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*Global Financial Stability: Risks and Opportunities**

Shri Shaktikanta Das

I am happy to participate in the third annual conference of the Bretton Woods Committee's Future of Finance Forum. The conference brings together leaders and experts from the public and private sectors, multilateral institutions and think tanks to deliberate on emerging issues, trends and technologies in the financial sector. This comprehensive horizon scanning can enrich decision making and help to fashion strategies for exploiting opportunities, managing risks and building future resilience. Against this backdrop, I propose to focus on the global financial stability landscape and the evolving balance of risks and opportunities beyond the current macro-economic environment.

I. Current conditions

The global financial system has exhibited remarkable resilience in weathering several high impact shocks in the recent period. While global economic activity and trade have largely withstood downside risks, the last mile of disinflation has proved to be challenging, giving rise to financial stability risks. As market expectations about the future course of monetary policies re-align with policy guidance from central banks, the prospects of a hard landing appear to be receding. This is reflected in most forecasts, which suggest that near-term prospects are improving, notwithstanding the persisting uncertainties in the international economic and financial environment. Macro-financial health has been shored up by stronger balance sheets of financial intermediaries and supportive, and even proactive, micro and macroprudential policy responses. More recently, however, the implications of monetary policy divergence among countries are beginning to unfold, especially in the form of exuberance and sudden sell-offs in financial markets. Together with the recent unprecedented IT outage globally, these developments have shown how risks to the financial system can materialise on a global scale, and sometimes very quickly, as in a few banks in early 2023. These facts have brought home, once again, the importance of crisis preparedness and robust business continuity plans (BCP).

Nelson Mandela had said and I quote: "*After climbing a great hill, one only finds that there are many more hills to climb.*" While several near-term risks appear to have receded, the global financial system continues to face heightened uncertainty from the outer-term outlook. Some of these risks are well known and well acknowledged, but other risks are just emerging or are lurking in the background. As macroeconomic conditions diverge in different regions of the world and policy responses get increasingly unsynchronized, spillovers to advanced and emerging economies alike are getting amplified.

In this highly uncertain scenario, policy makers and financial sector regulators have to work with renewed urgency to buffer economic activity and financial sector from unforeseen shocks. **A flexible and robustly equipped regulatory architecture in the financial sector would be essential to stay ahead of the curve and minimise risks. Macroeconomic policy makers and other stakeholders must also be quick to adopt a forward-looking approach to navigate the difficult bends and turns on the road ahead. Employing sustainable business models and judiciously harnessing the full potential of technological advances will be the cornerstones of this approach.**

* Keynote Address by Shri Shaktikanta Das, Governor, Reserve Bank of India, at the Future of Finance Forum 2024 organised by the Bretton Woods Committee, September 13, 2024, Singapore.

II. Macroeconomic Outlook

The resilience of global economic activity in the first half of 2024 prompted a repricing of policy paths by financial markets. Accordingly, a better balance in the risks to the outlook began to emerge. Output path divergences started narrowing across economies. Cyclical effects also started waning. Going into the second half of the year, while global growth appears to be steady, it remains subdued by historical standards[1], with disparities between regions. Some emerging market economies (EMEs) continue to demonstrate resilience and adaptability, while others - mostly low-income countries (LICs) - are still in a vulnerable situation. A few advanced economies (AEs) are also at the risk of facing a slowdown.

In its July 2024 world economic outlook update, the International Monetary Fund (IMF) presented a cautiously optimistic outlook for the global economy[2]. In its view, varied momentum of activity is narrowing divergences across economies, while world trade is firming up. The growth of global trade is expected to align with the pace of global growth in 2024-25, thus keeping the trade-GDP ratio stable over the medium-term. At the same time, however, cross-border trade restrictions have increased amidst rising shipping costs and logistics disruptions. **Overall, the risks to the outlook are judged to be balanced, although in the near-term, they weigh on the downside. Let me now touch upon some salient risks to the global macroeconomic outlook.**

First, the momentum of global disinflation is slowing, warranting caution in easing monetary policy. The persistence of inflation, particularly in the services sector, poses a significant risk. Fuelled by a combination of elevated wage growth and constrained productivity, these factors are placing the balance sheets of financial intermediaries at risk from recognised and unrecognised valuation losses. The stickiness in inflation could delay the return to price stability which, in turn, increases external, fiscal and financial risks. In such a scenario, monetary policy management by Central Banks has to be prudent and supply side measures by government have to be proactive.

Second, unprecedented high levels of debt characterise the global economic landscape. It has reached a level of US$ 315 trillion or 333 per cent of global GDP according to the 2024 estimates of the Institute of International Finance. At these levels, the debt overhang poses significant spillover risks to EMEs. In particular, the low income and some middle-income countries are very vulnerable. Coexistence of high levels of debt and elevated interest rates can feed a vicious cycle of financial instability through impairment of government and private-sector balance sheets. Fiscal deficits or net accretions to debt stocks are higher than pre-pandemic levels. There also appears to be little scope for improvements in fiscal aggregates, given the fact that 2024 – the Great Election Year – is seeing 88 economies going into election cycles. Needless to emphasise that fiscal consolidation has become even more crucial than before for achieving the arduous 'last mile of disinflation'. For emerging economies, such consolidation could also lessen the incidence and severity of capital outflows by improving their ratings.

Third, increased and persisting geopolitical risks can further add to the heightened risk aversion among investors, prompting flights to safety and volatility in asset prices. Countries at the receiving end of such a situation have to build their own buffers and strengthen their resilience through appropriate policy responses.

Fourth, with trade policy uncertainty reaching exceptionally high levels, the risks associated with protectionism and unilateral trade policies threaten

[1] The IMF projection of global growth in 2024 and 2025, respectively, is below the historical (2000–19) annual average of 3.8 percent.

