MONETARY AND FINANCIAL SECTOR DEVELOPMENTS: THE CART AND THE HORSE

CHAPTER

02

India's monetary and financial sectors have performed well in the first nine months of FY25. Bank credit has grown at a steady rate in the current financial year, with credit growth converging towards deposit growth. There has been a consistent improvement in the profitability of scheduled commercial banks (SCBs) as reflected in a fall in gross non-performing assets (GNPAs) accompanied by a rise in the capital-to-risk weighted asset ratio (CRAR). The government has also achieved significant progress in financial inclusion, with the Financial Inclusion Index of the Reserve Bank of India (RBI) increasing from 53.9 in March 2021 to 64.2 at the end of March 2024. Rural Financial Institutions (RFIs) have been an important player in facilitating India's financial inclusion journey. Development Financial Institutions (DFIs) have contributed significantly to the country's economic progress by financing infrastructure development projects.

The capital markets have demonstrated strong performance, driving capital formation in the real economy, increasing the financialisation of domestic savings, and supporting wealth creation. As of December 2024, the Indian stock market has recorded new highs, consistently outperforming its emerging market peers despite geopolitical uncertainties and election-driven market volatility challenges. Meanwhile, the insurance and pension sectors continue to perform with the vision of achieving universal coverage and strengthening the financial ecosystem further.

The financial sector is currently undergoing a transformative period marked by several emerging trends. Notably, there is an increase in the share of consumer credit in overall credit extended by banks and a rise in non-bank financing options. Additionally, equity-based financing has gained popularity, with the number of initial public offerings (IPOs) increasing sixfold between FY13 and FY24. While these developments herald a new era for the financial sector, they also introduce potential risks from a regulatory standpoint. The rise in consumer debt, the expansion of unsecured lending, and the growing number of young investors underscore the need for balancing growth and stability. Such regulation should encourage financial sector growth while ensuring stability and resilience.

INTRODUCTION

2.1 Financial institutions play a pivotal role in shaping a country's economic growth trajectory by facilitating savings, investments, and credit for economic activities. The prevailing monetary policies influence the interplay between financial intermediation and economic growth. This chapter examines the key trends and policy changes in monetary policy and the financial intermediation ecosystem in India. These developments are shaped by evolving domestic and global factors, including inflation trends, economic activity projections, and interest rate movements in major economies like the US, EU, and Japan.

2.2 The chapter is structured into two parts. The first part of the chapter explores the evolving monetary policy and key indicators such as Reserve Money (M0), Broad Money (M3) and Money Multiplier (MM), among others. The second part focuses on the various developments in the financial sector. It begins with an analysis of the banking sector's performance and credit availability, including the contributions of RFIs and DFIs to economic growth. The next section under the discussion on 'financial sector developments' examines capital market trends, particularly the rise in investor participation in the equity segment. Subsequent sections cover developments in the insurance and pension sectors, followed by an overview of the role of financial sector regulators in maintaining financial stability. The chapter also discusses the government's mechanism for addressing cybersecurity in the financial sector and the role of the Financial Stability and Development Council (FSDC). It concludes with a financial sector outlook, highlighting key challenges for the future.

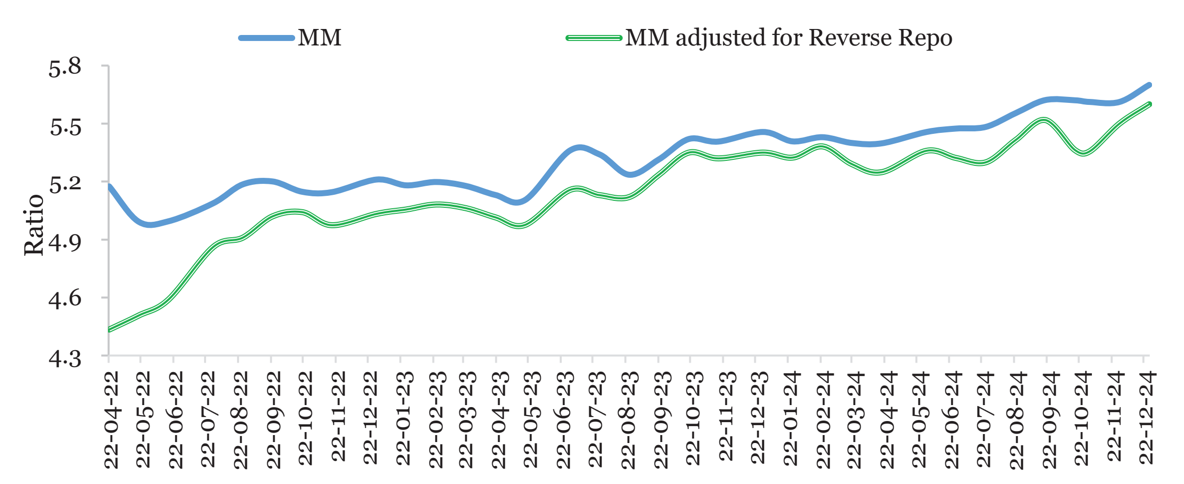
MONETARY DEVELOPMENTS

2.3 The primary objective of monetary policy is to maintain price stability while also considering the goal of economic growth, as stable prices are essential for sustainable growth. The RBI employs various policy instruments, such as manoeuvring the interest rates, conducting open market operations (OMO), altering the cash reserve ratio (CRR) and statutory liquidity ratio (SLR), etc, to achieve this stability.

2.4 During the first nine months of FY25 (April 2024-December 2024), the Monetary Policy Committee (MPC) of the RBI, in its various meetings, decided to keep the policy repo rate unchanged at 6.5 per cent. Until its August 2024 meeting, the committee retained its stance on the 'withdrawal of accommodation' to ensure inflation aligns with the target while supporting growth. Considering the prevailing and expected inflation-growth dynamics, the committee, in its October 2024 meeting, decided to change the policy stance from the 'withdrawal of accommodation' to 'neutral'. In its December 2024 meeting, the MPC announced a cut in CRR to 4 per cent of the net demand and time liabilities (NDTL) from 4.5 per cent. The decision is expected to infuse around ₹1.16 lakh crore liquidity in the banking system.[1]

2.5 Examining the trend in various measures of money supply in the economy, viz., different aggregates that reflect varying degrees of liquidity, it is seen that the monetary base, viz. the most liquid form of money, M0, recorded a year-on-year (YoY) growth of 3.6 per cent as of 3 January 2025, compared to 6.3 per cent a year ago. The growth in M3, excluding the impact of the merger of a non-bank with a bank (with effect from 1 July 2023), was 9.3 per cent (YoY) as of 27 December 2024, compared to 11 per cent a year ago. Component-wise[2], aggregate deposits were the most significant component and contributed most to the expansion of M3. Amongst sources[3], bank credit to the commercial sector was a major contributor to the increase in M3. As of 27 December 2024, MM[4], i.e., the ratio of M3 to M0, stood at 5.7 against 5.5 a year ago. Adjusted for reverse repo amounts, analytically akin to banks' deposits with the central bank, the adjusted MM was lower at 5.6 as of 27 December 2024.

Chart II.1: Higher Money Multiplier as of December 2024, indicating higher liquidity in the market



Source: Money Stock: Components and Sources, Publications, Weekly Statistical Supplement, RBI Reserve Money: Components and Sources, Publications, Weekly Statistical Supplement, RBI

1 RBI press release dated 6 December 2024, 'Maintenance of Cash Reserve Ratio (CRR), https://tinyurl.com/pxkhxndd.

2 Components of Broad Money=Currency with the Public + Aggregate Deposits (Demand Deposits with Banks + Time Deposits with banks + 'Other' deposits with Reserve Bank).

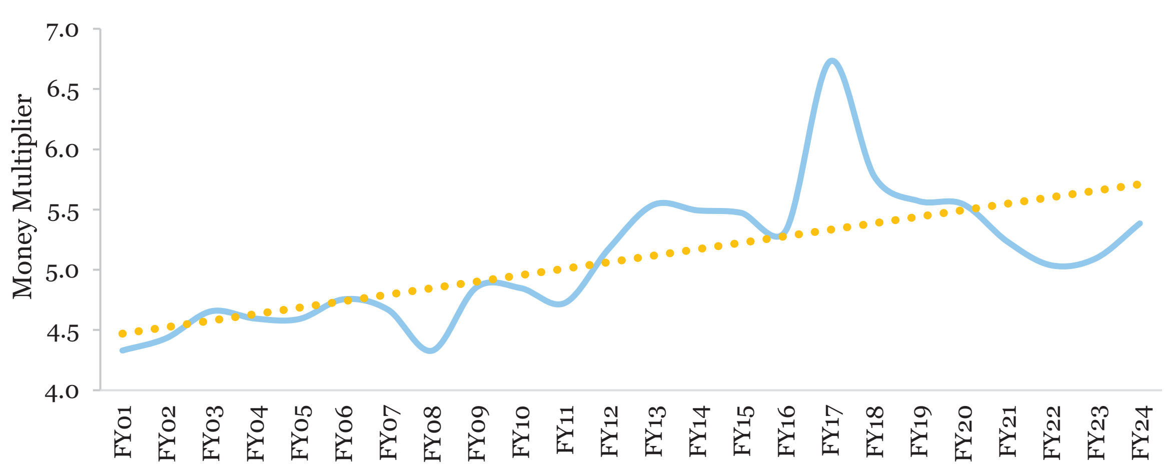
3 Sources of Broad Money=Net Bank Credit to Government + Bank Credit to Commercial Sector + Net Foreign Exchange Assets of Banking Sector + Government's Currency Liabilities to the Public- Banking Sector's Net Non-Monetary Liabilities).

4 The money multiplier measures the maximum amount of money that a banking system generates with each unit of central bank money.

2.6 A country's MM is influenced by two main factors: - the amount of cash individuals (and businesses) hold and the reserves that banks maintain. When individuals keep more cash, the banking system cannot create money, resulting in a lower multiplier. In this case, cash in hand acts as a leakage from the banking system. Similarly, the reserves that banks hold with the central bank also count as a leakage, further decreasing the MM. In India's case, banks hold a portion of their deposits as reserves with the RBI, known as CRR.

2.7 A higher MM indicates that the banking system is generating a greater money supply from the money provided by the central bank. In India, recent efforts to promote financial inclusion have encouraged people to hold less cash in hand relative to their deposits, which partly explains the increase in the MM. Chart II.2 shows that MM has been on an upward trend over the years. It declined during the COVID-19 pandemic as increased economic uncertainty caused individuals to increase their cash holdings, resulting in a fall. However, after FY22, it has resumed its upward trajectory, reflecting enhanced liquidity generation in the economy.

Chart II.2: Increase in Money Multiplier over the years



Source: Database on Indian Economy, RBI

FINANCIAL INTERMEDIATION

2.8 Financial intermediaries are critical in implementing and transmitting monetary policy actions. Policy rates set by the MPC are transmitted to the real economy through financial intermediaries adjusting their lending and deposit rates. Similarly, the CRR and SLR requirements influence the lending capacity of the financial intermediaries. All these policy rates/ratios, in effect, have a bearing on the economic growth, price levels and financial stability of the economy. The performance of financial intermediaries, such as banks, capital markets, insurance, pension sector, etc., is discussed in this chapter section.

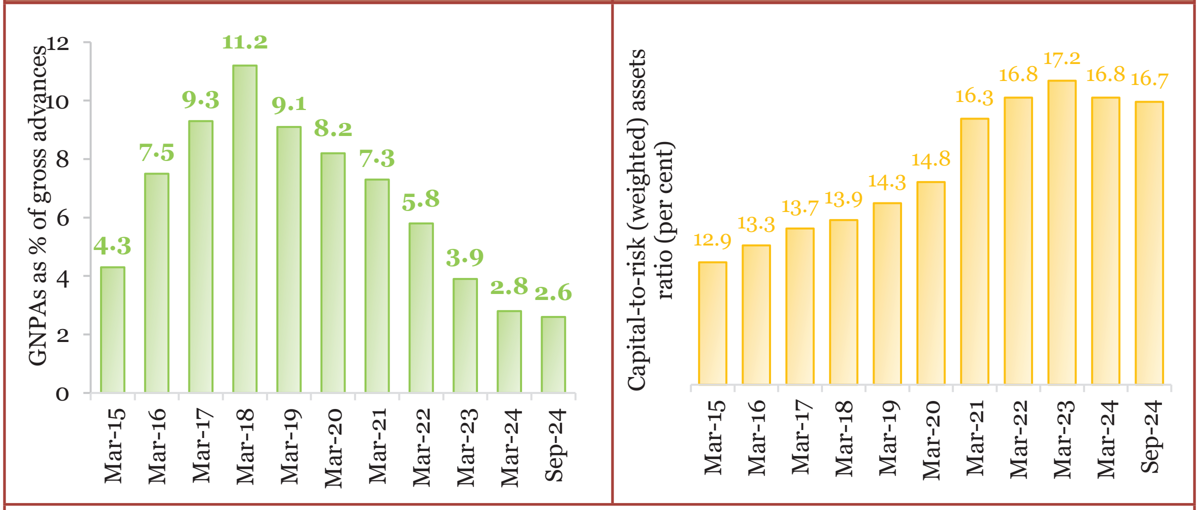
Performance of the banking sector and credit availability

Improvement in asset quality of banks

2.9 The GNPA ratio of SCBs has declined consistently from its peak in FY18 to a 12-year low of 2.6 per cent at the end of September 2024. Lower slippages and a reduction in outstanding GNPAs through recoveries, upgradations, and write-offs have led to this decrease. Lower GNPAs and higher provisions accumulated in recent years also contributed to a decline in net NPAs at around 0.6 per cent at the end of September 2024. Improvements in asset quality parameters were observed across all major bank groups.

Chart II.3a: Decline in GNPAs of SCBs

Chart II.3b: CRAR well above the required norms



Source: RBI Financial Stability report, various issues

2.10 The restructured standard advances (RSA) ratio, which is the share of RSA in total gross loans and advances, for SCBs declined from 1.8 per cent at the end of March 2022 to 0.7 per cent at the end of September 2024. All major bank groups reported a decrease in this ratio. The CRAR of SCBs has increased in the post-asset quality review period, which was conducted from August to November 2015. For FY24, around 93 per cent of the increase in the capital funds was contributed by the rise in Tier-I capital of banks, indicative of the robustness of capital buffers. At the end of September 2024, the CRAR of SCBs stood at 16.7 per cent, and all banks met the Common Equity Tier-1 (CET-1) requirement of 8 per cent.

2.11 The profitability of SCBs improved during H1 of FY25, with profit after tax (PAT) surging by 22.2 per cent (YoY). The cost of funds rose in sync with the tightening monetary policy cycle. During Q2 of FY25, the cost of funds increased marginally for SCBs. As the transmission was faster for lending rates relative to deposit rates and the overall yield on assets remained broadly stable during the last year, the net interest margin (NIM) has marginally declined across all bank groups. Despite a contraction in NIM, both return on equity (RoE) and return on assets (RoA) ratios improved in September 2024. Further, as the GNPAs and slippages declined, the provision coverage ratio improved further to 77 per cent at the end of September 2024 per cent from 74.9 per cent in March 2023.

