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Confederation of Indian Industry

Remodelling India's Corporate Banking Sector

September 2023

Contents

Foreword

The year that has gone by, has been the best year for Indian banks in more than a decade, with many financial institutions performing their best and banks' profitability reaching a 14-year high with an approximate 12 percent return on equity.

On the international front, in 2023, global banking is facing testing times. In the past few months, the sector has experienced significant turmoil, prompted by the pace and quantum of interest rate movements. We have seen that many small and mid-size banks in North America, as well as long-standing institutions across America and Europe, have faced material stress, with some being forced to file for bankruptcy.

The Indian Banking system is presently in one of the better phases. In any system for credit growth, lenders need to have confidence that there is a fair amount of transparency of data, information and client discipline so that the money given away is recoverable.

In the last 5-7 years, that has become much better than ever, both on corporate and on retail loans. It is expected that banking sector credit to grow at 13-14 per cent in fiscal 2024. Formal economy is getting more and more digital and transparent for lenders and this is evident in the credit book.

As per RBI Report the total flow of resources to the commercial sector was ₹29,49,176 crore in FY23 against ₹22,51,703 crore in FY22.

Last financial year's momentum in the flow of resources to the commercial sector seems to be sustaining in FY24.

CII and Sumedha Fiscal Services have been associated together over the past decade. I congratulate the CII Eastern Region and the Sumedha Fiscal Services team for presenting an insightful report titled "**Remodelling India's Corporate Banking Sector**" at this year's Banking Colloquium.

I trust the readers would find this report interesting and useful.

Shiv Siddhant Kaul
Chairman
CII Eastern Region

Introductory Message

The Indian banking system stands on a solid foundation, experiencing its strongest financial health in a decade. The sector that was burdened with alarming levels of non-performing assets (NPAs), poor capital adequacy, and a negative return ratio had undergone a remarkable metamorphosis. In reality, this transformation was the result of a series of regulatory measures implemented over the years, along with a shift in the business model of the banks.

Bank history provides insight into the evolution of these institutions, their impact on the economy, and lessons we can learn from their mistakes. The city of Kolkata has significantly influenced the development of the modern banking system in the country. The bank of Hindustan, the first commercial bank in the country, was founded in Kolkata in the year 1770. The nineteenth century witnessed the establishment and eventual closure of multiple banks. Pivotal organizations, including the Reserve Bank of India and the State Bank of India (formerly Imperial Bank), were founded in the first half of the 20th century. The industry experienced a severe crisis that led to the closure of many banks between 1913 and 1969.

Post-independence, a series of banks were nationalized. In the aftermath of 1992, a series of measures were taken towards liberalization of the sector, ultimately enhancing efficiency in the system.

From manual bookkeeping to the use of AI and ML-led operations, the banking industry has undergone a tremendous transformation over the last 50 years. Along with the evolution of technology for banks, a series of regulatory measures like liberalization of the banking system, introducing capital adequacy norms, adopting Indradhanush framework, financial inclusion, NPA management and merger of banks ensures efficiency, and stability in the banking system and reduced the risk of collapse. The financial inclusion program has resulted in almost all Indian households having banks accounts. With over 10,000 fintech businesses operating, India is leading the fintech revolution. Fintech businesses either directly compete with incumbent banks, work together, or integrate microservices with them.

NPA resolution is another area where India has made great strides. Over the last seven years, the Government introduced IBC and Bad Bank frameworks to combat NPAs, and these have proven to be efficient in handling stressed assets in the banking system. The current IBC Ecosystem is robust and comprised of 4330 IPs, 109 IPEs, 15 benches of NCLT, 3 IPA and 5356 RVs. Since inception till June 30, 2023, a total of 6815 corporate debtors had undergone CIRP, out of which 4742 cases were closed with different outcomes. The resolution of stressed assets through bad banks was initiated with the formation of NARCL in 2021.

NARCL and IDRCL act as ARC-AMC frameworks for the acquisition and resolution of legacy stressed assets where the banks' exposure is INR 500 Crore or more. NARCL already acquired a few large stressed assets namely Jaypee Infratech, SREI Equipment Finance, SREI Infrastructure Finance, and SMPL Infra.

The phrase 'change is the only constant' certainly applies to banking sector. With 4000 years of history, the industry has undergone numerous changes in areas of business model, technology, and regulatory environment and that has shaped what it is today. The banking industry will continue to change in the future, and in this journey, the most adaptable bank will survive, therefore "the banking will survive but banks may not".

Vijay Maheshwari
Chairman, CII-ER Banking Core Committee & Director, Sumedha Fiscal Services Ltd;

01

History of Commercial Banking

The term 'Bank' is believed to have originated from the Greek word 'Banque' which means 'bench'. In ancient times, these benches were utilized by the Jews, who functioned as bankers, for keeping, lending, and exchanging money and coins in the marketplace. At times, these Jewish bankers faced defaults in meeting their obligations, resulting in bankruptcy, and the benches they used for their business were broken into pieces. Hence, it is perceived that both the terms 'Bank' and 'Bankrupt' originated from the same Greek word 'Banque'[1].
Evidence of banking traces back to Babylon in 2000 BC. In an act of faith, the citizens of Babylon used to keep their valuable belongings in the temples, entrusting them to the safe custody of God, commonly known as Temple Banking.

In India, the concept of banking dates back to Vedic times (2000 BC to 1400 BC). During the Aryan days, money lending was regarded as one of the honourable professions aligning with activities such as tillage, trading, and cultivation.

Notably, Chanakya's treatise 'Arthashastra', written around 300 BC, cites the presence of creditors, lenders, lending rates, and financiers (merchant bankers) during the time of the Maurya dynasty. During the Mughal era, the banking activities thrived, and money-lending activities became pervasive.

Globally, the first financial institution resembling a bank emerged in Venice in 1157, primarily to fund the Republic of Venice's wartime activities. It wasn't until 1640 that the words 'bank' or 'banking' came into being. Notably, English goldsmiths of the 1640s earned the credit for establishing the world's first modern bank.

In the 18th century, the British East India Company expanded its trade operations in India, necessitating the establishment of a modern banking system similar to that in England. The existing traditional banking system in India at that time proved inadequate to meet their requirements. To address these challenges, Agency Houses in Kolkata and Mumbai stepped in to provide banking services. The Bank of Hindustan, founded by Messrs Alexander & Co. in 1770 in Kolkata, became the pioneering modern commercial bank[2].

[1] Evaluation of Banking System in India, Rajput PS; Journal of Contemporary Issues of Law [JCIL], Volume 4, Issue 3
[2] Commercial Banks and Industrial Finance in India: The Pre-Liberalization Scenario, Subhamoy Das; Business Studies – Vol XXXV & XXXVI, 2014 & 2015

Bank of Hindustan used to provide financial services to merchants, traders, and colonial officers, while also used to facilitate trade between Europe and India. Nevertheless, multiple issues caused the Bank of Hindustan to struggle, leading to its eventual closure in 1832. Two banks, the General Bank of Bengal and Bihar and the General Bank of India were set up around the same time. However, both of them had a relatively short lifespan.

To strengthen trade practices, and facilitate remittance three Presidency Banks, namely Bank of Bengal, Bank of Bombay, and Bank of Madras were established in three presidential towns between 1806 and 1843. These banks were named after three presidential towns that served as administrative hubs for the British East India Company. Beyond their customary banking functions, these presidency banks assumed the role of Government bankers and had the authority to issue currency notes until the enactment of the Paper Currency Act, in 1861. The year 1921 witnessed the amalgamation of presidency banks and formed a new entity, the Imperial Bank of India. In the article 'The Presidency Banks: The Transition' the author Arun Kumar Banerjee expounded on these banks as 'These Institutions occupied commanding heights in the world of Indian banking, with cream of British and large Indian industrial houses.

Till 1921, their entire management staff was wholly non-Indian". The Imperial Bank, which was set up after the merger of three presidential banks eventually transformed into the State Bank of India in 1955. Prior to the formation of the Reserve Bank of India in 1935, the Imperial Bank used to perform the role of central bank for the British occupied India.

The next significant development was the formation of Allahabad Bank, country's oldest joint stock bank, established in 1865. The bank survived until 2019 before it amalgamated with the Indian Bank. During the mid-twentieth century, several banks were established as joint stock entities, but most of them failed to survive. Punjab National Bank, managed by Indians since its inception, was established in Lahore in 1895. The Swadeshi Movement of the early twentieth century led to the formation of many joint-stock banks by Indians, popularly known as Swadeshi Banks. Notable among them were Central Bank of India, Bank of Baroda, Canara Bank, Indian Bank, and Bank of Mysore. Due to the presence of numerous banks, the necessity for a monitoring bank became evident, leading to the establishment of the Reserve Bank of India.

Timeline of Developments in the Indian Banking Sector

Pre-Independence

Establishment of Bank of Hindustan	1770
General Bank of Bengal & Bihar	1780s
General Bank of India	1780s
Bank of Bengal (Presidency Bank)	1806
Bank of Bombay (Presidency Bank)	1840
Bank of Madras (Presidency Bank)	1843
Allahabad Bank	1865
Panjab National Bank	1895
Swadeshi Banks (BoB, Canara, Indian Bank)	1900s
Merger of Presidency Banks (Imperial Bank)	1921
Banking Crisis	1913-69
Formation of Reserve Bank of India	1935

Post-Independence

1949	Nationalization of RBI
1955	Transformation of Imperial Bank to State Bank of India
1955	Nationalization of the State Bank of India (SBI)
1959	Nationalization of 7 banks as subsidiary of SBI
1969	Nationalization of 14 large private banks
1969/80	Banking Companies Acquisition and Transfer of Undertaking Act
1980	Nationalization of 6 private banks
1992	Liberalization of Banking Sectors
1993-97	Establishment of new generation private banks
2003-13	Establishment of a few more private banks
2015	Establishment of payments banks and small banks
2017-21	Consolidation of PSU banks

The Reserve Bank of India[3]

Established in 1935, the Reserve Bank of India (RBI) stands as the nation's cornerstone central bank. The Reserve Bank of India Act, the statutory operational guideline, came into force in 1934 before the RBI was established. The concept and functions of central banks worldwide represent a relatively recent development. Almost all major central banks came into existence in the early twentieth century. In its formative era, the RBI functioned as a shareholders' institution and was later nationalized in 1949.

Initially, its primary objectives were to regulate the issue of currency notes, maintain currency reserves for monetary stability, and manage the credit and currency framework of the country.

Furthermore, the central bank played a pivotal role in establishing several developmental financial institutions, including DICGC, UTI, IDBI, NABARD, and the DFHI. Post-liberalization, the role of RBI evolved in alignment with the functions of other global central banks, encompassing tasks like developing and maintaining Monetary Policy, overseeing Bank Supervision and Regulation, and managing the Payment System.

[3] https://rbi.org.in/history/Brief_Chro1935to1949.html

Banking Crisis

During 1913, John Maynard Keynes wrote in his book 'Indian Currency & Finance': "*In a country so dangerous for banking as India, should be conducted on the safest possible principle'*[4]. Within a year, his warnings proved to be true. Between 1913 and 1969, the Indian banking sector witnessed a massive crisis resulting in the closure of a large number of banks and the loss of depositors' money.

During the late nineteenth and early twentieth centuries, banks mushroomed as there was no or limited regulation in place to control their emergence. An article[5] published in Mint authored by Mr. Amol Agarwal reported that as of 1913, there were as many as 451 banking companies in existence. However, there are limited financial disciplines among those banks. They used to lend aggressively without proper due diligence and assessment. Additionally, in the absence of any centralized authority and proper regulation, standardized banking practices were absent. As a result, those banks faced a shortage of liquidity and were unable to withstand mass withdrawals, ultimately leading to their collapse. The first major bank to collapse was the Presidency Bank of Bombay in the mid-1860s.

A CNBC TV18[6] report titled 'Backstory: The Collapse of Presidency Bank of Bombay' by author Mr Sundeep Khanna explained how a well-managed and well-run bank was trapped in a self-created crisis.

During the early 1960s, the city of Bombay witnessed a surge in cotton trade amid a crisis in the USA. The Presidency Bank of Bombay started extending credits recklessly to those traders and merchants without proper collaterals. However, with the end of the crisis in the USA, the euphoria in the Bombay cotton market gradually disappeared, ultimately impacting the Presidency Bank of Bombay.

Between 1913 and 1966, as many as 1800 banks collapsed, out of which 25% were in Kerala, 21% in West Bengal, and 20% in Madras (Agarwal A, Mint, 2018). Even after the inception of the Reserve Bank of India, continuous bank failures persisted. It was believed that the RBI, in its early days, had limited power to regulate banks. However, the Banking Regulation Act of 1949 granted additional authority to the RBI. With the enactment of the new regulation, the statutory liquidity ratio (SLR) was introduced. Moreover, the process of licensing the bank, both for the new as well as the existing, was introduced after the enactment of the Act.

[4] Indian Currency & Finance, John Maynard Keynes, Macmillan and Co., Limited, London, 1913.
[5] Banking Crisis: An Indian History, Amol Agarwal, www.livemint.com, February 24, 2018
[6] Backstory: The collapse of Presidency Bank of Bombay in 1868; Mr. Sundeep Khanna, www.cnbcTV18.com, February 7, 2018

Banking in India in the Post-Independence Era

Bank Nationalization

During the pre-independence era, the banking systems were mostly privately owned. The banks were predominantly concentrated in urban centers, with limited penetration of banking services in rural areas. Furthermore, a considerable gap existed in financing the emerging businesses, newly developed industries, and agricultural and small-scale sectors; these gaps remained largely unaddressed. To address these issues, the RBI was first nationalized in 1949 followed by the Imperial Bank in 1955. The Imperial Bank's name changed to the State Bank of India[7], which is now the largest bank in the country. In 1959, seven banks were nationalized and subsequently became subsidiaries of SBI.

