange rate, which is the relative price of money domestic per foreign. The inability of the international quantity theory of money to explain changes in the real exchange rate as opposed to only the nominal exchange rate is one of its flaws. The nominal exchange rate is deflated by pricing levels foreign compared to domestic, resulting in the actual exchange rate. For the actual economy, the real exchange rate is what really counts. A currency's high real value indicates that its goods are selling for less on international markets, which tends to discourage exports and promote imports. Purchasing power parity would apply if the actual exchange rate were constant, meaning that the exchange rate would be proportional to comparable price levels. Even for commodities and services that are exchanged worldwide, purchasing power parity does not, in reality, maintain in the near term, not even roughly. However, over time, buying power parity does have a tendency to persist [9], [10].

The late Rudiger Dornbusch's overshooting model is one elegant explanation of exchange-rate determination. According to this theory, a rise in the real interest rate caused, for instance, by a tighter MONETARY POLICY causes the currency to appreciate more in the short run than it would in the long run. The justification is that foreign investors will only be prepared to keep foreign assets if they anticipate a decline in the value of the domestic currency in the future, provided that the rate of return on domestic assets is greater as a result of the tightening of monetary policy. The decline in the native currency's value would compensate for the lower rate of return on overseas investments. Given that the value of the local currency grows in the short term, the only way its value will decrease in the future is if the short-term increase exceeds the long-term increase. A benefit of this theory over the international quantity theory of money is that it can account for changes in the actual exchange rate, thus the name overshooting.

It is quite difficult to forecast the short-term movement of currency rates. Exchange rate fluctuations are often seen by economists to follow a random walk, which implies that both a rise and a drop in the future are equally probable. Even after the event, it is difficult to explain short-run variations. Attempts by market players to predict the future course of macroeconomic fundamentals may be seen in certain short-term fluctuations, there is no question about it. Speculative bubbles are exchange rate movements that are unrelated to macroeconomic fundamentals and instead result from self-fulfilling changes in expectations. However, many short-run movements are difficult to explain and may be due to ineffable determinants such as some vague market sentiment or speculative BUBBLES. Those who trade foreign exchange for a living typically look at economists' models of fundamentals, when thinking about horizons of one year or longer. A common technical-analysis strategy is to buy currency whenever the short-run moving average rises above the long-run moving average, and sell when it moves the other way. At horizons of a month or less, they tend to rely more on methods unrelated to economic fundamentals, such as technical analysis. The volatility of exchange rates is fairly significant. There have been 36 months since the main exchange rates started to fluctuate in 1971 when the movement in the dollar/pound rate was more than 5%. These 36 months made up 12.7% of the

total up to 2004 months. Consider the Bretton Woods system, which was in place from 1955 to 1970 and was called after the New Hampshire town of Bretton Woods where a 1944 conference defined the post-World War II international monetary order. At that time, exchange rates were pegged throughout that time period. Only one month, or about 0.5% of all months, had a shift in the dollar/pound rate that was more than 5%. The exchange rate between the dollar and the yen and the mark later the euro saw similarly increased volatility between 1971 and 2004.

Businesspeople have long worried that excessive levels of exchange rate volatility would make it more expensive for people to buy, sell, or borrow or lend money internationally. Economists have previously questioned the significance of this impact. Importers, exporters, and others might theoretically use the forward exchange market to hedging their foreign currency risk. Furthermore, statistical analysis made it impossible to determine if historically rising exchange-rate volatility had been linked to declining trade. But in recent years, this impact has received greater attention. Fewer minor currencies have forward exchange markets, and those that do seldom extend beyond a year. Even if the necessary forward market does exist, utilizing it will incur charges, such as transaction fees and maybe a foreign currency premium. Economists have now statistically identified substantial effects: bilateral commerce between the member nations increases greatly when countries reduce bilateral exchange-rate fluctuation, particularly if they create a currency union. For instance, trade between nations that adopted the euro rose by over 30% in only the first few years.

Even those with strong and well-supported hypotheses regarding the anticipated course of future movements must concede the high degree of uncertainty given the significant volatility of currency rates. of fact, a large portion of the very high volume of foreign currency transactions is caused by differences of opinion. In other words, there are always buyers and sellers in transactions, and they often have opposing opinions on the expected direction of the exchange rate in the future. Looking at the forward exchange rate is the most popular method for attempting to determine what the average view of market participants is. In the forward exchange market, players swap dollars for foreign money for delivery at a price set today, but let's say one year from now. One may claim that the forward market thinks the currency will appreciate against the dollar over the next year if a currency is trading at a forward premium to the dollar, which means that the dollar price of the currency is higher on the one-year future market than on the spot market.

Regrettably, the forward rate seems to be a poor indicator of the future exchange rate in reality. At least as often as it moves in the stated direction, the future spot rate has a tendency to move in the opposite direction from that anticipated by the forward rate! Researchers have never been able to determine if this demonstrates speculators' irrationality or anything else. Exchange-risk premiums are compensation that risk-averse investors need in order to expose themselves to risk, according to the standard technical explanation, which is termed an exchange-risk premium. Risk surcharges might be minimal. However, they are impacted favorably by both uncertainty and the volume of assets, like bonds, that government's issue. By the 1990s, capital controls i.e., limitations on transferring financial assets across national borders had all but been abolished in the wealthier nations. Despite some market openness, there are still significant limitations in the poorest nations. Financial markets are highly linked and capital is highly mobile when there are no restrictions on it crossing international boundaries. Arbitrage is permitted in this situation because investors purchase assets in nations where they are cheap and sell them where they are

costly, bringing prices into alignment. Arbitrage attempts to equalize Interest Rates internationally. The most effective kind of arbitrage achieves covered interest parity by bringing the forward discount and the interest rate difference into parity.

In the absence of significant transaction costs, capital restrictions, or other obstacles to the international flow of money, covered interest arbitrage results in covered interest parity. Once again, covered interest parity is defined as the forward discount being equal to the interest rate difference. If uncovered interest parity persists, it is less certain. Under uncovered interest parity, the interest rate difference would be equal to both the forward discount and the anticipated rate of future exchange rate fluctuation. Due to the difficulty of measuring investors' private expectations, it is difficult to determine if this situation really exists. Existence of an exchange-risk premium is one reason why uncovered interest parity can be susceptible to failure. As long as nations are willing and able to pay the prevailing global rate of return, they may fund an endless amount of deficits by borrowing abroad if uncovered interest parity remains. But if uncovered interest parity fails to hold, nations will discover that the interest rate they must pay increases with the amount of debt they take on.

### CONCLUSION

Banks' foreign exchange activities are essential for promoting global commerce, controlling currency risks, and promoting economic stability. These activities, which include a variety of services that meet the interests of corporations, investors, tourists, and governments, include the exchange of one currency for another. In conclusion, bank foreign exchange transactions are essential to the world's financial system. They provide investment possibilities, support managing currency risks, and promote global commerce. The importance of foreign currency markets in contemporary finance is highlighted by the markets' dynamic character, which is impacted by economic, geopolitical, and technical variables. To maintain the integrity and stability of the world financial system, banks that do foreign exchange business must preserve moral standards, follow rules, and provide transparent services.

### REFERENCES:

- [1] W. A. Asnawi and P. Van Rate, Pengaruh Kinerja Keuangan Bank Terhadap Return on Assets ROA Studi pada Bank Umum Devisa buku 4, *J. EMBA*, 2018.
- [2] G. Syamni, R. Rasyimah, D. Ratnasari, and M. S. Abd. Majid, Determination of Return on Assets of the Foreign Exchange Banks in Indonesia, *Binus Bus. Rev.*, 2018, doi: 10.21512/bbr.v9i3.4872.
- [3] CBSL, Annual Report 2017 - Central Bank of Sri Lanka, *Cent. Bank*, 2018.
- [4] P. K. Adigwe, C. S. Okaro, I. J. Emejulu, and A. C. Ananwude, Banking Sector Operations and Foreign Direct Investment in Nigeria: A Causality Analysis, *Asian Themes Soc. Sci. Res.*, 2018, doi: 10.33094/journal.139.2018.12.60.75.
- [5] H. Ritha, Pengaruh Struktur Kepemilikan Dan Ukuran Size Perbankan Terhadap Kinerja Perbankan 2009-2014, *Transparansi J. Ilm. Ilmu Adm.*, 2018, Doi: 10.31334/Trans.V8i2.65.

- [6] M. Sourigna, S. Zhu, and A. Chanthavieng, The Study of Monetary Policy Instruments and Implementation Challenge in Laos, *Int. J. Econ. Financ.*, 2018, doi: 10.5539/ijef.v10n2p169.
- [7] E. Kaygın, E. Topçuoğlu, and S. Özkes, Investigating the bitcoin system and its properties within the scope of business ethics, *Turkish J. Bus. Ethics*, 2018.
- [8] N. Batari Ayunda Praja And U. Hartono, Pengaruh Ukuran Perusahaan, Capital Adequacy Ratio Car, Loan To Deposit Ratio Ldr, Non Performing Loan Npl Terhadap Profitabilitas Pada Bank Umum Swasta Nasional Devisa Yang Terdaftar Di Indonesia Periode 2012-2016, *J. Ilmu Manaj.*, 2018.
- [9] H. Y. Lim and H.-K. Bang, Implication of Financial Reforms in China and Vietnam for North Korea, *SSRN Electron. J.*, 2018, doi: 10.2139/ssrn.2800000.
- [10] J. P. Owens and R. McDonell, Creating Mechanisms to Get Good Access to Beneficial Ownership Information in International Context, *SSRN Electron. J.*, 2018, doi: 10.2139/ssrn.3161723.



## CHAPTER 22

### TRADE FINANCE AND INTERNATIONAL TRANSACTIONS: CROSSING THE NATIONAL BOUNDARIES

---

Dr Selvi S, Associate Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-dr.selvi@cms.ac.in

#### ABSTRACT:

Trade finance is essential for promoting cross-border trade, assuring seamless international transactions, and reducing the risks associated with international trade. This study provides a thoughtful examination of trade finance, including its procedures, important tools, difficulties, and crucial role in building global trade partnerships. The definition of trade finance in the study's first sentence is given as the group of financial tools, goods, and services that facilitate the transfer of commodities and services across international boundaries. It places emphasis on its function in handling issues such as the differences in payment schedules, exchange rate volatility, and business hazards experienced by exporters and importers. The study's main topic is the workings of trade finance instruments. It explores a wide variety of mechanisms, such as trade credit insurance, documentary collections, open account agreements, and letters of credit. The study emphasizes how these tools provide parties participating in international transactions security, payment certainty, and risk avoidance.