Chart II.4a: Return on Assets of SCBs (Annualised)

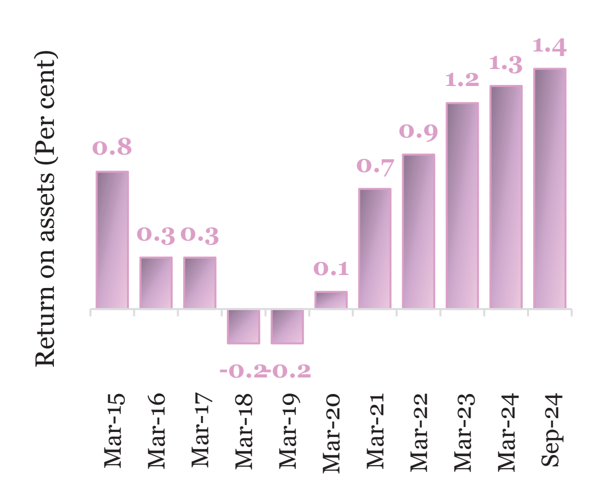
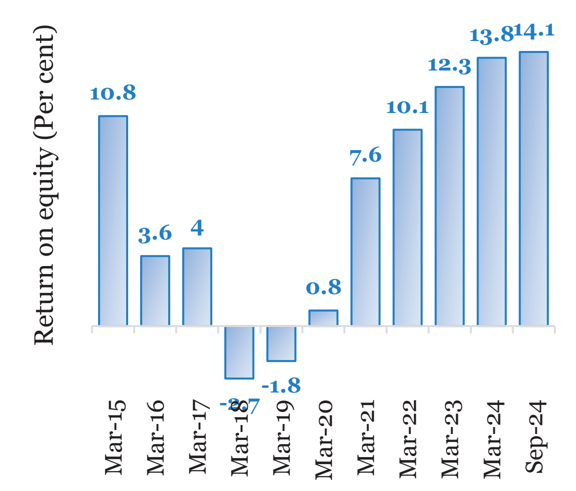


Chart II.4b: Return on Equity of SCBs (Annualised)



Source: RBI Financial Stability report, various issues

Trends in bank credit

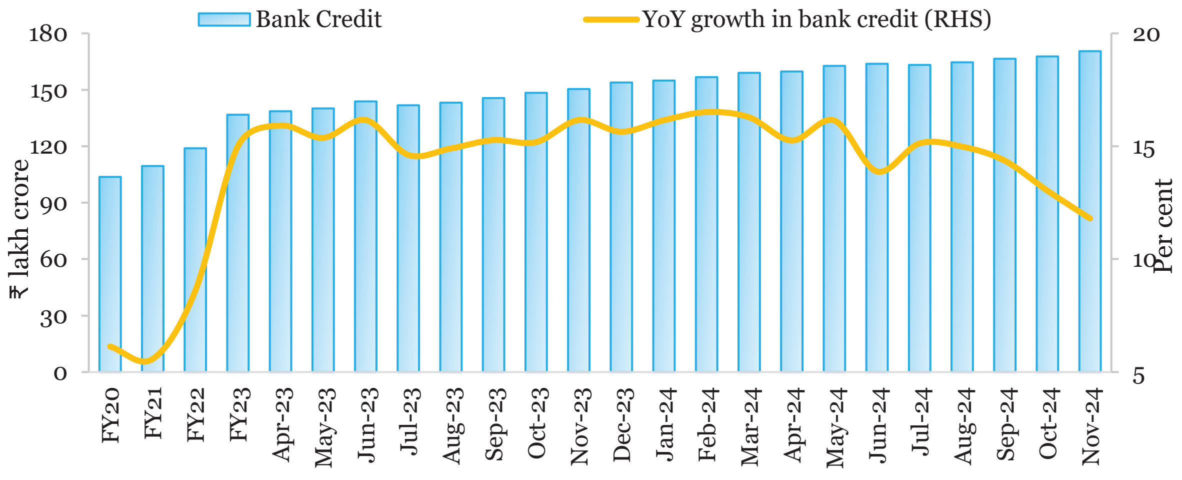
2.12 Against the backdrop of the recent monetary policy tightening cycle in India, bank deposits continue to exhibit double-digit growth. However, their profile has gradually shifted towards schemes offering higher returns. Growth in term deposits continues to outpace the current and savings account deposit growth. As of the end of November 2024, the YoY growth in aggregate deposits of SCBs stood at 11.1 per cent. The growth in bank credit has started converging towards deposit growth. At the end of November 2024, the growth in overall bank credit moderated to 11.8 per cent (YoY) from 15.2 per cent a year ago over the same period.[5] Moreover, the growth in overall bank credit up to 27 December 2024 in the current financial year moderated to 7.7 per cent.

2.13 In the current financial year, up to 27 December 2024, the growth rate in non-food credit has been 7.5 per cent compared to a growth of 11 per cent over the same period last year. The moderation in credit growth can be attributed to an increase in lending rates (as a result of monetary policy transmission of higher policy rates to higher lending rates) and the imposition of increased capital requirements for unsecured personal loans, credit cards and lending to Non-Banking Financial Companies (NBFCs) by the

5 The statistics in this section on bank credit exclude the impact of the merger of a non-bank with a bank.

RBI from 100 per cent to 125 per cent.[6]

Chart II.5: Trend in credit disbursal by SCBs



Source: RBI data on sectoral deployment of bank credit

2.14 Sector-wise, the growth in agriculture credit as of 29 November 2024 in the current financial year was 5.1 per cent. The growth in industrial credit picked up and stood at 4.4 per cent as of the end of November 2024, higher than 3.2 per cent recorded a year ago. Across industries, bank credit to micro, small, and medium enterprises (MSMEs) have been growing faster than credit disbursal to large enterprises. As of the end of November 2024, credit to MSMEs registered a YoY growth of 13 per cent, whereas it stood at 6.1 per cent for large enterprises. Credit growth to the services and personal loans segments also moderated to 5.9 per cent and 8.8 per cent, respectively, as of the end of November 2024 in the current financial year. Amongst the services sector, the moderation has been driven by a slowdown in credit disbursal to NBFCs. Vehicle and housing loans drove the moderation in the personal loans segment. In terms of increasing risk weights to NBFCs and credit cards, RBI's policy interventions contributed to the moderation of credit growth in those segments.

2.15 In December 2024 MPC, the RBI announced an increase in the interest rate ceiling on Foreign Currency Non-Resident [FCNR(B)] deposits with maturities of 1 to 3 years and 3 to 5 years.[7] Accordingly, banks can now garner fresh deposits under these categories by offering a higher rate of interest. It has also decided to link the foreign exchange retail platform with the Bharat Connect platform to enhance access to foreign exchange for MSMEs. These measures will not only help banks attract investible funds for credit growth but will also help attract more foreign inflows into India. Another

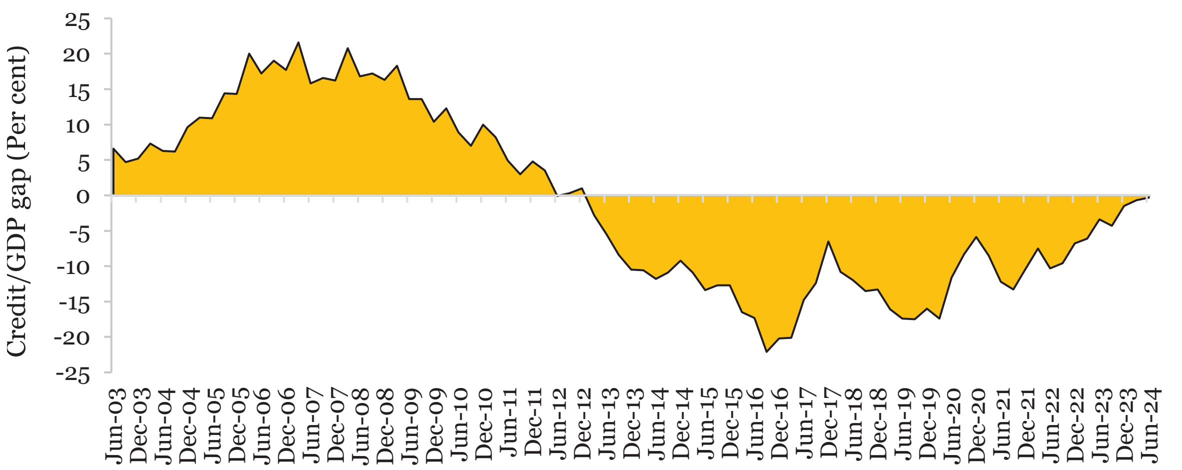
6 RBI notification, 'Regulatory measures towards consumer credit and bank credit to NBFCs', dated 16 November 2023, https://tinyurl.com/ns8rbwjm.

7 RBI press release dated 6 December 2024, 'Interest Rates on Foreign Currency (Non-resident) Accounts (Banks) [FCNR(B)] Deposits', https://tinyurl.com/mt9uwtx.

significant measure to improve credit access for small and marginal farmers includes increasing the limit for collateral-free agricultural loans from ₹1.6 lakh to ₹2 lakh.[8]

2.16 The credit/GDP ratio is a good statistic to evaluate where an economy stands in the financial cycle.[9] If the ratio is significantly greater than its trend value, it may indicate a build-up of stress in the lending sector. On the other hand, if the ratio is lower compared to its trend, it indicates ample room for growth. In the case of India, there was a positive credit/GDP gap (i.e., the difference between the credit-GDP ratio and its long-term trend) between 2006 and 2012, indicating excessive credit growth. This also coincided with the investment boom over that period. A bust followed this in the credit cycle; higher NPAs impaired the banking sector's lending ability, leading to a significant slowdown in credit growth.

Chart II.6: Indian economy witnessing the commencement of a new credit up-cycle[10]



Source: Bank for International Settlements (BIS)

2.17 After tiding over this situation and the recovery from the COVID-19 pandemic, an upward trend in the credit/GDP ratio is observed, with the gap steadily closing. With credit growth outpacing nominal GDP growth for two successive years, the credit-GDP gap narrowed to (-) 0.3 per cent in Q1 of FY25 from (-) 10.3 per cent in Q1 of FY23. Therefore, despite the double-digit growth in bank credit post-April 2022, the credit-to-GDP ratio is below the trend line, indicating that the recent growth in bank credit is sustainable.

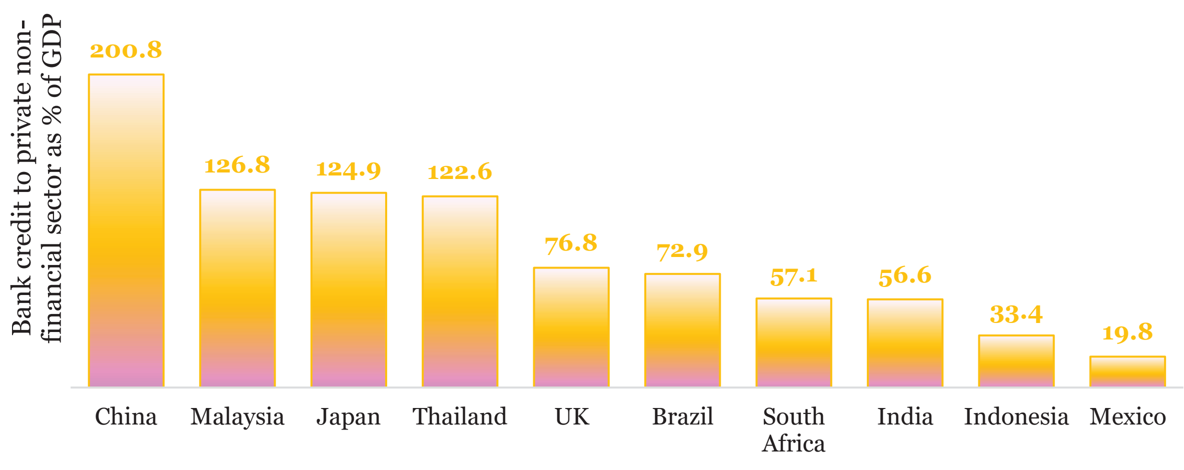
8 RBI press release dated 6 December 2024, 'Credit flow to agriculture-Collateral free agriculture' loans, https://tinyurl.com/2ehsn7ap.

9 Giese, J., Andersen, H., Bush, O., Castro, C., Farag, M., & Kapadia, S. (2014). The credit-to-GDP gap and complementary indicators for macroprudential policy: Evidence from the UK. International Journal of Finance & Economics, 19(1), 25-47, https://tinyurl.com/4pwcehu4.

10 Credit/GDP includes all lending sectors (bank and non-bank) and all borrowing sectors (Household & NPISHs, General Government, Non-financial sector and non-financial corporations)

2.18 A cross-country comparison indicates that India's bank credit to private non-financial sector to GDP ratio is lower than that of Advanced Economies (AEs) such as the US, UK, and Japan. Compared to emerging market economies (EMEs), the ratio is also lower. Still, it is higher than that of Indonesia and Mexico.

Chart II.7: Cross-country comparison of bank credit to private non-financial sector as per cent of GDP[11]



Source: Bank for International Settlements

2.19 Although pockets of stress have appeared lately, as we shall see later, India's credit landscape highlights the recovery in the credit environment from the crisis of the second decade, now trying to consolidate itself. At the heart of this growth lies a strong policy emphasis on financial inclusion, as reflected in the significant rise in RBI's Financial Inclusion Index[12] from 53.9 in March 2021 to 64.2 by March 2024. The next section explores the crucial role of Rural Financial Intermediaries (RFIs) in closing the gap between financial services and underserved regions, thereby advancing financial inclusion across the country.

Rural Financial Institutions

2.20 RFIs are vital in ensuring inclusive growth through financial inclusion, credit accessibility, agricultural financing, and empowerment of rural entrepreneurs. These institutions comprise a network of organisations that provide banking and financial services in rural areas. This multi-agency system includes Regional Rural Banks (RRBs), Rural Cooperative Banks (RCBs), SCBs, Small Finance Banks, NBFCs, Micro Finance Institutions, and local area banks. The system supports rural India through a network of banking outlets, which include branches and banking correspondents. The National

11 Average of bank credit to the private financial sector as percentage of GDP in the first two quarters of 2024.

12 The index measures progress achieved in financial inclusion across 97 indicators in three dimensions: access, usage, and quality of financial services.

Bank for Agriculture and Rural Development (NABARD) oversees the performance and health of RRBs and RCBs, focusing on aspects such as growth, the composition of assets and liabilities, business structure (deposits and loans), and profitability indicators.

2.21 RRBs were established in 1975 under the Regional Rural Banks Act of 1976. Starting from an initial number of five in 1975, they have significantly expanded in reach, branch count, total deposits, and advances. There were 133 RRBs in 2006. Following certain mergers, liquidations, and amalgamations to improve their performance, the number was brought down to 43 in 2023. Their coverage expanded from 523 districts in 2006 to 696 districts, and the number of branches grew substantially from 14,494 in 2006 to 21,856 in 2023. As of 31 March 2024, there were 43 RRBs (sponsored by 12 SCBs) with 22,069 branches, with operations extending to 31.3 crore deposit accounts and 3 crore loan accounts in 26 states and 3 UTs.[13]

2.22 The government approved ₹10,890 crore in recapitalisation assistance to RRBs during FY22 and FY23.[14] This recapitalisation scheme included operational and governance reforms as part of the Sustainable Viability Plan designed to revitalise RRBs. The plan aimed to achieve several objectives, including credit expansion, business diversification, reduction of NPAs, cost rationalisation, technology adoption, and improvements in corporate governance. As a result of this recapitalisation assistance and the implementation of the viability plan, the performance of RRBs at a consolidated level has shown significant improvement over time. During FY24, these banks achieved historic highs across all metrics. The consolidated net profit of RRBs increased from ₹4,974 crore in FY23 to ₹7,571 crore in FY24. The consolidated CRAR rose from 13.4 per cent as of March 2023 to an all-time high of 14.2 per cent by March 31, 2024. The number of RRBs with a CRAR of less than 9 per cent decreased from 9 as of March 2023 to 4 as of March 2024. Additionally, the number of profit-making RRBs grew from 37 in FY23 to 40 in FY24, while the number of loss-making RRBs fell from 6 to 3 during the same period.

