



Paradigm Shift in Banking: Moving Towards a Resilient, Inclusive and Sustainable Model

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The Indian banking sector has been undergoing a significant transformation in recent years. More specifically, the sector has witnessed monumental changes in the last few decades such as addressing long-standing issues including addressing the twin issues of Non-Performing Assets (NPAs) and capital to becoming a leader in adopting digital technologies for financial inclusion. The paradigm shift in the banking industry is aimed towards a more resilient, inclusive and sustainable future. This is important as India seeks to position itself as a global economic powerhouse which will require the banking system to evolve in a meaningful manner in order to meet new demands, such as financing infrastructure development, supporting Small and Medium-sized Enterprises (SMEs) and adopting sustainable business practices to mitigate the risks posed by climate change. Such an approach is also essential as we embark on the journey to become the third largest economy in the world.

This article delves into the historical evolution, present challenges and future opportunities for India's banking sector, with a focus on how it can build a more inclusive, resilient and sustainable financial ecosystem.

The imperative of banking as the enabler of growth

India remains the fastest growing major economy in the world. India's growth potential remains

unmatched, with the Government aiming to transform the nation into a developed entity by the centenary of its independence in 2047. While there is no precise definition for a developed economy, it is widely believed that a per capita income of between US\$ 12,000-15,000 per annum could be a reasonable threshold for qualifying as a developed country. India's per capita GDP in 2023 stood at US\$ 2,731. India could achieve a per capita GDP of around US\$ 14,000, by 2041-42, with the overall size of the economy estimated to be ~US\$ 22 trillion. In fact, India is expected to become a US\$ 5 trillion economy by 2027-28 and US\$ 10 trillion economy by 2034, even if we assume a conservative 10% growth in per capita income.

Needless to say, that achieving this ambitious target will require significant investments in infrastructure, manufacturing and innovation and will require massive funding. The banking sector will play a key role in this, as the Indian economy is still dominated bank-led financing as opposed to market-led financing. In fact, a breakup of the funding sources for 2023-24 indicates that banks continued to be major source of finance. In 2023-24, India's GDP was around Rs. 295 lakh crore, of which fixed capital formation was 31% which translates to around Rs. 90 lakh crore. The broad sources of finance were (only illustrative as there would be overlap in some sources):

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- Bank credit: Rs. 12 lakh crore (50% of incremental credit of around Rs. 22 lakh crore go as term loans).
- Corporate bond issuances: Approx. Rs. 8-9 lakh crore.
- External Commercial Borrowings (ECBs): About \$ 50 bn which is around Rs. 4-4.5 lakh crore
- FDI was around \$ 70 bn which is around \$ 6 lakh crore
- Equities of Rs. 1-2 lakh crore in a good year.
- Government capex Rs. 11 lakh crore.
- State capex: Around Rs. 8-9 lakh crore.
- NBFCs incremental credit would be around Rs. 1-2 lakh crore as long term loans.
- Other sources would be around Rs. 15-20 lakh crore through internal accruals and other sources.

While there has been some diversification in the Indian financial landscape, the banking sector still remains the most relevant. This is due to the relatively underdeveloped capital markets, which are still not positioned to provide the scale of financing needed for large infrastructure projects. As a result, banks are the primary source of capital for most industries, including manufacturing, agriculture and Small and Medium Enterprises (SMEs). As per a recent analysis, to achieve the target of US\$ 30 trillion GDP by 2047, growth in India's financial sector will need to be scaled up by 20 times. This will require US\$ 4 trillion of capital base in banks, 1/3rd of which will have to be fresh capital deployment.

India's infrastructure needs are enormous, with projects like highways, railways, airports and smart cities requiring massive investments. Banks are

expected to provide the bulk of financing for these projects, particularly public sector banks. The Indian Government's focus on developing infrastructure projects like highways, railways and smart cities presents enormous funding requirements. Public Sector Banks (PSBs) and private banks are expected to provide long-term financing for these large-scale projects. The role of banks in financing infrastructure development is hence, crucial, as access to credit is a key driver for economic growth.

In the past as well, banks especially Public Sector Banks (PSBs) have played an active role in supporting Government's infrastructure initiatives like the Pradhan Mantri Awas Yojana (PMAY) for affordable housing and the Smart Cities Mission, which aims to develop 100 smart cities across India. This has worked in parallel with supporting major financial inclusion programmes like the Jan Dhan Yojana. PSBs had also taken the lead in funding the expansion in infrastructure in the earlier decade.