#### KEYWORDS:

Finance Instruments, Global Trade, International Commerce, International Transactions, Trade Finance.

#### INTRODUCTION

The financial tools and goods used by businesses to support international trade and commerce are referred to as trade finance. Importers and exporters may more easily do business via trade thanks to trade financing. A broad phrase, trade finance refers to a variety of financial instruments used by businesses and banks to facilitate trade transactions. The goal of trade finance is to eliminate supply and payment risks from deals by bringing in a third party. While the importer may be given credit to complete the trade order, trade finance provides the exporter with receivables or payment in accordance with the arrangement [1]–[3]. Trade finance may not always be a sign that a buyer is short on cash or liquid, while general financing is used to maintain solvency or liquidity. Instead, trade finance may be used to guard against the special risks that come with international commerce, such as exchange rate changes, political unpredictability, problems with non-payment, or the creditworthiness of one of the parties.

**Several of the financial tools used in trade financing are listed below:**

- a. Banks may provide lending lines of credit to assist importers and exporters alike.
- b. Letters of credit lessen the risk involved in international commerce since the buyer's bank ensures payment to the seller for the delivered products. Payment will not be made, nevertheless, until the conditions of the LC are satisfied by the seller, so the buyer is also protected. To complete the deal, both sides must uphold their end of the bargain.



- c. Factoring is the practice of paying businesses a portion of their receivables.
- d. Exporters may be given working capital or export credit.
- e. Insurance may be used for shipment and delivery of products as well as to shield the exporter from the buyer's failure to make payment.

Despite the fact that there has been international commerce for ages, trade finance helps it develop. The expansion of international commerce has been aided by the widespread use of trade financing.

### **Why Trade Finance Lowers Risk**

By balancing the contrasting requirements of an exporter and an importer, trade finance may assist lower the risk involved with international commerce. To prevent the possibility that the importer accepts the cargo but declines to pay for the products, an exporter would prefer that the importer pay ahead for an export shipment. However, if the importer makes an advance payment to the exporter, the latter may take the money but refuse to provide the products. A letter of credit from the importer's bank to the exporter's bank, which authorizes payment once the exporter submits proof of shipping, such as a bill of lading, is a typical solution to this issue. The letter of credit promises that the exporter will receive payment whenever the issuing bank gets confirmation that the items were dispatched by the exporter and that all other conditions of the contract have been satisfied. The buyer's bank takes on the duty of paying the seller with the letter of credit. The buyer's bank would need to confirm that the buyer was able to fulfill the deal financially. Trade is facilitated by trade finance, which helps importers and exporters develop mutual trust [4], [5].

### **Additional advantages of trade finance**

In addition to lowering the risk of nonpayment and non-receipt of products, trade finance has emerged as a crucial instrument for businesses to increase productivity and income.

### **Increases operational efficiency and cash flow**

Trade finance assists businesses in obtaining funding to support their operations, but it also often functions as a credit extension. In the event of factoring, trade finance enables businesses to obtain a cash payment based on accounts receivable. The risk of nonpayment or non-receipt of products may be reduced if the importer and exporter conduct a commercial transaction with the use of a letter of credit. Because the buyer's bank guarantees payment and the importer is aware that the items will be supplied, cash flow is therefore enhanced. To put it another way, trade finance guarantees less delays in payments and shipments, enabling both importers and exporters to manage their operations and arrange their cash flow more effectively. Consider trade finance as expansion financing for the firm utilizing the shipping or trade of products as collateral.

### **Increased Sales and Profits**

Businesses may expand their customer base and income via trade with the help of trade financing. For instance, a U.S. corporation that successfully closes a deal with a company abroad may not be able to fulfill the order's requirements for the items. However, the exporter may execute the order with assistance from commercial or public trade finance organizations or via export financing. Because of the innovative financial solutions that trade finance offers, the U.S. Corporation is able to acquire new clients that it may not have otherwise.

**Reduce the Chance of Financial Difficulty**

Without trade finance, a business might miss payments, lose a significant client or supplier, and suffer long-term consequences. Companies may benefit from having choices like revolving credit facilities and accounts receivable factoring not just for international trade but also for when they face financial challenges.

**Explaining International Trade Finance**

While cross-border commerce is essential for the expansion of the world economy, it also carries certain risks and uncertainties that primarily impact importers and exporters.

The availability of finances to purchase goods from abroad is one of the main issues importers must deal with.

One of the greatest dangers for exporters is not receiving timely payment for products from purchasers across international borders. By providing financial assistance and assurance, international trade finance seeks to reduce these risks for all parties participating in international commerce.

**Meaning of International Trade Finance**

The term international trade finance refers to the financial assistance provided by banks or other financial institutions to importers and exporters using a variety of financial instruments, such as bank guarantees and letters of credit, to enable them to conduct business without facing financial hardship. Importers, exporters, banks, trade finance firms, and other stakeholders are engaged in international trade financing [6]–[8]

**Who Makes Use of Foreign Trade Finance?**

Importers, exporters, merchants, producers, manufacturers, etc. are examples of parties that make use of international trade financing.

**Who is a trade finance provider?**

For its business customers, a number of financial institutions other than banks provide safe and reliable import and export financing services.

**Institutions of finance**

Many financial institutions concentrate on handling different financial products for their business customers, including investments, loans, deposits, and more. Companies may get advance money from financial institutions with a valid operating license if they require it for ongoing business activities.

**Money-Making Middlemen**

In addition to the aforementioned financial institutions, a number of financial intermediaries work with financial companies to assist international trade transactions. Examples of these intermediaries include agents and third-party service providers. It is made up of insurance brokers who may point you in the direction of insurance providers.

## Standard Commercial Banks

Small and large local and international banks provide companies all over the globe with services related to international trade financing.

### What sets international trade finance apart from other forms of financing?

There are a few significant distinctions between conventional finance or credit issuance and international trade financing. While broad finance is used to manage solvency or liquidity, financing for international commerce may not necessarily be an indication that a buyer is strapped for cash or liquidity. Instead, the particular risks associated with international commerce, such as fluctuating currency rates, political instability, a party's creditworthiness, or issues with non-payment, may be protected against using trade finance internationally. Trade finance entails a range of trading intermediaries, such as banks and other financial institutions, to enable multiple financial transactions between importers and exporters. They assume the position of a third party and take over the responsibility of the supplier and client, removing any risk. The contract states that the importer may provide credit to execute the trade order while the exporter obtains receivables or payment. Several of the many various forms of activity that fall under the wide category of trade finance include letters of credit, export credit, lending, forfaiting, factoring, etc.

### Different Forms of Foreign Trade Finance

International trade finance may protect buyers and sellers from the risks of international commerce while general funding is commonly used to assure solvency or liquidity. It can be provided in a variety of ways. The many forms of international trade financing are as follows:

**Word of Credit:** Assuring the seller that they will swiftly receive the full amount owed in return for the products and services they have provided, a letter of credit is a document that validates the existence of money and is issued by a financial institution on behalf of the buyer. When the terms and conditions of the issued letter of credit are satisfied, the financial institution will partially or fully pay the seller. However, the buyer cannot do so.

**Bank Promise:** International enterprises may get services for international trade financing from domestic or foreign banks of any size. In the event that the importer or exporter is unable to keep their half of the bargain, a bank may provide this kind of guarantee, functioning as a security. Therefore, companies might look for financial support in the form of bank guarantees.

**Factoring:** Businesses and organizations may utilize factoring as a financial strategy when they want quick cash. Selling company receivables to a factor, a third party, is the process of factoring. The factor or trade financier pays a reduced price for the exporter's bills. The business client or consumer pays the whole purchase price to the factor.

**Export financing:** A guarantee, insurance, or credit known as an export credit allows a foreign buyer of goods or services to defer payment over time. These financial services may be obtained by international businesses via export credit organizations.

**Forfaiting:** The exporter sells all of their accounts to a forfaiter at a discounted price in return for cash for all of their accounts. The right to collect export receivables from an exporter is sold without recourse to a forfaiter via the practice of forfaiting.

**Insurance:** In international commerce, risks including cargo loss, product damage, and customer nonpayment are quite prevalent and may have a detrimental effect on exporters. When it comes to the delivery and shipment of the goods as well as protecting the exporter from these dangers, insurance is crucial.

## DISCUSSION

### Financial Support for International Trade

Financial support is made possible by international trade finance, which helps different firms generate funds to support efficient international operations and prevent any disturbance brought on by sales made on credit or any other problem. International factoring or forfaiting is used by companies, importers, and exporters to reduce any financial risks associated with transactions done on credit. Better relationships between buyers and sellers International trade financing benefits firms by offering quick cash to facilitate commerce. By making sure that both buyers and sellers can fulfill their financial responsibilities to one another, buyers and sellers are able to preserve positive and stress-free business relationships. Extend their worldwide operations by giving financial support, firms may grow or extend their global activities and generate revenue through trade. When working capital is not disrupted or stopped as a result of sales made on credit to foreign purchasers, expanding worldwide operations will be simple [9], [10]. Businesses may start expanding their worldwide operations since foreign buyer non-payment risks can be reduced with the help of international trade financing.

### Both exports and imports

An import is a product that is purchased from the worldwide market, while an export is a product that is sold to the global market. The current account portion of a nation's balance of payments accounts for imports and exports. Wealthy nations may employ their resources such as labor, technology, or capital more effectively thanks to global commerce. Different nations are blessed with various natural resources and assets, including land, labor, money, and technology. This enables some nations to manufacture the same commodity more rapidly and cheaply, or more effectively. They could thus sell it for less than other nations. If a nation cannot effectively manufacture a good, it may nonetheless receive it via trade with another nation that can. In international commerce, specialization is referred to as this.

### Comparative Benefit

For instance, England and Portugal have traditionally been cited as an example of how two nations might profit from one another by specializing and trading in accordance with their individual comparative advantages, going all the way back to Adam Smith's *The Wealth of Nations*. In such instances, Portugal is claimed to have a large number of vineyards and be able to produce wine at a low cost, but England is believed to be able to produce fabric more cheaply due to the abundance of sheep on its pastures. The idea of comparative advantage states that any nation would ultimately acknowledge these truths and give up trying to produce the more expensive good domestically in favor of trading. In reality, England would probably cease making wine and Portugal would probably stop making fabric over time. Both nations would understand that it was in their best interests to trade with one another in order to acquire the other rather than diverting their energies from producing what they were comparably better at locally.