In 1969, a large-scale nationalization of banks took place, with the Government nationalizing 14 large private banks. Unlike Imperial Bank, these banks were privately owned. These banks were of considerable size and enjoyed a widespread presence across the country. The subsequent wave of bank nationalization occurred in 1980, leading to the nationalization of another six banks. Following the nationalization, the Government of India gained control over 91% of the banking business in the country[8].

Evolution of Banking Legislations

The Banking sector has transformed through a series of developments driven by the introduction of new legislation. These following regulations laid the foundation for a robust banking system which is prevalent in the country now.

Development of Banking Laws

The Reserve Bank of India Act, 1934	▪ The Reserve Bank of India Act, 1934 provided the **statutory background** for the setting up of the Reserve Bank of India in 1935; ▪ The Act provides **guidelines** for the **function of the RBI** in the country;
The Banking Regulation Act, 1949	▪ Enacted in 1949, the act provides a framework to **regulate banks in India**; ▪ The Act entrusted RBI to control the banking system in the country and to monitor the day-to-day activities of banks; ▪ Through this Act, RBI was vested with the power to issue **banking licenses**, regulate the norms related to **shareholding**, monitor the appointment of **key management personnel**, and administer the process of bank **merger and liquidation;**

[7] State Bank of India is the largest bank in India in terms of assets, branches, and customer base.
[8] Wikipedia;

The State Bank of India Act, 1955	▪ The State Bank of India Act, 1955 was enacted to **constitute the State Bank of India**, which came into existence after the nationalization of the Imperial Bank of India in 1955. ▪ The Act **outlines** the **operational guidelines**, which **govern the function** of the State Bank of India.
The Banking Companies (Acquisition and Transfer of Undertakings) Acts, 1969 and 1980	▪ This act **empowered the Government to nationalize banks**. The Act was initially introduced in 1969, leading to the nationalization of 14 banks by the Government. In 1980, an additional 6 banks underwent nationalization.
The Banking Regulation (Amendment) Act, 2020	▪ Through this amendment, the **Reserve Bank of India was given additional power to regulate the cooperative banks**. ▪ However, this Act does not apply to primary agricultural credit societies and cooperative societies whose principal business is long-term financing for agricultural development.

Liberalization of the Banking Sector

During the late twentieth century, the Indian banking system was in a state of transition towards maturity. The transformation was marked by the nationalization and the implementation of a series of regulations intended to govern and supervise the banking activity complemented by a fully functioning central bank. Despite this, the overall banking ecosystem exhibited a lack of alignment with the broad objective of the nation. The financial health of many leading banks was not at its very best.

Against the backdrop, in 1991 the Government appointed a committee led by Mr. M Narashiman, a former RBI Governor. The committee identified several issues in the banking system, including the necessity for banks to maintain high liquidity, offering concessional rates for bank lending to agriculture and SME industries, and the prevalence of government-controlled interest rates rather than those controlled by the banks.

The total number of banks was considerably higher than the actual requirements, and there was a significant concentration of bank branches in the rural areas. Furthermore, the loan rates were exorbitantly high in the 1990s (minimum 16%[9]), rendering businesses unviable.

In this context, the Committee recommended reducing liquidity requirements. During 1991-92, the CRR and SLR used to be 15% and 38.5% respectively, resulting in banks being left with limited funds to extend credit. The Committee also recommended stopping direct credit programs practiced by the Government and setting market-determined interest rates for deposits and lending.

Additionally, the committee proposed establishing an Asset Reconstruction Funds (ARF) and advocated for granting autonomy to the sector. The Government implemented a few of the recommendations suggested by the Committee.

In 1998, a second Committee was set up under Mr. Narasimhan to oversee the banking reform process. The Committee recommended bank consolidation through the merger of robust banks and also proposed raising the capital adequacy to enhance inherent strength.

Post the recommendation, both the SLR and CRR were reduced, which provided greater flexibility to banks.

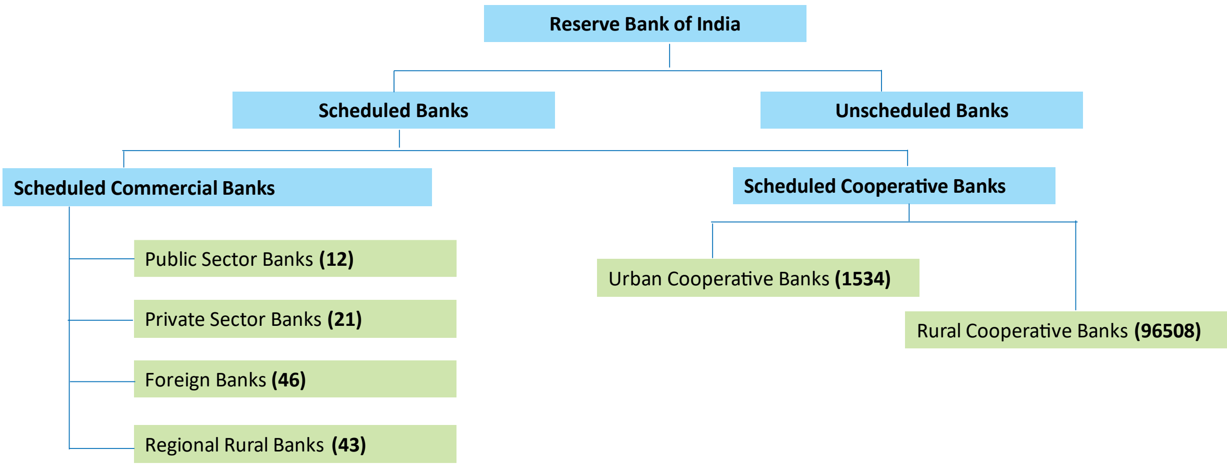
Additionally, the entry barriers for new players were relaxed, leading to the establishment of 10 new private banks between 1994 and 2000. A value migration had been witnessed, where private banks kept on growing at a rapid pace and took the market share from the PSU banks. Overall, the process of liberalization marked the initial step in introducing the much-needed flexibility and efficiency to the banking system.

Recent Developments

As a part of bank liberalization, ten banks were given licenses to operate in the country in the year 1993. Among these ten, seven are currently operational, while the remaining three have been merged with other banks. After a decade, in 2003, two banks - Kotak Mahindra Bank and Yes Bank - were granted licenses to operate in 2003. In 2013, the Reserve Bank of India invited interest from corporates to establish new banks in the country. Consequently, the RBI received 25 applications, yet only Bandhan Bank and IDFC Bank were given licenses to establish banks. In 2015, following the recommendation of the Nachiket Mor Committee on Comprehensive Financial Services for Small Business and Low-Income Households, the RBI issued licenses to eleven entities to operate payment banks in the country. The target customers of payment banks are lower-income families, marginal workers, and businesses in the unorganized sector. Three payment banks surrendered their licenses before commencing operation. Currently, only six payment banks are fully operational.

[9] Three decades of liberalisation: Banking highs and lows; Mr. Tamal Bandyopadhyay, The Hindustan Times, July 2021.

The Current Structure of Indian Banking Sector



Source: IBEF & RBI, The number of Scheduled Commercial Bank as on 2022 and the Number of Rural Cooperative Banks as on March 2021.

Between 2017 and 2021, a series of bank mergers took place, primarily aimed at strengthening and enhancing competitiveness within the PSU banking space to better serve the growing economy's credit demand. The initial merger involved Dena Bank and Vijaya Bank; both were amalgamated with the Bank of Baroda. Subsequently, this consolidation continued, resulting in the amalgamation of 10 more banks into four major banks namely Punjab National Bank, Union Bank, Canara Bank and Indian Bank. The banking industry witnessed a mega-merger after Covid when HDFC merged with HDFC Bank. Following the merger, HDFC Bank became the world's seventh-largest bank by market capitalization, trailing behind major players such as Morgan Stanley and Goldman Sachs.

Operationally, there was a notable surge in digital transactions post-COVID, and nearly all banks strengthened their presence in the digital arena. The amalgamation of PSU banks that took place during the past few years finally began to yield positive results. During the first quarter of the financial year 2024, PSU banks reported their best-ever quarter in history.

According to the current trend and the government's agenda, several reforms are expected to occur in the near future. One notable aspect of these reforms is the further amalgamation and privatization of PSU banks. There may be an introduction of the Banking Law (Amendment) Bill, which could result in the government's stake in PSU banks falling below 51%, ultimately facilitating privatization.

02

Changing Business Models

Ignoring technological change in a financial system based upon technology is like a mouse starving to death because someone moved their cheese.

- ***Chris Skinner***

Transformation of Banking Business Models Over the Last Five Decades

From manual bookkeeping and the use of typewriters to AI and ML led operations, the banking industry has undergone a tremendous transformation over the last 50 years. Earlier the banking operations were performed manually, with all account-related information being maintained in ledgers and registers. An individual file was maintained for each client. For deposit and withdrawal of money, customers had to visit the bank branch in person, where the teller would then register the transaction in the customer's account ledger. Cheques were a common method of payment in those days, and their processing was done manually. Likewise, for loan processing, numerous manual interventions were required instead of a system-based approach. Most importantly, all calculations, including interest calculations, bank reconciliations, and financial computations, were performed manually using an adding machine, calculator or simple pen and paper.

Inroads of Technology

A few ambitious banks decided to change the traditional banking practices to enhance the efficiency and provide a better customer experience. The first major breakthrough in technology adoption was found in 1950 when Diners Card[10] introduced the first universal credit card. This unique portable payment solution enabled customers to purchase products from numerous establishments without the need for immediate payment. Notable, customers did not have to carry cash to purchase merchandise, which proved to be a remarkable development during that era. The Diners Card was introduced in India in 1961 by a businessman named Kali Mody. The Central Bank of India was the first Indian Bank to launch a credit card operation in 1980[11].

Money withdrawal has become easier after the invention of the Automated Teller Machine by the Scottish gentleman John Shepherd-Barron in collaboration with Barclays Bank.

[10] *MX Technologies Inc. (www.mx.com)*
[11] *Tata Capital*

Emerging Trends in Technology

1980s	1990s	2001-10	2011-2020	2020 Onwards
Mechanization	**Automation**	**Internet Banking**	**Digital Transformation**	**Emerging Technologies**
▪ MICR ▪ Standard Cheques ▪ Encoders ▪ Card Based Payment	▪ ATMs ▪ Electronic Funds Transfer ▪ Core Banking Solutions ▪ Electronic Clearing System	▪ RTGS ▪ IMPS ▪ NEFT ▪ Online Banking ▪ Cheque Truncation System	▪ App Based Banking; ▪ Cash and Cheque deposit in ATM; ▪ E KYC, ▪ RuPay Card	▪ Cloud Computing ▪ AI & ML ▪ Big Data Analytics ▪ Robotic Process Automation

The first computer in a bank was introduced in the 1960s when the then Bank of New South Wales purchased its first-ever computer for GBP 1 million. The Swift payment network was developed in 1973 for secure digital international money transfers.

Indian Context

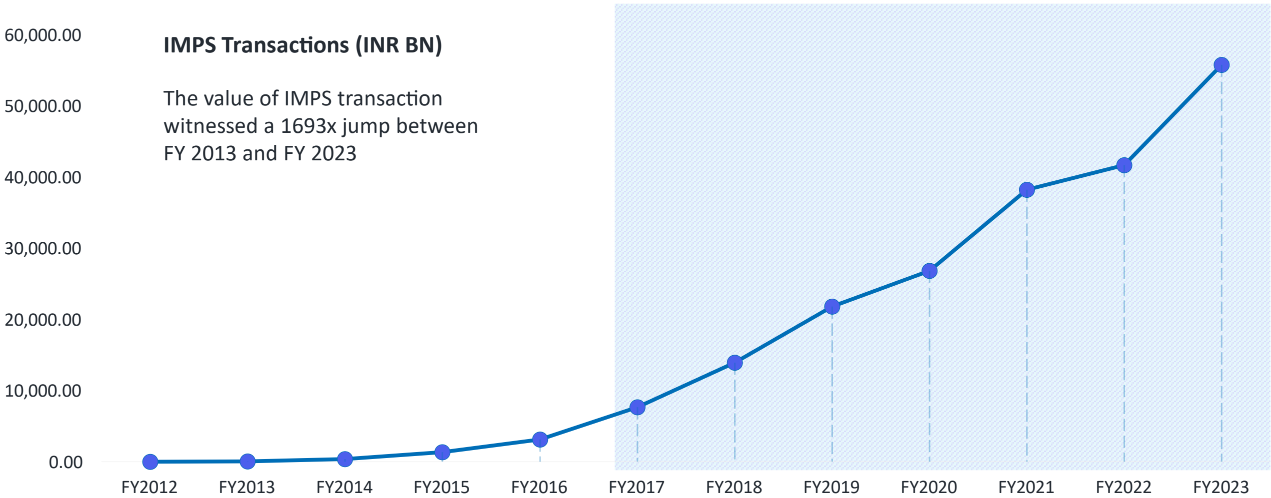
While banks worldwide were rapidly advancing towards computerization, banks in India also recognized the urgent need for automation. Computerization became necessary to enhance customer service, streamline record-keeping, improve decision-making, and boost productivity. However, the path of computerization was not easy in India. Before its introduction in the early 1980s, banks had to reach an agreement with trade unions to introduce computer. During the same time, a committee under the leadership of former RBI governor Dr. C. Rangarajan was established to oversee the implementation of bank computerization, providing a framework for the process.

Initially, the computers operated as standalone devices, and later they were interconnected within branch and with other offices through a centralized server. As a result, the concept of core banking emerged. Core banking operation is a centralized model which brings services like ATM withdrawal, any branch banking, debit card operation, mobile banking and internet banking under a unified system.