2.23 Asset quality of RRBs measured by GNPA as a percentage of gross advances improved from 7.3 per cent in FY23 to 6.1 per cent in FY24, which is the lowest level in the past 10 years. During the same period, net NPAs declined from 3.2 per cent to 2.4 per cent. Credit expansion contributed to an increase in the consolidated credit-to-deposit ratio, which rose from 67.5 per cent as of March 2023 to 71.2 per cent as of March 2024, the highest in 33 years. All RRBs successfully met the regulatory targets and sub-targets set by the RBI under the Priority Sector Lending (PSL) guidelines during FY24.

13 NABARD report on 'Empowering Rural Financial Institutions', https://tinyurl.com/bdh5384b.

14 Ibid note 13.

Development Financial Institutions

2.24 DFIs are key players in supporting economic progress. Their main objective is to boost economic expansion through funding infrastructure developments. These institutions offer extended financial and technical aid across different sectors. DFIs supply technical assistance, including reports on projects, studies on their feasibility, and advisory services. By improving access to credit for infrastructure and housing projects, DFIs encourage more loans to be directed towards these critical areas. DFIs play a vital role in India by providing long-term funding for key sectors, supporting economic growth, fostering industrial expansion, improving infrastructure, and helping develop small and medium-sized businesses.

2.25 The early DFIs were set up in the 1950s to 1960s. They included the Industrial Financial Corporation of India (IFCI), Industrial Credit and Investment Corporation of India (ICICI) and Industrial Development Bank of India (IDBI). Over time, these DFIs became universal banks or commercial banks. As two major DFIs converted into commercial banks, there were fewer institutions to address the macro needs of industrial and infrastructure development. Institutions such as Infrastructure Development Finance Company (1997), India Infrastructure Finance Company Limited (IIFCL) (2006), and more recently, the National Bank for Financing and Infrastructure Development (NaBFID) (2021) have focused on funding infrastructure development. The performance of some of these is discussed in the following paras.

2.26 IIFCL has supported India's infrastructure development over the past 18 years. As a long-term financing institution, it is amongst the most diversified public sector infrastructure lenders in terms of eligible infrastructure sub-sectors and product offerings. It is mandated to finance green-field and brown-field projects, covering direct lending, takeout finance, refinance and credit enhancement across all infrastructure sub-sectors as notified by the government in the Harmonised Master List of Infrastructure Subsectors.[15] As of September 2024, IIFCL had approved cofinancing for over 780 projects with a total outlay of over ₹ 13.9 lakh crore. This includes more than 500 public-private partnership (PPP) projects, representing about 28 per cent of the country's total PPP projects. IIFCL's total sanctions and disbursements on a cumulative basis exceed ₹2.8 lakh crore and ₹1.4 lakh crore, respectively, while the outstanding loan book stands at ₹58,995 crore. Overall, IIFCL has accorded loan sanctions to projects having around 31,000 km of highways (22 per cent of India's NH capacity), 95 GW of installed energy capacity (23 per cent of India's installed capacity), 22 GW of installed renewable energy capacity (11 per cent of India's installed renewable capacity) and 880 million tonnes of port capacity (35 per cent of India's total port capacity).[16]

15 Harmonised master list of infrastructure sub-sectors, https://tinyurl.com/mbd8629x.

16 Based on the inputs received from the Department of Financial Services.

2.27 Given the need for a long-term capital provider with a holistic sectoral mandate, as opposed to the niche mandate of other DFIs, the National Bank for Financing and Infrastructure Development (NaBFID) was established as an infrastructure-focused DFI through NaBFID Act, 2021. The RBI accorded it an 'All India Financial Institution' (AIFI) status on 8 March 2022, making it the fifth AIFI after NABARD, Small Industrial Development Bank of India (SIDBI), NHB and Exim Bank. NaBFID has both financial and developmental objectives. Its financial objective is to lend or invest, directly or indirectly, and seek to attract investment from private sector investors and institutional investors in infrastructure projects to foster sustainable economic development in India. The developmental objective of the institution is to coordinate with the central and state governments, regulators, financial institutions, institutional investors, and other relevant stakeholders.

2.28 NaBFID has sanctioned ₹1.3 lakh crore loans as of 30 September 2024. The road and energy sector, including renewable energy, account for over three-fourths of loans sanctioned. The institution has identified a project pipeline across sectors such as roads, power generation, renewables, railways, ports, transmission and distribution, data centres, and social and commercial sectors like hospitals, ropeways, and others. It is targeting sanction (cumulative) of loans aggregating over ₹3 lakh crore by the end of FY26. It offers longer tenor loans (15 to 25 years), longer reset on loans (3 to 5 years), and fixed interest rate loans up to 15 to 25 years, helping infrastructure developers navigate the interest rate cycle and manage risks therein.[17]

Use of Artificial Intelligence by banks

2.29 Over the past several decades, banks have consistently adapted the latest technological innovations to redefine customer interactions. Globally, banks introduced ATMs in the 1960s and electronic card-based payments in the 1970s. The 2000s saw the widespread adoption of 24/7 online banking, followed by the rise of mobile banking in the 2010s. Now the world is in the artificial intelligence (AI)-powered digital age, driven by decreasing data storage and processing costs, greater accessibility, and connectivity. These innovations can lead to higher automation and often enhance human decision-making speed and accuracy when correctly managed to mitigate risks.[18]

2.30 The use cases of AI and Machine Learning (ML) applications by banks in India range across areas such as credit underwriting, regulatory capital planning, liquidity management, fraud detection and prevention, risk assessment and management,

17 Ibid note 16.

18 McKinsey and Company report, 'AI-bank of the future: Can banks meet the AI challenge?', https://tinyurl.com/2zsxuyhw.

portfolio optimisation, pricing models, and chatbots. The rapid pace of technological evolution in India, particularly in areas like AI, blockchain, and data analytics, has created new opportunities to reimagine traditional financial services and processes.[19] AI and large language models (LLMs) have enhanced customer service through interactive chatbots and personalised experiences, while blockchain offers secure, transparent, and efficient transactions. Moreover, evolving consumer behaviour and expectations, driven by the rise of digital natives and increasing demand for personalised, seamless, and convenient financial solutions, encourage established companies and newcomers to innovate to remain competitive.

2.31 Along with the benefits, using AI in the banking system entails a few risks. The black-box nature of AI systems can make it difficult to assess the system's reliability or contest its decisions. This lack of transparency can lead to trust concerns and challenges in validating the fairness and accuracy of AI decisions, making it challenging to audit or interpret the algorithms that drive the decisions. Accountability risks include difficulty in tracing decisions to their source and establishing liability. Other risks include those related to (i) human resources, such as inadequate human oversight, over-reliance on AI, and loss of human expertise; (ii) cyber risks; (iii) malicious usages like synthetic identity frauds, rogue trading, and market manipulation; (iv) system related risks such as inability to intervene and market correlations; and (v) third-party dependencies and service provider concentration.[20]

2.32 International bodies such as the Organisation for Economic Cooperation and Development (OECD) have outlined core principles governing the use of AI[21], which include inclusive growth, respect for the rule of law, transparency and explainability, robustness and safety, and accountability. The Hiroshima AI Process Comprehensive Policy Framework[22] established in December 2023, includes a set of guiding principles and a code of conduct, marking a significant step towards a coordinated global approach for the responsible development of AI. Different techniques are being adopted by regulators across the globe, most of which are focused on principles-based guidance.

2.33 Establishing robust AI governance is the first and crucial step in addressing the challenges that come with the implementation of AI systems. Without an appropriate governance framework, AI systems may operate without clear guidelines or oversight, leading to potential abuse or misuse of technology. As vulnerabilities could evolve with the pace of innovation and degree of AI integration in financial services, regulatory and supervisory effectiveness may take a backseat if financial regulators' AI-related skills

19 PwC India report, 'Mapping the FinTech innovation landscape in India', https://tinyurl.com/k67efs6v.

20 Based on the inputs received from RBI.

21 OECD AI principles, https://tinyurl.com/4sryrmz9.

22 Hiroshima AI process, https://tinyurl.com/4sajs5uf.

and knowledge do not keep pace with developments in this space. Accordingly, the RBI has proactively engaged with regulated entities and experts to assess the ongoing developments while effectively communicating its expectations through multiple engagement forums. It has also created a regulatory sandbox focusing on innovative technology products/services.[23] Further, the RBI announced the establishment of a committee to create a Framework for Responsible and Ethical Enablement of Artificial Intelligence (FREE-AI) in the financial sector.[24]

Efficacy of Insolvency Law

2.34 While financial intermediaries play their part in providing credit to various agents of the economy for economic activity, debtors may sometimes fail in their endeavours. This requires a mechanism to rescue them and provide an honourable exit to honest debtors or an attempt to resolve the stress and get them back into the business. For this purpose, enacting the Insolvency and Bankruptcy Code, 2016 (IBC/Code) has ushered in a modern and comprehensive insolvency resolution framework for distressed entities. By addressing financial distress and NPAs, the Code has had an indelible impact on the health of the country's banking sector and redefined the debtor-creditor relationship.

2.35 Till September 2024, 1068 resolution plans approved under the Code have resulted in creditors realising ₹3.6 lakh crore, 161 per cent against liquidation value and 86.1 per cent of the fair value (based on 964 cases where fair value has been estimated). The haircut for creditors relative to the fair value of assets was around 14 per cent, while relative to their admitted claims, it was around 69 per cent.[25] Further, until September 2024, 79 corporate debtors (CDs) were closed by sale as a going concern under liquidation. These 79 CDs had claims amounting to ₹1.4 lakh crore, as against the liquidation value of ₹4678.2 crore. The liquidators in these cases realised ₹3674.1 crore.

2.36 Resolutions under the Code have spanned across all sectors, from large steel manufacturing companies and real estate projects to small FMCG companies. Out of the 12 large accounts referred by the RBI for resolution under the Code, 10 have been successfully resolved. This highlights that the resolution process under the Code is designed to be sector-agnostic so that all types of distressed entities can find a viable solution to their financial distress.

2.37 The deterrent effect of the Code has led to a significant shift in debtor behaviour. Thousands of debtors are resolving distress in the early stages of distress. They are

23 Das, Shaktikanta (2024), 'Inaugural Address at RBI@90 Global Conference on Digital Public Infrastructure and Emerging Technologies', August 26, Bengaluru, https://tinyurl.com/5yr33njj.

24 RBI press release dated 26 December 2024, https://tinyurl.com/5b5zzmwa.

25 This realisation does not include the Corporate Insolvency Resolution Process (CIRP) cost and many probable future realisations such as equity, realisation from corporate and personal guarantees, funds infused into Corporate Debtors (CDs), including capital expenditure by the Resolution Applicants, and recovery from avoidance applications.

resolving when default is imminent, on receipt of a notice for repayment but before filing an application, after filing application but before its admission, and even after admission of the application, and making best effort to avoid consequences of resolution process. Most companies are rescued at these stages. Till March, 2024, 28,818 applications for initiation of CIRPs of CDs having underlying default of ₹10.2 lakh crore were withdrawn before their admission.

2.38 The outcomes of the IBC in terms of its efficiency and effectiveness are discernible from various statistics such as the number of resolutions, early resolutions before the financial distress becomes chronic, and time taken for the processes to complete, etc. However, beyond these numbers, the Code has other far-reaching impacts through its interaction with the higher-level systems like the legal, economic, and financial systems. Some of these systemic benefits of the law, flowing through multiple channels, as proven by research, are as follows:

- **Forex hedging by firms–**Research shows that the likelihood for currency mismatches in the corporate sector has reduced after India's bankruptcy reform. As per BIS research (2018)[26] the introduction of the new bankruptcy law raised the probability of currency hedging by 13.7 per cent for firms which originally had a high degree of currency mismatch. Thus, there is an incentive for firms to hedge currency exposure risk better in the presence of a bankruptcy law.
- **Reducing bond credit spreads–**Sengupta and Vardhan (2023)[27] highlight that the IBC lowered the credit spreads for bonds issued by non-financial firms from FY17 to FY20 compared to the bonds issued by the finance firms in FY15 and FY16, especially when other issue-level determinants of credit spreads are considered. This shows an encouraging development and reinforces the fact that an effective bankruptcy resolution regime is critical for bond investors to develop confidence in the Indian market. Currently, the bond market is skewed towards high-rated (AAA and AA) bonds, which account for more than 85 per cent of all issuances. Investor confidence in effective bankruptcy resolution will be crucial to developing a deep and liquid market for lower-rated bonds.
- **Exports–**Khan and Chakraborty (2022)[28], study a large sample of 4,434 firms between 2000 and 2020 and find that exporting firms in India have benefitted from the bankruptcy reform law by helping them better access credit and get out of financial constraints.

2.39 Macroprudential tools are handy for muting the effects of credit cycles. However,

26 Mohanty, M. S., & Sundaresan, S. M. (2018). FX hedging and creditor rights. BIS Paper, (96b), https://tinyurl.com/2evkk828.

27 Sengupta, R., & Vardhan, H. (2023). Bankruptcy regime change and credit risk premium on corporate bonds: Evidence from the Indian economy. Indira Gandhi Institute of Development Research, https://tinyurl.com/5n8nep6c.

28 Khan, T. A., & Chakraborty, I. (2022, March). Financial constraints and export behaviour: An analysis of Indian manufacturing firms. https://tinyurl.com/4pvutkhz.

a good bankruptcy regime acts as a backstop during downswings, in turn reducing the need for costly macroprudential interventions. A continuously evolving and improving IBC framework is important to achieving a 7-8 per cent growth over the next decade. India's growth aspirations require capital to operate at the frontiers of productivity and efficiency. An efficient bankruptcy system will free up capital, allowing better production, employment, and growth prospects.

2.40 The next step towards insolvency and bankruptcy reform is to improve operational efficiencies to speed up the resolution process. This is especially important for MSMEs, for whom legal costs can prove to be substantial. Improving time efficiencies in the system comes down to using innovative resolution routes such as the pre-pack arrangements for MSMEs, inter-disciplinary capacity building of resolution professionals across legal, financial and industry basics and minimising judiciary delays in proceedings. Operational efficiencies require a balancing act between fairness and fastness of resolution. Further, improvements are also required to ensure the timeliness of the insolvency and bankruptcy processes under the Code. Box II.1 discusses the issue of delays in the processes under the IBC.

Box II.1: IBC and National Company Law Tribunals

The IBC lays a time limit of 180 days from the date of admission for closure of an insolvency process, with a provision for extension by 90 days with the approval of the committee of creditors (CoC) and the adjudicating authority (AA), i.e., the NCLT. The regulations provide detailed timelines for various processes to be undertaken in the corporate insolvency resolution process (CIRP) and liquidation processes. This aspect of the insolvency law has been crucial in determining its performance, and with time, the delays in the completion of processes have become a concern.