These two nations understood that by concentrating on the items for which they had a comparative advantage, they might increase their output. The Portuguese would then start producing solely wine, while the English would exclusively produce cotton. Now, any nation may produce a specialized output of 20 units annually and trade an equal amount of both goods. As a result, both items are now available in each nation for less money. The potential cost of manufacturing both items is higher for both nations than the cost of specialization, as we can see from this. Absolute advantage may be contrasted with comparative advantage. Only when each producer has an absolute advantage in producing a particular product does absolute advantage result in clear profits from specialization and commerce. A producer would never export anything if they possessed any absolute advantages. However, we do see that nations with a comparative advantage, even those without a glaring absolute advantage, benefit from trade.

### **Why Comparative Advantage Arose**

David Ricardo, an English political economist, is credited with developing the concept of comparative advantage. Although it has been speculated that Ricardo's mentor, James Mill, likely created the concept and snuck it into Ricardo's book on the fly, comparative advantage is covered in Ricardo's book *On the Principles of Political Economy and Taxation*, which was published in 1817. As was previously said, the concept of comparative advantage demonstrated how Portugal and England both benefited from specialization and trade based on their own comparative advantages. In this instance, Portugal was able to produce wine at a reasonable price while England was able to produce fabric for a reasonable price. Each nation would finally acknowledge these truths, according to Ricardo, and quit seeking to produce the more expensive commodity.

China's comparative advantage over the US in terms of labor costs serves as a more modern illustration of comparative advantage. Simple consumer items are produced by Chinese employees at a far lower opportunity cost. In specialized, capital-intensive work, the U.S. has a competitive edge. American employees provide high-end products or profitable investment prospects for less money. These types of trade and specialization are advantageous for any nation. The notion of comparative advantage contributes to the explanation of why protectionism has historically failed. It may result in an immediate local advantage in the form of new employment if a country withdraws from an international trade agreement or if a government applies tariffs, but this is seldom a long-term solution to a trade issue. That nation will eventually become less competitive than its neighbors, who were already better equipped to manufacture these goods at a lower opportunity cost.

### **Arguments against Comparative Advantage**

Why isn't international trade open between nations? Why do some nations continue to be impoverished while others benefit from free trade? There are several causes, but economists believe that rent seeking is the most significant one. When one group organizes and presses the government to further its interests, rent seeking happens. Say, for instance, that American shoe manufacturers are aware of the free-trade argument and agree with it, but they also realize that cheaper imported shoes will harm their particular interests. No one in the shoe business wants to lose their job or see revenues fall in the near term, even if doing so would allow workers to be more productive than if they switched from manufacturing shoes to creating computers. This desire could prompt the shoemakers to advocate for tax benefits specifically for their goods or

higher levies or even outright bans on imported footwear. There are many calls to safeguard American employment and traditional American crafts, despite the fact that such protectionist measures would ultimately make American workers and customers less wealthy and less productive.

### **Other Potential Advantages of International Trade**

In addition to boosting productivity, international commerce also gives nations the chance to engage in a global economy, which promotes the possibility of foreign direct investment FDI. Theoretically, economies may expand more effectively and readily join the competitive market. Foreign capital and skills may enter the nation via FDI for the receiving government. It increases employment levels and, ostensibly, causes the gross domestic product GDP to increase. FDI provides business development and growth for the investor, which results in better revenues.

### **Protectionism vs. Free Trade**

There are competing hypotheses, as there always are. Regarding the degree of control over commerce between nations, there are two opposing viewpoints in international trade.

#### **Fair Trades**

The easier of the two ideas is free trade. Another name for this strategy is laissez-faire economics. There are no trade limitations under a laissez-faire system. The fundamental tenet is that efficient manufacturing will be ensured by global supply and demand forces. Therefore, nothing has to be done to safeguard or encourage commerce and development since market forces will take care of these things on their own.

#### **Protectionism**

According to protectionism, it's crucial to regulate global commerce in order to guarantee that markets operate as intended. Supporters of this idea try to direct the market in accordance with their belief that market inefficiencies may impede the advantages of global commerce. Although there are many distinct types of protectionism, tariffs, subsidies, and quotas are the most often used ones. These tactics make an effort to address any inefficiency in the global market. International commerce has the ability to increase a nation's capacity to manufacture and acquire commodities by providing the possibility for specialization and, therefore, more effective resource utilization. However, critics of international free trade have claimed that it still permits inefficiencies that put poor countries at risk. The world economy is unquestionably undergoing constant development. As a result, its players must also change as it does.

### **What are the advantages of global trade for businesses?**

The advantages of international trading for a corporation include diversification, a broader pool of prospective customers, which increases earnings and revenues, maybe less rivalry in a foreign market that hasn't yet been penetrated, and potential gains from fluctuating currency rates.

### **What Justifies the Need for Global Trade?**

International trade results from regional disparities between each country. International commerce is often sparked by disparities in technology, education, demand, governmental regulations, labor laws, natural resources, wages, and financial possibilities.



## CONCLUSION

Global commerce, economic development, and international collaboration are all facilitated by trade finance and international transactions, which are essential elements of the global economy. These systems use a variety of financial products and services to control risks, finance transactions, and assure seamless cross-border movement of commodities and services. In conclusion, international trade and trade financing are crucial components of the world economy. These measures promote economic development and improve intergovernmental relations by lowering risks, easing access to finance, and encouraging economic collaboration. The dynamics of international commerce and finance will continue to be shaped by the development of trade finance techniques, particularly the incorporation of technology and sustainable practices. Government measures that obstruct commerce internationally and safeguard home markets are known as trade barriers. These include import and export permits, taxes, quotas, subsidies, and standardization.

## REFERENCES:

- [1] P. Puspita, Analysis Of Factors Affecting International Banking Activities: A Focus On The Transactions Of Islamic International Trade Financing Case Study In Xyz Islamic Bank, *E-Mabis J. Ekon. Manaj. Dan Bisnis*, 2018, Doi: 10.29103/E-Mabis.V18i1.285.
- [2] V. A. Ermakov, E. M. Burmistrova, N. B. Bodin, A. A. Chursin, And E. A. Shevereva, A Letter Of Credit As An Instrument To Mitigate Risks And Improve The Efficiency Of Foreign Trade Transaction, *Espacios*, 2018.
- [3] A. E. Davis, Global Production Networks And The Private Organization Of World Trade, *J. Econ. Issues*, 2018, Doi: 10.1080/00213624.2018.1469865.
- [4] World Trade Organization, *Can Blockchain Revolutionize International Trade?* 2018. Doi: 10.30875/7c7e7202-En.
- [5] D. A. Larson, Mitigating Risky Business: Modernizing Letters Of Credit With Blockchain, Smart Contracts, And The Internet Of Things, *Michigan State Law Rev.*, 2018.
- [6] L. A. Dimatteo, International Trade Finance, In *International Business Law And The Legal Environment*, 2018. Doi: 10.4324/9781315724447-15.
- [7] A. S. Gundogdu, The Rise Of Islamic Finance: 2-Step Murabaha, *Asia-Pacific Manag. Account. J.*, 2018.
- [8] Z. Z. . Mokodongan, T. O. Rotinsulu, And D. M. Mandeij, Analisis Fluktuasi Tingkat Kurs Rupiah IdR Terhadap Dollar Amerika Usd Padasistem Kurs Mengambang Bebas Di Indonesia Dalam Periode 2007.1-2014.4, *J. Berk. Ilm. Efisiensi*, 2018.
- [9] V. M. Shavshukov, A. V. Vorontsovsky, And L. F. Vyuneneko, Analyzing Dynamics And Forecasting Real Effective Exchange Rates For Brics Countries 1994–2016, *St Petersburg. Univ. J. Econ. Stud.*, 2018, Doi: 10.21638/Spbu05.2018.405.
- [10] K. Turkcan And V. Avsar, Financial Dependence And The Terms Of Payments In International Transactions, *Appl. Econ. Lett.*, 2018, Doi: 10.1080/13504851.2017.1343439.



## CHAPTER 23

### MONEY LAUNDERING AND ANTI-MONEY LAUNDERING AML

---

Dr Batani Raghavendra Rao, Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-brr@cms.ac.in

#### ABSTRACT:

Money laundering, which is the practice of hiding the source of illegal payments, seriously jeopardizes the stability of the world financial system. This study offers a thorough analysis of money laundering, its negative effects, the rise of anti-money laundering AML initiatives, essential tactics, difficulties, and cooperative steps made to combat this financial crime. Money laundering is described in the study's first paragraph as the methodical process of converting illegally acquired monies into legal assets via a series of intricate transactions. It highlights the pernicious effects of money laundering, such as how it supports criminal activity, finances terrorists, and threatens financial stability. In the study, the establishment of anti-money laundering AML policies is the main focus. It explores the collaborative frameworks that have been built by governments, regulatory agencies, financial institutions, and international organizations to identify, prevent, and fight money laundering. The study emphasizes how crucial AML measures are to protecting against illicit activity and preserving the integrity of financial institutions.

#### KEYWORDS:

Anti-Money Laundering, Criminal Organization, Financial Crime, Financial System, Money Laundering.

#### INTRODUCTION

Money laundering is the illicit practice of disguising huge sums of cash obtained via criminal activity, such as the financing of terrorism or drug trafficking, as coming from a legitimate source. The technique launders the money, which is thought to be filthy as a result of the illicit action, to make it seem clean. Both white-collar and low-level criminals use money laundering, a severe financial crime. Anti-money-laundering AML rules are in place at the majority of financial institutions today to identify and stop this behavior. For criminal groups to successfully employ money earned unlawfully, money laundering is necessary. Large sums of illicit currency need inefficient and risky handling. Criminals need a means of depositing money into reputable financial institutions, but they can only do so if it looks to originate from reputable sources. Placement, layering, and integration are the traditional three phases in the money laundering process [1]–[3].

Through placement, dirty money is covertly injected into the established financial system. Layering uses a series of transactions and accounting gimmicks to hide the money's origin. The now-laundered money is withheld from the real account in the last phase, integration, and utilized for whatever the crooks have in mind for it. Be aware that this template may not apply in real-world circumstances. The three steps of money laundering may not all be present, or certain stages may be merged or repeated numerous times. From the very basic to the most complicated,

there are several methods to launder money. Using a genuine, cash-based company run by a criminal organization is one of the most popular tricks. For instance, if the company operates a restaurant, it can overstate daily cash collections in order to transfer unlawful funds via the eatery and into the firm's bank account. The money may then be withdrawn as required after that. These companies are often referred to as fronts.