The period between 2000 and 2010 marked the beginning of internet banking where a host of web-based services were launched to improve customer services and enhance operational efficiency in the banking system. Transfer of funds on a real-time basis through RTGS (Real Time Gross Settlement) was one such service launched by RBI in 2004. This safe and secured internet-based transaction system enables the real time transfer of high-value funds between two parties without having any upper transaction limit. During the financial year 2023, funds worth INR 14,99,463 billion were transferred using the RTGS.

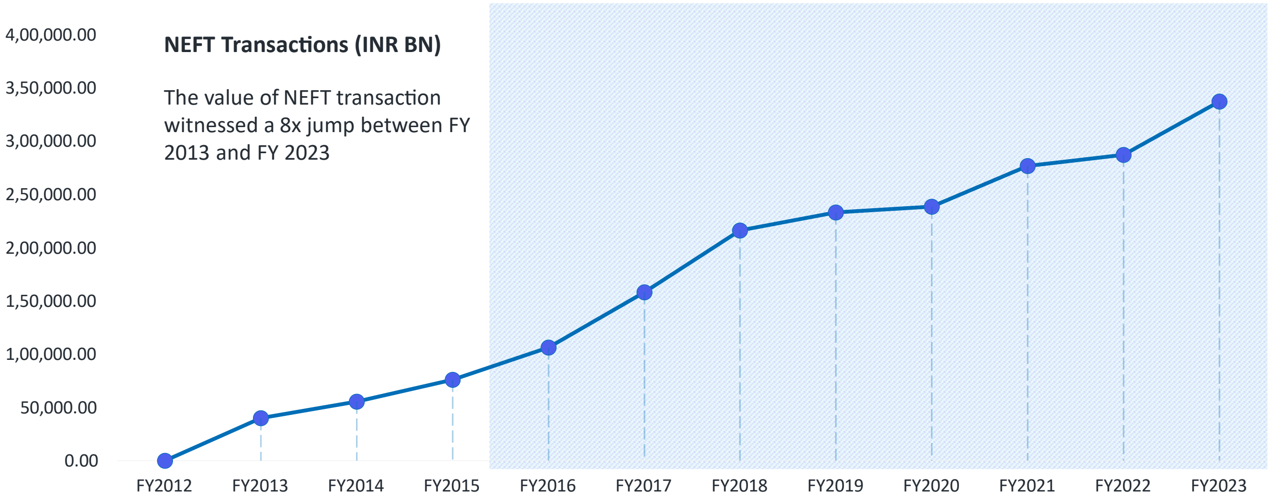
NEFT is another such web-based platform introduced by RBI in 2005. Through NEFT, users can transact amounts of any denomination, albeit not in real-time but with a slight time lag. According to the RBI statistics, the total value of NEFT transactions in the financial year 2023 was INR 3,37,195 billion. In 2010, NPCI launched IMPS service, an instant interbank electronic fund transfer service primarily designed for mobile banking. In 2008, RBI launched the Cheque Truncation System (CTS), which replaced the manual process of cheque clearing with an electronic image-based clearing process. This change has ultimately reduced the cheque-clearing cycle and made the process a cost-effective one.

Transactions through IMPS

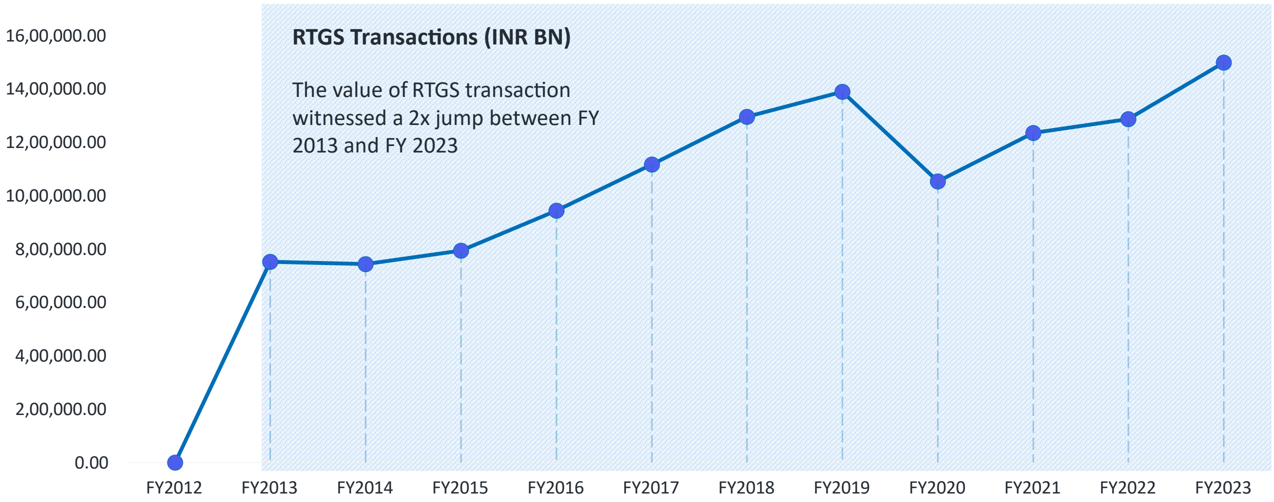


Source: RBI

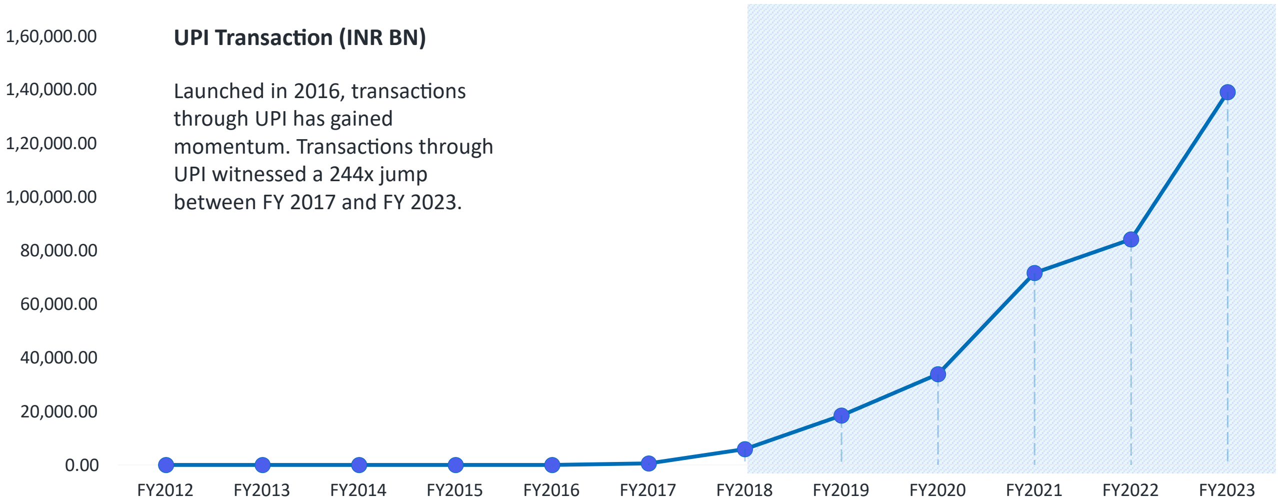
Transactions through NEFT



Transactions through RTGS



Transactions through UPI



Data Sources: RBI

The digital transformation started in the banking sector at the beginning of 2010s when banks began offering self-service options to their customer through an automated system. With Android-based smartphones gaining popularity, banks launched their app-based mobile banking platform loaded with a host of features, enabling customers to conduct banking transactions 24×7. Through mobile banking, customers can now apply for loans, purchase insurance, transfer funds to other accounts, invest in stocks, mutual funds (MF), IPOs, and request cheques, among other features. All these features significantly reduced customers' visits to bank branches, ultimately saving time for both bank executives and customers. Now, customers can deposit cheques and cash at ATM outlets. The introduction of Aadhaar-based KYC has significantly reduced paperwork. The homegrown RuPay card has been an integral part of banks' digital transformation journey.

Since its inception in 2012, RuPay has held a distinct position in the duopolistic domestic debit card market, which was dominated by two foreign players, Visa and MasterCard. The issuance of the RuPay card received a major boost when the Government mandated its issuance through the PM Jan Dhan Yojana in 2014. With close to 70 crore debit cards issued to date, RuPay holds a 69% market share in terms of active cards. RuPay Credit Cards are also consolidating their position in the domestic credit card market.

As per the latest statistics, approximately 25% of all new credit cards in India are part of RuPay network. Fueled by RuPay's cost-effective offerings, the debit card population witnessed a massive surge in the last decade.

Emerging Technologies

The use of cloud computing, AI and machine learning, Big Data Analytics, and Robotic Process Automation is increasing during the current decade to improve customer service and streamline service delivery.

Cloud Computing

Since the middle of the 2010s, the banking sector has witnessed steady progress in digitization, which further accelerated since the onset of the pandemic. The adoption of the cloud is an integral part of the digitization process, and most banks and financial institutions have made significant progress. By migrating into the cloud, banks and financial institutions can reduce substantial data storage and processing costs, especially the front-end capex cost. Additionally, migrating into the cloud offers banks a high degree of flexibility, enabling them to keep pace with the changing market and respond to customer needs more quickly. Moreover, banks can easily adopt and integrate the latest technologies backed by AI, Robotics, Blockchain, and Big Data Analytics either for service delivery or to enhance operational efficiency while operating in the cloud environment.

Artificial Intelligence and Machine Learning

Artificial Intelligence (AI), which until the last decade used to be considered a fantasy world, is now a reality. The rate of adoption of AI is even faster for the banking and financial sector. The implementation of AI in banks enables faster decision-making within the organization, improves the service delivery model and enhances operational efficiencies. Since implementation, AI tools have been used for fraud detection. As a personal finance tool, AI can recommend products that best meet customers' expectations. Now, AI tools are performing time-consuming, repetitive tasks like data entry, and loan processing with a greater accuracy, which is making the system more efficient. AI tools as virtual assistance to customers have been successfully used in the banking world.

Big Data Analytics

Enormous amounts (in multiple quintillion bytes) of data are generated every day, and the big data analytics platforms structure this data to draw meaningful conclusions. In addition to unstructured data, banks utilize semi-structured data related to customers, credit bureaus, product pricing, macroeconomics etc. for purposes such as risk management, fraud detection, wealth management, customer retention, and innovation.

Robotic Process Automation

Robotic Process Automation (RPA) is used in the banking industry to automate many mundane and repetitive tasks that used to be performed by employees. RPA reduces process errors to almost zero while simultaneously reducing processing costs by 30% to 70% [12]. RPA is used in areas like customer onboarding, loan processing, customer services, credit card processing, fraud detection, and account closure.

[12] Automation Edge (https://automationedge.com/blogs/robotic-process-automation-rpa-in-banking-industry/)

Fintech Ecosystem

India is the hub of 10,000+ fintech companies and approximately 70% of them have been established in the last five years. The country has developed an ecosystem for fintech, where all components viz. Technology, Government Support, Funding, Collaboration and Incubation are vibrant and mature thereby fueling the growth of the sector. These fintech companies have disrupted the service delivery model, where advanced technology and connectivity have led to unbundling of banking services consumed by the end client. Customers are equipped with a lot of information about different financial service providers, and their value propositions.

Therefore, instead of relying on a single provider, customers can now choose multiple providers for various services. From the standpoint of service providers, the availability of customer data has made their job easier in terms of evaluating a customer without the need for a prior relationship. Therefore, the competitive advantages of incumbent banks are being diminished gradually. Service that was previously obtained from one bank is now being accessed through a range of financial institutions.

Fintech Business Models

Competition: Compete with the incumbent in different micro areas of banks and financial services;

Integration: Integration of microservices from different providers offered as a bundle;

Collaboration: Collaboration with banks by offering them peripheral services, which enables banks to deliver business in an innovative, efficient, and more profitable way.

Regulatory Changes Leading to Efficiency

Over the last 50 years, the Indian banking sector has witnessed a series of regulatory measures, that have ultimately enhanced transparency, and brought much-needed efficiency and stability to the system. Before 1991, the way banks conducted business was different from what it is currently. During that time, banks were not permitted to set the basic lending and borrowing rates, and there was no concrete policy for addressing non-performing assets in the banking system[13]. Banks did not have any capital adequacy norms. Without permission from the RBI, the banks did not have the authority to sanction high-value loans or open branches. The RBI was the sole authority to decide the exchange rate. However, the scenario started changing after 1992 when a series of measures were taken in the form of ***liberalization***, which ultimately reshaped the foundation of the industry. Liberalization opened up the sector for private players and foreign banks, and after 1992, HDFC Bank and ICICI Banks were formed, both of which are categorized as “too big to fail” banks.

Capital Adequacy: In 1992 the RBI decided to introduce a risk asset ratio system for banks in line with the capital adequacy norms prescribed by the Basel Committee on Banking Supervision, a group of central bankers from across the world. Maintaining a capital adequacy ratio above the prescribed limit ensures efficiency and stability in the banking system and reduces the risk of collapse. So, far three versions of Basel norms have been implemented, with Basel III being the latest.

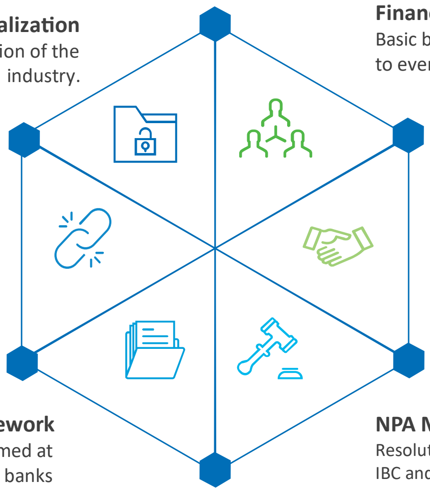
In India, Basel III norms are already in place, and the capital adequacy of banks is being evaluated based on them. Currently, the capital adequacy ratio in banks has been stable and on a cumulative level, has been higher than the threshold limit adopted by the RBI.