Within three years of implementation of the Code, the difficulties in complying with the timelines were evident, and it was amended to provide a 330-day outer limit for a CIRP, including judicial proceedings. Current evidence shows that the 1068 CIRPs, which have yielded resolution plans (as of the end of September 2024), took an average of 582 days (after excluding the time excluded by the AA) for conclusion, and the 2,630 CIRPs, which ended up in orders for liquidation, took on average 499 days for conclusion. This average time for a CIRP does not include the time taken for an application to be admitted and time periods that are excluded by the order of the AA for reasons assigned by it. The time excluded by AA in the cases resolved so far was, on average, 116 days. This constitutes about 64 per cent of the time intended in the Code to complete the entire process. The exclusion of time done by the AA helps address compliance with the Code. Still, it does not address the impact on the erosion of business and economic value of the corporate debtor.

The NCLT/Tribunal was made the AA for insolvency and bankruptcy matters, along with their pre-existing adjudicatory role under the Companies Act 2013 and the Competition Law. The government has taken comprehensive measures to strengthen the NCLT. As of September

2024, 30 courts and 16 benches were functioning headed by the President, and 31 each of judicial and technical members. As of the end of July 2024, the NCLT has, quite notably, reported as adjudicated 34,690 cases under the IBC against 35,501 cases numbered, i.e., close to 98 per cent adjudication and disposed of 29,705 cases. However, there are 2,593 cases awaiting admission and 4,723 pending after admission.[29] Further strengthening the number of courts, benches, and members and ramping up physical infrastructure, as envisaged in the Union Budget 2024-25, will help improve the disposal rate.[30]

Further, addressing issues in the insolvency procedures and the Tribunal's administrative processes would help to reduce pendency in the long term. Delays in admission are of particular concern since, until admission, the company continues to be controlled by the defaulting debtor. While admission is awaited, the opportunities for value shifting, funds diversion and assets transfers increase, leading to further erosion of the value of the CD.[31] While the prescription is admission in 14 days, in FY21, the average time for admission of 153 applications by operational creditors (under section 9 of the Code) was 468. In FY22, an average of 650 days was taken in the admission of 207 applications.[32] Reasons for delay in admission occur as the AA tries to establish the existence of debt and default, as promoters file objections. Including evidentiary proof in the form of contracts, GST filings, etc., is all provided for, but all of this can be contested.

The financial system with digital credit information repositories receipts trading platforms, and the Information Utility (IU),[33] set up under the IBC, is quite robust and should be harnessed, and a means for verification of debt and default may be enabled, especially for applications filed by financial creditors. If developed by the market, such a service would address the problem and may also be monetisable as the applicant creditors will benefit from early admission of applications. Providing in the Code for the use of IU records as conclusive proof about the occurrence of a default in general, with necessary exceptions,[34] would enable such services.

Tribunals could improve the time taken for admission with the use of technology and the aid of the court registry for verification, scrutiny, and clearing of defects in the application. The proposed integrated platform for use by various stakeholders can include such features.[35] This would eliminate the need for pre-admission hearings and help reduce the time to admit an application. In the case of applications filed by operational creditors a voluntary mediation mechanism, if made applicable, may help address default and hence obviate the need for admission.

Another source of delays at the AA during the CIRP is the adjudication of inter-locutory applications.[36] It includes procedural requirements like the appointment of an insolvency

29 National Company Law Tribunal, https://tinyurl.com/3x8wcxbx.

30 Para 61 and 62 of the Union Budget, 2024-25.

31 Standing Committee on Finance, Thirty-second report August 2021 Implementation of the Insolvency and Bankruptcy Code – Pitfalls and Solutions https://tinyurl.com/23m36yze.

32 Insolvency and Bankruptcy Board April 2022. Consultation paper on issues related to reducing delays in the corporate insolvency resolution process, https://tinyurl.com/43nthke9.

33 https://nesl.co.in.

34 Discussion Paper, January 2023, Ministry of Corporate Affairs, https://tinyurl.com/yc4vmaky.

35 Insolvency and Bankruptcy Board of India, Quarterly Newsletter Jan-Mar 2023 https://tinyurl.com/2e4vwz3n.

36 Insolvency and Bankruptcy Board November 2022. Report of the Colloquium on Functioning and Strengthening of the IBC Ecosystem, https://tinyurl.com/mt6u5ykv.

professional, appointment of an authorised representative, consideration of delayed claims, the constitution of the CoC, etc. and frivolous applications. In instances where an objective criterion to determine the achievement of a procedural milestone can be assessed or when decisions are arrived at by consensus among stakeholders, it can be taken on record of the AA. It may not be considered for formal posting before the court. Extending engineering principles, the process, method, and output of repetitive procedural tasks, which are amenable for standardisation, should be standardised such as, the use of template-based submissions and orders. In dealing with frivolous applications, the Tribunal needs to be more stringent, and using prevention by way of the imposition of high costs would have the necessary deterrent effect.

Tribunals have addressed the burden on the traditional judicial system by enabling specialisation in narrower domains to enable speedy relief by reducing formalistic procedures and complexity. Tribunals are envisaged to reduce costs and improve efficiency. The same would be possible if the trappings of the traditional judiciary were avoided both in procedure and stakeholders' mindsets.

The IBC provides a non-adversarial resolution process but has not been enabled in practice at the NCLT. The design and execution of procedures in the NCLT may be revisited, keeping the quasi-judicial nature of the mandate as a foundational tenet. Separate Rules for the NCLT in its role as the AA under the Code may also provide more clarity in dealing with procedural matters and improve the efficiency in its functioning.

Development in capital markets

2.41 Capital markets are central to India's growth story, catalysing capital formation for the real economy, enhancing the financialisation of domestic savings, and enabling wealth creation. As of December 2024, the Indian stock market has achieved new highs, with intermittent corrections, in the midst of geopolitical uncertainties, currency depreciation and domestic market volatility challenges. Investor participation has been a contributor, with number of investors growing from 4.9 crore in FY20 to 13.2 crore as of 31 December 2024. This growth, combined with active listing activity and recent measures by the regulator, viz. Securities and Exchange Board of India (SEBI), to temper excesses, is expected to foster sustainable market expansion.

2.42 **The primary markets** continued to witness heightened listing activities and investor enthusiasm in FY25, notwithstanding the market volatility and geopolitical uncertainties. As per the E&Y Global IPO trends[37], Indian stock exchanges provide conducive market conditions for foreign conglomerates to list their local subsidiaries, thereby offering a good opportunity for unlocking value. India's share in global IPO listings surged to 30 per cent in 2024, up from 17 per cent in 2023, making it the leading contributor of primary resource mobilisation globally.

2.43 The total resource mobilisation from primary markets (equity and debt) stands at ₹11.1 lakh crore from April to December 2024, which is 5 per cent more than the

37 EY Global IPO Trends Report, https://www.ey.com/en_in/insights/ipo/trends.

amount mobilised during entire FY24. This also amounts to 25.6 per cent of gross fixed capital formation of private and public corporations during FY24. The number of IPOs increased by 32.1 per cent to 259 during April to December 2024 from 196 in the corresponding period of the previous year, while the amount raised almost tripled from ₹53,023 crore to ₹1,53,987 crore in the same period. The mainboard platform witnessed a significant increase in issue size as the average IPO deal size rose to ₹ 2,124 crore, up from ₹814 crore in entire FY24. In the case of small and medium enterprises (SMEs) IPOs, the average deal size increased to ₹39 crore from ₹31 crore during the same period.

2.44 Reflecting the buoyant market conditions, Qualified Institutional Players (QIPs) emerged as the preferred equity fundraising mechanism for the corporates during FY25, with a 11.4 per cent share in total capital raised. Resource mobilisation through rights issues remains buoyant, with ₹16,881 crore raised during April to December 2024, compared to ₹6,538 crore in the corresponding period of the previous year.

2.45 The domestic **corporate debt market** continued to gain significant traction during the year. The value of corporate bond issuances stood at ₹7.3 lakh crore from April to December 2024, with an average monthly issuance of ₹ 0.8 lakh crore, higher than the average of ₹0.66 lakh crore in the corresponding period of the previous year. Private placements remained the preferred channel for corporates, accounting for 99.1 per cent of total resources mobilised through the bond market. Increasing investor demand and elevated costs of borrowing from banks have made these markets more attractive for corporates for funding requirements.

2.46 In contrast to the equity market, the debt market in India remains under-capitalised. As a percentage of GDP, the corporate bond market is only 18 per cent in India, as opposed to 80 per cent in Korea and 36 per cent in China.[38] The market for corporate bonds comprises high-end bonds, with 97 per cent of corporate bond issuances concentrated in the top 3 rating categories (AAA, AA+ and AA). Issuers who are unable to get these ratings are unable to access the bond market. This may explain why most issuers are NBFCs or public sector undertakings (PSUs).[39]

2.47 An overwhelming majority of corporate bond issuance happens through the route of private placement, which actively deters the participation of retail investors. In FY24, the public placement of corporate bonds stood at ₹19,000 crore against the private placement of around ₹8,38,000 crore.[40] The financial services sector dominates the issuance of corporate bonds at nearly 60 per cent of the total (International Monetary

38 SEBI Annual bulletin, https://tinyurl.com/4rntp3xx.

39 IMF paper, 'India's Financial System-Building the foundation for strong and sustainable growth', https://tinyurl.com/3xmz39pw.

40 ORF, 2024 -https://tinyurl.com/48fzyvwr.

Fund (IMF), 2023). Outside financial services, real estate and power generation/ supply comprise the rest. Consequently, corporate bond issuance from manufacturing and non-energy infrastructure sectors is a very small proportion of the overall bond market. From April to December 2024, ₹16,456 crore was raised by Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts (InvITs).

2.48 If liquidity has to enter corporate bond markets, problems such as entry costs, information asymmetry, and the absence of a secondary market must be addressed. For example, insurance and pension funds cannot be invested in bonds that are lower than AA-rated. This effectively crowds out small players in the corporate bond market. Liquidity is also bottled through regulations that prevent provident funds from investing in corporate bonds for more than 3 years. Moreover, insurance funds are not allowed to invest in debt issued by private companies.

Secondary Market: Positive performance amidst volatility

2.49 Turning to the performance of the secondary markets, since the commencement of FY25, they have experienced significant volatility driven by various events. These include the general elections in June 2024, the unwinding of carry trades in Japan in August 2024, the escalation of conflict in the Middle East and the U.S. Presidential Election (November 2024). Notwithstanding the intermittent corrections, the markets showed a consistent upward trend until September 2024, scaling new all-time highs. Strong domestic economic prospects, robust domestic institutional investor inflows, foreign portfolio investments, anticipated policy pivots from major central banks, etc., drove the uptrend. However, this trend has moderated since October 2024, driven by economic stimulus measures in China, the US Presidential elections and valuation concerns. On account of recent corrections, the benchmark index, Nifty 50, delivered a return (in local currency) of 4.6 per cent return from April to December 2024. The highest returns (in USD) were delivered by Hong Kong’s Hang Seng (22.2 per cent), followed by Nasdaq Composite (17.9 per cent), Singapore FTSE Straits Times (16.2 per cent) and South Africa’s FTSE/JSE All Share index (13.3 per cent) during the same period.

2.50 However, on a longer-term basis, Indian markets have been among the best-performing markets in the world. The compounded annualised returns of Nifty 50 for the past ten years (since March 2014) stand at 8.8 per cent (adjusted for USD), trailing below few indices, such as the US NASDAQ composite index (15.3 per cent) and US Dow Jones (9.2 per cent) among a select set of significant markets as of December 2024. The corresponding CAGR of China's Shanghai Composite indices stands at 3.2 per cent. The positive performance of the Indian stock was driven by strong profitability growth, rapid traction of digital financial infrastructure, expanding investor base and substantial reforms in products and processes. In line with the performance of Indian markets, India's weight in the MSCI-EM index reached a new high of 20 per cent in July 2024 before settling down at 19.4 per cent at the end of December 2024. This is only the third highest after China and Taiwan.

2.51 On 23 May 2024, the total market capitalisation of BSE-listed stocks closed above the USD 5 trillion milestone for the first time. At the end of December 2024, BSE's market capitalisation increased by 14.2 per cent since March 2024 to reach ₹445.2 lakh crore. BSE market capitalisation to GDP ratio stood at 136 per cent at the end of December 2024, rising significantly over the last 10 years.

Table II.1: Market capitalisation to nominal GDP ratio (percentage)

	India	China	Brazil	Japan	South Korea	United Kingdom	United States
Dec-19	77	60	65	121	89	106	158
Dec-20	95	79	68	129	122	92	195
Dec-21	113	80	50	136	127	108	206
Dec-22	105	65	42	126	96	91	157
Dec-23	124	61	44	147	114	71	179
Dec-24*	136	65	37	157	90	84	213

Source: CEIC Database, IMF and WFE
Note: The data has been revised based on the 1st advance estimate of GDP released on 7 January 2025. Projected figures: GDP figures are taken from IMF projections, and market capitalisation is taken as at the end of Q2 of FY25 (i.e., Sep-24 end) for the US, India, Japan, Korea, and China, the UK and Brazil market cap figures are as on the end of December 2024. Market capitalisation was taken country-wise as Brazil (Brasil, Bolsa, Balcão), China (Shanghai and Shenzhen Stock Exchange), All India, Japan (Japan Exchange Group Inc.), South Korea (Korea Exchange), United Kingdom (London Stock Exchange) and USA (NYSE and NASDAQ)

Rise in investor participation in capital markets

2.52 The period since the pandemic has seen a surge in individual and household participation as capital market investors through direct (trading in markets through their accounts) and indirect (through mutual funds) channels. Healthy corporate earnings, stable macro fundamentals, efficient and robust technology architecture facilitating efficient trading, clearing, and depository systems, and trust garnered by mutual fund ecosystem and online digital investment platforms have encouraged greater participation in capital markets.

2.53 The incremental addition to demat accounts has been continuously increasing, with the number of demat accounts rising sharply by 33 per cent to 18.5 crore at the end of December 2024 on a YoY basis. In the equity cash segment, individual investor share turnover[41] was 35.6 per cent from April to December 2024. There are 11.5 crore unique investors with demat accounts and 5.6 crore unique investors in mutual funds as of the end of December 2024. Higher investor participation has engendered a self-reinforcing cycle of strong market returns, bringing in even more investors. This, in

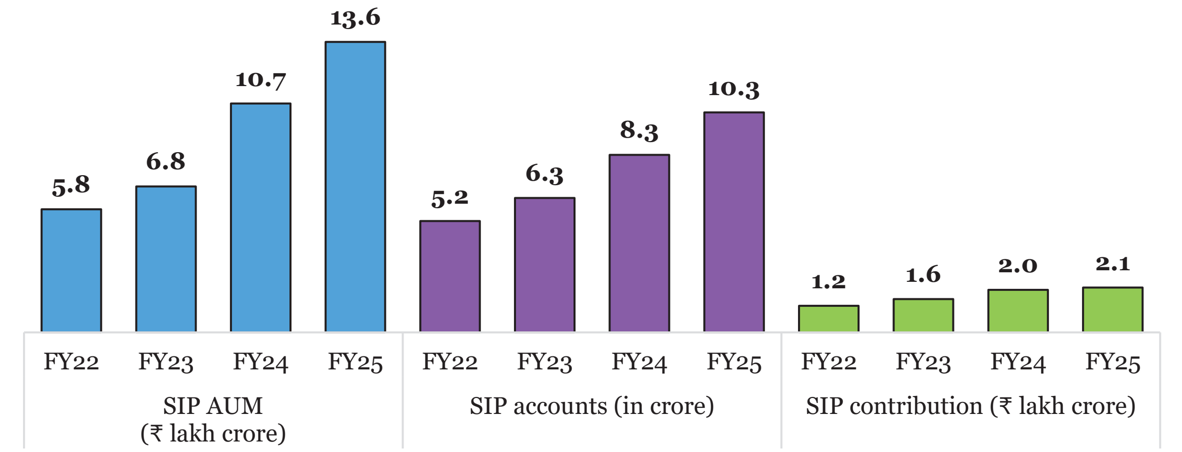
41 Share turnover refers to the ratio of the value of traded shares of individual category to the total turnover in the cash market (BSE and NSE).

turn, will eventually transform the securities market into a more diverse, inclusive, and robust platform for wealth creation.