[2] The forecast for global growth for 2024 was maintained at the IMF's April 2024 assessment of 3.2 per cent while for 2025 it was raised by 10 basis points to 3.3 per cent.

to undermine the multilateral trading system. Such a scenario is filled with potential to create a protracted period of economic fragmentation and reduced global growth. Revival of multilateralism and co-ordinated policy action can mitigate the severity of this situation.

Fifth, climate change related adverse weather conditions are imparting considerable uncertainty to both growth and inflation trajectories. Inward-looking policies, including trade-distorting measures, could compromise the ability to tackle global challenges like climate change. Climate commitments made by nations must be fulfilled, while adhering to the widely accepted principle of common but differentiated approach.

All these risks are getting increasingly interdependent, as changes in the profile of any one of the risks usually shifts expectations relating to others. The need of the hour for policy authorities and central banks is, therefore, to remain agile and craft appropriate forward looking measures and structural changes to overcome the risks.

III. Global Financial Stability Risks

I would now like to outline a few global financial stability risks. First, global financial markets have displayed resilience in recent months, with equity and bond yields rallying, volatility remaining low for the most part, and narrowing of corporate bond spreads; but there has been a sharp increase in prices of relatively riskier assets. While stocks have been supported by strong earnings, the narrowing of corporate spreads has coincided with rising episodes of corporate defaults[3]. The current scenario also differs from past monetary policy tightening cycles when markets displayed risk-off sentiments and prices of riskier assets declined. To the extent that valuations are currently stretched, sudden shocks could precipitate stress that spreads contagiously across financial market segments through sell-offs and band-wagon effects.

Second, market expectations of higher interest rates in the United States (US) along with other factors, had kept the US dollar strong. The generalized global risk-on risk-off environment had increased the volatility of capital flows for many emerging markets[4]. Further, a strong USD increases debt service burdens and inflationary pressures for EMEs. To what extent this scenario will get impacted would depend upon the quantum and timing of policy pivot by the US Fed, following their recent pronouncements to this effect.

Third, the proliferation of non-bank institutions in financial intermediation may create risks to financial stability due to their size, complexity and interconnectedness with domestic and global financial systems. In recent years, a number of vulnerabilities have emerged in NBFIs in advanced economies, contributing to periods of market dysfunction[5]. Hidden leverage and liquidity mismatches of these institutions can amplify shocks and propagate strains throughout the financial system.

Fourth, private credit[6] has grown four-fold over the last ten years. It is now a major source of corporate financing among middle-market firms that have low or negative earnings, high leverage, and lack high-quality collateral. Proliferation of this asset class, along with intensifying competition with investment banks on larger deals, may shift supply-demand dynamics and result in poorer underwriting

[3] The global corporate default tally stood at 87 as of July 2024, which is above its five-year average. Distressed exchanges accounted for two-thirds of defaults in July and are at their highest level since 2009. Further, these defaults were led by media and entertainment sector and consumer products sector – 'Default, Transition, and Recovery: Distressed Exchanges Reached Their Highest Level Since 2009', S and P Global, August 15, 2024.

[4] Global Financial Stability Report: The Last Mile: Financial Vulnerabilities and Risks, April 2024, International Monetary Fund.

[5] Financial Stability Risks from Non-bank Financial Intermediation in Australia. Bulletin – April 2024; Reserve Bank of Australia.

[6] Nonbank corporate credit provided through bilateral agreements or small "club deals" outside the realm of public securities or commercial banks. This definition excludes bank loans, broadly syndicated loans, and funding provided through publicly traded assets such as corporate bonds. (Global Financial Stability Report, IMF, April 2024).

standards. As a consequence, the probability of credit losses can rise and make existing risk management models obsolete. The rapid growth of private credit, their increasing interconnectedness with banks and NBFIs, and their opacity creates vulnerabilities that could become systemic. Regulators world over need to give a closer look to these developments and come out with necessary guardrails.

Fifth, stress in the global commercial real estate (CRE) sector needs to be watched closely[7]. Banks exhibit high sensitivity to expected and unexpected CRE losses, due to the relatively high CRE coverage ratios in their loan books. Further, liquidity squeezes can materialise for banks with large CRE exposures, as short sellers may target them and investor confidence may slip further. As I said earlier, staying alert and undertaking forward looking regulatory measures ahead of the curve can contain the risks to bank balance sheets and systemic stability.

IV. Higher for Longer Interest Rates

The interaction of financial conditions with monetary policy can present overwhelming risks to financial stability. The synchronized monetary policy tightening in the last couple of years across the globe, is gradually giving way to monetary policy divergence in 2024. While quite a few central banks have started treading the path of rate cuts on account of recession worries[8], many still continue to maintain restrictive stances and refrain from reducing policy rates so as to break the back of inflation persistence decisively. The 'higher for longer' interest rate environment did bring forward financial stability risks, as seen in March 2023 in certain advanced economies. Tight financial conditions impacted balance sheets of banks in these jurisdictions. Market expectations of rate cuts are now regaining momentum, especially after indications of a policy pivot from the US Fed, but the adverse spillovers from the 'higher for longer' interest rate scenario remains a contingent risk. On the other hand there are central banks which naturally and justifiably remain averse to premature loosening of policy before inflation has been durably reined in their countries. Central Banks in these countries need to remain watchful of their domestic inflation–growth balance and make policy choices.

V. Geo-Political Risks

The resurgence of geopolitical risks and their persistence pose high risks to financial stability, given their high speed of transmission and the multi-faceted exposure of the financial sector. Geopolitical risks may emanate not only in the form of wars, terrorist attacks, trade disputes and political gridlocks, but also through supply chain strains, technology decoupling, cyberattacks and weaponisation of finance.