Indradhanush Framework: In 2015, the government launched the Indradhanush framework, which introduced a series of measures aimed at revitalizing the PSU banks. These measures included the appointment of MD & CEO and a separate non-executive chairman, replacing the Chairman cum MD, and the establishment of the Banking Board Bureau to oversee the appointment of top-level executives in the banks. Another significant aspect of this framework was the recapitalization of the PSU banks. Following the announcement, the government infused INR 3.10 Lakh Crores in PSU banks between 2017 and 2021. Out of this amount, INR 0.34 Lakh Crore was provided from the budgetary allocation, while INR 2.60 Lakh Crores was raised through the issuance of recapitalization bonds. As part of this framework, the boards of banks were granted autonomy in decision-making along with increased accountability for their performances.

Financial Inclusion: India has achieved remarkable success in financial inclusion thanks to full government support and the implementation of multiple schemes. Basic banking and financial services are now accessible to every Indian without discrimination. Nearly 100% of households in India have bank accounts, and these accounts, administered through the government's social benefits schemes (DBT), provide a wide range of services, effectively reducing leakages to zero.

[13] 25 years of reforms: Meet Indian banking sector's poster boys of liberalisation; www.economictimes.indiatimes.com

Regulatory Changes Leading to Efficiency



Merger of Banks: Over the past few years, the government has undertaken the merger of 13 PSU banks into five with the objective of consolidating the PSU banking space. Following the mergers, these banks have grown in size and are now better equipped to thrive in the highly competitive industry. The mergers have resulted in the scaling up of these banks' operations and the optimization of their cost structures. The financial health of all the anchor banks in these mergers is gradually improving, supported by enhanced operational efficiencies, reduced NPAs, and increased profitability.

NPA Management: With the objective of resolving NPA issues in the banking sector, the Government introduced the Insolvency and Bankruptcy Code in 2016 and launched the Bad Bank (NARCL) in 2021. To date, the resolution of stressed assets through both the IBC framework and the bad bank has achieved significant success. Most importantly, these two initiatives have established a vibrant ecosystem for the resolution of stressed assets.

Concluding Thought

The landscape of banking operations in the 1880s, which relied heavily on manual processes, has undergone a significant evolution. It transitioned from mechanization and basic automation to a more advanced digital journey, incorporating deep tech innovations. During this transformation, some banks that couldn't keep up with the competition lost business to more efficient counterparts, a phenomenon commonly referred to as 'value migration.' Conversely, a series of regulatory changes have not only made banks more dynamic but also safeguarded them from bankruptcy, even in the midst of and following the pandemic. Thanks to these changes, the financial health of banks is now at its peak.

03

Artificial Intelligence in Banking and its Adoption Including Digital Push

India is now prepping itself along with the whole world for cutting-edge technologies including 5G, blockchain, Artificial Intelligence (AI), machine learning, augmented reality and virtual reality, robotics, machine learning processing etc. The development and adoption of these technologies will be critical for the Government and the Industry for planning, quick decision-making, expediting development, detecting new trends or drawing out linkages and associations. India is one of the fastest-growing economies that has a significant stake in the development of AI globally. The country is home to a highly skilled workforce that matches up to a vibrant technology market and a large start-up ecosystem that added 68K+ startups in the first half of 2023. The Emerging Technologies division of the Ministry of Electronics and Information Technology (MeitY) is responsible for fostering, promoting and developing cutting-edge technologies in the country.

The emerging technologies division is supporting work for policy/strategy papers in emerging areas like AI, Robotics, Blockchain, Computer visions, Drones etc.

AI is transforming the way business is conducted across industries. The growing prevalence of industrial robots, computerized production equipment, marketing chatbots and machine-learning investment algorithms is constantly expanding the range of tasks that machines can perform.

The public release of OpenAI's generative pre-trained transformer (GPT) model in June 2020 led to a striking change in the way knowledge is acquired from the internet. Subset of AI that focuses on creating new content rather than solely focusing on analyzing or predicting data. This new content ranges from music to art to text to software code. This technology drives inspiration from fields such as deep learning, neural networks and probabilistic modelling to mimic human creativity in a machine-driven manner.

View of Some Generative AI Apps

Chat GPT – Natural Text Generation

Lexica- Browse AI generated images and the prompts that have been used

Mage.space - Prompt based image generation

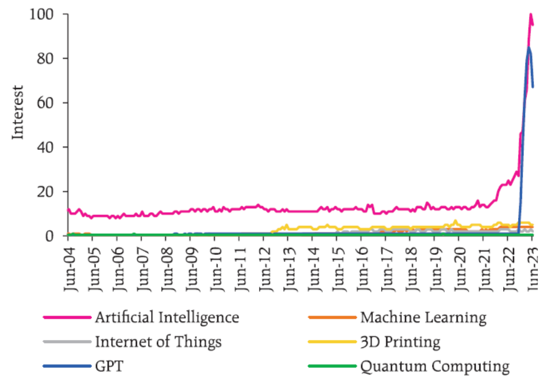
Jasper **Creative writing (ads/blogs, articles, products descriptions).**

Artificial Intelligence and Financial Services

Technological advancements aided by affordable high-end computing power have led to widespread adoption of Artificial Intelligence (AI) tools across different spheres. AI is reshaping financial services with its wide-ranging applications, which encompass process automation, risk assessment, credit scoring, regulatory compliance, customised financial products, and predictive analytics. AI-powered chatbots and machine learning (ML) algorithms ensure round-the-clock customer support and can detect fraudulent activities expeditiously, thereby enhancing operational efficiency and precision.

While there is an animated debate on the potential impact of AI on humanity, big technology companies are in fierce competition for enhancing user experiences to gain an edge in market power in emerging technologies.
International organizations are stressing the need for enhanced safeguards and global cooperation in this context.

Graphic Representation of the Google Trends of Emerging Technologies



Source: Financial Stability Report, RBI

A proactive and informed approach for navigating risks needs to prioritize: (a) **customer expectations**; (b) **cybersecurity threats**; (c) **data privacy**; (d) **sensitivity to ethical concerns related to bias, transparency and accountability**; (e) **collaboration among financial institutions and industry stakeholders for integration of processes**; (f) **regulatory compliance**; and (g) **minimizing skill gap to keep pace with rapid technological changes**.

Quantum computing can further enrich optimization in the financial sector and enhance encryption algorithms as well as break encryption technologies. Its potential impact on AI-based financial services, however, needs to be assessed carefully, with the need for the development of quantum-resistant encryption to safeguard sensitive financial data. Models and training data used to create AI will need to be regularly re-programmed to learn and improve to remain relevant and obviate any systemic disruption in financial services. This requires regular collaboration with stakeholders for seizing opportunities, measuring and managing risks and adjusting policies, regulations and supervisory approaches to ensure an inclusive, sustainable and secure financial intermediation.

Fintech

The term “FinTech” is a contraction of the words “Finance” and “Technology”. It refers to the technological startups that are emerging to challenge traditional banking and financial players and covers an array of services, from crowd-funding platforms and mobile payment solutions to online portfolio management tools and international money transfers.

Though the Indian FinTech Industry is young but it is growing at a rapid pace fueled by a large market base, an innovation-driven startup-landscape and friendly government policies and regulations. Several startups populate this emerging and dynamic sector, while both traditional banking institutions and non-banking financial companies (NBFCs) are catching up.

Fintech has the potential to provide one-time solutions to the problems faced by traditional financial institutions such as low penetration, scarce credit history and cash-driven transaction economy.

The landscape of traditional financial services has undergone a profound shift with the advent of FinTechs. This transformation has significantly impacted the delivery of financial services by making them faster, cheaper, more efficient and more accessible. The global FinTech sector which currently generates $245 billion annual revenue - a mere 2% share of global financial services revenue - is estimated to reach $1.5 trillion annual revenue by 2030. The Indian FinTech industry is projected to generate around $200 billion in revenue by the year 2030. This projection indicates that by 2030, India's FinTech sector could potentially contribute to approximately 13% of the global FinTech industry's total revenue. These projections underscore the increasing significance of the Indian Fintech sector.

Technological innovations by Fintechs are the result of interplay between the underlying (i) **digital public infrastructure**; (ii) **institutional arrangements**; and (iii) **policy initiatives**. These key elements help foster a conducive environment for nurturing creative ideas and promoting transformative technologies, which lead to beneficial and impactful changes in the financial industry.

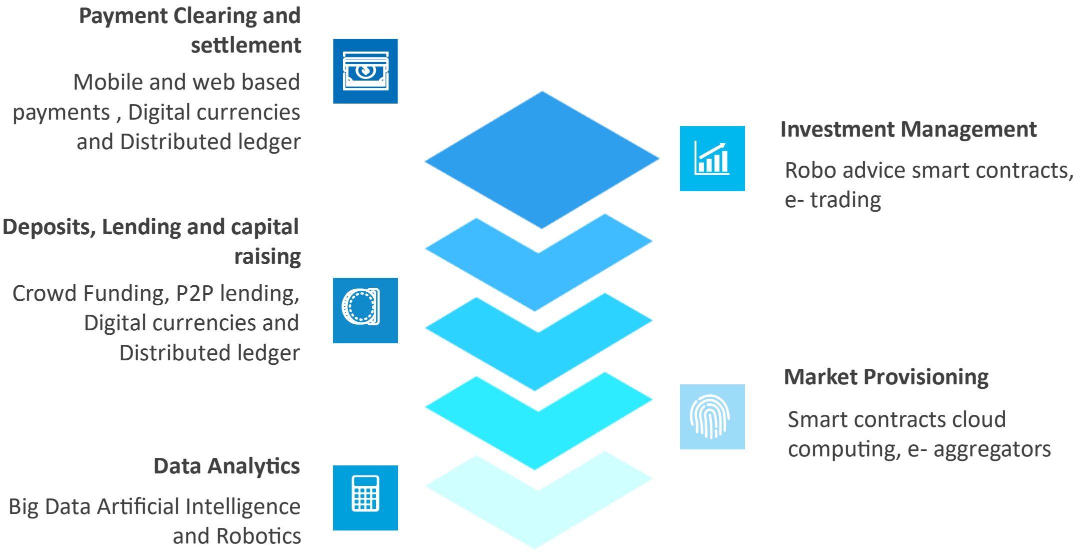
Fintech Market Opportunity in India

Sector & Segments	Market Size (2022)	Market Size (2030)	CAGR (2022-2030)	% share market size (2030)
Overall Fintech Market	$584 Bn	$ 2.1 Tn	18%	
Lendingtech	$270 Bn	$ 1.3 Tn	22%	60%
Insurtech	$ 87 Bn	$307 Bn	17%	14%
Payments	$165 Bn	$ 253 Bn	5%	12%
Neobanking	$ 48 Bn	$ 183 Bn	18%	9%
Investment Tech	$ 9.2 Bn	$ 74 Bn	30%	3%
Fintech SaaS	$4.6 Bn	$ 31 Bn	27%	1.50%

Source: Inc 42 Calculations, and Secondary Sources

Some of the major FinTech products and services currently used in the marketplace are Peer-to-peer (P2P) lending platforms, crowdfunding, blockchain technology, distributed ledgers technology, Big Data smart contracts Robo advisors, E-aggregators etc. These Fintech products are currently used in international finance, which bring together the lenders and borrowers, seekers and providers of information with or without a nodal intermediation agency.

Financial institutions are seeking to increase their knowledge in relation to technological innovation, both through partnerships with tech companies and by investing in or acquiring such companies. Despite this, there are wide differences in the preparedness of market participants for these changes in practice.
The working group on FinTech and Digital Banking set up by the Reserve Bank of India, categorized the Fintech innovations into five main groups through its scoping exercise. **These 5 (five) categories represent the broad major areas, that have the potential to affect the financial markets.**



Fintech In India: Key Growth Drivers

Socio Economic	▪ **Growing Formal Employment:** The number of Individuals with EPFP Accounts on payroll has doubled from 6.1 Mn in FY 2019 to 12.2 Mn in FY 2022, indicating a significant increase in formal sector employment. This trend suggests a preference for borrowing from institutional lenders like banks and NBFCs rather than relying on local money lenders. ▪ **Expanding Financial Inclusion:** According to the World Bank, the percentage of the Indian Population (aged 15 and above) with a bank account has risen from 35% in 2011 to 78% in 2021. Furthermore, there has been a substantial increase in Bank account penetration among the poorest 40% of the population, reaching 78% in 2021 compared to 27% in 2011.
Technology Infrastructure	▪ **Growing Smartphone Adoption:** India witnessed an astounding 10.2x growth in smartphone users over the past decade. from 91 Mn users in 2012, the number has surged to 931 Mn in 2022, establishing India as the second largest smartphone user base globally. ▪ **Expanding Internet Penetration**: By the year 2030, India is projected to have a staggering 1.3 billion Internet users. With an estimated doubling of users from 749 Mn in 2020 the internet user base is set to grow 1.7x in the next ten years.
Market Factors	▪ **Growing Venture Capital Inflow:** The Fintech sector has emerged as a major recipient of investments in the Indian startup ecosystems, with a five-year CAGR of 20% (2019-2022). It ranks second in terms of funding, contributing 19% of the total $141 Bn raised by Indian Startups between 2014 and H1 2023, only behind the e-commerce sector, which accounts for 24% of the funding. ▪ **Expanding Addressable Market:** The Fintech market opportunity in India is projected to reach $ 2.1 Tn by 2030, growing at a computed annual growth rate (CAGR) of 18%.

Financial sector and Technology Advancement

The technological innovations in the designing and delivery of financial services have significantly altered the dynamics of the financial sector, especially in the last decade. While the exact scope of activities under Fintech will keep evolving with the use, need and circumstances- the financial sector will certainly continue to embrace technology even more.

To enable the regulated and orderly growth of the Fintech ecosystem in India, the Reserve Bank of India in August 2019 became one of the very few countries that have their very own Regulatory Sandbox (RS) ecosystems. RS is a collaboration between the regulators, innovators the financial service providers and the end users, which would ensure that Indian consumers continue to receive the best in financial services.