2.54 The mutual fund industry has grown well in the last few years and is now crucial in channelling financial savings towards risk capital formation and leveraging technology and innovation. The rise in retail participation through mutual funds is reflected in the doubling of unique investors from 2.9 crore in FY21 to 5.6 crore as of December 2024. The total number of folios (excluding FoF domestic schemes) increased from 17.8 crore at the end of FY24 to 22.5 crore at the end of December 2024, and retail investors[42] held mutual fund units worth ₹18.6 lakh crore. This surge in participation, coupled with strong market performance, has led to a remarkable increase in mutual funds' assets under management (AuM), which rose to ₹66.9 lakh crore as of December 2024, registering 25.3 per cent growth from March 2024.

2.55 The mutual fund segment presently has more than 10 crore Systematic Investment Plan (SIP) accounts, with cumulative SIP inflows of ₹10.9 lakh crore since inception. Monthly average gross SIP flows have more than doubled in the last three years, from ₹0.10 lakh crore in FY22 to ₹0.23 lakh crore in FY25. Aided by these sustained inflows, mutual fund ownership in Indian listed companies has risen to a fresh all-time high of 9.5 per cent[43] in the quarter ending September 2024, from 8.7 per cent in FY24.

Chart II.8: Trends in SIP Investment



Source: Association of Mutual Fund Industry
Note: Outstanding SIP accounts and SIP AuM are reported at the end of the financial year
SIP contribution pertains to yearly gross contribution through SIP accounts
Data for FY25 is as of December 2024

2.56 Amid the impressive performance of the Indian stock markets, several factors could potentially pose significant risks. Box II.2 discusses these factors in detail.

42 Defined as individuals investing ₹2 lakh or below.
43 Includes passive and active (Source: NSE Market Pulse, November 2024)

Box II.2: Risks for the Indian stock market in 2025

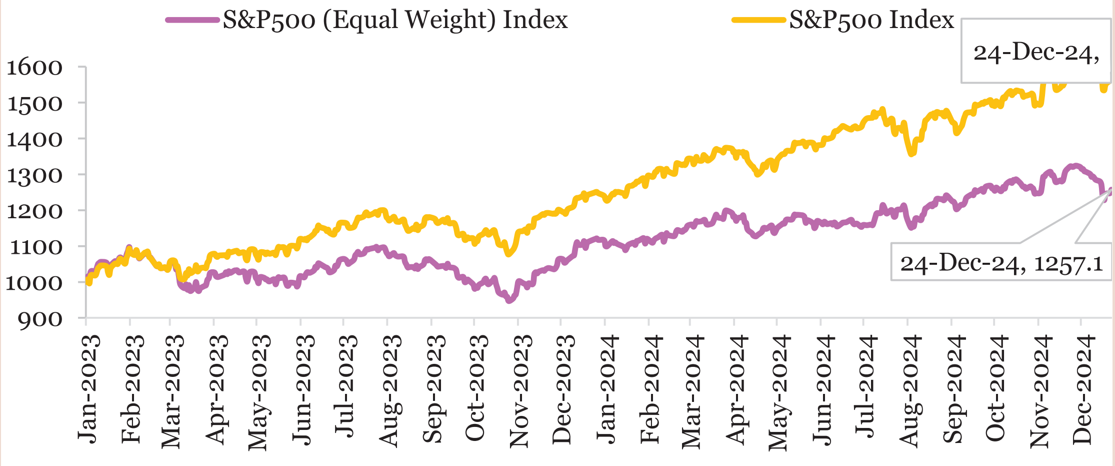
As we move into 2025, the US financial landscape is characterised by high stock market valuations, record corporate profits and extremely optimistic investor sentiment. With the US comprising 75 per cent of the MSCI World Index (as of November 2024), any correction in its market could have profound ripple effects on global markets, including India, underscoring the need for heightened vigilance.

US markets at a record high

Notwithstanding accentuated geopolitical tensions, the US equity markets had a solid run for the second year in a row, outperforming the broader developed market pack. Following a 24 per cent gain in 2023, the S&P 500 Index is well on course to generate a 20 per cent+ return in 2024. This outperformance came on the back of economic resilience, robust corporate earnings that have surged to record-high levels (~USD 4 trillion as of the quarter ending September 2024),[44] strengthening rate cut expectations early in the year and an all-time high investor confidence. That said, the surge in US stock market valuations to an unattractive zone, currently at their third highest levels as indicated by Shiller's S&P 500 CAPE ratio (Cyclically Adjusted Price-Earnings Ratio), warrants some caution. Further, the rally over the last two years has been largely driven by a few mega-capitalisation technology companies—Apple, Microsoft, Amazon, Alphabet, and Nvidia. This is reflected in a strong 40 per cent+ year-to-date return in the S&P 500 Top 10 Index.

The performance of the S&P 500 Equal Weight Index, which assigns equal weight to all 500 constituents, effectively diluting the impact of the largest companies, is also a good assessment of the performance of the S&P 500 excluding these companies. The S&P 500 Index has rallied by a total of 56 per cent in 2023 and 2024, more than double that generated by the equal weight index. This, along with tapering rate cut expectations, with the US Federal Reserve's dot plot now suggesting a 50bps cut in 2025, down from the earlier guidance of 100bps, has added to the potential risks and uncertainties.

Chart II.9: S&P500 vis-à-vis S&P500 (Equal Weight) index (Rebase to 1000)



Source: LSEG Workspace

Note: Data for the S&P 500 Index and the S&P 500 Equal Weight Index is from January 2023, both rebased to 1000 (as of 3 January 2023). Data is till 24 December 2024

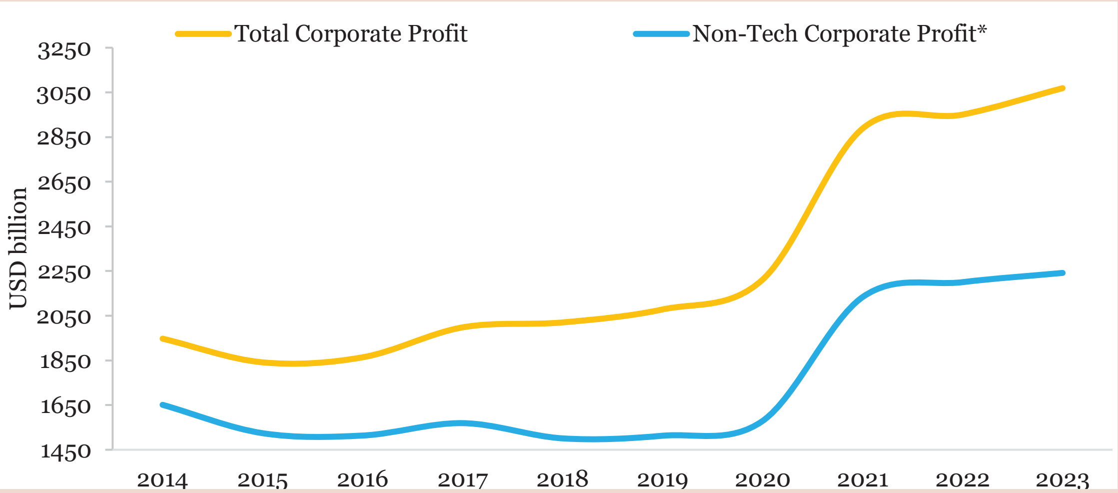
44 Data Source: Federal Reserve Economic Data (FRED), National Income: Corporate Profits Before Tax (Without IVA and CC Adj.), Billions of Dollars, Quarterly, Seasonally Adjusted Annual Rate. https://fred.stlouisfed.org.

Interestingly, investor sentiments this time have been heavily influenced by sustained demand for high-growth stocks and extreme and unreasonable optimism, as indicated by an all-time high divergence between the share of respondents expecting an increase in stock prices and income levels (based on the Conference Board Consumer Confidence Survey). However, history shows sentiment-driven rallies are often fragile, with confidence shifting rapidly in response to external shocks, such as geopolitical events, policy changes, or economic slowdowns. This makes the current environment particularly susceptible to volatility, with any unexpected developments potentially triggering significant market corrections.

At the same time, questions are emerging about the sustainability of U.S. corporate earnings, particularly as they are concentrated within a few major technology firms and supported by strong government spending, up 10 per cent YoY to USD 6.75 trillion[45] from October 2023 to September 2024.

Furthermore, investor demand for structured and complex products, where returns are backed by revenues from unconventional assets such as data centres, music catalogues and solar panels revenues, has surged to the highest level since the Global Financial Crisis (GFC).[46]

Chart II.10: US corporate profits vs. non-tech corporate profits



Source: LSEG Workspace
Note: The technology sector has been identified based on Thomson Reuters sector classification and market capitalisation as of 26 December 2024[47]

Retail participation in India at record high

Indian equity markets have also had a steady run since the onset of the pandemic, driven by factors that extend beyond global influences. One such notable factor has been a surge in retail participation over the last five years, both in terms of investor numbers and trading activity. The unique investor base at the National Stock Exchange (NSE) surpassed the 10-crore mark in August 2024, tripling in the last four years, and currently stands at 10.9

45 US Treasury website, https://fiscaldata.treasury.gov/americas-finance-guide/national-deficit/.

46 https://www.ft.com/content/5219f962-3499-4928-8c73-5610b7a0109e.

47 This excludes the 85 technology companies within the top 503 companies(S&P500), where corporate profit data has been available for the last 10 years.

crore (as of 26 December 2024). The number of client codes, indicating a number of investor accounts at NSE, has risen from a little under six crore at the end of 2019 to nearly 21 crore as of December 2024.

Regarding activity, the number of individuals that traded at least once a month in the NSE's cash market segment increased from ~32 lakh in January 2020 to ~1.4 crore in November 2024. The rise in individuals' participation in Indian equity markets is also reflected in the amount of money invested by them. After remaining on the sidelines for the previous 11 years, individuals turned net buyers of Indian equities in 2020, only to strengthen it further over the ensuing years. In the last five years (2020-24), individuals have invested a net amount of ₹4.4 lakh crore in the NSE's cash market segment, with net inflows in 2024 (Jan-Nov'24) surging to a record high of ₹1.5 lakh crore. This, along with strong indirect participation via mutual funds, has more than made up for volatile FPI outflows over the last five years. Notably, direct and indirect (via mutual funds) ownership of individual investors at 17.6 per cent (as of September 2024) in the NSE-listed companies is now at par with FPIs. This gap was as high as 7.1 percentage points in FY21.

Participation of individual investors during the 2008 GFC and 2020 COVID-19 pandemic

Chart II.11a: Count of active individual investors

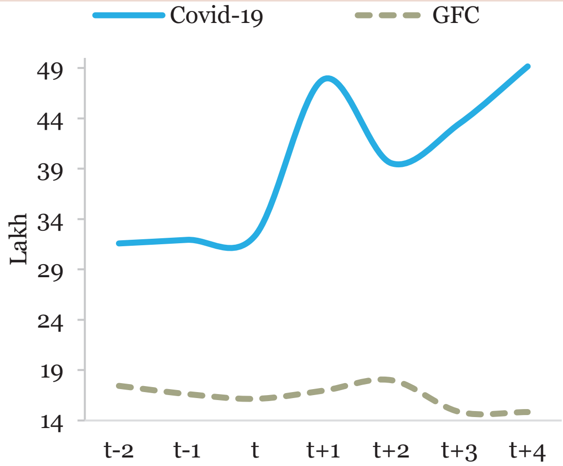
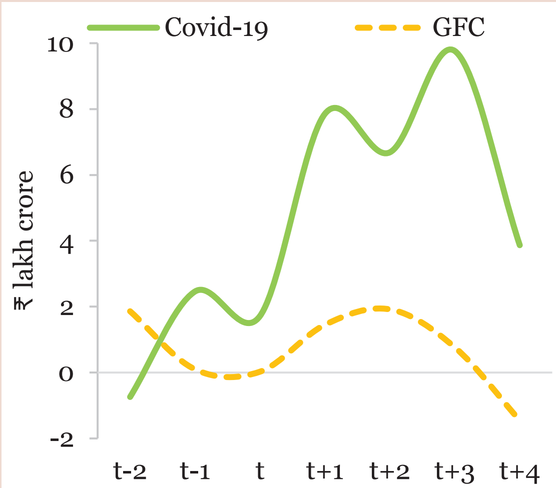
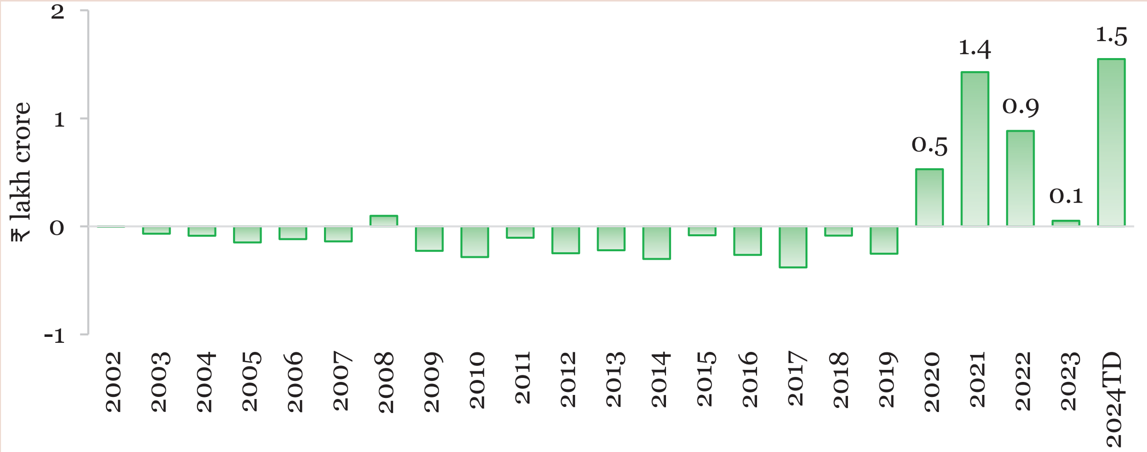


Chart II.11b: Net inflows by retail investors



Source: NSE Economic Policy and Research (EPR)
Note: 't' is the month when the event occurred. For COVID-19, t is February 2020, and for GFC, it is August 2008
Active investors are those investors who have traded at least once during the month
Individual investors include individual domestic investors, NRIs, sole proprietorship firms and HUFs
Net flows are calculated as buy traded value – sell traded value in the NSE's cash market segment
Net flows include investments in securities in EQ, BE, SM, and ST series, including ETFs only

Chart II.12: Annual trend of net inflows by individual investors in the NSE's cash market segment



Source: NSE EPR
Note: Individual investors include individual domestic investors, NRIs, sole proprietorship firms and HUFs
Net flows are calculated as buy traded value – sell traded value
Net flows include investments in securities in EQ, BE, SM, and ST series, including ETFs only
Data for 2024
Till Date is for the period January-November24

Deepening individual participation, coupled with robust gains generated by Indian equities, outpacing other asset classes, has created significant household wealth over the last few years. As per the NSE's estimates, household wealth in Indian equities has increased by over ₹40 lakh crore in the last five years (2020-2024; as of September 2024).