A combination of astute Government policies along with a well-functioning domestic financial market will be essential for India to truly emerge as an economic powerhouse. In order to achieve this, banks will play a major role.

Future of Banking

As India's banking sector continues to evolve, it faces both opportunities and challenges in the coming years. The digital transformation of banking, financial deepening and the consolidation of public sector banks will shape the future course of the industry.

The financial sector is experiencing rapid digitalisation and innovation. While all of us strive to enhance financial inclusion, optimise digital payments and

harness emerging technologies like blockchain and artificial intelligence, we also confront the inherent unpredictability and interconnectedness of the global financial system. The one factor which will be closely monitored will be the resilience of the banking system on a real time basis. This is so because as the economy expands, growth will never be smooth and there will be different phases that have to be traversed. This is where banks need to be nimble and perspicuous during good times and have buffers in place to be used when the business cycles are not favourable. To ensure this, the structures built revolving around business need to be strong.

Resilience

While the banking system today is on a strong footing led by low NPA levels and more than adequate levels of capital and liquidity buffers, it was not always the case. In the past, Scheduled Commercial Banks (SCBs) were marred by a host of issues including high levels of NPAs, even as returns on assets and equity were declining. The roots of the NPA crisis could be traced back to the aggressive lending practices adopted by the banks during the early 2000s, particularly for infrastructure projects. While much of these loans were initially profitable, delays and cost overruns in several infrastructure projects along with legal challenges in terms of land issues resulted in increasing incidence of defaults on repayments. This led to a sharp rise in NPAs. This marks a strong turnaround from the issues which were plaguing the banking system just a few years ago.

To address this, RBI initiated the Asset Quality Review (AQR) in 2015 with the objective of cleaning up balance sheet of SCBs. The AQR was aimed at ensuring that banks recognized NPAs transparently

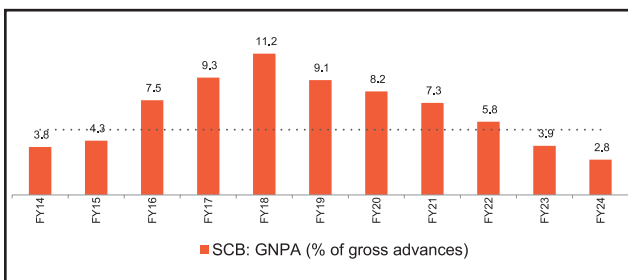
and made adequate provisions for bad loans. This marked a shift towards better governance and transparency in the banking sector. As a result of this, stressed accounts were reclassified as NPAs and expected losses on stressed loans, not provided for earlier under flexibility given to restructured loans, were provided for. This was complimented by a comprehensive strategy adopted by the Government, namely the “4R’s strategy”. This consisted of:

1. Recognition: Transparent recognition of NPAs.
2. Resolution: Recovery and resolution of bad loans.
3. Recapitalization: Injecting capital into stressed public sector banks.
4. Reforms: Implementing long-term reforms to prevent future crises.

With the proper recognition of restructured loans, provisioning requirements, especially of public sector banks, surged. In addition to this, the RBI also introduced the guidelines for the revised Prompt Corrective Action (PCA) framework in 2017. Under this, capital, asset quality and profitability were the key areas for monitoring. The PCA was introduced with the objective of timely intervention and taking corrective measures in an opportune manner. This, in turn, could help to restore the financial health of banks that are at risk by limiting deterioration in their health and preserving their capital levels. Under the PCA framework, restrictions were imposed on banks which included limits on lending, dividend-distribution and branch expansion, as well as requirement of higher provisions. At its peak, 12 banks were placed under the PCA framework.

A massive recapitalisation of Rs. 1.57 lakh crore was undertaken by the Government during 2015-2022. This recapitalisation was an important contributor to financial stability of banks and the overall banking system. The pain was severe, but beneficial effects started to show up from 2018, resulting in improved asset quality – the gross non-performing assets ratio fell from a peak of 11.2% in March 2018 to 5.8% in March 2022. By 2022, all troubled banks had exited the PCA. This was also complimented by other regulatory interventions in the form of setting up of Insolvency and Bankruptcy code (IBC) and the National Asset Reconstruction Company Limited (NARCL). These helped in creating an institutional environment for addressing stress in banks’ balance sheets on an ongoing basis. Apart from this, Government also undertook bank consolidation, which involved merging smaller public sector banks to create stronger, more resilient institutions. Most significantly, in 2019, 10 public sector banks were merged into 4 larger banks. This move was intended to strengthen the banks’ balance sheets, improve operational efficiency and reduce costs.