The geopolitical risk index[9] has spiked sharply in 2024 amidst increases in trade restrictions and financial sanctions, reversing the gains from several decades of global economic integration[10]. Geopolitical risks are imparting heightened volatility to capital flows and asset prices. They are even impacting bystanders or countries not directly involved in conflicts. These developments often result in strains on the international monetary system, undermining the efficiency of the global payments systems. Even as we reap the many benefits of increasing financial integration, it is evident that the contagion risks from geopolitical events can no longer be ignored, especially in the context of transactions in forex, equity and debt markets as well as in the banking system[11].

[7] According to the IMF, CRE prices fell by 12 per cent globally in real terms over the past year with the sector also remaining vulnerable to higher vacancy rates and rising financing costs.

[8] Bank of Canada, Bank of Japan, European Central Bank, Bank of England.

[9] Caldara, Dario. and Iacoviello, Matteo (2022), "Measuring Geopolitical Risk", American Economic Review, Vol. 112, No 4, April, pp. 1194 1225.

[10] Financial Stability Report, RBI; June 2024.

[11] NguyenHuu, T., & Örsal, D. K. (2024). Geopolitical risks and financial stress in emerging economies. The World Economy, 47, 217–237.

Geo-economic fragmentation is weighing on the medium-term outlook for global growth. This can delay the convergence of emerging and developing economies with better living standards. In addition, geopolitical tensions in the past have generally been associated with volatility in crude oil prices and disruptions in supply conditions. With their negative feedback loops, they aggravate the stress on the real economy and the financial system. While it may not be possible to completely insulate from such risks, it is important to deal with them through systematic monitoring, building buffers, devising contingency plans and fostering multilateral cooperation.

VI. Opportunities

As we navigate these risks and challenges, we need to recognise that there are also huge opportunities ahead of us. Current challenges open pathways for economic resilience and a stronger global outlook, if addressed collaboratively and strategically. Let me highlight some of these opportunities.

(i) Impending monetary policy pivots with a strong probability of soft landing provides hope that global inflation could be on a sustained downward trajectory. This would open up space to strengthen the foundations of growth in an environment of benign input costs and revival of the labour market. For emerging market economies in particular, this possibility offers opportunities to capitalise on robust fiscal, monetary, and financial policy frameworks to exploit the potential to attract investment and accelerate sustainable growth. This is also an apt time to consolidate the gains from the post–pandemic rebound with deeper structural reforms in both product and factor markets.

(ii) Despite the uncertainty surrounding the geo-political outlook, the latest projections suggest a turnaround in world trade is taking hold[12]. This offers another engine for economic expansion. Addressing trade policy uncertainties more forcefully and in coordination presents an opportunity to strengthen global prosperity.

(iii) It is important to acknowledge the role that finance will continue to play in the global growth story, particularly for emerging markets such as India[13]. This is an opportune time to enhance the breadth, access and efficiency of financial markets while also protecting consumer interests. A forward-looking approach would require developing regulatory sandboxes, fostering collaboration with innovators, and ensuring the integration of new players into the regulatory framework without compromising prudence and stability.

(iv) Digitalisation has been a game changer, driving empowerment, entrepreneurial innovation, productivity, and enabling an irreversible transformation of the economic landscape. Leveraging the digitalisation channel has the potential to bring in improvements in the field of financial inclusion, formalisation of finance and enhancements in cross-border payments systems.

(v) Climate change gives us another critical opportunity for innovation. Quest for new climate technologies and harnessing them can be instrumental in fostering energy independence, especially for developing countries. Climate-smart financial solutions

[12] The current value of the WTO Goods Trade Barometer, an early indicator of the trajectory of merchandise trade volume, stands at 103 — above both the quarterly trade volume index and the baseline value of 100.

[13] A well-developed financial sector is a precondition for the efficient allocation of resources and the exploitation of an economy's growth potential. As such, understanding the dynamic nature of the financial system by way of new sources of financing, savings and investment trends and even demographic changes is vital.

such as issuance of green bonds also provide avenues for private sector involvement and engagement.

(vi) Reforming the international monetary and financial and system is crucial for ensuring global economic stability, fostering growth, and mitigating systemic risks. The current system, while having supported decades of economic expansion, is increasingly challenged by imbalances and inefficiencies, including the dominance of a few currencies in global trade and finance. While reforms should address these imbalances to enable greater inclusion of emerging economies in global financial governance, they should also focus on strengthening the global financial safety net (GFSN).

VII. Conclusion

As I proceed to conclude, let me briefly touch upon India's prospects in this unsettled and highly uncertain international environment. The Indian economy rebounded from the severe contraction imposed by the COVID-19 pandemic and averaged real GDP growth of above 8 per cent during 2021-24. For 2024-25, the Reserve Bank of India (RBI) projects real GDP growth at 7.2 per cent, with risks evenly balanced around this forecast. This growth outlook reflects the underlying strength of India's macro-fundamentals, with domestic drivers – private consumption and investment – playing a major role. Moreover, the growth trajectory is supported by an environment of macroeconomic and financial stability. Inflation has moderated from its peak of 7.8 per cent in April 2022 into the tolerance band of +/- 2 per cent around the target of 4 per cent, but we still have a distance to cover and can not afford to look the other way. The Reserve Bank's projections indicate that inflation is likely to ease further from 5.4 per cent in 2023-24 to 4.5 per cent in 2024-25 and 4.1 per cent in 2025-26. Meanwhile, fiscal consolidation is underway and public debt levels are on a declining trajectory over the medium-term. Corporate performance has improved strongly, enabling deleveraging and strong growth in profitability. Balance sheets of banks and non-banking financial intermediaries, regulated by the Reserve Bank of India, have also strengthened[14]. Our stress tests reveal that these financial intermediaries will be able to maintain regulatory capital and liquidity requirements even under severe stress scenarios.