This rise in retail participation aligns with a steady decline in the 5-year rolling beta between the Nifty 50 and the S&P 500 in the last four years, suggesting a reduced sensitivity of Indian markets to U.S. market movements. This decoupling is further evidenced by the increasing resilience of Indian markets during periods of FPI outflows. For example, in October 2024, despite FPI outflows of USD 11 billion, the Nifty 50 index was corrected by only 6.2 per cent, thanks to strong downside support provided by domestic institutional and individual investors. In contrast, during the March 2020 pandemic-driven market sell-off, FPI outflows of USD 8 billion triggered a steep 23 per cent market decline.

Even as the resilience demonstrated by the Indian market, supported by growing retail participation, is promising, the risks associated with a potential US market correction cannot be overlooked, given historical trends.

What does the history tell us?

Historical data and research suggest that the Indian equity market has been notably sensitive to movements in the US market. The Nifty 50 has historically shown a strong correlation with the S&P 500, with analysis of daily index returns between 2000 to 2024 revealing that in 22 instances when the S&P 500 corrected by more than 10 per cent, the Nifty 50 posted a negative return in all but one case, averaging a 10.7 per cent decline. On the other hand, during 51 instances when the Nifty 50 experienced a correction of over 10 per cent, the S&P 500 exhibited positive returns in 13 instances, with an average return of -5.5 per cent.

This underscores the asymmetric relationship between the two markets, highlighting a more pronounced impact of the movement in US markets on Indian equities than the other way around.

Further evidence shows that S&P 500 returns Granger-cause[48] Nifty 50 returns, meaning that changes in the US market are a leading indicator for the Indian market, especially during shocks, while the reverse is not true. This emphasises that Indian markets tend to react more to trends originating in the US, reinforcing the need for caution in the event of a downturn in the latter's stock market.

Potential risks for India in 2025

Elevated valuations and optimistic market sentiments in the US raise the likelihood of a meaningful market correction in 2025. Should such a correction occur, it could have a cascading effect on India, especially given the increased participation of young, relatively new retail investors. Many of these investors that have entered the market post-pandemic have never witnessed a significant and prolonged market correction. Hence, if one were to occur, its impact on sentiment and spending may be non-trivial.

GIFT City

2.57 The International Financial Services Centres Authority (IFSCA) is poised to play a pivotal role in India's vision for 2047. As a unified regulator, IFSCA is responsible for developing and regulating financial institutions, services, and products within India's International Financial Services Centres (IFSCs). With its internationally aligned regulatory regime, IFSCA aims to create an environment conducive to global financial institutions operating in India. This, in turn, will facilitate the growth of India's financial sector, making it a key player in the global economy.

2.58 GIFT IFSC has been witnessing brisk growth, having more than 720 entities across categories. The international and domestic financial services industry is gravitating to this unique jurisdiction which benefits from unrestricted currency convertibility as it is classified as a non-resident zone under the Foreign Exchange Management Regulations. GIFT-IFSC has continued its ascent as a leading IFSC, improving its rank by five places in the 'Global Financial Centres Index 36' (GFCI 36), rising to 52nd position. It also achieved a notable jump in the FinTech rankings, climbing four places to rank 45. This progress reflects the concerted efforts of IFSCA in fostering a robust FinTech ecosystem.

2.59 The vibrant banking ecosystem in GIFT IFSC comprises foreign and domestic banks set up as branches of the parent bank operating as IFSC Banking Units (IBUs). As of September 2024, the total asset size of IBUs crossed USD 70 billion, and the cumulative value of transactions undertaken by IBUs crossed USD 975 billion. Credit exposure of IBUs stands over USD 51 billion as of September 2024, covering countries

48 Granger causality is a statistical concept that determines if one variable can predict another variable based on its past values.

like the US, UK, Singapore, UAE, etc., apart from India. Additionally, the cumulative derivatives trades by IBUs crossed USD 982 billion, while the cumulative non-deliverable forwards (NDF) bookings reached almost USD 500 billion.

2.60 The asset management ecosystem in IFSC is proliferating. It comprises 128 Fund Management Entities, 168 Alternative Investment Funds (AIFs), and three Investment Advisors. By September 2024, AIFs had raised total commitments of USD 12.1 billion. Further, the insurance ecosystem in IFSC currently comprises 37 entities, including 15 IIOs (IFSC Insurance Offices) and 23 IIIOs (IFSC Insurance Intermediary Offices). The total (Re)insurance premium booked by IIOs is USD 427 million, and the total (Re) insurance premium transacted by IIIOs is USD 1,036 million, up to September 2024.

2.61 As of September 2024, 60 entities had registered as FinTechs or TechFins in GIFT-IFSC, reflecting the region's dynamic FinTech landscape. IFSCA has conducted 13 hackathons and received 152 applications from 14 jurisdictions under its FinTech Entity framework, showcasing its commitment to innovation.

Developments in the insurance sector

2.62 The global insurance market is experiencing a dynamic period of growth and transformation, driven by steady economic expansion, strong labour markets, and rising real incomes. Despite considerable challenges in 2023, including persistently high inflation and geopolitical tensions that constrained the global GDP growth, the insurance sector demonstrated a positive growth rate of 2.8 per cent.[49] The changing macroeconomic environment, climate fluctuations, technological progress, and evolving customer preferences drive transformation in technology, infrastructure, business models, and organisational culture within the insurance industry. Global insurers are actively adopting innovative technologies, expanding their market reach, and prioritising customer-centric approaches to improve efficiency and address emerging demands.[50]

2.63 India's insurance market has also continued its upward trajectory. Total insurance premium grew by 7.7 per cent in FY24, reaching ₹11.2 lakh crore, despite a slight decline in insurance penetration[51] from 4 per cent in FY23 to 3.7 per cent in FY24. Life insurance penetration dropped marginally from 3 per cent in FY23 to 2.8 per cent in FY24, while non-life insurance penetration remained stable at 1 per cent.

49 Swiss Re Institute World Insurance Report 2024, https://tinyurl.com/bdfc3ma8.

50 EY August 2024 report, 'Insurance for All: enhancing insurance coverage across India', https://tinyurl.com/ucapam6y.

51 Insurance penetration is calculated as the percentage of insurance premiums paid in a year to the country's gross domestic product.

Insurance density[52] in the country saw a modest rise from USD 92 in FY23 to USD 95 in FY24. Non-life insurance density increased from USD 22 to USD 25, while life insurance density remained consistent at USD 70. This growth in insurance density has been on an upward trajectory since FY17. The gross direct premium of non-life insurers increased to ₹2.9 lakh crore in FY24 from ₹2.6 lakh crore in FY23, registering a YoY growth of 7.7 per cent. Health and motor segments primarily contributed to this growth. The life insurance industry recorded a premium income of ₹8.3 lakh crore in FY24, compared to ₹7.8 lakh crore in FY23, registering a YoY growth of 6.1 per cent. While renewal premiums accounted for 54.4 per cent of the total premium received by the life insurers, new businesses contributed the remaining 45.6 per cent. The life insurance industry paid benefits of ₹5.8 lakh crore in FY24, out of which ₹42,284 crore was due to death claims. The net incurred claims[53] of non-life insurers stood at ₹1.72 lakh crore in FY24.

2.64 With an overall insurance penetration rate of 3.7 per cent, below the global average of 7 per cent, there is a notable gap in coverage that presents opportunities for insurers to expand their reach. By targeting tier 2 and 3 cities and rural areas where awareness and accessibility are limited, insurers can tap into new customer segments and stimulate growth. Additionally, insurance density in India is relatively low compared to global standards. Innovative distribution models can facilitate the inclusion of underinsured customers who are already covered by government schemes such as the Pradhan Mantri Jeevan Jyoti Bima Yojana, Pradhan Mantri Fasal Bima Yojana, and Pradhan Mantri Jan Arogya Yojana.[54]

2.65 The Swiss Re Institute has projected India's insurance sector to grow at a rate of 11.1 per cent and is expected to become the fastest-growing market among the G20 nations over the next five years (2024-2028). An expanding middle class, technological advancements, and supportive regulatory measures will likely drive this growth.[55] In the life insurance segment, there is a noticeable shift towards protection and guaranteed return savings products, which now cover 40 per cent of households, largely due to LIC's extensive network. The non-life insurance sector is expected to double its premium-to-GDP ratio over the next two decades. However, it will remain below the global average.[56]

52 Insurance density is calculated as the ratio of insurance premium to population (calculated in USD for international comparison).

53 Net claims incurred is the total outstanding claims at the end of a financial year. It is calculated by adding the claims paid during the year to the outstanding claims at the end of the year and then subtracting the outstanding claims at the beginning of the year.

54 Ibid note 50.

55 Swiss Re Institute Report, 'India's Insurance Market: Growing Fast with Ample Scope to Build Resilience', https://tinyurl.com/mryxwhve.

56 Morgan Stanley Investor presentation ASIA, 2023.

2.66 Evolving customer expectations and emerging risks, such as climate change and geopolitical uncertainty, present significant challenges for insurers. Additionally, increasing life expectancy and a growing elderly population pose underwriting risks related to longevity and highlight the widening pension gap. Non-financial risks have gained importance alongside traditional financial risks. The industry must address and manage concerns related to misselling, delayed claims settlements, AI, cybersecurity, and third-party interactions. A clear and quantitative understanding of risk appetite is essential for effective risk management. Insurers must develop strong capabilities to tackle these emerging risks through rapid innovation while ensuring efficiency and productivity through simplification, standardisation, and digitisation. [57]

Developments in the pension sector

2.67 Ensuring financial security in retirement is essential for individuals and societies, especially as many countries face ageing populations' social, economic, and financial challenges. The World Economic Forum (WEF) has highlighted that, for the first time in history, globally, the number of people aged 65 and over has surpassed the number of children aged five and younger.[58] Retirees face increasing risks due to rising inflation and higher interest rates, which elevate the cost of government debt and strain the government's ability to maintain their current level of services.[59]

2.68 An IMF staff discussion paper[60] has analysed the global trends in rising government pension expenditure, projecting that public pension spending will increase by an average of 1 per cent of GDP in AEs and 2.5 per cent in EMEs by 2050. In many advanced economies, younger individuals must save significantly more and delay retirement by several years to receive pension benefits comparable to today's retirees. Additionally, countries with ageing and shrinking working-age populations are expected to experience a more pronounced decrease in national savings than those with younger populations.

2.69 According to the Mercer CFA Institute Global Pension Index[61], 2024, India's overall index value has moderated from 45.9 in 2023 to 44 in 2024. The overall index is a weighted average of three sub-indices viz. adequacy (40 per cent), sustainability (35

57 McKinsey report, 'Steering Indian insurance from growth to value in the upcoming 'techade', https://tinyurl.com/3xdtknbj.

58 WEF (2024), 'How communities can step up to provide long-term care for the world's ageing population' https://tinyurl.com/ys8s7twk.

59 Mercer CFA Institute Global Pension Index 2024, https://tinyurl.com/s3btauhu.

60 Eich, F., Soto, M., & Feher, C. (2014). Public Pension Spending in Advanced and Emerging Market Economies: Past Trends and Projected Outcomes. Bruce and Virginia MacLaury Senior Fellow, The Brookings Institution Creating equitable and sustainable pensions is one of the main policy challenges of the twenty-first century. Policymakers need to be reminded constantly of the challenges that they need to confront. This timely collection of essays by experts in the field offers an analysis of the core issues which is based on rigorous think, 31, https://tinyurl.com/mr3sc4y9.

61 Mercer CFA Institute Global Pension Index, https://tinyurl.com/y2tk573p.

per cent), and integrity (25 per cent). A decline in the value of the adequacy[62] sub-index from 41.9 (as per the 2023 survey report) to 34.2 (as per the 2024 survey report) and a decrease in the net pension replacement rates has driven the moderation in the overall index. On the other hand, the scores for sustainability[63] and integrity[64] sub-indices have improved across the two survey rounds.

2.70 India's pension sector has grown significantly since the introduction of the National Pension System (NPS) and Atal Pension Yojana (APY). As of September 2024, the total number of subscribers reached 783.4 lakh, showing a YoY growth of 16 per cent from 675.2 lakh in September 2023. The number of APY subscribers, which includes its earlier version, NPS Lite, rose from 538.2 lakh in March 2023 to 629.1 lakh in September 2024. APY subscribers comprise approximately 80.3 per cent of the overall pension subscriber base.[65]

2.71 Disaggregated data from the Pension Fund Regulatory and Development Authority of India (PFRDA) indicates significant improvements in terms of gender in the subscriber demographic for APY. The share of female subscribers increased from 37.9 per cent in FY16 to 52 per cent in FY24. Additionally, the age distribution has shifted to favour a younger cohort, specifically those aged 18-25, whose share rose from 29.2 per cent in FY16 to 45.5 per cent in FY24. However, 93.7 per cent of APY accounts correspond to a pension amount of ₹1,000 per month, while 3.7 per cent are for ₹5,000. This overwhelming preference for a low pension amount among APY subscribers can be attributed to several factors, the most significant being that the target population primarily consists of low-income households, where daily consumption needs take precedence over savings. Furthermore, the overall pension coverage for these two schemes has increased from 0.95 per cent of the total population in FY16 to 5.3 per cent in FY24. Additionally, the AuM for these schemes as a proportion of GDP have risen from 0.86 per cent in FY16 to 4 per cent in FY24.

2.72 On 24 August 2024, the government approved Unified Pension Scheme (UPS) for Government employees that will be implemented along with the present NPS, and will be effective from FY26. UPS has features of both old and new pension schemes to offer a wholesome retirement cushion to the employees. The scheme offers a family pension,

62 The adequacy sub-index represents both the benefits of the current pension systems and an assessment of some important system design features. It is calculated based on these indicators: benefits, system design, savings, Government support, home ownership, and growth assets.

63 The Sustainability sub-index focuses on the future and uses various indicators that will influence the likelihood that the existing systems will be able to provide benefits for decades to come. It is calculated based on these indicators: pension coverage, total assets, demography, public expenditure, government debt, and economic growth.

64 Integrity sub-index includes many legislative requirements that influence the overall governance and operations of the system, which affect the level of confidence that the citizens of each country have in their system. It is calculated based on these indicators: regulation, governance, protection, communication, and operating costs.

65 Based on PFRDA data.

a guaranteed pension amount, and a minimum pension for all the people working in government jobs. It guarantees 50 per cent of the average basic pay of the past 12 months preceding the date of retirement as the guaranteed pension for the employee, provided the employee has served the government for at least 25 years. The minimum pension under the scheme is ₹ 10,000 per month for employees who have at least 10 years in the service upon superannuation. In case of death of the pensioner, 60 per cent of the pension amount (which he or she received right before the demise), will be offered to the family.[66]

2.73 Despite this growth, India's pension system has considerable potential for further expansion. Pension assets, including major schemes like the Employees' Provident Fund Organisation (EPFO), account for 17 per cent of the GDP. The NPS contributes an additional 4.5 per cent of the GDP. In contrast, the average pension assets in OECD countries exceed 80 per cent of their GDP.[67] India's capacity to financially empower its citizens is anticipated to grow as the economy progresses. Additionally, the extension of NPS to children through the NPS Vatsalya[68] is expected to contribute to this empowerment. Box II.3 discusses further aspects of the pension landscape in the country.