Figure 1: GNPA ratio of SCBs on a decline



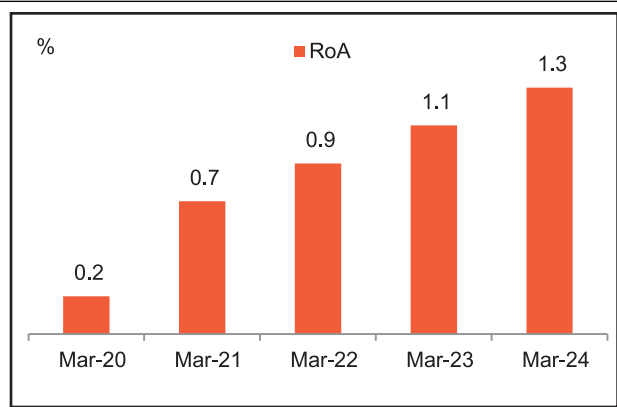
Source: Financial Stability Report, RBI

The financial system went through a different kind of turbulence with the NBFC crisis just before COVID struck which led to considerable risk aversion in the market. The downturn in this segment exposed

severe asset-liability mismatches in the NBFC sector, leading to a liquidity crunch and a subsequent slowdown in credit availability. The RBI stepped in with liquidity support and imposed stricter regulations to bring stability to the NBFC sector. This was followed by the COVID-19 pandemic which led to widespread disruptions across all sectors, including the banking sector. The crisis tested the resilience of India’s financial system, particularly in areas such as maintaining liquidity, handling loan defaults and ensuring financial stability. The RBI responded swiftly with measures like moratorium on loan repayments, liquidity infusion and restructuring packages for businesses hit hard by the pandemic. Banks played a critical role in ensuring that credit continued to flow to sectors like healthcare, MSMEs and agriculture during the pandemic. Public sector banks extended emergency credit lines to businesses to help them weather the storm.

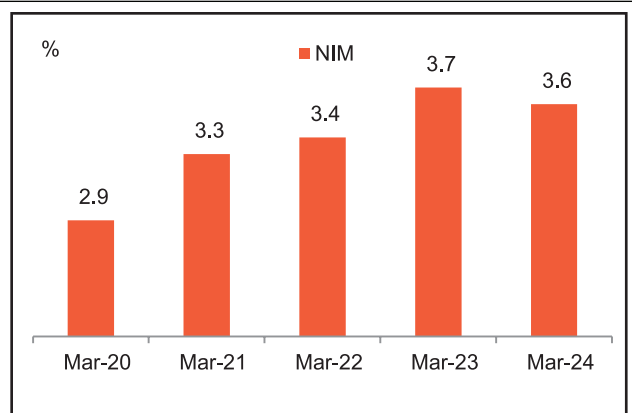
The banking system emerged stronger from the pandemic led by a sustained uptick in the business cycle. There has been a considerable improvement in the profitability of banks as is visible from a sustained increase in banks’ Return on Assets (RoA). This is further complimented by decline in NPA ratio leading to strong capital buffers. At 16.8% as of March 2024, the Capital to Risk-weighted Assets Ratio (CRAR) of banks is comfortably above the minimum regulatory requirement. In fact, RBI’s Banking Stability Indicator (BSI) shows that overall stability of the banking system improved on the back of stronger capital levels, higher earnings and decline in the stock of NPAs, including restructured asset. In turn, these developments are catalysing a broad-based and sustained credit expansion.