The Indian Banking Sector is making the most use of AI. Many Indian nationalized banks are leveraging AI-based technologies to streamline their operations and enhance customer experience. Some of the use of AI by banks is:

- **Getting the KYC process right with advanced AI solutions:** Banks and Financial Institutions carry the onus of verifying identity, address and other details at every step but this process is highly error prone and can lead to further errors and even fraud. Hence Banks are in the process of adopting Computer vision for optical Character Recognition (OCR) Face Match, Liveness, Tamper Checks, Natural Language processing algorithms for name match, address match, related party identifications across millions of legal documents, etc.
- **Understanding the Customers:** RBL bank uses numerous AI technologies built of predictive and prescriptive analytics such as smart screens with motion sensors to greet customers, customer vision to recognize customers, and speak to them, and gesture and motion detection to understand their gestures. This enabled the bank to reduce its operational costs and achieve wealth management for its customers smoothly.
- **Prevention of Loan Frauds:** The Indian Banking system is reeling from bad loans and frauds amounting to incredibly high sums. Punjab National Bank the victim of a high-profile fraud case has sought to integrate AI into its software to detect early warning signs using borrower's information collated from various internal and external sources. This includes putting in place end-to-end comprehensive solutions for Early warning signals (EWS) and Intelligent transaction monitoring so that timely corrective action can be taken in the event of potential fraud.
- **Innovate 2 Transform: Addressing Financial Crime Management with AI & ML:** The Indian Banking industry is one of the most resilient and transformative industries in recent times. Financial Crime Management is one of the main themes of the Banking Industry and this industry has realized the need for migration from decade-old systems and practices of tick box approach to looking into internal data such as transactions of customers and filling STRs. By establishing a more robust infrastructure for fraud case management, banks can benefit from more effective fraud risk governance through the provision of more timely, accurate information on changes to fraud risks and the effectiveness of fraud controls.

- **Payment clearing and settlement services:** Innovations in this category are targeted at improving the speed and efficiency of payments, clearing and settlement, reducing costs and changing the ways people access financial services and conduct financial transactions. Some of the innovations in areas of payments, clearing and settlements in the financial markets are as follows:

  - Mobile and web-based payment applications
  - Digital Currencies
  - Distributed ledgers Technology
  - Block Chain technology
  - Deposits lending and capital raising services
  - Peer-to-peer lending
  - Crowdfunding

- **Market provisioning services:** Advances in computing power are facilitating faster and cheaper provisions of information and services to the market. A few of these innovations are mentioned below:
  - Smart Contracts
  - E- aggregators
  - Cloud computing
  - Big data
  - Artificial Intelligence (AI) & Robotics

- **Investment Management Services:** Automated systems have the potential to transform the business of investment management. A few commonly used applications in investment management services are discussed as under:
  - Robo advice
  - E-Trading

Digital Push

To foster innovation in a sustainable manner, it is essential to nurture it through an institutional setup and accordingly, the Reserve Bank has set up the Reserve Bank Innovation Hub (RBIH) as announced in its Monetary Policy Statement on Development and Regulatory Policies dated August 06, 2020. The objective is to promote innovation across the financial sector by leveraging technology and creating an environment which would facilitate and foster innovation. It will strive towards creating an eco-system that would focus on promoting access to financial services and products and would further financial inclusion. It will also develop the required internal infrastructure to promote Fintech research and facilitate engagement with innovators and start-ups. Further RBIH will collaborate with financial sector institutions, technology, industry and academic institutions and will coordinate efforts for the exchange of ideas and development of prototypes related to financial innovations.

The Reserve Bank of India in order to find innovative solutions to the existing challenges in the payment and settlement landscape, launched the first hackathon HARBINGER 2021 on November 09, 2021 and invited solutions from domestic and global fintech companies, programmers and students on four problem statements related to payments landscape which are listed below:

- Innovative, easy-to-use, non-mobile digital payment solutions for converting small ticket cash transactions to digital mode.

- Context-based retail payments to remove the physical act of payment
- Alternate authentication mechanism for digital payments
- Social Media Analysis Monitoring tool for detection of digital payment fraud and disruption.

The Fintech department is working towards preparing a proper institutional framework and conducting proof of concept (PoC), Pilot and rollout of Central Bank Digital Currency (CBDC), promote the use of technologically driven innovative financial products/services especially to foster financial inclusion, evaluation of technical aspects with respect to NBFC –Peer to Peer lending platform and NBFC- Account Aggregators, pursue and encourage research in financial services and explore and drive the testing and adoption of new SupTech and RegTech tools.

RBI through its press release dated August 14, 2023, is set to launch the Pilot Project for Public Tech Platform for Frictionless Credit. The aim of the platform is to focus on products such as Kisna Credit Card, Dairy Loans, MSME Loans (without collateral), personal loans and home loans through participating banks. This platform would enable linkage with services such as Aadhar e-KYC, land records from boarded State Government etc.

Policy Initiatives

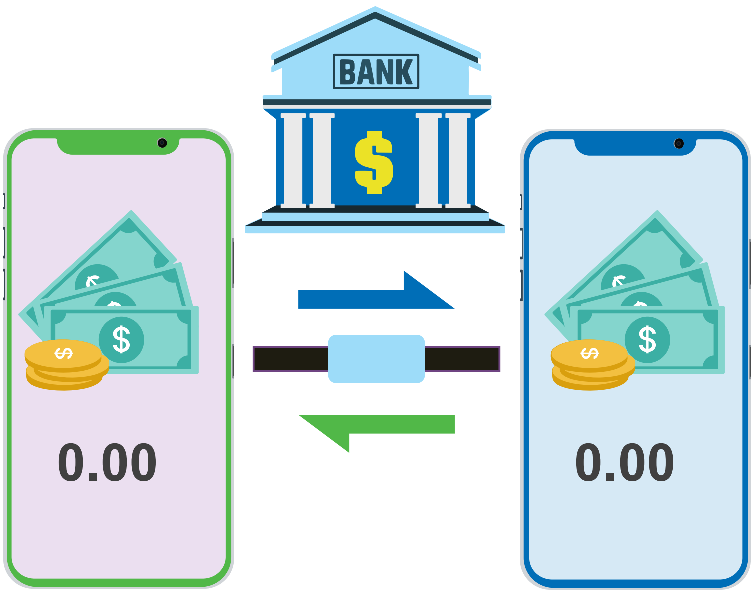
Timely and appropriate policy initiatives play a crucial role in shaping the development of the FinTech sector. The focus of our policy initiatives is to promote a conducive environment for innovation and also ensure the security and stability of financial services. We have taken many such policy initiatives in recent times. They include the issuance of regulatory guidelines for emerging areas such as payment banks (2014), account aggregators (AA) (2016), pre-paid instruments (2017), peer-to-peer (P2P) lending (2017), invoice discounting (Trade Receivable and Discounting System-TReDS) (2018), and Digital Lending Guidelines (2022, 2023). Incidentally, the cumulative number of consent-based information sharing through Account Aggregators reached 15.65 million in July 2023. With entities from Insurance, Capital markets and Pension Funds joining the AA framework, it is receiving a lot of traction.

The Regulatory Sandbox framework was announced in August 2019 with a view to foster responsible innovation and promote efficiencies in financial services. The four cohorts on retail payments, cross-border payments, MSME lending and prevention of financial frauds, together with the neutral fifth cohort, reflect our commitment to promote innovation in the FinTech space. Drawing upon the learnings from the first cohort of Regulatory Sandbox, RBI has put in place a 'Framework for facilitating Small Value Digital Payments in Offline Mode' which should give a push to digital transactions in areas with poor or weak internet or telecom connectivity.

Future Road Ahead

In the recent period, technological innovations have led to marked improvements in efficiency, productivity, quality, inclusion and competitiveness in the extension of financial services, especially in the area of digital lending –

- Digitalization of Agri-finance was conceptualized jointly by the Reserve Bank and the Reserve Bank Innovation Hub (RBIH). This will enable delivery of Kisan Credit Card (KCC) loans in a fully digital and hassle-free manner;
- In Union Budget 2023, the KYC process will be streamlined by using a 'risk-based' strategy rather than a 'one size fits all' approach;
- Digital modes of payment have grown by leaps and bounds over the last few years. As a result, conventional paper-based instruments such as cheques and demand drafts now constitute a negligible share in both the volume and value of payments;
- The RBI has launched a pilot to digitalize KCC lending in a bid for efficiency, higher cost savings, and reduction of TAT. This is expected to transform the flow of credit in the rural economy;
- In November 2022, RBI launched a pilot project on central bank digital currency (CBDC);
- In Union Budget 2023, a national financial information registry would be constructed to serve as the central repository for financial and ancillary data;
- India will contribute 2.2% to the world's digital payments market by 2023, while the value of such transactions is expected to reach US $12.4 trillion by 2025;



04

IBC Framework

This (The Insolvency and Bankruptcy Code, 2016) is considered as the biggest economic reform next only to GST.
- Ministry of Finance, Government of India, Press Release, May 11, 2016

The Insolvency and Bankruptcy Codes 2016 (IBC Code, or the Code), which became effective on December 01, 2016, stands as one of India's most significant economic reforms in recent times. Throughout the early 21st century, India's economy has experienced a rapid pace. However, the country's credit system has not been that robust, and the bond market is said to be underdeveloped. Banks were struggling with the burden of increasing non-performing assets.

In the Financial year preceding the introduction of the IBC Code, the Indian banking system witnessed a surge of around 80% in non-performing assets over the previous year. At the end of the financial year 2016, the Gross NPA of banks were 7.61% of the gross advances[14] and total stressed assets accounted for 11.50% of total advances.

Before the introduction of the IBC Code, there was no dedicated legislation that exclusively dealt with bankruptcies and insolvencies of distressed companies. Since the pre-independence period, India had the Presidency Town Insolvency Act, 1907 and the Provisional Insolvency Act, 1920 which used to deal with stressed assets to some extent. Despite having shortcomings, these two regulations had merits and some features of these two had been brought within the scope of the IBC Code.

Earlier, banks and financial institutions used to resort to filing civil suits in court to recover dues from the defaulting companies. However, this process was time-consuming, often taking between 5 to 15 years to reach a judgment. Moreover, the civil courts were burdened with multiple cases, and insolvency and bankruptcy related cases were treated like any other cases and did not get any special priority.

[14] Source: RBI

Based on the recommendation of various committees, the DRT Act (The Recovery of Debts due to Banks and Financial Institutions Act, 1993) was enacted for the speedy resolution of bad loans in the banking system. Under this legislation, a special adjudicating authority, the Debt Recovery Tribunal (DRT) was formed to take care of the debt recovery-related issues in the banking and financial system. However, the DRT Act proved insufficient for recovering the bad loans from defaulters. The defaulting borrowers identified several loopholes in the act and they acted accordingly in the tribunal.

Subsequently, the SARFASEI Act (The Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002) was introduced. The act empowered banks and financial institutions to act independently without the intervention of the court. It enabled banks and financial institutions to auction the mortgage assets of defaulted borrowers without court involvement.

The Companies Act, 1956 and 2013 contained provisions to deal with insolvency. However, the SICA Act (The Sick Industrial Companies (Special Provision) Act 1985), which was introduced in 1985 remained insufficient to handle issues related to bankruptcies. Consequently, all the aforementioned regulations proved to be complex, overlapping, and plugged with loopholes. Moreover, out-of-court stressed asset resolution mechanisms such as CDR, SDR, S4A and 5:25 were not very effective, resulting in a building of bad loans in the banking system.

These factors contributed to a fragmented, time-consuming, and costly recovery process, leading to a low recovery rate from the stressed companies.

The presence of an efficient insolvency regime is the topmost priority for a vibrant business environment. An effective insolvency system enables lenders to detect a stressed company at a very early stage and act accordingly to prevent its liquidation. It indirectly encourages responsible lending practices among banks and financial institutions, ensuring that due diligence is performed before extending credits. Additionally, it restricts debtors from making improper business decisions.

An insolvency mechanism is considered efficient when it achieves a high recovery rate, minimizes time to conclude the process, and keeps recovery costs low. Moreover, the outcome, whether the business continues as a going concern or undergoes liquidation, serves as a crucial indicator of the effectiveness of any recovery mechanism.

Before the introduction of the code, India lagged significantly behind other countries in all the above parameters. During the pre-IBC era, the Indian banking system had a dismal recovery rate from the stressed assets, recovering only 26 cents per dollar of bad debt. In contrast, many countries such as Japan, Finland, Canada, Hong Kong, Japan, Singapore, and Slovenia achieved much higher recovery rates, exceeding 85 cents per dollar. In other parameters also, India lagged behind those countries.

With this background, the Insolvency and Bankruptcy Code, 2016 was introduced on December 01, 2016.

Demystifying the Code

Code Objectives

- To **reduce the time** of the resolution for **maximizing the value** of the assets;
- To promote **entrepreneurship**;
- To make **credit available**;
- To **balance the interest** of all stakeholders by **consolidating** and amending the existing laws relating to insolvency and bankruptcy;
- To **provide a framework** for dealing with cross-border insolvency cases;

Key Features

- The Code has brought a paradigm shift from "**Debtors in Possession**" to "**Creditors in Control**";
- Insolvency test moved from "**Erosion of Net Worth**" to "**Payment Default**";
- **Single insolvency and bankruptcy framework**. It has **replaced**/modified/amended many **existing laws** and out-of-the-court settlement procedures;
- The Code has introduced a **time-bound process** at each stage of the resolution;
- Established **well-defined ecosystem** comprising of the **Insolvency and Bankruptcy Board of India (IBBI), Adjudicating Authority, Insolvency Professional and Insolvency Professional Entities, Information Utility, and Valuers (Including Registered Valuer Entity)**;
- The **managerial control** of the corporate debtor has been **shifted** to **insolvency professional**;
- **Government dues would rank below** the claims of other creditors

The Process of Insolvency Resolution

- The resolution process is conducted **transparently in a time-bound manner** within a **well-established institutional framework**. As per the code, the process must be **completed within 180 days** from the corporate debtor's admission to the CIRP (Corporate Insolvency Resolution Process). NCLT, the adjudicating authority, may extend this period **by another 90 days** when necessary.