Box II.3: Securing Retirement: Transforming India's Pension Landscape

By design, the benefits of a robust pension system are realised long into the future. The system's liabilities (pension payments) become due far later, while there is always a risk that the assets (contributions from a younger workforce) may change in the meantime. A potential asset-liability mismatch can result in explosive government debt once the future payouts become due. For instance, Greece and Italy suffered pension crises as their populations aged. The UK is predicted to hit a pensions crisis in the next two decades.[69]

What constitutes an efficient pension system in the case of India?

Considering India's unique demographic and labour market characteristics, the pension system must embrace principles of sustainability and scalability. Emphasising sustainability is crucial to ensure that as India moves beyond its favourable demographic window, the burden of an ageing population does not disproportionately affect the younger generation. For a pension scheme to be sustainable, the outflows must be adequately linked to the inflows. In this context, Pay-As-You-Go (PAYGO) schemes[70] begin to fail when demographic profiles change. Furthermore, the nature of inflation indexation is important, especially in defined benefit schemes. Even small differences in percentage points for indexation can lead to significant variations in the annuities paid out.

66 PIB press release dated 24 August 2024, https://tinyurl.com/yck3uwjm.

67 3rd Ranjit Kumar Dutta leadership lecture delivered by Dr. Deepak Mohanty, Chairman, PFRDA. Dibrugarh University, 4 March 2024, 'Progress of Indian Economy and Prospects of Pension Security', https://tinyurl.com/bdhtkmud.

68 PIB press release of Ministry of Finance dated 16 September 2024, https://tinyurl.com/pny4tt45.

69 Financial Times 2024, https://tinyurl.com/mr2k8hba.

70 PAYGO schemes are essentially pay-as-you-go arrangements where the young salaried employees bear the price of pension payments for the older generation. Several OECD nations usually follow this.

Despite significant advancements in the pension sector, 5.3 per cent of the total population is covered by the NPS and APY combined. This highlights another critical aspect of the Indian pension system: scalability. Low costs are essential to enhance coverage meaningfully. Achieving this will require highly competitive, low-cost fund management and minimal transaction costs, which is particularly vital for small-ticket transactions.

In principle, taking into consideration both scalability and sustainability, India's pension system design seems robust and stable. The NPS is one of the lowest-cost pension schemes globally[71] and its framework is based on a defined contribution model, which ensures that future payouts are determined by market fluctuations, thereby reducing the fiscal burden on the government. Additionally, the APY aims to address the retirement needs of the unorganised and informal sectors - first time in India's pension history. While progress under APY has been notable, its scalability in practice remains an area for further development. The key issue moving forward is how to make the pension system more accessible to the informal sector.

Role of financial inclusion in advancing financial literacy: The example of the Unified Payment Interface (UPI) illustrates how a well-designed platform can serve as a cost-effective solution for financial inclusion on a large scale. The widespread adoption of UPI proves that a lack of financial literacy did not hinder its success; rather, the necessity to utilise UPI encouraged the informal economy to open bank accounts. This suggests that financial inclusion can indeed precede financial literacy. Thus, a fundamental step in integrating a significant portion of the informal sector into the pension framework is raising awareness about pension and financial literacy and utilising modern, application-based interfaces that allow seamless access to these services.

Behavioural nudges for scalability: A persistent issue with micro-pension schemes is their low uptake among the poor, who often have a strong urge to allocate limited funds toward immediate consumption.[72] In this context, increasing participation can be achieved through behavioural interventions. These interventions could involve changing how information is presented, simplifying the enrolment process (for example, using UPI-enabled pension payments), and providing timely reminders.

Young people in India may not feel an immediate need to secure an optimal pension plan. The old-age dependency ratio is about 15.7 per cent, which is significantly lower than in many EMEs. However, this should not lead to complacency. The best time to repair a roof is when the sun is shining, not when it is raining.

Financial sector regulators

2.74 Independent regulators are key institutions established as separate "agencies" at arms' length from the political system, with delegated powers to implement specific policies in several sectors. Regulators have been set up in the utility sector (energy, telecom, airports), competition, social sector (higher education), financial services (capital markets, insurance, pensions) etc. These regulatory agencies are seen to be

71 Department of Financial Services 2024, https://tinyurl.com/32efw7wf.

72 World Bank 2019, https://tinyurl.com/53uy6655.

mainly designed to have the authority to deal with intricate issues, providing non-discriminatory access to essential services and guaranteeing "fair and transparent" regulations. The key benefit sought from an institutional framework based around these independent regulators/agencies is to safeguard market interventions from the interference of political and private interests. Further, these independent regulatory bodies (IRBs) can set up and benefit from a specialised workforce with relevant technical knowledge of the area of regulation.

2.75 The financial sector is primarily governed through IRBs – RBI, SEBI, IRDAI, PFRDA and IBBI, with FSDC having a broader financial stability mandate, enabling inter-regulatory coordination and promoting financial sector development.[73] Each IRB varies in design, the nature of delegated functions, and the degree of autonomy, which are unique to the socio-political context of its evolution and the regulated domain. However, certain basic structure elements are common to all regulatory bodies: they are backed by a statute, are accountable to the legislature, enjoy a certain degree of autonomy from the government, have legislative, executive and quasi-judicial functions, and engage in specialised and technocratic decision-making processes.

2.76 Regulations are the basic instruments of law through which the IRBs conduct their functions and deliver on their objectiveness. The efficiency and effectiveness of regulatory action are directly dependent on the quality of regulations. The primary responsibility of these IRBs is the making of regulations, the power for which is delegated to the IRBs by statute and is an essential component of the autonomy of IRBs. Box II.4 discusses the regulation-making aspect of the IRBs in the financial sector space, suggesting the approach of regulatory impact assessment for strengthening this process.

Box II.4: Institutionalising regulatory impact assessments in independent regulatory bodies

The regulators in the financial sector space are largely left to regulate themselves in their mandate of ensuring optimal and adequate regulation and assessing themselves. In the existing governance architecture, the performance of IRBs in the financial sector is assessed in the following ways.

Parliament, through the Committee on Sub-ordinate Legislations[74] in the Rajya Sabha: It is mandated to examine if the powers delegated under a law passed by the legislature have been duly exercised and are within the conferment or delegation and not beyond.

73 Department of Economic Affairs, Government of India. Structure of Financial Stability and Development Council, https://tinyurl.com/nhbd23t3.

74 Rajya Sabha Practice and Procedure Series No. 13, Committee on Subordinate Legislations No.13 pp 3-4. https://tinyurl.com/4vtvwxbh.

Parliament, through the Standing Committee on Finance, can examine the performance of specific sectors and the IRBs. The Committee, in 2024, examined the performance of the insurance sector (66th Report).

Department / Ministry administering the parent statute- These assessments deal with overall performance, utilisation/expenditure of grants, compliance with parliamentary procedure and administrative matters regarding the structure and composition of the IRBs. The quality of regulation usually falls beyond the ambit of regular evaluations.

The Comptroller and Auditor General's (CAG) mandate includes the various audits of autonomous entities, including IRBs. However, the scope of CAG's financial compliance and financial audits do not include the IRB's regulation-making processes. The quality of regulation is beyond the scope of these audits.

Judicial review – Once a regulation is challenged, the courts then review, ex-post, the implementation of the regulations. Such reviews may cover the form, content or implementation of the regulation. Withstanding judicial scrutiny improves the regulation's force and vindicates the regulation maker's decisions. However, the gains from such review are only available after implementation and not during the making of regulations.

The quality of regulations can be broadly assessed based on five criteria: democratic legitimacy, accountability of the regulator, fair, accessible and open procedures, expertise and efficiency.[75] While these criteria are impacted by many structural and operational factors in the regulator and beyond, using a 'fair, accessible and open procedure' for regulation-making is more practicable than the others. A systematic procedure for regulation-making is one way to ensure that the quality of regulations is right.

Regulatory impact assessment (RIA) has been identified as an effective tool when used as part of the regulation-making process to ensure the quality of regulations. RIA is an administrative obligation or an instrument of public policy analysis for identifying the costs of regulation on certain business sectors (Fischer, Miller and Sidney 2007) [76] and has been promoted by the World Bank (2010).[77] OECD laid down the guidelines for the use of RIAs in 2008.[78] By 2016, 32 of the 35 OECD countries had included RIA in their regulatory frameworks (Deighton-Smith, Erbacci and Kauffmann 2016).[79] Globally, countries are increasingly adopting and revamping RIA procedures, including countries across all income levels.[80]

75 Baldwin, Robert., Cave, Martin., and Lodge, Martin (2012). Understanding Regulation: Theory, Strategy and Practice. 2nd ed, OUP, p. 25.

76 Fischer, F., Miller, G., and Sidney, M. 2007. Handbook of Public Policy Analysis Theory, Politics and Methods. Boca Raton: CRC Press.

77 World Bank Group, Investment Climate Advisory Services. 2010. Making It Work: 'RIA Light' for Developing Countries, Better Regulation for Growth. Washington, DC: World Bank Group.

78 OECD. 2008. Introductory Handbook for Undertaking Regulatory Impact Analysis. Paris: OECD Publishing.

79 Deighton-Smith, R., Erbacci, A., and Kauffmann, C. 2016. "Promoting inclusive growth through better regulation: The role of regulatory impact assessment." OECD Regulatory Policy Working Papers No. 3. Paris: OECD Publishing.

80 World Bank Group, Worldwide Practices of Regulatory Impact Assessments Case study. 2016.

Financial sector IRBs have been including the elements/aspects of RIA and related regulatory best practices. The RBI has set a Medium-term Strategy Framework - Utkarsh 2022, and the SEBI indicates regulatory plans as part of its annual reports.[81] The IBBI governs the regulation-making process through the IBBI (Mechanism for Issuing Regulations) Regulations, 2018. [82] It provides for at least 21 days for public consultations while proposing/amending regulations, consultations with stakeholders and advisory committees, and an economic analysis covering the expected costs and benefits to society, economy, stakeholders, and itself on account of the proposed regulation. It also provides for a review of all regulations every three years. It is observed that most regulators practice consultations with stakeholders during regulation-making through discussion papers shared on their websites. A third-party evaluation of the regulatory performance of the IBBI was conducted in 2021 (NCAER, 2021).[83]

There is vast scope for improvement in the regulatory responsiveness in terms of following participatory processes of the IRBs.[84] The second Administrative Reforms Commission[85] recommended including reviews of regulations. The Financial Sector Legislative Reforms Commission[86] detailed the process for making regulations as part of the draft financial code. The proposed process included a detailed cost-benefit analysis of the proposed regulations alongside the considered alternatives. The Union Budget 2023-24[87] recommended that the financial sector regulators include public consultations as part of the regulation-making process, issuing subsidiary directions, conducting a comprehensive review of existing regulations and laying down time limits for various applications under different regulations.

As financial sector regulators take steps to address the review of regulations and shortcomings in the regulation-making process, it would be an opportune time to institutionalise a systematic approach such as the RIA. There is vast evidence of the benefits of RIAs in terms of better quality of regulations and reduced compliance burden, thereby reducing the cost of compliance for businesses. RIA is also effective in improving the transparency and responsiveness of the IRBs, thereby improving credibility.

One credible approach to RIA would be to set up an independent agency housed inside the regulator to evaluate the regulations from all angles. This agency will report to the Board and not to the management. It can provide an impartial and objective assessment of the regulatory processes and outcomes, including the economic and social impacts of regulations. An economic and social cost-benefit analysis of regulations will prove useful to

81 Securities Exchange Board of India Annual Report 2023-24 https://tinyurl.com/mtddd28z.

82 The IBBI (Mechanism for Issuing Regulations) Regulations, 2018, https://tinyurl.com/2x9xnuy5.

83 National Council of Applied Economic Research 2021. Evaluation of the Regulatory Performance of the Insolvency and Bankruptcy Board of India. https://tinyurl.com/mvvz55xw.

84 Carnegie India Measuring Regulatory Responsiveness in India: A Framework for Empirical Assessment 2019. https://tinyurl.com/3u5x7tvb.

85 Second Administrative Reforms Commission, Organisational Structure of Government of India, Thirteenth Report April, 2009 (Para 6.4.8) pp 156-158

86 Report of the Financial Sector Legislative Reforms Commission Vol II: Draft Law, 2013. https://dea.gov.in/fslrc.

87 Government of India, Speech of the Finance Minister, Union Budget 2023-24 Para 99 and 100. https://tinyurl.com/bdemfe54.

regulators in making them effective and purposeful rather than broad-based, cumbersome, and inhibiting legitimate economic activity and risk-taking. Such a move will signal that regulators are willing to live by the principles they expect regulatory entities to follow. This will strengthen the credibility of the process regulators follow and improve the acceptance of the proposed measures.

Regulation in the financial sector must strike an optimal balance between the imperative of stability and the goals of fostering innovation, efficiency, and competition. Given the country's low financial literacy and lower-middle-income status, ensuring stability is essential to prevent systemic risks and protect consumers. However, this should not come at the expense of stifling creativity, innovation, or healthy market dynamics. At the same time, an excessive focus on innovation and competition without adequate safeguards can lead to financial instability, resource misallocation, and erosion of trust in the system. Striking this balance is particularly critical for India, considering its vast and diverse economy, growing aspirations, and substantial investment needs to sustain high growth and development. Regulators must consistently strive to achieve this equilibrium, and the suggestions outlined in this box, if implemented, will help them pursue and maintain that balance effectively.

Cybersecurity aspects of India's financial sector

2.77 Cyberspace has emerged as a multifaceted and rapidly evolving global environment where interactions among individuals, software, and services are facilitated by the widespread proliferation of information and communication technology (ICT) devices and networks. With innovative technologies and advanced digital tools, cyberspace has effectively transcended geographical barriers for exchanging information and communication. However, this digital revolution has concurrently introduced new challenges and threats, including the illicit use of cyberspace for criminal activities.

2.78 With technological advancements, the Indian financial sector is witnessing a digital transformation that has enhanced efficiency and accessibility and increased exposure to diverse cyber threats. These threats, ranging from phishing and ransomware to Distributed Denial of Service (DDoS) attacks, SMSing, and fake/malicious mobile applications, pose serious challenges to the financial system's stability. As per the information reported to and tracked by the Indian Computer Emergency Response Team (CERT-In)[88], the number of observed and handled cybersecurity[89] incidents stood at 11.6 lakh, 14 lakh and 13.9 lakh during 2020, 2021 and 2022, respectively.

2.79 The financial sector remains susceptible to cyber threats because it manages sensitive data and conducts critical transactions. Criminals often target financial

88 Indian Computer Emergency Response Team, Ministry of Electronics and Information Technology, https://tinyurl.com/yz8tppnp.

89 Cyber security is the application of technologies, processes, and controls to protect systems, networks, programs, devices and data from cyber-attacks. It aims to reduce the risk of cyber-attacks and protect against the unauthorised exploitation of systems, networks, and technologies.

institutions to either gain unauthorised access to assets or disrupt financial activities, jeopardising economic stability. Reports indicate that almost one-fifth of all reported cyber incidents involve financial institutions, with banks being the most affected. According to IMF's April 2024 Global Financial Stability Report, cyberattacks have resulted in extreme financial losses, which have increased fourfold since 2017, amounting to USD 2.5 billion. Beyond these direct losses, indirect costs such as reputational damage and expenditures on enhanced security have also significantly risen.[90]

2.80 National Cyber Security Policy 2013 (NSCP-2013) was released by the Government in August 2013 for public use and implementation with all relevant stakeholders. The objective of the policy is to create a framework for comprehensive collaboration and collective response to deal with issue of cyber security at all levels with in the country. The FSDC is the apex body for addressing high-level policy issues and fostering inter-regulatory coordination among key financial sector regulators. The FSDC facilitates inter-regulatory coordination, financial sector development and the maintenance of financial stability. In view of the increasing digitalisation of the financial sector, FSDC has been focusing on cyber security issues as strengthening the cyber resilience of the financial sector is key to maintaining financial stability.