India's vision of global progress emphasises international cooperation that is people-specific, ambitious, action-oriented and decisive. India's G20 Presidency in 2023 and its continuing contributions thereafter reflects India's vision of the world being one earth, one family with one future. These priorities include strengthening the Multilateral Development Banks (MDBs) to address shared global challenges of the 21st century; achieving financial inclusion and productivity gains through digital public infrastructure; debt resolution for lower and middle-income countries; and financing cities of tomorrow, among many others.

In conclusion let me say that, India remains committed to the reshaping of the global order in the decades ahead for the betterment of the world. It is now time for everyone to work for 'one future' for the entire mankind.

[14] (i) Gross Non-Performing Assets (GNPA) ratio of banks was 2.7 per cent at end-June 2024, the lowest since end-March 2011. The annualised slippage ratio, which measures new NPA accretions as a percentage of standard advances, continued to decline to reach at 1.3 per cent at end-June 2024. The provision coverage ratio (PCR) continued to improve to reach at 76.5 per cent by end-June 2024. Capital to risk-weighted assets ratio (CRAR) stood at 16.8 per cent at end-June 2024, much above the regulatory threshold. The annualized profitability indicators, namely, return on assets (RoA) and return on equity (RoE) stood at 1.4 per cent and 14.5 per cent, respectively, at end-June 2024, showing continued improvement. (ii) GNPA ratio of NBFCs was 2.8 per cent at end-June 2024, the lowest since end-March 2021. Similarly, NNPA ratio improved to 1.0 per cent at the end-June 2024. The annualised slippage ratio, which measures new NPA accretions as a percentage of standard advances, continued to decline to reach at 2.6 per cent at end-June 2024. The provision coverage ratio (PCR) continued to improve to reach at 61.5 per cent by end-June 2024. Capital to risk-weighted assets ratio (CRAR) stood at 26.6 per cent at end-June 2024, much above the regulatory threshold. The annualized profitability indicators, namely, return on assets (RoA) and return on equity (RoE) stood at 3.2 per cent and 11.6 per cent, respectively, at end-June 2024, showing continued improvement.

*India at an Inflection Point: Some Thoughts**

Shri Shaktikanta Das

I am happy to be back at the FIBAC annual conference. This conference is special as it brings together industry leaders, financial sector players and regulators on a single platform to discuss vital issues of contemporary relevance. I would like to congratulate the FICCI and the IBA for organising this annual conference.

The Indian economy is now at a critical juncture. Massive changes are taking shape in various economic sectors and markets; and the country is geared for orbital shifts. Our nation's journey towards becoming an advanced economy is drawing strength from a unique blend of factors: a young and dynamic population, a resilient and diverse economy, a robust democracy, and a rich tradition of entrepreneurship and innovation.

In this background, I have chosen to speak on the topic "India at an Inflection Point: Some Thoughts". I have structured my talk under four major themes. First, I would speak on India's growth prospects and the approach that we need to follow going forward. Second, I would dwell upon recent developments in inflation and monetary policy. Third, I propose to highlight certain issues relating to strengthening our financial sector. Finally, I would spell out certain expectations from the financial sector.

I. Growth Prospects

The Indian economy rebounded strongly from the COVID-19 induced contraction, growing at an impressive annual average rate of 8.3 per cent during the last three years. For the current financial year, the Reserve Bank has projected a growth rate of 7.2 per cent. The IMF has also revised India's GDP growth upwards to 7.0 per cent, citing improved prospects for private consumption, particularly in rural areas. Two days ago, the World Bank has also upgraded India's growth forecast to 7.0 per cent for 2024-25.

The National Statistical Office (NSO) has placed India's GDP growth at 6.7 per cent in Q1 of 2024-25. Notwithstanding the moderation in growth from the previous quarter and below our projection for Q1, the data shows that the fundamental growth drivers are gaining momentum. This gives us confidence to say that the **Indian growth story remains intact**.

Private consumption, which is the mainstay of aggregate demand with a share of around 56 per cent in GDP, has rebounded to 7.4 per cent growth from a feeble 4 per cent growth in the second half of the previous year. This reconfirms the revival of rural demand. The other important driver of growth, *i.e.*, investment, which accounts for around 35 per cent of GDP, grew at 7.5 per cent, keeping up with its recent momentum. Thus, more than 90 per cent of GDP expanded at a robust pace and materially above 7 per cent. The headline number, however, came lower against the backdrop of muted government expenditure of both the Centre and the States, perhaps due to the Lok Sabha elections. Excluding government consumption expenditure, GDP growth works out to 7.4 per cent.

On the supply side, while agriculture grew modestly at 2 per cent in Q1, it is likely to perform better, going forward, on the back of good progress of monsoon, improved *kharif* sowing, and good moisture conditions for *rabi* crops. Industry and services recorded a growth of 7.4 per cent and 7.7 per cent respectively in Q1, underscoring continued strength in economic activity. Construction activity remained robust growing at 10.5 per cent.[1]

* Inaugural Address by Shri Shaktikanta Das, Governor, Reserve Bank of India. Annual FIBAC 2024 Conference organised jointly by Federation of Indian Chambers of Commerce and Industry (FICCI) and Indian Banks' Association (IBA), on September 5, 2024, Mumbai.

[1] After growing by 9.9 per cent during 2023-24, construction activity continued to grow at a rapid pace of 10.5 per cent in Q1 of 2024-25.

According to the RBI's latest data[2], bank credit to agriculture and allied activities remained robust and increased by 18.1 per cent (y-o-y). Credit to industry surged by 10.2 per cent (y-o-y) in July 2024 as compared to 4.6 per cent in July 2023. Within industry, credit to MSMEs also grew at 14.4 per cent (y-o-y). Bank credit to industries such as chemicals and chemical products; food processing; petroleum, coal products and nuclear fuels; and infrastructure has been quite strong in July 2024. The enhanced credit flow to industry along with an all-time high-capacity utilisation points to an upturn in the investment cycle, as reflected in the NSO data.