Figure 2: Sustained increase in Return on assets by SCBs



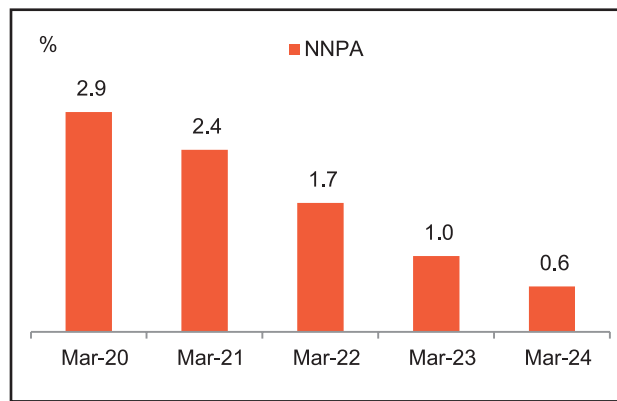
Source: Financial Stability Report, RBI and Bank of Baroda Research

Figure 3: Net Interest Margin (NIM) at comfortable levels



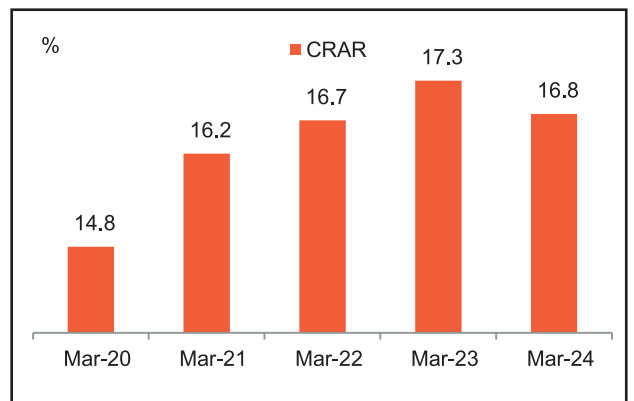
Source: Financial Stability Report, RBI and Bank of Baroda Research

Figure 4: Net NPAs at decadal low



Source: Financial Stability Report, RBI and Bank of Baroda Research

Figure 5: SCBs are well capitalized



Source: Financial Stability Report, RBI and Bank of Baroda Research

In the last few years, the Government has undertaken a series of reforms aimed at credit discipline, responsible lending and improved governance as well as adoption of technology, amalgamation of banks etc. which have contributed to the overall health of the banking system in India. There has been a significant enhancement in the asset quality of banks, led by improved borrower selection, more effective debt recovery and heightened debt awareness among large borrowers. In addition to regulatory capital and

liquidity requirements, qualitative metrics such as enhanced disclosures, robust code of conduct and transparent governance structures also improved banking performance. Simultaneously, the financial landscape in India is also undergoing a structural transformation, driven by factors like innovations in technology, financial deepening and changing savings and investment patterns, etc. Each of these shifts has a bearing on how financial entities carry out their business and adapt to the emerging risks.

Digitization

As India emerges as a global leader in digital transformation, its banking sector has been at the forefront of adopting technological innovations to enhance financial inclusion, improve operational efficiency and offer better services to customers. From fintech startups to the rise of blockchain and Artificial Intelligence (AI), technology has revolutionized the Indian banking landscape. This has been facilitated to a large extent by the Digital India Initiative and the subsequent adoption of the Jan-Aadhaar-Mobile (JAM) trinity. The Digital India Initiative was launched by the Government in 2015. The initiative aimed at transforming India into a digitally empowered society. The banking sector has been a key participant in this initiative through the use of the JAM Trinity which includes the following:

- Jan Dhan Accounts: The creation of zero balance bank accounts for the unbanked population.
- Aadhaar: The world's largest biometric identification system, linking citizens to financial services.
- Mobile Phones: The widespread adoption of smartphones and mobile internet has enabled digital banking and payments to become more accessible.

Other reforms such as India Stack, e-KYC and Unified Payments Interface (UPI) led to a tectonic shift in India's financial landscape. While a deep telecom penetration and availability of internet were the major drivers for this process, the catalyst for the transformation was the COVID-19 pandemic. The pandemic necessitated the need for digital payments and banks too recognised the need to respond to

customer demand. Banks offered technology that provided financial safeguard, with 24x7 banking, credit and direct benefit transfer among other services.

Digital banking in India refers to the use of digital channels such as mobile banking, internet banking and any other digital platforms for banking operations. With the introduction of digital banking, customers can now carry out banking transactions from the comfort of their homes. It has not only made banking more accessible but also more efficient.