2.81 India's Tier 1 ranking in the Global Cybersecurity Index (GCI) 2024, with a commendable score of 98.49 out of 100, signifies a significant milestone in its cybersecurity journey.[91] This recognition places India among the world's 'role-model' nations in cybersecurity. The GCI evaluates national efforts across five pillars—legal, technical, organisational, capacity building, and cooperation, highlighting India's holistic approach. India has strengthened its cybersecurity ecosystem through robust legal frameworks, targeted education programs, and international collaborations. By promoting awareness, skill development, and research, the country effectively addresses current cyber threats while preparing for emerging challenges, reaffirming its leadership in securing digital infrastructure.

2.82 The RBI, in collaboration with sectoral regulators like Insurance Regulatory and Development Authority of India and PFRDA, oversees the cybersecurity preparedness of the financial sector through regular IT examinations and monitoring of compliance with established guidelines. The primary focus is on the regulations issued by the RBI, emphasising essential elements, including governance, technology risk management, IT services management, cybersecurity operations, business continuity, response and recovery, vulnerability assessments, and third-party risk management. This framework is designed to fortify cybersecurity risk management and supervision across financial institutions in India.

90 IMF April 2024 Global Financial Stability Report, https://tinyurl.com/8wa6fpfw.

91 PIB press release of Ministry of Communications dated 20 September 2024, https://tinyurl.com/2sxewe8m.

2.83 The Indian banking sector benefits from a comprehensive and modern regulatory structure for cybersecurity, guided by both international and national standards. This framework is anchored by well-recognised international references, such as the ISO 27001 for Information Security Management Systems, the NIST Cybersecurity Framework, and the CPMI-IOSCO Cyber Guidance for Financial Market Infrastructures (FMIs). The RBI has recently introduced regulations on the oversight of IT outsourcing, including cloud services, as well as standards for the cyber resilience of digital payments. This comprehensive approach ensures that cybersecurity measures align with global best practices while addressing the unique challenges of India's financial ecosystem.

2.84 India's strong performance in cybersecurity is driven by a range of initiatives and measures implemented by the government to enhance cyber resilience and establish robust frameworks for cybercrime laws and cybersecurity standards. The country's legal institutions are well-equipped to tackle cybersecurity challenges and combat cybercrime, ensuring the protection of its digital infrastructure. Additionally, Sectoral Computer Incident Response Teams (CSIRTs) provide sector-specific technical support and incident reporting, further bolstering the country's cybersecurity capabilities. Education and awareness are central to India's cybersecurity strategy. Targeted campaigns and educational initiatives have promoted secure online practices across various sectors, including private industry, public institutions, civil society, and academia. The integration of cybersecurity into primary and secondary education curricula underscores the country's commitment to cultivating a knowledgeable and well-prepared digital citizenry.[92] Moreover, incentives and grants have fuelled skill development and encouraged research and innovation within India's cybersecurity industry. International collaborations and bilateral and multilateral agreements have further strengthened India's capacity-building and information-sharing efforts, solidifying its role as a global leader in cybersecurity.

2.85 India's ascension to Tier 1 in the GCI 2024 clearly indicates the nation's enhanced cybersecurity commitments. This achievement reflects the government's dedication to securing its digital domain and sets a benchmark for other countries.

RISKS PERTAINING TO INDIA'S FINANCIAL SECTOR

2.86 The Indian financial sector is currently at a pivotal moment. The traditional dominance of banks in providing credit is beginning to decline, and other participants and products in the financial sector are increasingly filling this role. This shift is a long-awaited and positive development for a country that aims to become a developed nation by 2047. Various financial innovations such as UPI, Open Credit Enablement Network (OCEN) and T+1 settlement have significantly eased access to credit in India. A recent

92 A Study of the Awareness on Cyber Security and Safety among Secondary Students (Class IX to XII), https://tinyurl.com/4zu4px4u.

initiative by the RBI, the Unified Lending Interface (ULI), can potentially be a game-changer in MSME financing.

2.87 While there is evidence of increasing reliance on the financial markets as a funding source, the financial markets must work in tandem with the banking sector to bridge the capital requirement gap. The financial markets must grow in line with, but not faster than, the economy's capital needs and overall economic growth. As the country undergoes this significant transformation, it is crucial to be aware of the potential vulnerabilities that may arise. India must prepare itself with appropriate regulatory and government policy measures to intervene and mitigate these risks when necessary. Additionally, banks need to enhance their capabilities to meet the demands of new-age households and the digital economy while maintaining their primary credit creation function. Excessive financialisation can hurt the economy. The costs may be particularly high for a low-middle-income country like India. Box II.5 discusses this in detail.

Box II.5: Can the growth of the financial sector come at a cost?

Lessons from the global financial crisis of 2008 reveal that uninhibited financial sector growth can come with a cost to the real economy. Till the run-up to the crisis, however, conventional wisdom dictated that the financial sector performed best when deregulated.[93] To sustain financial growth but prevent a crisis, regulators must be sensitive to the nuanced relationship between financial sector growth and the real economy.

Financial sector and the real economy – relationship

A developed financial system reduces transaction costs, allows better price discovery, and channels the flow of capital into innovative and risky economic activities. Research has established that finance is a causal driver of growth, not a by-product of the development process.[94] There is evidence that finance aids consumption smoothing and allows firms and households to absorb shocks.[95] Finance is essential for poverty and inequality reduction.[96] However, there is an inflexion point at which financial development switches from propelling growth to holding it back. For instance, BIS research shows that Ireland's steep rise in private credit to GDP ratio from 90 per cent in the 1990s to 150 per cent in 2007 shaved away 0.5 percentage points from productivity growth.[97] In contrast, by reducing its private credit to GDP during the Asian financial crisis, Thailand contributed to its productivity growth by 0.5 percentage points.

93 After the crisis erupted, Former Fed Governor Alan Greenspan admitted that he "made a mistake" in trusting that free markets could regulate themselves without government oversight.

94 Rajan, R. & Zingales, L. (1998). Financial dependence and growth. American Economic Review 88, 559-586, https://tinyurl.com/ycefwff9.

95 Kast, F. and D. Pomeranz (2018). Savings Accounts to Borrow Less: Experimental Evidence from Chile. NBER Working Paper 20239, https://tinyurl.com/pmxz3bs4.

96 Beck, Thorsten, A Demirgüç-Kunt, and Ross Levine, 2007, Finance, inequality and the poor, Journal of Economic Growth 12 (1), 27-49, https://tinyurl.com/446zcsfz,

97 Cecchetti,S. and Kharroubi (2015). Why does financial sector growth crowd out real economic growth? BIS Working Paper No 490. https://www.bis.org/publ/work381.pdf.

When the economy reaches a state of 'over-finance', the financial sector would compete with the real sector for resources. This competition for resources is especially seen in the case of skilled labour, which gets absorbed into the financial sector at the cost of the real economy.[98] Often financial sector innovation may result in products that do not add value to the real economy. Research also shows that rapid financial sector growth tends to favour high collateral–low productivity projects.[99] Often, financial booms are associated with the growth of sectors such as construction, where the collateral is high, but productivity growth is relatively low.

Greater levels of financial engineering can create complex products whose risks are not apparent to the regular consumer. At the same time, these products are designed so that the lenders have little 'skin in the game'.[100] Ultimately, the proliferation of such products can lead to an event such as the financial crisis of 2008. In the run-up to the crisis, mortgages were granted to people with little ability to pay them back. In turn, lenders reduced their exposure to risk by securitising these mortgages at multiple stages. When the mortgage bubble burst, it, in turn, took down with it instruments that were highly securitised, leading to the crises.

The changing influence of financial development on growth can be depicted as a bell-shaped relationship.[101] As research by the IMF shows, several developed nations, such as Ireland, the USA, and Japan, are past the point where incremental advances in the financial sector can contribute to growth.[102] In contrast, under-developed and developing countries such as Gambia, Ecuador and Morocco reap dividends to growth through faster financial development.

Sustaining financial development while mitigating financial stability risks – role of regulation

Can a developing economy (nations to the left of the peak of the bell curve) reach a point of over-finance such that advancements to the financial sector hamper its growth prospects? In the presence of weak institutions and poor regulatory quality, it is possible for an emerging economy to reach well past its optimal level of financial development.[103] Thus, the upper bound to financial development is fixed by the regulatory quality of the emerging market.

98 Ibid note 97.

99 Ibid note 97.

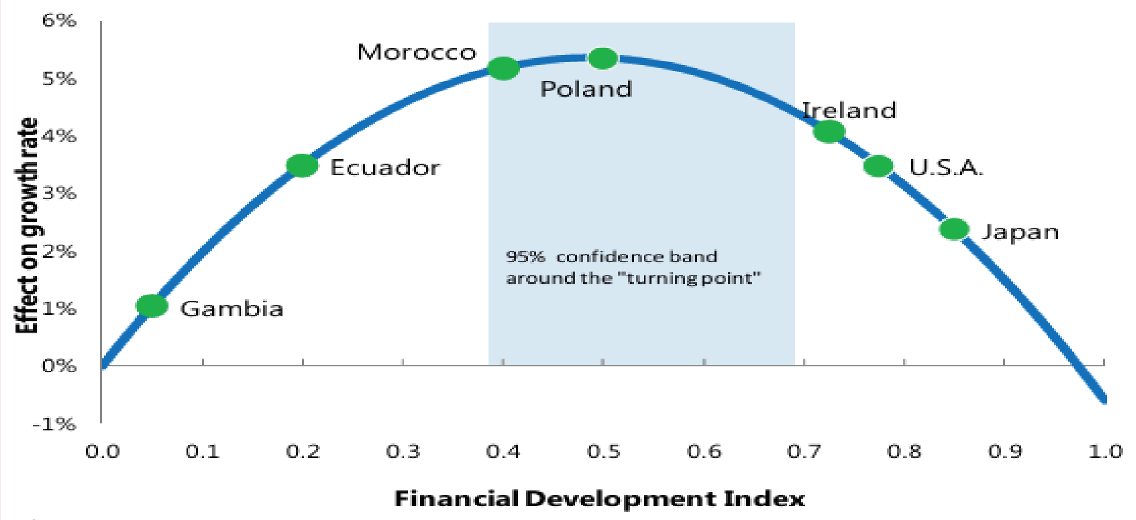
100 Zingales, L. (2015). Presidential address: Does Finance benefit society? Journal of Finance, 70(4), 1327-1363, https://tinyurl.com/3zjdztvu.

101 This relationship holds, keeping other determinants of growth (such as institutional quality, technological growth, capital formation, etc.) constant.

102 Sahay,R. et al. (2015). Rethinking Financial Deepening: Stability and Growth in Emerging Markets, IMF Staff Discussion Note SDN/15/08, https://tinyurl.com/55kpyrws.

103 Ibid note 102.

Chart II.13: Financial development and growth – a bell-shaped relationship



Source – Rethinking financial deepening, IMF Staff Discussion Note, 2015

As the regulatory quality in the financial sector improves, regulators will need to play a delicate balancing act between the goals of financial resilience and growth. On the one hand, building financial resilience would entail higher capital buffers, stricter regulations and reduced risk-taking. On the other hand, this would lead to lower financial growth by limiting profitable investments and innovation. For instance, a system where banks maintain high reserve ratios and only lend to the most creditworthy borrowers may exclude smaller households and businesses from accessing credit.

Managing the trade-offs between financial resilience and efficiency is especial significant for EMEs, which have two undertake large-scale financial inclusion and, at the same time, reduce there vulnerability to crises. In this context, regulatory innovations that use technology such as unified ledgers and digital infrastructure can help advance financial efficiency without compromising on resilience. EMEs such as Brazil and Thailand were making positive steps towards advancing such as technology in there financial system.[104] In India's case, innovations such as the OCEN framework and the ULI provide access to real-time information on the risk profiles of debtors and reduce the need for provisioning based on an overestimation of default risk.

OUTLOOK

2.88 India's financial sector has performed well amidst unfavourable geopolitical conditions. On the monetary front, system liquidity, represented by the net position under the Liquidity Adjustment Facility, remained in surplus during October-November 2024. The financial parameters of banks continue to be strong, reflected in improved profitability indicators. The gap between the growth of credit and deposits of SCBs has

104 Carstens, A. G., & Nilekani, N. (2024). Finternet: the financial system for the future. Bank for International Settlements, Monetary and Economic Department, https://tinyurl.com/3h5np8fn.

narrowed, with deposits keeping pace with loan growth. Capital markets significantly contribute to capital formation, the financialisation of domestic savings, and wealth creation. Strong macroeconomic fundamentals, healthy corporate earnings, supportive institutional investment, robust inflows from SIPs, and increased formalisation, digitisation, and accessibility have all fuelled the market's continued growth. India's insurance sector is performing well and is projected to become the fastest-growing market among G20 nations over the next five years (2024-2028). The pension sector is expected to grow as the economy transitions from a lower-middle-income to an upper-middle-income country.

2.89 The financial sector is witnessing a moment of positive flux, with several changes taking shape. Firstly, there is a rise in the share of consumer credit in overall credit extended by banks.[105] Between FY14 and FY24, the share of consumer credit in total bank credit increased from 18.3 per cent to 32.4 per cent.[106] Secondly, there has been a rise in non-bank-based financing in recent years. Banks' share in total credit has declined from 77 per cent in FY11 to 58 per cent in FY22.[107] Simultaneously, there has been a rise in NBFCs and bond market financing. Thirdly, equity-based financing has catapulted to popularity, with IPO listings growing six times between FY13 and FY24 and India being ranked first globally in terms of the number of IPO listings in FY24.[108] Young investors are also driving the equity boom under the age of 30. As a report by the NSE notes that between March 2018 to September 2024, the proportion of young investors surged from 23 per cent to 40 per cent.[109]

2.90 These emerging trends mark the dawn of a new era for India's financial sector. However, they also bring regulatory challenges and potential risks that cannot be overlooked. One critical risk to guard against is the dominance of financial markets in shaping policy and macroeconomic outcomes, a phenomenon known as 'financialisation.' The consequences of financialisation are evident in advanced economies, where it has led to unprecedented levels of public and private sector debt—some visible to regulators and some not. Economic growth in such contexts becomes overly reliant on rising asset prices to offset leverage, exacerbating inequality and asset market considerations that may overly influence public policies, particularly regulatory ones. As India strives to align its financial system with its economic aspirations for 2047, she should strive to maintain the fine balance between financial

105 Sengupta, R., & Vardhan, H. (2021). Consumerisation of banking in India: Cyclical or structural. Ideas for India, https://tinyurl.com/3rsh6x6w.

106 RBI Handbook of Statistics, 2024.

107 Sengupta, R., & Vardhan, H. (2022). India's Credit Landscape in a Post-Pandemic World. IGIDR Working Papers, https://tinyurl.com/3evtf5th.

108 NSE 2024, Indian Capital Markets: Transformative shifts achieved through technology and reforms, https://tinyurl.com/5n7sm2d6.

109 SEBI, 2024, https://tinyurl.com/3n7ktss5.

sector development and growth on the one hand and financialisation on the other. It means that the country has to chart its path with respect to its context, considering the levels of financial savings in households, its investment needs, and levels of financial literacy. Ensuring that incentives in the sector are consistent with national growth aspirations is a policy imperative.

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