### **Money-Laundering Substances**

Smurfing sometimes referred to as structuring is a typical kind of money laundering. To avoid being caught, the thief divides huge sums of money into several little deposits and often disperses them across numerous accounts. The use of currency exchanges, wire transfers, and mulescash smugglers who carry huge sums of cash over borders and deposit it in foreign accounts where money-laundering regulation is less strict can also be used to commit money laundering. Other ways to launder money include:

- a. Investing in goods that may be readily transported to other countries, such as jewels and gold.
- b. covertly purchasing and disposing of priceless possessions including homes, automobiles, and yachts.
- c. Casino gambling and money laundering.
- d. Fake goods.
- e. Using shell firms, which are effectively dormant businesses or organizations that only exist on paper.

### **Electronic Money Laundering: What Is It?**

The old crime has taken on a new look because to the Internet. The emergence of peer-to-peer P2P mobile phone transfers and anonymous internet payment systems has made it more difficult to identify money transactions that are not authorized. Furthermore, the third element of money laundering, integration, may be carried out with little to no trace of an Internet protocol IP address thanks to the usage of proxy servers and anonymizing software. Online auctions and sales, gambling websites, and virtual gaming platforms are more places where money may be laundered. Illegally obtained funds are turned into virtual currency and subsequently back into real, useable, and untraceable clean funds. Money laundering's newest frontier is digital currency like Bitcoin. They are not completely anonymous, but because to their greater secrecy when compared to more traditional forms of cash, they are increasingly being utilized in extortion schemes, the drug trade, and other illegal activities [4], [5].

### **Prevention of Money Laundering**

In recent decades, governments all around the globe have intensified their efforts to prevent money laundering, enacting laws requiring financial institutions to set up systems to identify and report suspicious activities. The money involved is a considerable sum. Global money-laundering transactions are estimated by the United Nations Office on Drugs and Crime to be worth between \$800 billion and \$2 trillion annually, or between 2% and 5% of the world's gross domestic product GDP, though it is challenging to calculate the exact amount due to the clandestine nature of money laundering. To combat money laundering on a global scale, the Group of Seven G-7 established the Financial Action Task Force FATF as an international organization in 1989. Its scope was extended to include preventing the funding of terrorists in the

early 2000s. In 1970, the Bank Secrecy Act was enacted in the United States, requiring financial institutions to disclose certain transactions to the Department of the Treasury on a suspicious activity report SAR, such as cash transactions over \$10,000 or any other that they find suspicious. The Financial Crimes Enforcement Network FinCEN, which uses the data that banks provide to the Treasury Department, may share it with domestic criminal investigators, international organizations, or foreign financial intelligence units. Although these regulations were useful in identifying criminal conduct, the Money Laundering Control Act of 1986 was the first to make money laundering itself unlawful in the United States. The USA Patriot Act, which was passed shortly after the terrorist attacks of September 11, 2001, increased money-laundering operations by permitting the use of investigative techniques intended to combat organized crime and drug trafficking in terrorism cases. A professional title known as a Certified Anti-Money Laundering Specialist CAMS is offered by the Association of Certified Anti-Money Laundering Specialists ACAMS. A CAMS certified individual may work as a brokerage compliance manager, a Bank Secrecy Act officer, a financial intelligence unit manager, a surveillance analyst, or an investigative analyst for financial crimes.

### **Why Is Fighting Money Laundering Important?**

The goal of anti-money laundering AML is to strip criminals of the proceeds from their illicit businesses, removing their primary incentive to carry out such evil operations. Millions of individuals throughout the world are put in danger by illegal and risky operations including drug trafficking, people smuggling, sponsorship of terrorism, smuggling, extortion, and fraud. These activities also have a significant negative social and economic impact on society. In light of the fact that money laundering serves to legitimate the profits of such crimes, the fight against money laundering may significantly benefit society by reducing criminal activity [6]–[8].

## **DISCUSSION**

### **What Exactly is a Money Laundering Example?**

Let's say a drug dealer wants to purchase a new automobile using money acquired illegally from selling narcotics. The dealer must launder the money to make it seem legal since it is challenging and suspicious to attempt to buy a car in full cash. The drug dealer also operates a small laundry, a venture that requires a lot of cash.

The money from the heroin transaction is mixed with the money from the laundry before being transported to a bank for deposit. The dealer may then purchase the automobile without raising any suspicions by drawing a check from the laundromat's account. Purchasing chips from the casino with cash and receiving checks in exchange for the chips from the casino, sometimes without engaging in any gaming or putting even small bets, is another frequent method of money laundering in casinos.

### **How Do You Know If Someone Is Money Laundering?**

There are a number of warning signs to watch out for that might indicate money laundering. Some of them include engaging in questionable or covert financial activity, making substantial cash transactions, having a business that seems to have no actual purpose, engaging in excessively complicated transactions, or making many transactions that are just below the reporting level.

**What are a few methods for using real estate for money laundering?**

The undervaluation or overvaluation of properties, the buying and selling of properties quickly after one another, the use of third parties or businesses to keep the transaction separate from the illegal source of funds, and private sales are some methods that are frequently used by criminals to launder money through real estate transactions.

**What Roles Do Cryptocurrencies Play in Money Laundering?**

Convertible virtual currencies, or CVCs, are another name for cryptocurrencies, and the U.S. Financial Crimes Enforcement Network FinCEN indicated in a study from June 2020 that they have increasingly replaced traditional currencies in a variety of illegal online activities. CVCs are being used more often to layer transactions and conceal the source of money obtained from criminal activities, in addition to becoming the main method of payment for online purchases of ransomware tools and services, online exploitative content, narcotics, and other illicit commodities. Criminals utilize a variety of cryptocurrency-based money-laundering methods, such as mixers and tumblers that disrupt the link between the address or wallet sending bitcoin and the address receiving it.

**Anti-Money Laundering AML: What Is It?**

The network of laws, rules, and processes known as anti-money laundering AML aims to expose attempts to pass off criminal payments as legitimate revenue. Money laundering aims to cover up offenses including minor drug sales and tax evasion as well as public corruption and funding of terrorist organizations. The introduction of AML law was a reaction to the expansion of the financial sector, the abolition of international capital restrictions, and the ease with which intricate webs of financial transactions could be carried out. According to a high-level United Nations body, money laundering will account for \$1.6 trillion in yearly flows in 2020, or 2.7% of the world's GDP.

**Anti-Money Laundering AML Understanding**

The 1970 Bank Secrecy Act mandated that banks record cash deposits of more than \$10,000, but AML requirements in the US have since grown to include a complex regulatory framework requiring financial institutions to do due diligence on their clients and look for and report suspicious activities. Similar measures have been implemented by the European Union and other governments.

**What Is Anti-Money Laundering in Plain English?**

In its broadest definition, anti-money laundering AML refers to the body of rules, procedures, and laws that guard against the entry of illicit funds into the financial system. AML targets a broad range of crimes, including as market manipulation, tax fraud, and market rigging, as well as attempts to hide these actions as the source of money. Effective AML policies have wider implications for decreasing crime since most criminals and terrorists depend heavily on laundered money for their unlawful activities. To stop money laundering and economic crime, many organizations are required by the Money Laundering Regulations to do thorough client due diligence. Due diligence on customers must include AML checks since they check clients against PEP and Sanctions lists and confirm their stated identities. Failure to adhere to AML rules may result in fines and, in severe circumstances, disqualification as a director or corporate entity.

## Identify Your Client

Compliance for banks begins with confirming the identification of new customers, a procedure frequently referred to as Know Your Customer KYC. Banks are expected to know the nature of a client's activity and confirm deposited monies are from a genuine source in addition to confirming the customer's identification. Additionally, as part of the KYC procedure, banks and brokers must check new clients' names against databases of criminal suspects, people and businesses that are subject to sanctions, and politically exposed persons foreign public officials, their relatives, and close allies. Three stages may be used to separate money laundering:

- a. The introduction of ill-gotten gains into the financial system.
- b. Transactions that use a technique called layering to hide the money's illegitimate source.
- c. Making real estate, financial investments, or other purchases with dirty money.
- d. Aiming to the ward such scams at the first deposit window is the KYC procedure.

## Due diligence on the customer

Client due diligence is essential to the KYC procedure, for instance by verifying the veracity and accuracy of the information a prospective client submits. However, it is also an ongoing process that includes both current and past clients as well as their transactions. Continuous examination of each client's potential for money laundering is necessary for customer due diligence, and those clients who are recognized as having greater non-compliance risks should get a more thorough investigation. Customers who are added to sanctions and other AML lists must be identified. As stated by the U.S. According to Treasury's Financial Crimes Enforcement Network, the U.S.'s four primary standards for client due diligence are as follows [9], [10]:

- a. Recognizing and confirming the client's identity.
- b. Recognizing and confirming the identification of beneficial owners who own a stake of at least 25% in a business before establishing an account.
- c. Recognizing the nature and intent of client interactions to create client risk profiles
- d. Carrying out constant surveillance to spot questionable transactions, report them, and update consumer data.

Customer due diligence looks for signs of money laundering techniques include layering and structuring, commonly referred to as smurfing the splitting of big transactions into smaller ones to get around reporting requirements and escape detection. The AML holding period, which mandates that deposits must stay in an account for at least five trading days before they may be moved elsewhere, is one regulation in place to prevent stacking. Financial institutions must create and execute a documented AML compliance policy that is supervised by a designated AML compliance officer and has written approval from a senior management member. These programs must have risk-based procedures for conducting ongoing customer due diligence as well as ongoing monitoring to identify and report suspicious transactions.

## Anti-Money Laundering History

While there have long been efforts to regulate illegal riches, the phrase money laundering is just a few decades old and has only recently been widely used. The first significant item of U.S. The 1970 Bank Secrecy Act, which was created in part to combat organized crime, included AML regulations. The Act required banks to identify the persons performing transactions and to keep records of transactions, in addition to forcing banks to disclose cash deposits of more than \$10,000. In 1974, the same year that the term money laundering became widely used in the wake

of the Watergate crisis, the U.S. Supreme Court affirmed the validity of the Bank Secrecy Act. Additional law was introduced in the 1980s as drug trafficking activities escalated, in the 1990s as financial surveillance was expanded, and in the 2000s as financing for terrorist groups was cut off. When the Financial Action Task Force FATF was established in 1989 by a number of nations and international organizations, anti-money laundering gained more worldwide importance. Its goal is to create and encourage the adoption of global standards to stop money laundering. Following the 9/11 terrorist attacks, FATF extended its scope to include preventing the funding of terrorism in October 2001. The International Monetary Fund IMF is a key player in the battle against money laundering. Similar to the FATF, the IMF has pressured its member nations to adhere to global norms in order to stop the funding of terrorism. The 1998 Vienna Convention on Drug Trafficking, the 2001 Palermo Convention against International Organized Crime, and the 2005 Merida Convention against Corruption all have AML rules.