It is evident that India is on a sustained growth path. Consumption and investment demand, the two main drivers of growth, are growing in tandem. Government expenditure of the centre and the states is likely to pick up pace in line with the Budget Estimates in the remaining quarters of the year. Strong balance sheets of banks and corporates have created congenial conditions to further support private capex. Corporate profits (net) have grown by 14.2 per cent in Q1:2024-25.[3] Government capex continues to be strong. Overall, the Reserve Bank's projection of GDP growth at 7.2 per cent for 2024-25 does not appear out of place.

As regards growth prospects in the medium to long-term, it is felt that the Indian economy is on the cusp of transformational shifts. The fact that growth is on a rising trend, despite modest global growth and continuing global challenges, shows that structural drivers are playing a bigger role in India's macroeconomic outcomes. These drivers include: policy push on creating robust physical infrastructure; our fast growing digital public infrastructure; innovation and technological advancements across sectors; and critical reforms in key areas.

To realise the aspiration of transitioning from an emerging to an advanced economy by 2047, **the Indian economy would need a multi-pronged and a multi-sectoral approach**. Our focus should be on employing all engines of growth from both supply and demand sides. The supply side focus must encompass agriculture, industry and services. We should be mindful of the fact that agriculture possesses huge potential in India. Agri-commercial activities in horticulture, edible oils, dairy, poultry, food processing, *etc.* could be the focus areas. Our approach should be to enhance productivity as well as quality of our produce so that we gain a significant share in world exports, while meeting our domestic requirements.

The potential contribution of manufacturing will be pivotal to generate additional employment. Initiatives such as 'Make in India', 'Start up India', 'One District One Product (ODOP)' and 'Production Linked Incentive (PLI)' scheme, among others, are helping the manufacturing sector gain competitiveness and grow faster. The MSME sector, in particular, holds a lot of promise to step up growth and employment opportunities. Overall, the manufacturing sector must take the lead in niche areas to compete globally.

The services sector, which has remained the mainstay of growth over the last several decades, must explore new vistas of opportunities with focus on higher value-added services. In addition, requisite focus on research and development (R&D) is also vital for productivity and competitiveness. Together with government initiatives, including higher fund allocations for R&D, the private sector may also be an active partner in this field.

As I stated earlier, key demand drivers like consumption, investment and exports of goods and services will have to move in tandem. Higher

[2] Sectoral Deployment of Bank Credit- July 2024 (data released by RBI on August 30, 2024).

[3] Net profits of 2,934 listed private non-financial corporates grew by 14.2 per cent in Q1: 2024-25 as against 6.4 per cent in Q4:2023-24. (Performance of Private Corporate Business Sector during Q1:2024-25, released by RBI on August 30, 2024).

domestic consumption would help insulate the economy from the vagaries of external uncertainties. Investment remains critical for sustainable growth of the economy and, given the current confluence of favourable factors, it is time for the private corporate sector to come forward in a big way. The potential of external demand can be utilised to our advantage by getting integrated into the global supply chains.

A holistic approach to nurture and accelerate a broad-based growth of the economy would also necessitate **preservation of the gains of past reforms and accelerating India's reform journey with more reforms**. From an economic perspective, reforms that have imparted paradigm shifts and buttressed our stability and growth story would include: (i) shifting from administered exchange rate of the rupee to a market determined regime; (ii) stoppage of automatic monetisation of budget deficit financing by the Reserve Bank; (iii) enactment of the Fiscal Responsibility and Budget Management (FRBM) Act; (iv) introduction of the flexible inflation targeting framework; (v) enactment of the Insolvency and Bankruptcy Code (IBC); and (vi) implementation of the Goods and Services Tax (GST). Each of these six reforms have yielded long term positive outcomes. These reforms need to be augmented by reforms in land, labour and agricultural markets. While we have made some progress in these areas, lot more needs to be done both at the national and sub-national levels. Improvements in ease of doing business, especially at local levels, will boost our competitiveness.

II. Inflation and Monetary Policy

In early 2022, the flare up in food, commodity and energy prices, following the outbreak of the war in Ukraine, led to a sharp increase in inflationary pressures. This was further compounded by a series of adverse domestic weather shocks. The decisive steps taken by the Reserve Bank, supply side measures from the government and cooling of international commodity prices have led to downward shift in inflation from early 2023-24. Nevertheless, the pace of disinflation is frequently interrupted by volatile and elevated food inflation. It is the headline inflation that matters. It is the headline inflation with food inflation having a weight of 46 per cent that the people understand. With the monsoon progressing well and the healthy *kharif* sowing raising prospects of better harvest, there is greater optimism that food inflation outlook could become more favourable over the course of the year.

We have to remain watchful of how the forces impacting inflation play out. **The balance between inflation and growth is well-poised**. We must successfully navigate the last mile of disinflation, and preserve the credibility of the flexible inflation targeting (FIT) framework which is a major structural reform. The best contribution that monetary policy can make for sustainable growth is to maintain price stability.

III. Financial Sector – Strengthening the Foundations for Future

India's financial sector has repeatedly demonstrated its ability to overcome challenges and crises. The financial sector showed remarkable resilience during and in the aftermath of the COVID-19 pandemic. Today, all key indicators of the financial sector demonstrate its robust health[4]. This resilience, combined with other forces, can act as critical driving forces for India's future.