- Once a Corporate debtor is admitted into the CIRP, the resolution process commences. On initiation, an insolvency professional or **IP** (initially an interim insolvency professional) **assumes the managerial control** of the corporate debtor and conducts the entire corporate insolvency process. Initially, the IP is tasked with collecting creditors' claims and forming the **Committee of Creditors** (CoC). Subsequently, IP prepares an information memorandum and **solicits resolution plans from the potential resolution applicants**.

- The resolution plans submitted by resolution applicants undergo review by the CoC, who then **either accept or reject the plan** by majority vote. If the plan is **accepted**, it proceeds to **NCLT for final approval**. Conversely, if the plan is **rejected** or does not get any resolution application, the corporate debtor proceeds to **liquidation**.

The IBC Ecosystem

The Code, which was introduced on December 01, 2016, has evolved over the years and now provides a strong network of stakeholders for smooth functioning. The stakeholders as on June 30, 2023, comprised of -

- **4330 Insolvency Professionals (IPs)** registered throughout India, out of which 2470 IPs have AFA (authorization for assignment);
- **109 Insolvency Professional Entities (IPE)** Registered throughout India;
- **15 Benches of the National Company Law Tribunal (NCLT)** actively pursuing IBC cases;
- **3 Insolvency Professional Agencies (IPAs)** and **1 Information Utility (IU)** in place:
- **16 Registered Valuer Organizations (RVOs)** with **88 Registered Valuer Entities (RVE)** and **5356 Registered Valuers (RV)** in place;

Measuring Success

Since the introduction of the Code, India has made remarkable progress in stressed assets resolution. Throughout this period, a significant improvement has been witnessed in both collection efficiencies and the speed at which disputes are resolved. This progress has been acknowledged by the international community, as reflected in India's improved ranking in the 'Resolving Insolvency' parameter under the World Bank's Ease of Doing Business (EODB) framework.

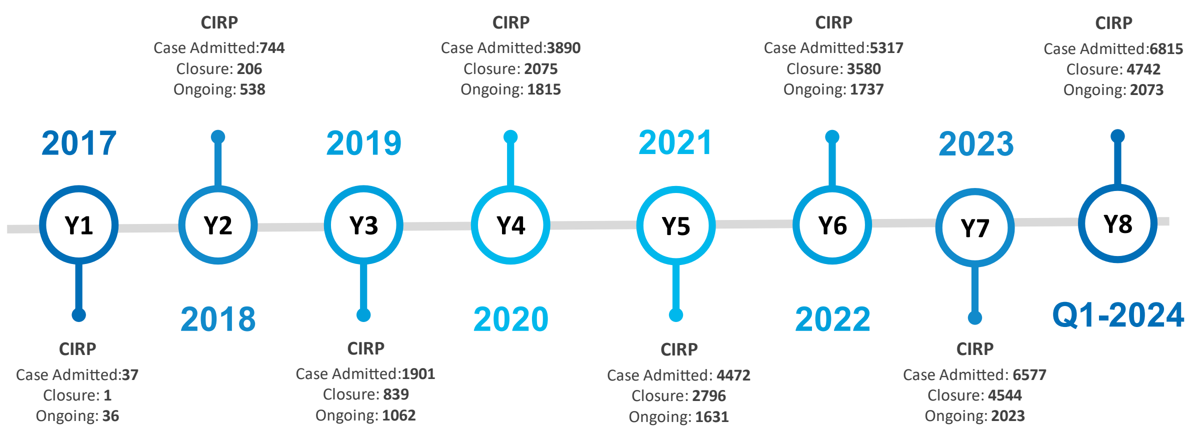
Despite all the positives, the code has its limitations. In this evolving state the resolution process is often delayed beyond the prescribed timeline due to litigation occurring at different stages of the CIRP process, as well as inadequate regulatory infrastructure.

A continuous Admission of Cases

Since its inception on December 01, 2016, till the end of June 2023, a total of 6815 corporate debtors had undergone the CIRP. Out of which, 4742 cases were closed either through approval of the resolution plans, commencement of liquidation or due to appeal/review/withdrawal U/s 12A of the Code.

During the financial year 2022-23, there were 1260 new cases admitted in CIRP and another 238 new cases were admitted during the first quarter of the financial year 2023-24. The continuous admission of such a significant number of cases reflects the effectiveness of the code in the resolution of the stressed assets. As of June 30, 2023, a total of 2073 cases are active and are at various stages of the CIRP process.

Progress in the Corporate Insolvency Resolution Process (Cumulative Cases)



Source: IBBI

Outcome of CIRP Initiated Stakeholder-wise, as on June 30, 2023

		*CIRP **Initiated By***				
Outcome	**Description**	**FCs**	**OCs**	**CDs**	**FisPSs**	**Total**
Status of CIRPs	Closure by **Appeal/Review/Settled**	286	711	8	0	1005
	Closure by **Withdrawal** u/s 12A	248	641	8	0	897
	Closure by Approval of **Resolution Plan**	413	250	56	1	720
	Closure by Commencement of **Liquidation**	965	941	214	0	2120
	Total Closed Cases	**1912**	**2543**	**286**	**1**	**4742**
	Ongoing	1122	826	122	3	2073
	Total (Ongoing + Closed Cases)	**3034**	**3369**	**408**	**4**	**6815**
Resolution	**Realization by Creditor** as % of Liquidation Value	180.90%	124.40%	147.60%	138.40%	167.20%
	Realization by Creditor as % of their Claims	34%	17.70%	18.30%	42.60%	31.60%
	Average Time Taken for Closure of CIRP (Days)	643	635	541	552	632
Liquidation	Liquidation Value as % of Claims	6.20%	9.30%	8.60%		6.80%
	Average Time Taken for Closure of CIRP (Days)	480	458	391		462

Source: IBBI

Resolution of Claims Amounting to INR 9.22 Lakh Crores

As of June 30, 2023, there had been a total of 720 CIRP cases that were ended with the approval of the resolution plan. In these cases, creditors successfully realized INR 2.92 Lakh Crores against their combined claim of INR 9.22 Lakh Crores. Creditors' collective realizations were 67.18% higher than the liquidation values determined by the valuers.

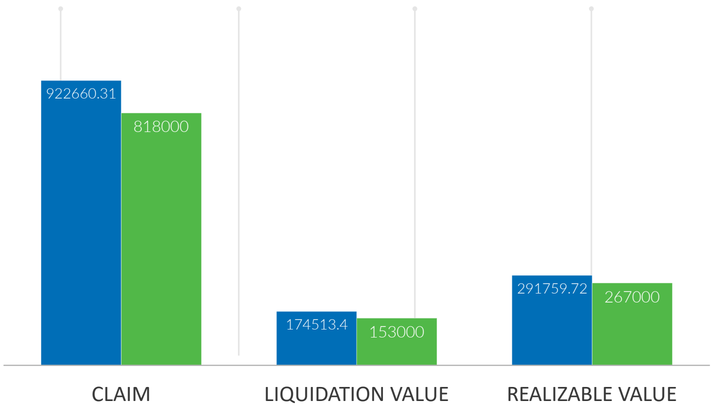
The cumulative collecting efficiencies from concluded resolution cases stood at 31.62%, therefore creditors saw only 31.62 cents returned for every dollar they had claimed. Notably, around 38% of these corporate debtors were either under BIFR or had become defunct. In such instances, the debtors managed to realize as much as 22.64% of their admitted claims.

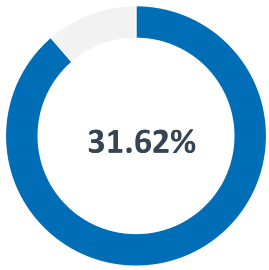
Of the 720 resolutions, 127 were large cases where creditors' claims in individual accounts exceeded INR 1000 Crores. These 127 large cases accounted for 88.66% of total claims amounting to INR 8.18 Lakh Crores out of the overall INR 9.22 Lakh Crores claimed across the 720 companies. The recovery rate in these 127 cases was slightly higher, reaching 32.64%.

Poor Recoveries from Liquidation Proceedings

Until June 30, 2023, a total of 2120 CIRPs were ended with the commencement of liquidation. Among these 2120 liquidation cases, the final report has been submitted for 555 cases, while the remaining 1565 cases are currently in the ongoing liquidation process. For these 555 closed cases, the combined claims of all the claimants have been INR 1.30 Lakh Crores.

720 CIRPs Ended with Approval of Resolution Plans





Realization by Creditor as % of their Claims

The cumulative collecting efficiencies from concluded resolution cases stood at 31.62%.

Source: IBBI

However, only INR 5119 Crores has been realized from the sale proceeds, with INR 5113 Crores distributed to stakeholders. This indicates a recovery rate of 3.94%. The admitted claims of 1972 closed and ongoing liquidation cases, out of a total of 2120 cases, for which data is available, is INR 11.80 Lakh Crore against the liquidation value of INR 58407 Crore. This indicates an anticipated realization of 4.95% of the claim amount upon completion.

Notably, about 77% of the corporate debtors whose CIRPs ended with the commencement of liquidation had a history of being earlier with BIFR or defunct. These companies had virtually negligible value remaining before admitting the CIRP process.

Closure by Liquidation Dominates

From all closed cases, it is seen that liquidation dominates over resolution.

Out of 4742 closed cases as of June 30, 2023, around 15% (720 cases) concluded with the approval of a resolution, while approximately 45% (2120 cases) resulted in the initiation of liquidation.
The remaining cases were closed either by appeals, reviews, settlements or withdrawals under Section 12A of the Code. In the majority of instances involving liquidation, the Committee of Creditors (CoC) opted for liquidating the corporate debtor instead of approving a resolution plan. Many of these corporate debtors were fundamentally so weak that they did not receive any resolution plan from the resolution applicant.

A Delay in the Process

Among the 2073 ongoing CIRPs, about 65% of cases have been continuing for over 270 days. According to regulations, CIRP is required to be completed within 330 days from the insolvency commencement date.

Data provided by IBBI reveals that, on average, the closure of CIRP that ended with the approval of the resolution plan took approximately 632 days. Similarly, for liquidation, the average duration is around 462 days.

Pre-packaged Insolvency Resolution Process

In 2021, the Insolvency and Bankruptcy Board of India (IBBI) introduced the pre-packaged insolvency process to address insolvency cases for MSMEs. This process focuses on resolving smaller cases with default amounts ranging from INR 10 Lakh to INR 1 Crore. The pre-packaged insolvency process must be completed within 120 days from the date of initiation. To date, six applications have been admitted under this regulation, out of which resolution plans for 4 have been approved.

Further Initiatives

IBBI is contemplating a series of changes in the current regulations to revitalize the code. The changes are expected to affect areas such as CIRP admission, the CIRP process itself and the liquidation process.

Some of the anticipated changes include:

- Introduction of a fast-track CIRP, where resolution plans may be approved informally before submission to the adjudicating authority;
- Extending the scope of the pre-packaged insolvency process to large corporations, currently, it’s only available for MSMEs;
- Implementing special provisions for operational creditors, allowing a fixed share of resolution proceeds to be reserved for them, aiming to reduce litigation and expedite resolution;
- Possible allowance for the partial sale of defaulters' assets in the absence of a resolution plan;
- Implementing project-wise insolvency resolution for real estate companies instead of the entire entity;
- Establishing a code of conduct for the CoC (Committee of Creditors) members;

Concluding Thought

Since its introduction on December 01, 2016, the code has resolved claims amounting to INR 21.02 Lakh Crores (INR 9.22 Lakh Crores for resolution and INR 11.80 Lakh Crores for Liquidation). The recovery rate in many cases has suppressed the expectations of the creditors. However, the overall recovery rate is relatively low due to several reasons. A significant number of these corporate debtors who underwent CIRP were either under BIFR or had possessed minimal assets to monetize before entering the process. The recovery rate has gradually decreased over the years. A worrisome concern is the delay in completing the process, with CIRP often exceeding the time stipulated by the Code.

The code is still in a state of evolution. Over the years, multiple amendments have been observed that ultimately strengthen the Code. Even the Supreme Court has intervened in Insolvency Cases, leading to significant amendments in the Code. Taking all these factors into consideration, it can be concluded that the code stands as one of the most significant economic reforms in recent times.

05

Concept of Bad Banks & Emergence of NARCL

The decade 2010s had been challenging for the Indian banking sectors. In the aftermath of the 2008 global financial crisis, the growth momentum, which had been in place between 2003 and 2007, started disappearing. In many cases, corporate capex that lacked proper viability studies, and were funded by banks without conducting adequate due diligence, turned unviable and ultimately became NPAs.

The burden of NPAs not only troubled the banks but also weighed down the growth engine of the economy. In 2016, banks underwent for asset quality reviews (ARQ) as mandated by the RBI, leading to a subsequent increase in NPAs within the system. Without proper resolutions, a rising number of non-performing assets and provisions thereon weakened the banks' balance sheet, necessitating capital infusion to maintain standard capital adequacy ratios.

With weak balance sheets and poor capitalization, banks were sceptical about extending loans, even to viable projects. Efforts were made to come out from the vicious circle of NPAs, however, not a single measure proved effective in resolving the issue.

Given this context, three distinct recommendations were presented to the Government to tackle stressed assets within the Indian banking system, forming the foundation of today's bad bank concept.

Proposal of Setting up Public Sector Asset Rehabilitation Agency (PARA)[15]

The idea of setting up a Public Sector Asset Rehabilitation Agency (PARA) was first proposed in the Economic Survey of 2016-17. The Survey raised concern regarding the twin balance sheet (TBS) problems that the country had grappled with since the 2008 financial crisis. In the aftermath of the crisis, corporates became highly leveraged and found it difficult to meet their obligations. This, in turn, placed considerable stress on the bank's balance sheets due to the increasing burden of NPAs.