### **What Are Some Methods of Money Laundering?**

Money launderers sometimes use cash-generating enterprises owned by accomplices to transfer illegal money, or they may inflate invoices in transactions involving shell companies. Money transfers used in layering transactions are intended to hide the source of illegal payments. Structuring, also known as smurfing, is the act of dividing a large transfer into smaller ones in order to avoid reporting requirements and AML scrutiny.

### **Is it possible to stop money laundering?**

AML enforcement may at best try to control money laundering rather than eradicate it completely given that projected yearly flows are close to 3% of the world's economic output. Despite the fact that AML regulations undoubtedly make their life more difficult, money launderers never seem to run out of resources or collaborators.

### **Why Is Compliance with AML Important?**

According to a conservative estimate, the amount of money laundered worldwide in a single year is thought to be between \$800 billion and \$2 trillion, or 2% to 5% of the world's GDP. Illegal weapons sales, smuggling, embezzlement, insider trading, bribery, and computer fraud schemes are all common examples of money laundering. It is also pervasive in prostitution rings, trafficking of firearms or drugs, and other forms of organized crime. Anti-money laundering and counter-funding of terrorism CFT are closely related strategies used by financial institutions to stop the financing of terrorists. AML laws cover both money laundering source of funds and terrorist funding destination of funds. Financial institutions utilize AML strategies for the following reasons, in addition to the moral obligation to prevent money laundering and terrorist funding

- a. In order to comply with rules, they must keep an eye on customers and transactions and report any suspicious behavior.
- b. Defense of shareholder value and the reputation of their brand.
- c. Avoiding possible legal and criminal penalties for disobedience or carelessness, as well as consent orders.
- d. Cost savings from penalties, hiring employees, paying for IT, and setting aside money for risk exposure.



## CONCLUSION

The fight against illegal financial activity, the protection of financial system integrity, and the avoidance of supporting criminal businesses are all goals of money laundering and anti-money laundering AML operations. The integrity of financial institutions and social well-being are seriously threatened by money laundering. For these illegal acts to be discovered and stopped, effective AML operations are necessary. In the continuous battle against money laundering, cooperative strategies including governments, financial institutions, technology, and international organizations are essential. The international community may strive toward a more secure and open financial environment by being watchful and adjusting to changing challenges. Customer due diligence CDD refers to the examination financial institutions and others are expected to do to prevent, detect, and report infractions. Anti-money laundering AML is the general term for the laws, regulations, and processes aimed at discouraging money laundering. KYC regulations require customer due diligence when screening and verifying potential customers.

## REFERENCES:

- [1] Z. Chen, L. D. Van Khoa, E. N. Teoh, A. Nazir, E. K. Karuppiah, and K. S. Lam, Machine learning techniques for anti-money laundering AML solutions in suspicious transaction detection: a review, *Knowledge and Information Systems*, 2018. doi: 10.1007/s10115-017-1144-z.
- [2] R. F. Pol, Anti-money laundering effectiveness: assessing outcomes or ticking boxes?, *J. Money Laund. Control*, 2018, doi: 10.1108/JMLC-07-2017-0029.
- [3] M. Campbell-Verduyn, Bitcoin, crypto-coins, and global anti-money laundering governance, *Crime, Law Soc. Chang.*, 2018, doi: 10.1007/s10611-017-9756-5.
- [4] K. Benson, Money Laundering, Anti-Money Laundering and the Legal Profession, in *The Palgrave Handbook of Criminal and Terrorism Financing Law*, 2018. doi: 10.1007/978-3-319-64498-1\_6.
- [5] C. Gikonyo, Detection mechanisms under Kenya's anti-money laundering regime: omissions and loopholes, *J. Money Laund. Control*, 2018, doi: 10.1108/JMLC-06-2017-0023.
- [6] V. Tan, The art of deterrence: Singapore's anti-money laundering regimes, *J. Financ. Crime*, 2018, doi: 10.1108/JFC-01-2018-0001.
- [7] M. Zali and A. C. H. Maulidi, Fighting against money laundering, *BRICS Law J.*, 2018, doi: 10.21684/2412-2343-2018-5-3-40-63.
- [8] E. S. Mekpor, A. Aboagye, and J. Welbeck, The determinants of anti-money laundering compliance among the Financial Action Task Force FATF member states, *J. Financ. Regul. Compliance*, 2018, doi: 10.1108/JFRC-11-2017-0103.
- [9] S. Turner and J. Bainbridge, An Anti-Money Laundering Timeline and the Relentless Regulatory Response, *J. Crim. Law*, 2018, doi: 10.1177/0022018318773205.
- [10] S. Sittlington and J. Harvey, Prevention of money laundering and the role of asset recovery, *Crime, Law Soc. Chang.*, 2018, doi: 10.1007/s10611-018-9773-z.



## CHAPTER 24

### **BASEL ACCORDS AND BANKING STANDARDS: GLOBAL BANKING STANDARDS ARCHITECTURE**

---

Dr Batani Raghavendra Rao, Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-brr@cms.ac.in

#### **ABSTRACT:**

The Basel Accords, a set of global banking standards created by the Basel Committee on Banking Supervision BCBS, are essential for advancing financial stability, risk management, and regulatory coherence in the banking sector globally. The Basel Accords, their development, core tenants, influence on banking activities, difficulties, and ongoing support to a stable financial system are all thoroughly explored in this study. The Basel Accords, a collection of international regulations designed to provide a standard framework for banks to analyze and manage risks while keeping appropriate capital reserves, are introduced in the study's first paragraph. It emphasizes how important such agreements are for averting financial crises, guaranteeing responsible risk-taking, and boosting trust in the banking industry. Discussed is the development of the Basel Accords, with a focus on the change from Basel I to the more thorough and risk-conscious Basel II and Basel III frameworks. The study investigates how these agreements changed as a result of improvements in risk assessment methodology and lessons learnt from financial crises.

#### **KEYWORDS:**

Banking Sector, Basel Accords, Capital Reserves, Financial Crises, Financial Stability, Risk Management.

#### **INTRODUCTION**

The Basel Committee on Bank Supervision BCBS established a set of three agreements Basel I, II, and III for the regulation of the banking industry. The Committee makes recommendations on capital risk, market risk, and operational risk in relation to banking and financial laws. The agreements make sure that financial institutions have sufficient cash on hand to withstand unforeseen losses. The 1980s saw the beginning of a multi-year process that resulted in the Basel Accords. The BCBS was established in 1974 to serve as a platform for frequent collaboration on banking supervisory issues among its member nations. The BCBS initially focused on enhancing financial stability by improving supervisory know-how and the quality of banking supervision throughout the world, but has since shifted its focus to observing and assuring the capital adequacy of banks and the banking system [1]–[3]. The Bretton Woods system, which had just collapsed, was being replaced by new global financial arrangements when the Basel I pact was first put together by central bankers from the G10 nations. The meetings are referred to as the Basel Accords since the BCBS is based at the Basel, Switzerland headquarters of the Bank for International Settlements BIS. Australia, Argentina, Belgium, Canada, Brazil, China, France, Hong Kong, Italy, Germany, Indonesia, India, Korea, Netherlands, Singapore, South Africa, Turkey, and Spain are members, as are the United States, United Kingdom, Luxembourg, Japan, Mexico, Russia, Saudi Arabia, Switzerland, Sweden, the Netherlands, and Spain.

## Basel I

Basel I, the first Basel Accord, was published in 1988 and focused on the capital sufficiency of financial institutions. The assets of financial institutions are divided into five risk categories based on the capital adequacy risk: 0%, 10%, 20%, 50%, and 100%. This risk refers to the possibility that a financial institution might suffer an unanticipated loss. Internationally active banks are required by Basel I to hold Tier 1 and Tier 2 capital against risk equivalent to at least 8% of their risk-weighted assets. This makes sure banks have enough capital on hand to cover their debts. For instance, a bank must maintain capital of at least \$8 million if its risk-weighted assets total \$100 million. The bank's tier 2 capital consists of less liquid hybrid capital instruments, loan-loss and revaluation reserves, as well as secret reserves. Tier 1 capital is the most liquid and its main source of financing.

## Basic II

The Revised Capital Framework, often known as Basel II, was the second Basel Accord and functioned as an upgrade to the first one. It was primarily concerned with three topics: minimum capital requirements, supervisory evaluation of an institution's capital adequacy and internal assessment process, and the efficient use of disclosure as a tool to improve market discipline and promote good banking practices, such as supervisory review. The three pillars are these areas of emphasis taken as a whole. The acceptable regulatory capital of a bank was separated into three categories by Basel II. A bank is permitted to incorporate fewer subordinated securities in tiers that are higher than it. Each tier serves as a numerator in the calculation of regulatory capital ratios and must represent a certain minimum percentage of the overall regulatory capital. Tertiary capital is what is referred to as the new tier 3 capital and is what many banks retain to support their market, commodities, and foreign exchange risks that are generated from their trading activity. Compared to tier 1 and tier 2, tier 3 capital contains a wider range of debt, but it is of considerably worse quality. Tier 3 capital was later abolished by the Basel III agreements.

## Basel III

The BCBS made the decision to modernize and enhance the Accords in the light of the 2008 collapse of Lehman Brothers and the accompanying financial crisis. The BCBS attributed the collapse to insufficient governance and risk management, unsuitable incentive structures, and an overleveraged banking sector. A decision was made in November 2010 about the general framework of the capital and liquidity reform package. The current name for this agreement is Basel III. The three pillars are continued in Basel III, along with new criteria and security measures. Basel III, for instance, mandates that banks maintain a certain level of common ownership and a minimum liquidity ratio. Basel III eliminated tier 3 capital considerations and included new criteria for what the Accord refers to as systemically important banks, or those financial institutions that are deemed too big to fail.

## Basel I Explained

The Basel Committee on Banking Supervision BCBS created Basel I, a set of international banking rules. In order to reduce credit risk, it specifies minimum capital requirements for financial organizations. Internationally active banks were obliged by Basel I to maintain a minimum level of capital 8% depending on their risk-weighted assets. Basel I is the first of three sets of rules collectively known as the Basel Accords and referred to as Basel I, II, and III.