In this milieu, the financial sector needs to even further deepen financial inclusion, broaden access to credit and other financial products, and support overall

[4] GNPA ratio of banks was 2.7 per cent at end-June 2024, the lowest since end-March 2011. The annualised slippage ratio, which measures new NPA accretions as a percentage of standard advances, continued to decline to reach at 1.3 per cent at end-June 2024. The provision coverage ratio (PCR) continued to improve to reach at 76.5 per cent by end-June 2024. Capital to risk-weighted assets ratio (CRAR) stood at 16.8 per cent at end-June 2024, much above the regulatory threshold. The annualized profitability indicators, namely, return on assets (RoA) and return on equity (RoE) stood at 1.4 per cent and 14.2 per cent, respectively, at end-June 2024, showing continued improvement.

inclusive growth. It also needs to drive innovation in digital banking, foster sustainable finance, and build a robust financial ecosystem that can withstand emerging challenges and facilitate a higher trajectory of growth.

With the financial sector now in a strong position, it is our collective responsibility to safeguard this stability, especially in an environment of heightened global uncertainty. Financial institutions must continuously assess and refine their business models, recognise and deal with the emerging risks, and remain focused on capitalising on every new opportunity.

This brings me to the important issue of inclusive growth. While traditional metrics of economic growth like GDP and per capita GDP are important indicators of progress, they alone do not capture the full picture of what it means for a nation to be truly developed.

India has made remarkable[5] progress in extricating people out of poverty. A truly developed India must ensure that every citizen, regardless of their socio-economic status, has access to financial services and has the required financial literacy. By expanding access to banking, credit and insurance, and by harnessing the power of digital platforms, the financial sector can drive inclusive growth that extends to the most marginalised sections.

The Priority Sector Lending (PSL) programme remains crucial in addressing credit gaps for underserved segments. Introduction of Business Correspondents (BCs) has further enhanced financial outreach. The Financial Inclusion Index, introduced by the Reserve Bank, has improved from 53.9 in 2021 to 64.2, reflecting the strides made in providing access to financial services. There is, however, still more to be done to improve the usage and quality of these services.

Two more key drivers need to be prioritised: enhancing financial literacy and leveraging technology. The Reserve Bank has engaged in both self-driven and collaborative approaches to promote financial literacy. We run multimedia public awareness campaigns and outreach programmes as well as targeted financial literacy awareness programmes. Collaborating with other financial regulators, the Reserve Bank has assisted in establishment of the National Centre for Financial Education (NCFE) to bolster financial literacy efforts. With the support of banks and NGOs, 2,421 Centres for Financial Literacy have also been set up, covering almost all the blocks in the country.

On the technology front, the Reserve Bank has taken a number of initiatives to facilitate development of digital public infrastructure and innovation. The Unified Payments Interface (UPI) has revolutionised the digital payments space. Other initiatives like the Regulatory Sandbox and the Innovation Hub, have fostered a robust environment for enriching our fintech ecosystem. The commencement of the Reserve Bank's pilot project for frictionless credit, *i.e.* the end-to-end digital platform of the Unified Lending Interface (ULI) is expected to revolutionise access to credit, especially for farmers and MSMEs.

IV. Expectations from the Financial Sector

Having spoken about safeguarding financial stability and financial inclusion, I would now like to highlight some specific areas where I believe the financial sector can contribute to India's growth aspirations.

(a) Improving female labour participation

India's female labour force participation remains lower than the global average. This gap underscores the urgent need for targeted initiatives such as improving girls' education, skill development, workplace safety, and addressing societal barriers.

[5] As per a discussion paper on Multidimensional Poverty in India released by the Niti Aayog, Multidimensional poverty in India was found to decline from 29.17 per cent in 2013-14 to 11.28 per cent in 2022-23 with about 24.82 crore people escaping poverty during this period. Mutlidimensional Poverty in India since 2005-06 - A Discussion Paper By Prof. Ramesh Chand and Dr. Yogesh Suri, Niti Aayog, January 2024.

Entrepreneurship is a vital component of economic empowerment; yet in India, less than one fifth of MSMEs are owned by women. Women entrepreneurs often face significant challenges including limited access to capital, restrictive societal norms, and difficulties in accessing affordable finance. The financial sector has a crucial role to play in bridging this gender gap by implementing supportive policies, creating tailored financial products, and leveraging fintech innovations to offer better access to finance. This can be pursued on two fronts – one, by providing higher employment opportunities to women in financial institutions; and two, by supporting women entrepreneurs, through Government sponsored schemes as well as banks' own schemes tailored to suit businesses promoted by women. Banks could also actively explore onboarding larger number of women BCs *i.e.* 'bank saathis' or 'sakhis', especially from among SHG members.

(b) Supporting MSMEs

With our large young population, we need to fully tap the potential of MSMEs to drive employment and economic development. Despite their importance, many MSMEs remain small-sized and unable to scale up effectively due to various challenges, with access to affordable finance being one of the barriers.

The financial sector may play an active role in supporting MSMEs. Banks and financial institutions may develop tailored financial products and services that cater specifically to the needs of MSMEs. This includes offering flexible credit options, improving access to working capital, and providing financial support that accommodates the unique cash flow cycles and growth stages of MSMEs. This can propel MSMEs to expand, enhance their productivity, and contribute more significantly to job creation.

Conclusion

Let me now conclude. The Indian economy is forging ahead with macroeconomic and financial stability, and a favourable growth-inflation balance. The policy mix pursued in the recent years has strengthened the underlying fundamentals of the economy and augmented the buffers. Consumption, which had been our main driver of growth, has picked up pace, with recovery in rural demand. Investors' confidence is at an all-time high; banks and corporates demonstrate robust balance sheets; and structural reforms are playing a big role in pushing forward our growth frontier.

We are living in a dynamic and uncertain world, and we need to remain vigilant and continue to build stronger buffers. New opportunities are knocking at our doors and when I look at the entrepreneurial zeal and the talent of our younger population, it makes me more confident of India's long-term growth prospects.

Thank you. Namaskar.

*Address at the Global Fintech Fest (GFF), 2024**

Shri Shaktikanta Das

Honourable Prime Minister, Shri Kris Gopalakrishnan, Industry leaders, Esteemed participants, Members of the media, Ladies and Gentlemen.