In India, the digital banking revolution began with the introduction of internet banking. Almost all banks in India offer internet banking services which allows customers to perform a wide range of banking transactions, including fund transfers, bill payments and account balance inquiry. Following the success of internet banking, banks started offering mobile banking services. Mobile banking has become increasingly popular in India, particularly because of the widespread use of smartphones coupled with affordable internet access. As smartphone penetration surged, internet data costs plummeted, making online services accessible to a broader audience and setting the stage for an unparalleled digital revolution. Between 2014 and 2022, smartphone penetration skyrocketed from 15% to 66% of the population, while the cost of data came down sharply from Rs. 260/GB to a mere Rs. 7/GB. This transformation, from mobile internet as a luxury to a daily necessity, played a pivotal role in enhancing accessibility to digital banking services across the nation. Customers could use their mobile devices to transfer funds, pay bills and check account balances.

All these developments contributed to the increased use and adaptation of digital channels by individuals in

the country. From a primarily a cash-based economy, India has now become a world leader in real-time digital payment. Estimates suggest that almost 40% transaction in India are now done digitally. This has, in turn, fostered the growth of a thriving FinTech sector in the country. Publicly available information places the number of FinTechs founded in India at approximately eleven thousand (11,000). The sector has received investments of about US\$ 6 billion in the last two years alone. The rise of the fintech sector is likely to intensify the competition for banks and can disrupt traditional banking models. These tech-driven companies offer services with lower costs and better customer experience, compelling banks to adapt quickly or risk losing market share. However, it also presents an opportunity which will hinge on a successful collaboration between banks and fintech companies, thereby, creating new opportunities for innovation.

Inclusive lending

Financial inclusion remains a key priority for the policymakers as it is the cornerstone for inclusive growth. The digital banking revolution in India has been beneficial in improving the access of financial services to rural areas, who previously had limited access to banking services. The progress of financial inclusion in India was catapulted by the digital banking revolution and the Pradhan Mantri Jan Dhan Yojana (PMJDY). Under the scheme, more than 53 crore beneficiaries have been brought under the formal banking system by opening a Jan Dhan account (as of Sep 2024), with more than 60% of these accounts in the rural/semi urban centres. Apart from this, these bank accounts have garnered a deposit balance of ~Rs. 2.3 lakh crore and resulted in the issuance of

over 36 crore free-of-cost RuPay cards, which also provides an accident insurance cover of Rs. 2 lakh.

RBI's Financial Inclusion Index, which measures the level of financial inclusion based on three broad parameters i.e. access, usage and quality has also shown significant progress. The index rose to 64.2 in March 2024 from 53.9 in March 2021.

Even though, considerable progress has been made in expanding the scope of financial inclusion, digital banking channels will play a key role in ensuring the last mile connectivity. This will involve leveraging technology to deliver accessible as well as customised financial services. The success of digital India initiative has helped in bringing a wide proportion of rural population under formal channels which has also facilitated the steered direct benefit transfers from the Government to beneficiaries.

Priority Sector Lending is also an important aspect of financial inclusion. The scheme which was aimed at ensuring flow of credit to key sectors that had been overlooked by institutional lending, has evolved significantly over the years. This is to ensure that the scheme aligns more closely to the broader economic and social goals. Consequently, the scheme which initially included sectors such as agriculture and small-scale industries, has now expanded to areas such as MSMEs, education, renewable energy and more, while also applying to a broader range of banks.

In the coming years, financial inclusion will involve developing bespoke products and services which are best suited to different strata of the society depending upon their income level. This shall include innovative solutions which make it easier for people to not only access basic but also to use a variety of financial services.

Sustainability

Climate change continues to pose an existential threat to economies around the world. The financial sector and particularly banks, are also not immune to its impact. Banks are increasingly recognizing the risks posed by climate-related events and are taking steps to incorporate sustainability into their lending practices while also ensuring that they play a significant role in financing the transition to a low-carbon economy.

Climate change is manifesting itself at an alarming scale and pace globally. This poses a growing threat to economic growth and requires immediate and sustained action on all fronts. Recently, there have been growing instances of extreme weather events both globally as well as in India such as heat waves, droughts, flash floods and wildfires. While the risks that climate change poses on physical world is more apparent, it also possesses the potential to spill over into the financial sector. Climate events impact the real sector and by extension bank's exposure to these sectors, it has a direct bearing on risk management frameworks for banks and other financial institutions

In India, the agricultural sector is heavily reliant on the monsoon rains and hence, plays a major role in supporting the economy as well as food security. In 2023-24, emergence of El Niño event of 2023-24 brought this issue to the forefront. Due to this, average temperatures recorded in parts of country were much higher than normal years which impacted agricultural productivity, lower rainfall, diminished reservoir levels and contributed to lower agricultural production. This, in turn, impacted prices and inflation, while also affecting agricultural income and rural demand. Intuitively, these events can also have a detrimental impact on the loan-repayment capabilities of the borrowers and hence, the asset quality of banks.