### **The Basel Committee's past**

As a global forum where members might collaborate on issues relating to banking supervision, the BCBS was established in 1974. According to the BCBS, it seeks to improve financial stability by improving supervisory know-how and the quality of banking supervision throughout the world<sup>1</sup>. This is accomplished by agreements, which are rules. Basel I, the committee's first agreement, was published in 1988 and primarily addressed credit risk by developing a methodology for categorizing bank assets. The BCBS rules are not binding under the law. Implementation in each member's home nation is their responsibility. Basel I initially stipulated that by the end of 1992, a minimum capital-to-risk-weighted asset ratio of 8% would be in place. The Basel I minimum capital ratio framework, according to the BCBS, was adopted not only in its member countries but in virtually every other country with active international banks. In September 1993, the BCBS announced that G10 countries' banks with material international banking business were meeting the minimum requirements set out in Basel I.

### **Advantages of Basel I**

To reduce risk to customers, financial institutions, and the whole economy, Basel I was created. The capital reserve requirements for banks were lowered when Basel II was introduced a few years later. This drew considerable criticism, but many banks continued to operate under the old Basel I framework, which was eventually expanded by Basel III addenda, since Basel II did not replace Basel I. The fact that Basel I helped to continue the modification of banking rules and best practices, preparing the door for more protective measures, was perhaps its greatest legacy [4]–[6].

### **Basel I criticism**

Basel I has come under fire for hindering bank activity and impeding global economic development by reducing the amount of capital available for lending. The Basel I changes, according to those on the other side of that debate, did not go far enough. Basel I and Basel II received criticism for its inability to stop the financial crisis and Great Recession of 2007–2009, which served as the impetus for Basel III.

### **Conditions for Basel I**

A bank's assets are divided into five risk categories according to the Basel I classification system, which is denoted by the percentages 0%, 10%, 20%, 50%, and 100%. Depending on the kind of debtor, these classifications are applied to the assets of a bank. Cash, government and central bank debt, as well as any OECD Organisation for Economic Co-operation and Development government debt, fall within the 0% risk category. Depending on the debtor, public sector debt might fall into the 0%, 10%, 20%, or 50% categories. Debt held by development banks, OECD banks, OECD securities firms, non-OECD banks with maturities under one year, non-OECD public sector debt, and cash in collections are all included in the 20% group.

Residential mortgages fall into the 50% group, whereas the 100% category includes private sector debt, non-OECD bank debt with a term of more than a year, real estate, plant, and equipment, as well as capital instruments issued by other banks. A minimum of 8% of the bank's risk-weighted assets must be kept in capital, often known as Tier 1 and Tier 2 capital. This is done to make sure banks have enough capital on hand to cover their commitments. For instance,

a bank must maintain capital of at least \$8 million if its risk-weighted assets total \$100 million. The bank's basic financing, or Tier 1 capital, is the most liquid sort. Tier 2 capital, on the other hand, consists of less liquid hybrid capital instruments, loan-loss and revaluation reserves, as well as secret reserves.

## DISCUSSION

### What Is Basel I Meant to Achieve?

Basel I was designed to provide a global standard for the amount of capital that banks must have in reserve in order to satisfy their responsibilities. Its rules were designed to improve the global financial system's stability and safety.

### What Distinguishes Basel I from Basel II and Basel III?

Guidelines for how much capital banks must have in reserve depending on the riskiness of their assets were established with Basel I. Basel II updated those rules and imposed additional conditions. Based in part on the lessons learnt from the global financial crisis of 2007 to 2009, Basel III considerably improved the regulations.

### Basel Agreements Explanation

The Basel Committee on Banking Supervision BCBS created the Basel Accords. The Bank of International Settlements, which has its global headquarters in Basel, Switzerland, is whence the committee gets its name. The agreements were created exclusively to improve global financial stability. Banking was directly impacted by the resolutions. The Basel Committee examines risk elements related to global banking. Basel resolutions support more stringent laws and detailed regulations. But for these recommendations to be effective, every bank and financial institution has to abide by them. A severe monetary crisis will affect banks if the measures are not put into action. The resolutions for 2008, however, were more concise. The global financial crisis of 2008 had an influence that persisted for years. The committee chose a monitoring and management system as a result to guarantee banking safety. New standards and rules for banking were developed by the group. Regulations pertaining to capital sufficiency stand out among the others. The capital adequacy standards are referred to as Basel I, Basel II, and Basel III due to their widespread use.

### Basel III Accords: Reaction to the Financial Crisis of 2008

Many people think that Basel III was only a reaction to the financial crisis of 2008. But even before to the September 2008 Lehman Brothers bankruptcy, the financial sector had already identified flaws. Liquidity problems in the banking industry were the result of bad governance and an ineffective incentive system. The collapse of the housing market was only the result of underlying inefficiencies. Basel resolutions are always changing, but only if the rules are followed can financial institutions become stable. The Basel committee unveiled a new accord on general capital design and liquidity improvements in September 2010. The Basel III accord underwent further revisions in December 2010. The following are Basel III's characteristics:

- a. Basel III revised the system in charge of monitoring liquidity concerns.
- b. It promoted greater banking system resiliency.
- c. It concentrated on the kind and amount of common equity.

- d. The requirement for common equity was raised from 2% to 4.5% with an extra 2.5% cushion. Common equity in this context refers to a share of the risk-weighted assets of banks.
- e. The agreement also included a leverage ratio that could cover 30 days' worth of stress.

### **Underwriting Standards: What Are They?**

Underwriting standards are policies put in place to make sure that loans are given and kept in a safe and secure manner. The established underwriting guidelines aid in establishing benchmarks for the amount of debt that may be granted to an individual, the conditions of the loans, the amount of debt that a particular business is willing to issue, and the interest rates that will be applied.

### **Workings of Underwriting Standards**

Sound underwriting guidelines protect financial firms from irrational risks that might result in losses. Lending and underwriting criteria are often pro-cyclical, according to history. Banks may be tempted to relax underwriting requirements in order to boost the loan portfolio as competitive pressures for loan growth rise. This loosening of underwriting requirements may put banks at greater risk if circumstances start to worsen, leading to escalating losses and eventually a tightening of underwriting standards. For instance, several lenders increased flexibility on loan terms and decreased prepayment penalties during the financial crisis of 2008–2009. Many businesses tightened underwriting criteria during the same crisis, which was one of the reasons for the recession [7]–[9].

### **Standards for Underwriting Requirements**

A financial institution's board of directors and senior management often decide whether to change its lending policies and underwriting requirements. Alternately, how standards and processes are actually used in reality may lead to subtle, de facto adjustments in policy. In all situations, it is necessary to take the correct risk management precautions to guarantee that risks are accurately recognized, tracked, and managed and that loan pricing, terms, or other nonperformance measures are suitable for the risks being taken. Six fundamental lending conditions and underwriting requirements were identified by a Federal Reserve study of lending practices as being essential to maintaining strict credit discipline and ensuring wise credit selections. These requirements consist of:

1. Formal credit policies should outline a bank's risk tolerance, provide clear guidelines and measurement criteria, and follow a standardized procedure for approving and overseeing exceptions.
2. Processes for formally approving credit need to be separate from those for line lending.
3. It is recommended to employ standardized loan approval forms that encourage uniformity in financial analysis, collateral appraisal, guarantor support, and covenant clauses.
4. Utilize forward-looking tools to evaluate scenarios and predictions that concentrate on the main factors affecting performance.
5. To measure credit risk at loan commencement and during the loan's life, use risk assessment methods that effectively examine both quantitative and qualitative factors.
6. Make certain that management and lender information systems are capable of supporting the approval procedure as well as continuous portfolio composition and risk position monitoring.

### Underwriting Standards Example

The Federal Deposit Insurance Corporation FDIC has its own set of suggested rules for credit card underwriting criteria. Underwriting requirements, according to the Federal Deposit Insurance Corporation FDIC, assist in ensuring that credit cards given to clients have a reasonable degree of risk. The Federal Deposit Insurance Corporation FDIC suggests the following major underwriting guidelines for credit cards:

- a. Evaluation of the applicant's ability and desire to repay.
- b. Credit history and repayment of previous and ongoing debts.
- c. Income evaluations, such as income from investments, self-employment, etc.
- d. Taking into account all of the borrower's credit relationships with the bank.
- e. BCSBI
- f. BCSBI, the Banking Codes and Standards Board of India
- g. The Reserve Bank and 11 public, commercial, and international banks sponsored BCSBI. An independent and autonomous watch dog to monitor and ensure that the Banking Codes and Standards adopted by the banks are adhered to in true spirit while providing their services, is what it is described as. Under the leadership of Shri S.S. Tarapore, it was established in accordance with the recommendations made by the Committee on Procedures and Performance Audit of Public Services, which was established to investigate the level of customer service offered by banks with the main goal of delivering hassle-free service to the general public.
- h. The BCSBI and the Indian Banks Association have written a code of conduct for banks relating to their commitment to customers. Each individual client may get a copy of the same from the bank without charge. These regulations went into effect on July 1st, 2006.

The BCSBI outlines the following goals for the Code to encourage honest and ethical banking activities by establishing minimal requirements for interacting with consumers. To improve openness so that clients know what to anticipate from the services in a reasonable manner. To stimulate market forces to raise operational standards via competition. To encourage a fair and friendly connection between the bank's clients and them. To increase public trust in the financial system. The code will be applicable to all of the Bank's goods and services. The Code focuses on interest rates, tariff schedules, the terms and circumstances defining the relationship between the bank and the client, loss compensation, the privacy and confidentiality of customer information, and standards controlling bank marketing, advertising, and sales [10].

### CONCLUSION

A new era of stability, transparency, and risk management has been ushered in by the Basel Accords and banking rules, which have radically changed the global banking sector. With the aim of preventing financial crises, safeguarding depositor money, and ensuring the resilience of banking institutions, these international accords have given a framework for prudential supervision and regulatory compliance. In summary, the Basel Accords have dramatically changed the banking sector by promoting stability, risk management, and universal regulatory framework uniformity. Despite persistent difficulties, international regulatory organizations, governments, and financial institutions continue to work together to reinforce and improve banking standards. In a dynamic and linked world, the pursuit of a balanced strategy that assures financial stability while fostering economic growth continues to be crucial to the development of these standards. The General Manager of the Customer Service Department has been recognized



by the Bank as the organization's Code Compliance Officer, and clients are welcome to contact him or her with any systemic flaws they may have seen in regular business operations.