The Global FinTech Fest (GFF) has emerged as a flagship event, showcasing innovations, technological transformation and the spirit of collaboration in the Indian FinTech sector. Started in 2020 in the virtual mode, amidst the COVID-19 pandemic with about 12,000 participants, GFF 2024 has so far seen 80,000 participants. This demonstrates not only the growing stature of this event, but also the growing prominence of India in technology driven financial innovation. The presence of the Hon'ble Prime Minister in GFF 2024 inspires all of us to put in our best efforts to build a fintech ecosystem that is truly future ready.

In this endeavour, our priority should be to build an environment where financial services are seamlessly integrated into the lives of our 1.4 billion people. India now stands on the cusp of a transformation, where technology will be the engine to meet the aspirations of every citizen.

From mobile banking to digital payments, AI-driven lending, blockchain innovations, the FinTech ecosystem is constantly evolving to meet the diverse needs of our growing economy. Digital technologies have been instrumental in expanding financial inclusion, improving efficiency, and enabling real-time services across the country. Today, India stands as a global leader in digital payments, a feat achieved by combining proactive policymaking with innovation and technological advancements.

Collaboration between policymakers, regulators, and innovators is the defining element of India's Fintech journey. The success stories in our FinTech space - like the Aadhar, UPI, and DigiLocker - are results of such collaborative efforts.

Initiatives like the Account Aggregator framework, Unified Lending Interface (ULI), Open Credit Enablement Network (OCEN), and several others are expected to redefine credit access, particularly for small businesses and individuals. The Reserve Bank's regulatory frameworks have facilitated new and innovative businesses to grow in an orderly manner. These regulatory initiatives reflect our commitment to support innovation with prudence.

Our approach is collaborative. Regulations are finally issued after wide ranging consultations with experts and stakeholders. As I said two days ago in this forum, over the last one year, the officials and teams from various departments of the Reserve Bank have engaged in about 750 interactions bilaterally and held about 50 structured meetings with fintech players.

As we march towards India@100 in 2047, I urge every participant at this GFF and others who could not attend, to continue dreaming, innovating, and pushing boundaries.

Thank you.

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* Address by Shri Shaktikanta Das, Governor, Reserve Bank of India at the Global Fintech Fest (GFF), 2024, Mumbai, August 30, 2024.

*FinTech Innovations for India @100: Shaping the Future of India's Financial Landscape**

Shri Shaktikanta Das

I am very happy to participate in the 5th edition of the Global Fintech Fest (GFF). I would like to congratulate the organisers – NPCI, PCI and FCC[1] – for bringing together diverse stakeholders from the FinTech ecosystem including FinTech innovators and companies, banks, NBFCs, regulators and others for this year's GFF. This event has grown into a much awaited fixture in the calendar of not just the Fintech industry but also the broader technology ecosystem.

The GFF represents a true melting pot of ideas, where innovative concepts and diverse perspectives come together with potential to shape the digital future of our financial sector. It also provides a unique opportunity to align our goals and strategies, to ensure that the FinTech ecosystem continues to grow dynamically and sustainably.

India is now a fast-growing economic powerhouse with an increasingly tech-savvy population. India's financial sector has witnessed a remarkable transformation, driven among other factors by the FinTech sector. Publicly available information[2] 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.

In my address today, I propose to highlight three major aspects: (i) setting the priorities for India@100; (ii) technologies for the future; and (iii) the regulatory architecture for FinTechs.

I. Setting the Priorities for India@100

I would like to begin by quoting Mahatma Gandhi, who had said: "The future depends on what we do in the present". Therefore, as we proceed in our journey towards the centenary of India's independence in 2047, it would be essential to reflect and imagine the future of our financial landscape, its requirements, and the technologies that will shape it.

This journey will be marked by dynamic shifts in technology, regulation, geo-politics and societal expectations. 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. In this environment, developing a mindset that anticipates disruption and embraces change with prudence, becomes very important. Financial institutions and FinTech startups alike must, therefore, adapt swiftly, leveraging agile strategies and robust frameworks to capitalise on the new opportunities while mitigating the connected risks.

It is up to the stakeholders in India's financial ecosystem – banks, non-banks, fintechs, regulators and the government - to foster innovation with resilience. While the FinTech ecosystem is ushering in the much-needed personalisation and contextualisation of finance for consumers, the context needs to be broadened to build a financial system that serves the broader society. To achieve these, I wish to propose the following five policy priorities for the future of India's financial system.

Priority 1: Digital Financial Inclusion

As a policy priority, financial inclusion should ensure that everyone has appropriate access to financial services. The Reserve Bank's Financial Inclusion Index, which measures the level of

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* Address by Shri Shaktikanta Das, Governor, Reserve Bank of India - August 28, 2024 - at the Global Fintech Fest, Mumbai.

[1] **NPCI** – National Payments Corporation of India; **PCI** – Payments Council of India; **FCC** – Fintech Convergence Council.

[2] Traxcn database, Feed Report - FinTech - India - Apr 2024.

financial inclusion, rose to 64.2 in March 2024 from 53.9 in March 2021. As a country, we have succeeded in ensuring banking access to every village within a 5 km radius or hamlet of 500 households in hilly areas. 530 million Jan Dhan bank accounts[3] have been opened under a national mission, of which 66 per cent accounts have been opened in rural/semiurban centres and 55 per cent with women beneficiaries[4].

While significant strides have been made in expanding financial inclusion, the evolving landscape demands a shift towards Digital Financial Inclusion[5] (DFI) *i.e.* promoting secure and digitally enabled financial services and products for the financially excluded and underserved population. Digital Financial Inclusion has the unique advantages of scalability and cost-effectiveness. Accordingly, the next two decades will predominantly be about leveraging technology to deliver accessible and tailored financial services that meet diverse needs.