While there are serious limitations with respect to predicting these adverse climate events, quantifying their impact on the financial sector is also an uphill task. A key step for enhancing banks' preparedness to such events will require transparency in disclosing the amount of exposure at risk. Further, banks will also need to disclose the carbon intensity of their operations which will be crucial for developing an effective transition strategy.

Climate change also presents an opportunity for banks in terms of the need for green financing. The Indian Government has committed to an ambitious target of becoming a net zero carbon economy by 2070. The success of this will depend on financing key sectors effectively, thus, shaping the pace of decarbonisation. Some estimates place financing requirements to achieve net zero by 2070 to be close to US\$ 10 trillion.

In recent times, the need for green finance has garnered considerable attention. Green finance can be loosely defined as finance which is directed towards projects with environmental benefits, such as projects which are aimed at reducing greenhouse emissions, improving energy efficiency or renewable energy. However, there is a need for reliable information on green projects and enhanced transparency. To tackle this, the RBI is working on the draft disclosure framework on climate-related financial risks. This is expected to limit the misplacing of assets and misallocation of capital due to inadequate information in the market. Apart from this, inclusion of renewable energy sector, under priority sector lending and the "Framework for Acceptance of Green Deposits" has also facilitated bank funding towards green activities/projects.

Banks will also need to relook their exposures to sectors which are inherently energy intensive and hence, lead to higher emissions. Sectors such as

steel, cement, aluminium, chemicals, pulp and paper, energy and transport are highly energy intensive and contribute to over 40% of global greenhouse emissions. These sectors will require significant funding to transition to production processes which reduces emissions. This will require devising specialized products which cater to specific needs of a particular industry.

Despite the long-term benefits, there are several difficulties in moving towards sustainable financing. These include scalability, as the market for green bonds is still at a nascent stage. There is a need to expand it significantly to attract larger issuances and diverse set of investors. Further, robust monitoring and reporting mechanisms are also required for assessing the authenticity and impact of green projects, financed through these frameworks. For this, technology will play a significant role in. Artificial Intelligence (AI) and big data analytics can help banks and investors weigh environmental risks alongside opportunities associated with green investments. Apart from this, banks also need to develop new products as well as devise policies to increase the uptake of existing products which align with green and transition finance.

Conclusion

India's banking sector is at the brink of a new revolution which combines a triad of growth with prudence, financial inclusion and sustainability. The challenges of the past, such as the NPA crisis and NBFC failures, have provided valuable lessons. This has led to reforms that have not only strengthened the sector, but have also made Indian banks better capitalized, more resilient and increasingly driven by technology and innovation.

The digital transformation has been fuelled by initiatives like UPI and the JAM Trinity, which is, in turn, enabling greater financial inclusion. The rise of fintech companies and their collaboration with banks,

is reshaping the landscape, providing opportunities for banks to expand their services to previously underserved populations.

With changing times, sustainability and climate change have become even more pressing issues. As a result, role of bank has become even more important, as banks are playing a critical role in financing green projects and are incorporating Environmental, Social and Governance (ESG) principles into their risk management frameworks. In coming decade as well, the need for sustainable financing is only expected to rise further and banks will be key players in helping India meet its climate goals, such as net-zero emissions by 2070.

As banks expand their outreach and explore newer avenues, new opportunities will also bring new challenges for the banking sector. Adoption of artificial intelligence, blockchain and cybersecurity measures will become critical tools to navigate in the increasingly digitalized and globalized financial landscape. Regulatory and ESG compliance will also be extremely important for ensuring the long-term success of Indian banks.

India's ambition to become a US\$ 30 trillion economy by 2047, will have to be supported by banking sector playing an indispensable role in financing infrastructure, supporting Small and Medium Enterprises (SMEs) and promoting financial inclusion. A resilient and well-regulated banking system is the backbone of economic growth and India's banks stand ready to drive the nation towards this ambitious goal.

Ultimately, India's banking sector 2.0 is on the path to becoming a much stronger, inclusive and sustainable version of its current self. This will also ensure that it remains a cornerstone of our country's growth and development for decades to come.