The country was trying to solve the TBS issues, however, there had hardly been any success. Rather, the problems of non-performing loans continued to escalate. A handful of large companies were responsible for a significant portion of stressed assets in the system.

[15] https://pib.gov.in/newsite/PrintRelease.aspx?relid=157805 (Press Information Bureau, Government of India)

These companies had multiple creditors, and the lack of coordination among them further complicated the issue. Additionally, existing ARCs had not been very successful in resolving bad loans within the system. Drawing from the international experience, the survey concluded that only a professionally run central agency with government support could address these challenges. As a result, it recommended the setting up a centralized PARP.

Sunil Mehta Committee Recommendation to Address Stressed Assets in the Banking System, Project Sashakt

In 2018, a committee Chaired by Mr Sunil Mehta, who was the Chairman of Punjab National Bank, recommended a five-pronged resolution strategy known as "Project Sashakt" to address stressed assets problems in the banking system. Among the five, one recommendation was to resolute stressed assets through the AMC-AIF route targeting creditors with exposures of INR 500 Crores or more.

The committee recommended banks to set up an AMC, which would have multiple sector-specific AIFs under its umbrella. First, the stressed assets would be acquired by ARCs, and the AMC-AIF structure, designed to raise funds from institutional investors, would invest in these stressed assets. Subsequently, ARC would utilize these funds to redeem security receipts issued to banks in exchange for bad loans. Furthermore, the resolution strategy encouraged banks to invest in these funds. Additionally, this AMC-AIF structure could bid for stressed assets in the NCLT.

Recommendation of the Indian Banking Association (IBA) for Setting up a Bad Bank

The Indian Banking Association (IPA) submitted a proposal to the Government of India and the Reserve Bank of India for setting up a bad bank to address the NPA issues in the banking system. IBA proposed that the bad bank would have a two-tier structure, where an ARC and an AMC would be responsible for acquiring and managing stressed assets. The ARC would operate as per RBI guidelines set for ARCs.

Although accepted, these three recommendations were not implemented until the outbreak of Covid 19 when the Macro Stress Tests, a part of RBI's Financial Stability Report conducted in January 2021, warned that the gross NPA in the banking system might surge to 14.8% by September 2021 from 7.5% recorded in September 2020. In the February 2021 budget, Finance Minister Smt Nirmala Sitaraman unveiled plans to establish a bad bank for managing stressed assets in the banking system. The proposed bad bank was envisioned with a dual-layer structure, comprising an asset reconstruction company and an asset management company, which would take over the bad loans from the banks. The proposed structure resembled the one recommended by the Sunil Mehta committee and the Indian Banking Association (IBA).

On July 07, 2021, the National Asset Reconstruction Company Ltd (NARCL) was incorporated, featuring PSU banks as major shareholders and Canara Bank as the lead sponsor. NARCL is registered with the RBI as an ARC under the SARFAESI Act, 2002. In accordance with the budget proposal, the Indian Debt Resolution Company Ltd (IDRCL) was formally incorporated on September 03, 2021, to act as AMC for the resolution of stressed assets.

The Bad Banks

Bad banks are financial institutions and not necessarily banks only, that are formed to take away stressed or non-performing assets from the regular banks and enable them to function efficiently. As per the Reserve Bank of India, bad banks may be used to refer to any structure that enables segregation of performing assets from the non-performing, either on the or off-balance sheet.
The concept of setting up a bad bank first emerged in the 1980s when the USA-based Mellon Bank, which was struggling with the NPA issues and set up a separate bank Grant Street National Bank (GSNB) and transferred all stressed assets into it. GSNB had been successful in resolving the NPAs that were transferred to it. By inspiring the success of Mellon Bank, the Resolution Trust Corporation (RTC) was set up by the US Government in 1989.

International Experiences

Amidst the 1990s East Asian Financial Crisis, several countries set up centralized Asset Management Companies (CAMCs), where the governments were important stakeholders. The Korean Asset Management Company (KAMO), which was actually set up in 1962, expanded its function during the East Asian Financial Crisis of the 1990s. Following the 2008 financial crisis, a subsequent wave of setting up centralized Asset Management Companies was observed. These CAMCs are different from each other with respect to their funding sources, asset acquisition methods, pricing strategies for distressed assets, and approaches to disposing of bad loans[16]. A study done by Martini et al., in 2009, concluded that political consensus, efficient legal processes, adequate statutory powers to the new institutions, well-developed financial markets, and use of private sector expertise are important elements of a successful centralized AMC.

[16] RBI (RBI Bulletin, February 2022)

Centralized Asset Management Companies (CAMC) in the World

Country	Name	Year of Establishment
Korea	Korean Asset Management Company (KAMCO)[17]	1962
US	Resolution Trust Corporation (RTC)	1989
Sweden	Sweden	1992
Indonesia	Indonesian Bank Restructuring Agency (IBRA)	1998
Malaysia	Danaharta	1998
China	Orient, Great Wall, Cinda, Huarong Asset Management	1999
Japan	Resolution and Collection Corporation (RCC)	1999
Thailand	Thai Asset Management Company (TAMC)	2001
Ireland	National Asset Management Company (NAMA)	2009
Germany	FMS Wertmanagement	2010
UK	UK Asset Resolution Limited (UKAR)	2010
Spain	SAREB	2012

Source: RBI

A Review of CAMCs' Operational Structure Reveals the Following

Elements	Description
Funding Sources	▪ Partial or full funding from the **government** (US, Swedeen) ▪ **Issuance** of government-guaranteed **bonds** (Many East Asian Countries) ▪ Through **equity** contribution, ▪ A special **loan** from the Central Bank, or ▪ **Public Offering** of shares;
Asset Acquisition Methods	▪ **Buying toxic assets** from **financial institutions**, mostly from **banks** and investment trust companies; ▪ **Haircut** – between 20% to 80%; ▪ Banks and investment trust companies are compensated through **cash** and **security receipts** (usually guaranteed by the government); ▪ In certain countries, the transfer of stressed assets can be **voluntary** or **compulsory** (Vietnam and Korea); ▪ Sometimes, bad banks are mandated with **regional-specific** (China) or **sector-specific approaches** (Spain, Ireland);

[17] KAMCO's role expanded after the Asian Financial Crisis

Elements	Description
Pricing Strategies for Distressed Assets	▪ Countries use **different pricing** methods that depend upon factors like availability of data, **nature** and **quality** of **assets acquired**, and the **market** for **stressed assets**. ▪ For European CAMCs, the pricing is set between the **current market value** and the estimated **real economic value** of the assets.
Approaches to Disposing of Bad Loans	▪ Sometimes **two entities are involved**, one for the **acquisition of assets** and the second one for effective handling and **profitable disposal**. (e.g. in Malayasia, Danaharta, and Danamodal) ▪ In case of lack of expertise, CAMCs go for **partnership** with external **agencies**;

Source: Compiled based on information published in the article "Bad Banks a Good Samaritans: Lessons from Cross-Country Experience for India", in RBI Bulletin

The National Asset Reconstruction Company Ltd (NARCL)

The National Asset Reconstruction Company Ltd (NARCL) was incorporated on July 07, 2021, and it received the certificate of registration to commence business as an Asset Reconstruction Company from RBI on October 04, 2021. The NARCL has been functioning as a debt aggregator to acquire non-performing assets from the banking system, and recovering them by putting them on the path of resolution.

Operationally, NARCL will acquire stressed assets from banks by offering a certain percentage of cash and the rest in the form of security receipts (SRs).

The NARCL has obtained the necessary approval from the Government of India, which acts as a guarantor for the issuance of SRs. Canara Bank is the lead sponsor of NARCL and holds a 12.00% stake in the Company. Leading PSU banks and a few private banks are the stakeholders of the company.

Along with NARCL, the **India Debt Resolution Company Ltd (IDRCL)** was incorporated on September 03, 2021, and these two entities act as ARC-AMC framework for the acquisition of the stressed assets and the resolution of the same.

Major Shareholders of NARCL as on March 31, 2022

Name of the Shareholder	% of Holding
Canara Bank	12.00%
State Bank of India	9.90%
Union Bank of India	9.90%
Bank of Baroda	9.90%
Indian Bank	9.90%
Punjab National Bank	9.00%
Bank of India	9.00%
Bank of Maharashtra	5.00%
IDBI Bank	5.00%
ICICI Bank	5.00%
Others	15.40%

Source: NARCL Annual Report

The Working Framework of NARCL

Elements	Description
Funding Sources	▪ **Capitalized** through a **combination of debt and equity** from **various banks** that will have a **finite life of 5 years**;
Asset Acquisition Methods	▪ Will acquire **legacy stressed assets** where banks' exposure is **INR 500 Crore and above**. ▪ NARCL's acquisition process is going to be administrated by the **Financial Asset Acquisition Policy** framed under the extent **guidelines for ARCs**. ▪ Acquiring stressed assets that are being **resoluted under IBC** (Jaypee Infra, SREI, Helios Photo Voltaic); ▪ While acquiring bad assets from **banks**, **other ARCs** will be given options to beat the offer of NARCL (a **Swiss Challenge** process would be run to get better bids from other ARCs – e.g. This method was followed when NARCL acquired debt of SSA International). ▪ NARCL has **targeted** to **acquire** stressed assets worth **INR 2 Trillion** over the years.

Elements	Description
Pricing Strategies for Distressed Assets	▪ Backed by proper **valuation** and judicial bidding. ▪ Following the **15:85 structure introduced by the RBI**, i.e. 15% of the acquisition consideration will be paid in cash and 85% in security receipts; ▪ These Security Receipts (SRs) have been backed by a **guarantee from the Government of India**. Initially, the Government has given a **guarantee of INR 30,600 Crore** to back the SRs for a period of five years.
Approaches to Disposing of Bad Loans	▪ As per the ARC-AMC framework, both NARCL and IDRCL act jointly, where **NARCL acquires and aggregates** stressed assets and **IDRCL, with its expertise, helps NARCL in optimal resolution of stressed assets**; ▪ The **role of IDRCL** includes the **preparation of a restructuring plan** for acquired assets and the **implementation of resolution** plan after approval from NARCL.

A Few NARCL Deals

Jaypee Infratech Ltd	▪ The Company was under stress and the account turned NPA in March 2016. In August 2017, the Company was admitted for CIRP under IBC, 2016. ▪ NARCL has acquired approximately 94% of the principal outstanding from lenders at a 55% haircut.
Helios Photo Voltaic Ltd	▪ Helios Photo Voltaic Ltd (formerly known as Moser Baer), whose account turned NPA in December 2012, was under liquidation as a part of the CIRP process under IBC, 2016. ▪ NARCL on March 03, 2023, acquired approximately 70% of debt from PNB, SBI, Union Bank of India and Canara Bank.
SSA International Ltd	▪ SSA International Ltd.'s account turned NPA in January 2016. NARCL acquired 100% debt of the company from the lenders. ▪ Initially against the NARCL's, the counter offer was received from Rare ARC (through the Swiss Challenge Method), however, NARCL matched the offer of Rare ARC and acquired the debt.

SREI Equipment Finance Ltd and **SREI Infrastructure Finance Ltd**	▪ NARCL has made progress towards the acquisition of two SREI group entities, SREI Equipment Finance and SREI Infrastructure Finance. ▪ Initially, the resolution plan submitted by NARCL, as part of the CIRP process under IBC, 2016, was approved by the Committee of Creditors. ▪ Later the Kolkata Bench of NCLT also approved the resolution plan submitted by the NARCL during 2023.
SPML Infra Ltd	▪ NARCL on August 29, 2023, acquired debt from SBI, Canara Bank, PNB, BOB, Union Bank and ICICI Bank.

Does India Require Another ARC when there are Already 28 Operational?

In addition to NARCL, there are 28 other operational ARCs in India. As these ARCs are not well capitalized, they have difficulty in acquiring big-value non-performing assets. Furthermore, the yields from their stressed assets portfolios are notably low. An RBI-appointed committee report published last year shows that ARCs have managed to recover just 14% of the book value of the assets they have acquired. This poor recovery can be attributed to various factors such as the ageing of bad loans, low capitalization, and inadequate skill set to oversee revival[18]. Even, RBI has increased the minimum net worth requirement for ARC from INR 100 Crore to INR 300 Crore, and the existing players must achieve this increased threshold by March 2026 to stay in the business.

ARCs with a minimum net worth of INR 1000 Crore are the only ones eligible to act as resolution applicants in the CIRP process under the IBC Code, 2016.

Compared to existing ARCs, NARCL has been established to take over loans where creditors' exposure is INR 500 Crore and above. Moreover, NARCL's operational framework differs slightly from that of other ARCs in the country. The NARCL ecosystem comprises an ARC (NARCL) responsible for the acquisition of the stressed loan assets, an AMC (IDRCL) dedicated to the optimum resolution of acquired stressed loan assets, and the Government, which provides essential support and the guarantee for the issuance of security receipts (SRs). International experience has shown that the presence of a centralized AMC (CAMC) with government involvement as a key stakeholder can lead to more effective resolution of stressed assets.

[18] The Hindu Business Line Editorial, Operation Clean Up (*RBI's new ARC regulations may precipitate a shake-out in this sector*), October 26, 2022.

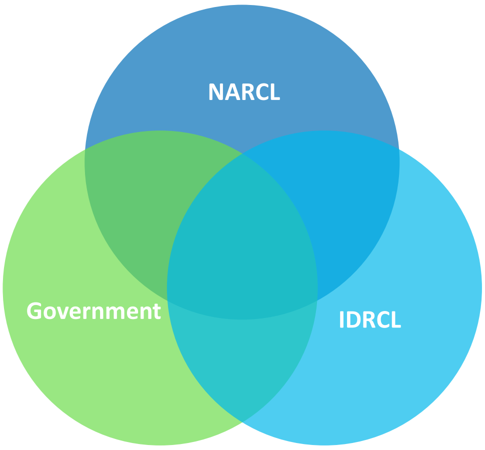
This CAMC model has been in use in other parts of the world since the 1990s, and India has adopted it as a relatively late entrant.