## REFERENCES:

- [1] R. Masera, CRR/CRD IV: The Trees and the Forest, *SSRN Electron. J.*, 2018, doi: 10.2139/ssrn.3136979.
- [2] S. Stavroyiannis, Value-at-risk and related measures for the Bitcoin, *J. Risk Financ.*, 2018, doi: 10.1108/JRF-07-2017-0115.
- [3] T. Davydiuk, Dynamic Bank Capital Requirements, *SSRN Electron. J.*, 2018, doi: 10.2139/ssrn.3110800.
- [4] P. Pelzer, Risk bearing capacity and the bearers of responsibility, *Crit. Perspect. Account.*, 2018, doi: 10.1016/j.cpa.2016.08.002.
- [5] M. H. Mahmood, Performance evaluation and proposals to enhance the iraqi banking sector, *Int. J. Contemp. Iraqi Stud.*, 2018, doi: 10.1386/IJCIS.12.3.289\_1.
- [6] S. Loesch, Capital Requirements Directives, in *A Guide to Financial Regulation for Fintech Entrepreneurs*, 2018. doi: 10.1002/9781119436775.ch13.
- [7] S. McPhilemy and R. Vaughan, The Levels of Application of Prudential Requirements: A Comparative Perspective, *SSRN Electron. J.*, 2018, doi: 10.2139/ssrn.2858210.
- [8] A. J. Anderson, Corporate Bond Liquidity Value in Stress Scenarios: Implications for the Basel Accords, *J. Bus. Account.*, 2018.
- [9] A. Zaman *et al.*, Sam Houston State University College of Education Dissertation Handbook SHSU College of Education Dissertation Handbook, *Education*, 2018.
- [10] T. Busika and M. Hoque, An investigation into the best approach to the implementation of Basel II in Swaziland, *Banks Bank Syst.*, 2017, doi: 10.21511/bbs.124-1.2017.02.



## CHAPTER 25

### **BANK MERGERS AND ACQUISITIONS: A COMPREHENSIVE OVERVIEW**

---

Dr Shashank M Hiremath, Associate Professor

Department of Finance, Jain (deemed to be University), Bangalore, Karnataka, India

Email Id-dr.shashank\_hiremath@cms.ac.in

#### **ABSTRACT:**

Bank mergers and acquisitions M&A have become important tactics for financial institutions looking to improve their efficiency, solidify their position in the market, and adjust to changing industry dynamics.

This study digs into the intricate world of bank mergers and acquisitions, examining their drivers, procedures, consequences on stakeholders, regulatory issues, and game-changing repercussions on the banking industry. The incentives driving bank M&A are highlighted in the study's first paragraph. In an increasingly globalized and technologically driven financial market, it is discussed how banks undertake mergers and acquisitions to obtain economies of scale, broaden their geographic reach, diversify their product offerings, and strengthen their competitive edge. The complex procedures of bank M&A are investigated. The stages from strategy planning and due diligence through negotiation and integration are outlined in the study. It talks about the difficulties that develop throughout these stages including culture alignment, technological integration, and human resource management.

#### **KEYWORDS:**

Bank Mergers, Banking Industry, Banking Regulation Act, SEBI, Stakeholders.

#### **INTRODUCTION**

In today's quickly expanding world, mergers and acquisitions are a strategy employed by businesses to expand, enter new markets, and get out from under financial strain. The practice of mergers and acquisitions has gained significant traction in the business world of today. The Companies Act, 2013, the Securities Contract Regulation Act, 1956, the SEBI Act, 1992, the Industries Development & Regulation Act, 1951, the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002, the State Bank of India Act, 1955, and the Banking Regulation Act, 1949 are among the recognized laws that are available in India on various modes of corporate restructuring [1]–[3]. The patterns of mergers and acquisitions in India have changed recently. The consequences of mergers and acquisitions have been varied in a number of economic sectors. The economy's main pillar is the banking industry. Although some of these banks have private minority owners, the majority of the Indian banking industry is government-owned. Bank mergers encourage institutions to expand globally and create better synergy while also enabling larger banks to acquire the troubled assets of smaller banks.

Another factor for bank mergers is the elimination of rivalry between the banks. By doing this, a significant amount of money that was previously used to foster competition may now be utilized to expand the banking industry. A bank with a large bad debt portfolio and low income may

sometimes combine with another bank to seek support for survival. In order to strengthen weak banks and maintain employment for the workforce, operate assets trapped in unviable banks, and improve the prosperity of the country through increased money flow, mergers between unviable banks in India should happen more quickly. A significant merger and acquisition in India's banking industry occurred in 2004 when IDBI Industrial Development Bank of India and its own subsidiary IDBI Bank merged. The transaction was valued at \$ 174.6 million or 7.6 billion Indian rupees. Another significant merger occurred in 2005 between Centurion Bank and Bank of Punjab. [3] This merger, which was worth \$82.1 million roughly Rs.3.6 billion in Indian currency, resulted in the establishment of the Centurion Bank of Punjab, which now has 235 branches throughout India. In 2008, HDFC Bank also acquired the Centurion Bank of Punjab.

Small and medium-sized banks are facing several challenges in the current economic climate because of outdated technology, a lack of resources, unsuccessful marketing campaigns, and a fragile financial foundation. Without new methods and innovations, their continued existence is called into question, and the bigger banks pose a danger. Their reorganization via the merger may provide some respite and aid in their recovery. Bank mergers have so far prevented weak banks from failing and shutting their doors. Smaller banks that worry about being aggressively acquired by a major bank may combine with other smaller banks to grow their market share and hedge against the potential takeover. The main goal of this effort, which has been adopted also by RBI, is to achieve expansion at the strategic level in terms of scale and client base. As a result, the combined bank's ability to create credit is greatly increased. Bank mergers provide the institution more strength to endure in a shifting economic climate. The weaker banks find that it is simpler to develop in the local and global financial markets via mergers.

### **Acquisitions and Mergers: Combining Banking Companies**

Mergers and acquisitions M&A are the obvious option and a successful strategy to enter new markets in light of the quickly evolving technology and the rise in corporate competitiveness. Corporations often use this strategy in an effort to expand into new markets and escape their unviable situation.

As the pillars of our economy, banks are regularly pushed to combine in order to grow internationally and foster concord, which improves the wealth of our nation by enhancing the flow of money. The Indian banking sector is now seen to be expanding quickly and evolving into a vibrant sector. Through mergers and acquisitions, the industry is given a new dimension that has helped banks rise to the top while providing enormous value to shareholders [4]–[6].

### **Guidelines for private sector bank mergers and acquisitions**

The Reserve Bank of India RBI published master directives facilitating the merging of private sector banks on April 21, 2016 the Guidelines. These Guidelines apply to any proposed merger between two banking firms or between a banking company and a non-banking financial company. Additionally, public sector banks would be subject to these guidelines as necessary.

The Banking Regulation Act of 1949's Section 44A gives RBI the discretionary power to approve the voluntary merger of two banking firms, according to the Guidelines. These powers do not apply to the voluntary merger of a banking business with a non-banking company, which is subject to National business Law Tribunal Tribunal approval in accordance with Sections 232 to 234 of the Companies Act of 2013.

**Board of Directors approval**

Bank boards are crucial to the amalgamation process since the decision to merge must be approved by a two-thirds majority of all board members, not simply those who are present and voting.

**Combination of two financial institutions**

No banking company may merge with another banking company, in accordance with Section 44A of the Banking Regulation Act of 1949, unless a scheme outlining the terms of the merger has been presented in draft form to the shareholders of each of the relevant banking companies separately and approved by a resolution passed by a majority of the shareholders of each of the aforementioned companies present in person or by proxy at a meeting of shareholders. The proposed plan must be approved by the boards of directors of the two banking firms prior to the shareholders' approval. When contemplating such permission, the following elements should be taken into account:

1. The combined company's assets, liabilities, and reserves, as well as whether or not the planned incorporation would boost asset value.
2. What kind of remuneration the combining banking business will provide to the combined company's shareholders.
3. Whether the proposed merger has undergone the necessary level of due diligence.
4. Whether independent valuers were used to assess the swap ratio and whether it is fair and suitable.
5. The two banks' shareholding arrangements and if, as a consequence of the merger and the swap ratio, any person, organization, or group will own shares in the combined bank in violation of RBI regulations.
6. The anticipated changes to the board of directors' makeup and if the new board's membership would be in accordance with the RBI Guidelines.
7. The effect on the combining banking company's viability and capital adequacy ratio.

If the necessary number of shareholders approve such a plan, it must be submitted to the RBI for approval, which, if given, would bind the relevant banking firms.

**Combining an NBFC with a banking organization**

If a merger of an NBFC and a banking business is being considered, the banking firm should get RBI's clearance after its board has approved the merger but before it is submitted to the Tribunal for approval. In addition to the factors mentioned above while deciding whether to approve the plan, the board should take the following factors into account:

1. Before the plan is authorized, ascertain if any RBI/SEBI rules have been broken or are likely to be broken by the NBFC and, if so, make sure they are complied with.
2. If the NBFC complies with Know Your Customer standards for each of its accounts that may eventually become accounts with the banking business.
3. Whether or whether the NBFC has accessed financing from banks or other financial institutions, and if so, whether or not the loan agreements call for the NBFC to get the permission of the relevant bank or financial institution prior to the proposed merger.

### Documents and information

The following are a few of the papers or pieces of information that must be presented together with the application for the plan of amalgamation:

- a. Shareholders of the banking entities have accepted the proposed merging plan.
- b. Certificates that have been signed by all of the representatives in attendance at the shareholders meeting.
- c. Certificates from the responsible executives of the banking businesses detailing the names of shareholders who notified the banking company in writing of their opposition to the merger proposal at or before the meeting, together with the number of shares each shareholder owned.
- d. Information about the potential CEO of the merged financial business.
- e. Annual reports for each of the three fiscal years prior to the date of the proposed merger.
- f. Any further details, proof, or justifications that RBI may ask for throughout the application process.

### Motives for M&A in banks

The following are the causes of bank mergers:

**1. Combining smaller banks:** In order to stabilize weak banks and diversify risk management, the goal of merging weaker banks with stronger banks has received support. The weaker banks may keep their presence and avoid going out of business entirely by partnering with a stronger one.

**2. Synergies and scale economies:** The two banks' merged client bases will develop synergies that will make the combined offering more lucrative and more likely to satisfy customers. Superior business portfolio, risk management strategies, and market capitalization will all be features of the combined bank. By making greater use of the resources at hand, it also benefits from economies of scale and cheaper costs [7], [8].

**3. Financial flexibility and scale economies:** A merger gives immediate access to financial resources, boosts liquidity, and aids in the sale of extra and unneeded assets. Pooling the resources of the many banks and using them effectively and efficiently helps. The banks will be better positioned after the merger to finance large projects that they previously wouldn't be able to execute on their own, making the financing process for such projects quick and easy.

**4. Technological development:** With the development of the internet, banks may now provide services via the use of a touch screen, enabling them to take advantage of the most recent innovations. When banks combine, they collaborate and employ cutting-edge technology to provide better services and assist the growth of the banking sector.

**5. Ability & Talent:** When two banks combine or are bought by one another, their personnel and knowledge are also combined, expanding the talent pool and giving the combined company an edge over its rivals.

### The effects of the mergers

The merger, which resulted in the consolidation of 27 public sector banks into 12, had as its main goal the establishment of next-generation banks and the eventual realization of a trillion-dollar

economy. The banking sector will surely benefit from and gain from this merger, which will also affect the banks' productivity, employees, and clientele. The goal of the government's bank consolidation plan is to grow the size of the banks so they can compete with both local and foreign financial organizations. SBI now has a 22% market share among all banks as a result of the mergers, while PNB, the second-largest public-sector bank, holds an approximate 8% market share. The country's second-largest nationalized bank in terms of income and branch network would be established via the merger of Punjab National Bank, United Bank of India, and Oriental Bank of Commerce. A worldwide competitor of the next generation bank will be produced by the consequent synergy.

## DISCUSSION

### Goals of the PSB Amalgamation

The mergers were announced by the Indian government with the following goals:

1. Boost operational efficiency to cut down on finance expenses.
2. Creation of banks with a substantial national footprint and a worldwide presence.
3. Potential unlocking through mergers and the creation of new banks.
4. PSB repositioning to build a \$5 trillion economy.
5. Greater capacity to accept more loans and risk.
6. Enhancement of service delivery.

### Indian mergers and acquisitions

The M&A process has attracted the attention of the Indian corporate sector, and a variety of business entities and firms are employing it to create diverse businesses that serve the constantly expanding local and international markets. Before the policies of 1991, which caused the previous policies to be abandoned, these activities remained inactive. Prior to liberalization, there were few actions related to the strategy of employing mergers and acquisitions because of the limitations imposed by laws such as the MRTP Act, ICA 1956, and FERA Act. The pre-liberalization era's fundamental economic policies did not benefit the private sector, which prevented it from establishing monopolies. However, many businesses all throughout the nation began employing this as a successful approach to grow after the rules changed in 1991, which may be referred to as the post-liberalization period. The MRTP Act and FERA Act's easing are to blame for everything. One may say that the expansion of the M&A industry has been fantastic to see. India was a fantastic participant in the Grant Thornton research, coming up at number 661 in 2007. India has developed into a strong participant in the mergers and acquisitions market throughout time, both locally and globally.

### Merging banks

In a short period of time, the Indian financial sector has accomplished a number of significant milestones. The fact that our democracy is the biggest and most varied in the world is a problem for the businesses since they must serve such a wide client base. The government's strategy includes reforming the banking industry by repositioning and integrating it into the global financial system. The banking industry has benefited from a number of changes and successful mergers that have occurred in recent years. Example:

1. Oriental Bank of Commerce and United Bank of India are being acquired by Punjab National Bank.
2. The union of Allahabad Bank and Indian Bank.
3. The union of Syndicate Bank and Canara Bank.
4. The union of Corporation Bank, Andhra Bank, and Union Bank of India.

### **RBI Regulations**

Peerless General Finance and Investments Co. The Supreme Court ruled in the case Limited v. Reserve Bank of India that RBI regulates India's banking industry as its primary function and that it plays a crucial role in the country's economic and financial affairs. The industry has benefited greatly from two supervisory roles of the RBI, which have improved the techniques of doing business and raised the bar for Indian banking norms [9], [10]. The 1949 Banking Regulation Act establishes two categories of mergers:

- a. Compelled.
- b. Mergers that are willing.

The RBI has started a forced merger in order to accomplish its primary goal of safeguarding a weak bank's depositors. There are a number of indicators that a bank is unsound, including:

- a. A significant number of non-performing assets.
- b. Making use of garbage or losing money.

The RBI must step in at such times and combine the weaker banks with the larger ones. Only the involuntary and mandatory mergers of private sector banks are subject to the Banking Regulation Act of 1949's procedures. The Regional Rural Banks Act of 1976 governs the regional rural bank. The RBI's role in the forced merger of private sector banks is outlined in Section 45 of the Banking Regulation Act of 1949, which gives the RBI the authority to request that a bank suspend operations while it formulates a reconstruction or amalgamation plan. It will allow the bank to be forcibly merged with any other bank without the approval of its shareholders or creditors. For the benefit of the different shareholders and to establish a competent management committee of the bank that will draft the merger or amalgamation plan, the RBI must impose a moratorium period. It also stipulates that the Central Government of India, which has the authority to approve the plan with or without modifications, must be notified of the numerous schemes that the RBI has finalized.

### **High Court jurisdiction over bank mergers**

In an interesting case before the High Court of Allahabad, the petitioner objected to a Central Government order of moratorium issued under Section 452 of the Banking Regulation Act, 1949, and a scheme prepared under Section 454 by RBI on the grounds that there had previously been a High Court order issued under Section 153 of the Companies Act that had approved an arrangement by the shareholders and creditors. The appellant argued that Section 45 could not be used to invalidate any decisions made by the High Court while it was exercising the authority granted to it by the Companies Act. The court rejected the appeal after finding that such an interpretation violated Section 45's plain language that it applied notwithstanding all other laws. Regarding the RBI's ruling on amalgamation plans, the High Court's jurisdiction and judicial review authority are severely constrained in several ways. In the case of Himalayan Bank Ltd v. Roshan Lal Mehra, the Supreme Court confirmed the preservation of a difference between the High court's and RBI's authority under the Banking Regulation Act, 1949. In this instance, it was



decided that the High Court could entertain a petition submitted by a bank that was currently subject to an amalgamation plan approved under Sections 45M and 45B of the Banking Regulation Act because the High Court still had the authority to issue orders under Section 392 read in conjunction with Section 391 of the Companies Act. In all situations, the Court emphasized that the merger plan constituted an option to liquidation itself rather than a replacement or alternative method of liquidation.

### **Reasons for M&A in India's Banking Sector**

Mergers and acquisitions have helped to create the ideal structure for the Indian banking industry. There are a variety of viewpoints on this subject, but there is optimism that things will become better after the financial institutions combine. Among the factors driving mergers and acquisitions in the banking industry are:

#### **Growing level of market competitiveness**

The merger was brought about by the development of new financial products and the joining of regional financial systems. The market share of each individual company shrank as a result of market industrialization and increased competition, which prompted the first mergers and acquisitions.

#### **The benefits of scale**

Economies of scale may cause industry consolidation because smaller businesses find it challenging to compete with bigger, more efficient enterprises.

#### **Skill and ability**

Talent and abilities are exchanged when one company merges with or buys the other. Due to the industry's intense competition, having a larger pool of talent and ability offers one an advantage over rivals.

#### **Merchandise and technology**

The doors have opened for new banks using the most advanced technology, and established banks are unable to compete with them as a result of the introduction of e-banking and certain financial instruments/derivatives as well as the reduction of admissions requirements. As a result, they decide to combine, giving the new bank a client base and the old bank access to the most recent technology the banking industry requires.

#### **Favorable synergies**

According to the notion of synergy, two businesses' combined worth and performance will be larger than the product of their individual components. The phrase is most often used in relation to mergers and acquisitions M&A. A merger is often motivated by synergy, or the potential financial gain from joining two businesses.

### **CONCLUSION**

Bank mergers and acquisitions M&A are complex strategic choices that alter the financial scene, having an impact on both institutions and economies. These transactions include the merger of banking organizations, often in an effort to realize economies of scale, boost competition, and



broaden market penetration. As a result, bank mergers and acquisitions have a significant impact on the market dynamics, client experiences, and future course of the banking sector. They have the ability to boost financial institutions and increase market reach and operational effectiveness. Success, however, depends on thorough planning, legal compliance, efficient integration, and a vigilant attention to maintaining consumer confidence. M&A will continue to be a strategic tool for institutions looking for expansion, adaptation, and ongoing competitiveness in a constantly changing market as the banking industry develops.

## REFERENCES:

- [1] H. Ben Said, R. Zouari-Hadiji, and A. Bouri, French bank mergers and acquisitions performance, *Risk Gov. Control Financ. Mark. Institutions*, 2017, doi: 10.22495/rgc7i4c1art3.
- [2] B. A. Shah and N. Khan, Impacts of mergers and acquisitions on acquirer banks' performance, *Australas. Accounting, Bus. Financ. J.*, 2017, doi: 10.14453/aabfj.v11i3.4.
- [3] Q. Chen and R. Vashishtha, The effects of bank mergers on corporate information disclosure, *J. Account. Econ.*, 2017, doi: 10.1016/j.jacceco.2017.05.003.
- [4] Ioanna A. Siouziou, Kanellos S. Toudas, and Marios Menexiadis, Internal Audit and Systems of Internal Audit in Greek Banks, *China-USA Bus. Rev.*, 2017, doi: 10.17265/1537-1514/2017.12.002.
- [5] M. P. Arena And M. Dewally, Investment Bank Expertise In Cross-Border Mergers And Acquisitions, *J. Financ. Res.*, 2017, doi: 10.1111/jfir.12118.
- [6] I. Patwari, Bank Mergers and Acquisitions: A Comparative Analysis of the Banking Regulation Act, 1949 with the Companies Act, 2013, *SSRN Electron. J.*, 2017, doi: 10.2139/ssrn.2998223.
- [7] K. N. Baltas, G. Kapetanios, E. Tsionas, and M. Izzeldin, Liquidity creation through efficient M&As: A viable solution for vulnerable banking systems? Evidence from a stress test under a panel VAR methodology, *J. Bank. Financ.*, 2017, doi: 10.1016/j.jbankfin.2017.05.005.
- [8] M. Anthony, Effects of merger and acquisition on financial performance: case study of commercial banks, *Int. J. Bus. Manag. Financ.*, 2017.
- [9] R. T. Huang, H. S. Sun, C. H. Hsiao, and C. W. Wang, Minimizing counterproductive work behaviors: The roles of self-determined motivation and perceived job insecurity in organizational change, *J. Organ. Chang. Manag.*, 2017, doi: 10.1108/JOCM-12-2015-0238.
- [10] K. S. Chuang, The role of investment banks on the impact of firm performance in mergers and acquisitions: evidence from the Asia-Pacific market, *Rev. Quant. Financ. Account.*, 2017, doi: 10.1007/s11156-016-0564-2.