Post establishment of NARCL, stressed assets resolution by ARC under the IBC framework gained significant momentum. NARCL has successfully acquired a few large assets that have ended with the approval of a resolution plan under the IBC framework. It has set ambitious targets for acquiring stressed loan assets in the upcoming years.

Additionally, 28 ARCs are operating in the country to resolve issues related to stressed assets. Still, there are large stock of legacy NPAs that are yet to be resolved.

Globally, the centralized AMC model (CAMC) has been successful in dealing with stressed assets. The model has been in practice since the 1990s. Surprisingly, India did not adopt this approach until the formation of NARCL in 2021. In a relatively short period, NARCL has acquired a few stressed loans, although it has not fully met its acquisition target for FY 2023.

The NARCL Ecosystem



- Acquisition of the stressed loan assets
- helps NARCL for optimum resolution of acquired stressed loan assets
- Provides essential support and the guarantee for the issuance of security receipts

Concluding Thought

The establishment of NARCL as a bad bank is a welcoming measure towards resolutions of stressed assets. Previously, the country had multiple regulations and out-of-court settlement processes for the resolution of stressed assets. These were eventually replaced by the IBC Code in 2016.

It is important to note that alongside acquisition, the successful resolution of the acquired stressed assets is equally critical. The success of NARCL will depend on how effectively NARCL and IDRCL work together to achieve resolution.

06

Future Road Ahead of the Indian Banking Industry

Indian economy is exuding enhanced strength and stability despite the massive shocks to the global economy in recent years. Indian Economy has continued to grow at a reasonable pace becoming the fifth largest economy in the world (In terms of GDP at market exchange rate) and contributing around 15% to the global growth. The banking sector remains healthiest in more than a decade with historically high levels of capital, declining levels of non-performing assets and rising profitability. Corporate balance sheets are robust with lower leverage, improving debt servicing capacity and strong profitability. Lower current account deficit and ample cash flows have strengthened the external sector.

The Monetary Policy Committee (MPC) in its meeting held on 8th, 9th, and 10th August 2023 decided unanimously to keep the policy repo rate unchanged at 6.50%. Consequently, the standing deposit facility remains at 6.25% and the marginal standing facility (MSF) and the bank rate is 6.75%.

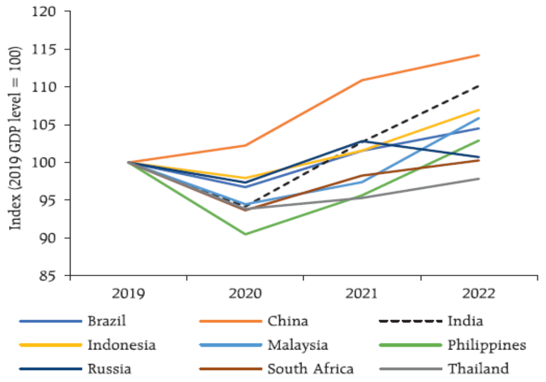
The global economy continues to face challenges of elevated inflation, high levels of debt, tight and volatile financial conditions, continuing geopolitical tensions, fragmentations and extreme weather conditions. Global growth is likely to remain low by historical standards in the current year and the next few years, despite the upward revision in the global growth forecast for 2023 by the IMF.

World merchandise trade volume growth is projected by the WTO to decelerate from 2.7% in 2022 to 1.7% in 2023. Real GDP growth for 2023-24 is projected at 6.5% with Q1 at 8.0%; Q2 at 6.5%; Q3 at 6.0%; and Q4 at 5.7%. Real GDP growth for Q1 2024-25 is projected at 6.6%.

Following Covid 19, the Indian economy registered a “V-shaped” recovery on the back of a series of recent reforms and pertinent policy support from the Government of India and the Reserve Bank of India.

As the Indian economy aspires to become a developed economy going forward, a holistic appraisal of the current macro economy is warranted to identify the bright spots and the weak points.

India's recovery post-Covid in comparison to emerging and developing market economies (EMDEs)



Source: RBI Bulleting, August 2023

Indian Banking Industry Market Size

The Indian Banking system consists of 12 public sector banks, 22 private sector banks, 46 foreign banks, 56 regional rural banks, 1485 urban cooperative banks and 96,000 rural cooperative banks in addition to cooperative credit institutions.
As of March 2023, the total number of ATMs in India reached 14,74,548. Moreover, there are 1,21,894 on–site ATMs and Cash recycling Machines (CRMs) and 96,243 off-site ATMs and CRMs.
Bank assets across sectors increased significantly since 2020. In 2022-23, total assets in the public and private banking sectors were US$ 1,553.57 billion and US$ 901.3 billion, respectively.

In 2022-23, assets of public sector banks accounted for 59.24% of the total banking assets (including public, private sector and foreign banks). According to RBI's Scheduled Banks' Statement, deposits of all scheduled banks collectively surged by a whopping Rs.1.98 lakh crore (US$ 24.32 billion) as on May 5, 2023, at a growth rate of 10.2%. As of November 4, 2022 bank credit stood at Rs. 129.26 lakh crore (US$ 1,585.09 billion).

Non-food bank credit registered a growth of 17.6% in November 2022 as compared with 7.1% a year ago on the back of robust credit demand from segments such as services, industry, personal, and agriculture and allied activities, according to RBI's statement on Sectoral Deployment of Bank Credit

Digital money and payments are transforming the global finance landscape, with profound implications for the international monetary and financial system. Digital Innovations contribute to welfare gains by smoothening business processes and facilitating customer service.

India is one of the very few countries that has two fast payment systems viz IMPS and UPI. The RTGS and the NEFT payment systems run 24x7. India's push towards its vision of Digital India combined with the efforts of RBI towards "Empowering Exceptional (E) payment Experience has led to the rapid adoption of and deepening of digital payments in the last few years. The introduction of Google Pay for Business has enabled small merchants to access credit through a tie-up with the digital lending platform for MSMEs- Flexi Loans. The introduction of UPI payments through WhatsApp has made payments all the easier.

The digital payments system in India has evolved the most among 25 countries with India's Immediate Payment Service (IMPS) being the only system at level five in the Faster Payments Innovation Index (FPII). India's Unified Payments Interface (UPI) has also revolutionized real-time payments and strived to increase its global reach in recent years.

Future Road Ahead of the Indian Banking Sector

Enhanced spending on infrastructure, speedy implementation of projects and continuation of reforms are expected to provide further impetus to growth in the banking sector. All these factors suggest that India's banking sector is poised for robust growth as rapidly growing businesses will turn to banks for their credit needs.
The advancement in technology has brought mobile and internet banking services to the fore. The banking sector is laying greater emphasis on providing improved services to their clients and upgrading their technology infrastructure to enhance customer's overall experience as well as give banks a competitive edge.

Initiatives of Government and Central Bank

- In October 2022, Prime Minister Narendra Modi inaugurated 75 Digital Banking Units (DBUs) across 75 districts in India.

- RBI launched the RBI Retail Direct Scheme for retail investors to increase retail participation in government securities.

- In June 2022, the number of bank accounts opened under the government's flagship financial inclusion drive "Pradhan Mantri Jan Dhan Yojana (PMJDY) – reached Rs. 45.60 Crore and deposits in the Jan Dhan bank accounts totalled Rs. 1.68 trillion (US$21.56 billion).

- In February 2020, the Cabinet Committee on Economic Affairs gave its approval for the continuation of the process of recapitalization of Regional Rural Banks (RRBs) by providing minimum regulatory capital to RRBs for another year beyond 2019-2020 till 2020-2021 to those RRBs which are unable to maintain minimum capital to Risk-weighted Assets Ratio (CRAR) of 9% as per the regulatory norms prescribed by RBI.

- In August 2021, Prime Minister Mr Narendra Modi launched e-RUPI, a personal and purpose-specific digital payment solution. e-RUPI is a QR code or SMS string-based e-voucher that is sent to the beneficiary's cell phone. Users of this one-time payment mechanism will be able to redeem the voucher at the service provider without the usage of a card, digital payments app, or Internet banking access.

- In September 2021, Central Banks of Indi and Singapore announced to link their digital payment system by July 2022 to initiate instant and low-cost fund transfers.

- In terms of market movements, as of June 2023, the 10-year G-Sec moved up by 13 bps during the month to 7.12%, while the 2-year to 5-year G-Sec curve also moved up by 12-17 bps. Corporate bonds across the curve rose by 10-15 bps. The OIS curve saw an even sharper move, with the 5-year OIS moving higher by 28 bps. Money market rates benefited from improved liquidity conditions, moving lower by 2-5 bps during the month.

- In Union Budget 2023, a national financial information registry was construed to serve as a central repository for financial and ancillary data; the KYC process was to be streamlined using a “risk-based strategy” rather than a “one size fits all” approach.

- National Payments Corporation of India (NPCI) has plans to launch UPI lite to enable offline UPI services for digital payments. Payments of up to Rs. 200 (US$2.67) can be made using this.

- As per the Union Budget 2023-24, RBI launched a pilot to digitalize Kisan Credit Card (KCC) lending in a bid for efficiency, higher cost savings, and reduction of TAT. This is expected to transform the flow of credit in the rural economy.

- The Government has proposed to bring all the 1,50,000 post offices under the digital banking core business to enable financial inclusion.

- The Reserve Bank of India has decided to put in place a comprehensive, risk-based framework covering the administration of all benchmarks related to foreign exchange, interest rates, money markets and government securities such as benchmarks on certificate of deposits (CDs) rates, repo rates, and FX Options Volatility Matrix as well as other benchmarks on government securities to provide greater assurance about the accuracy and integrity of benchmarks.

- RBI has proposed to launch an innovative payment mode viz., “Conversational Payments” on UPI, that will enable users to engage in a conversation with an AI-powered system to initiate and complete transactions in a safe and secure environment. This channel will be made available in both smartphones and feature phones-based UPI channels, thereby helping in the deepening of digital penetration in the country.

- The government proposed to introduce a digital rupee or a Central Bank Digital Currency (CBDC) which would be issued by the RBI using blockchain and other technologies.

- A digital Public Tech Platform is being developed by the Reserve Bank Innovation Hub (RBIH) to enable the delivery of frictionless credit by facilitating seamless flow of required digital information to lenders.

India has experienced a rise in fintech and microfinancing. India’s digital lending stood at US$ 75 billion in FY18 and is estimated to reach US$ 1 trillion by FY23 driven by the five-fold increase in digital disbursements. The Indian fintech market has attracted US$ 29 billion in funding over 2,084 deals so far (January 2017-July 2022), accounting for 14% of global funding and ranking second in terms of deal volume. By 2025, India's fintech market is expected to reach Rs. 6.2 trillion (US$ 83.48 billion).

India has made progress in sustaining its growth momentum. With Inflationary risks persisting amidst volatile international food and energy prices, lingering geopolitical tensions and weather-related uncertainties, the commitment to align the CPI inflation to the 4% target on a durable basis remains.

Notes

Notes

SUMEDHA
adding values to value

Sumedha Fiscal Services Ltd.

- Founded in 1989, Sumedha Fiscal Services Limited (SFSL) has evolved into a prominent financial services company, marked by a resolute and committed journey.

- Our array of services encompasses Debt Syndication, Financial Restructuring, Stressed Asset Resolution, Mergers and Acquisitions, Equity Placement, Valuation, Takeover, Delisting and buyback, Initial Public Offering, and Mutual Funds Distribution.

- SFSL has promoted Sumedha Management Solutions Pvt Ltd as Insolvency Professional Entity.

- SFSL has a pan-India presence across five locations with offices in Kolkata, Mumbai, Delhi, Ahmedabad, and Bangalore.

- SFSL is managed by a group of eminent chartered accountants with vast experiences in various financial sectors supported by about 65 members well-knit team of experienced professionals across the industry.

- It shares a strong relationship with corporates, banks, financial institutions, PE Funds, distressed assets funds & ARCs.

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Confederation of Indian Industry

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering Industry, Government and civil society, through advisory and consultative processes.

CII is a non-government, not-for-profit, industry-led and industry-managed organization, with around 9,000 members from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 300,000 enterprises from 286 national and regional sectoral industry bodies.

For more than 125 years, CII has been engaged in shaping India's development journey and works proactively on transforming Indian Industry's engagement in national development. CII charts change by working closely with Government on policy issues, interfacing with thought leaders, and enhancing efficiency, competitiveness and business opportunities for industry through a range of specialized services and strategic global linkages. It also provides a platform for consensus-building and networking on key issues.

Extending its agenda beyond business, CII assists industry to identify and execute corporate citizenship programmes. Partnerships with civil society organizations carry forward corporate initiatives for integrated and inclusive development across diverse domains including affirmative action, livelihoods, diversity management, skill development, empowerment of women, and sustainable development, to name a few.

As India strategizes for the next 25 years to India@100, Indian industry must scale the competitiveness ladder to drive growth. It must also internalize the tenets of sustainability and climate action and accelerate its globalisation journey for leadership in a changing world. The role played by Indian industry will be central to the country's progress and success as a nation. CII, with the Theme for 2023-24 as 'Towards a Competitive and Sustainable India@100: Growth, Inclusiveness, Globalisation, Building Trust' has prioritized 6 action themes that will catalyze the journey of the country towards the vision of India@100.

With 65 offices, including 10 Centres of Excellence, in India, and 8 overseas offices in Australia, Egypt, Germany, Indonesia, Singapore, UAE, UK, and USA, as well as institutional partnerships with 350 counterpart organizations in 133 countries, CII serves as a reference point for Indian industry and the international business community.

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