In the pursuit of Digital Financial Inclusion, FinTechs may strive to offer innovative and accessible financial services, bridging gaps in traditional banking with digital payment solutions, microloans, and affordable insurance. They can enable seamless access to financial services in remote areas through mobile banking apps, digital wallets and online lending platforms, with superior and safe customer experience. The use of data analytics and AI could further enable personalised and efficient financial solutions.

Priority 2: Digital Public Infrastructure (DPI)

The second key policy priority would be to further deepen Digital Public Infrastructure (DPI). DPI which encompasses frameworks like Digital Identity (Aadhaar), universal fast retail payments (UPI) and targeted payment solutions like platform for bill payments, will enhance the efficacy of the financial system in general. They would be key tools to promote interoperability, transparency and cost effectiveness.

New DPIs could address emerging challenges such as frauds, cyber threats, data privacy and other concerns. They could also support the integration of advanced technologies like blockchain and AI to enhance security and efficiency in financial services. Continuous innovation is crucial in harnessing technological advancements and maintaining a competitive edge in the global financial landscape.

One significant initiative in this direction is the Reserve Bank's pilot on Unified Lending Interface (ULI), earlier known as Public Tech Platform for Frictionless Credit (PTPFC). ULI aims to enable lending institutions to offer frictionless, end-to-end digital credit by leveraging consent based data and related services. There are about 50 such types of data services on the platform Apart from Banks and NBFCs, we are now focusing on inclusion of other lenders like cooperative credit institutions through the NABARD. A full-scale launch of ULI will be done in due course. As I said two days ago in another event, the 'New Trinity' of JAM[6]-UPI-ULI will mark a revolutionary step forward in India's DPI journey.[7]

Priority 3: Consumer Protection and Cyber Security

Ensuring robust consumer protection is crucial for upholding trust in the financial system. As consumers are increasingly relying on digital financial services, their expectations for personalised, efficient and seamless experience are also growing. Alongside traditional risks such as mis-selling and fraud, new

[3] These accounts refer to the savings bank deposit accounts opened under the Jan Dhan Yojana (Scheme) of the Government of India.

[4] https://pmjdy.gov.in/account (data as of August 14, 2024)

[5] Definition adopted from G20 Financial Inclusion Action Plan (FIAP) for 2024-2026.

[6] JAM stands for the integration of Jan Dhan bank accounts, Aadhaar biometric identification, and Mobile numbers. This framework is designed to promote financial inclusion in India by enabling direct benefit transfers, improving access to banking services, and leveraging digital identity for seamless service delivery.

[7] Inaugural Address by Shri Shaktikanta Das, Governor, Reserve Bank of India at the RBI@90 Global Conference on "Digital Public Infrastructure and Emerging Technologies", August 26, 2024, Bengaluru

manifestations of consumer risks such as data privacy and security breaches have emerged with the advent of new technologies. Leveraging technology for real-time monitoring and ensuring regulatory compliance will be essential to address these challenges effectively.

The Digital Personal Data Protection (DPDP) Act, 2023 is a cornerstone in India's consumer protection landscape. It marks a significant shift towards safeguarding personal data. This Act enshrines the principles of data minimisation and purpose limitation to ensure that organisations collect only necessary information and use it solely for specified purposes for the required period of time. It empowers individuals with the right to access, correct, and erase their data, thus giving consumers greater control over their personal information. The Act incentivises businesses to adopt robust data protection measures, which will ultimately enhance trust in digital transactions.

Dark patterns such as misleading buttons, hidden charges, and forced continuity, have become big concerns in the digital marketplace. The Guidelines for Prevention and Regulation of Dark Patterns, 2023 issued by Government of India is an important step to protect consumers from unfair application of technology in businesses. These guidelines aim to identify, prohibit, and penalise restrictive and misleading practices, so that consumers can make informed choices.

On their part, banks and FinTech NBFCs are expected to adopt a customer-centric approach; implement robust security measures; offer transparent financial products; and adopt fair lending practices. Algorithmic decisions need to be fair and unbiased and treat the customers equitably. Minimising technology risks requires investing in resilient IT infrastructure and continuous monitoring to protect against cyber threats and technical failures. By embracing these principles, businesses can enhance consumer trust, foster long-term relationships, contribute to a more secure and reliable financial ecosystem, and ensure their own long term viability.

Beyond these steps, cybersecurity emerges as a critical pillar in safeguarding India's digital financial ecosystem from a systemic stability perspective. As financial transactions increasingly migrate online, the threat landscape is expanding exponentially. Investing in state-of-the-art technologies such as AI-driven threat detection, analysis and mitigation, along with clear focus on improving human resource capabilities are necessary to bolster resilience of information systems. Promoting cybersecurity awareness among consumers and employees alike are essential steps towards building a secure digital economy.

As a regulator, I have to emphasise these aspects on behalf of the Reserve Bank while, at the same time, reiterating our continued commitment to promote innovation.

Priority 4: Sustainable Finance

Long-term economic stability needs prioritisation of sustainable growth and environmental preservation. India's commitment to environmental preservation is enshrined in Article 48-A[8] of the Constitution of India. From a financial sector perspective, we have taken steps for ensuring sustainability with recent initiatives of the Reserve Bank like Sovereign Green Bonds framework of India (2022) and the Framework for acceptance of Green Deposits (2023). These frameworks are expected to play an important role in financing green projects, incentivising sustainable practices and lowering societal costs of development.

Despite their benefits, green bond and green deposit frameworks face several challenges. They include scalability, as the market for green bonds needs to expand significantly to attract larger issuances and diverse set of investors. Ensuring authenticity

[8] The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country.

and impact of green projects, financed through these frameworks, requires robust monitoring and reporting mechanisms. Technology can play a pivotal role in overcoming these challenges. Blockchain technology, for instance, can enhance transparency and traceability in green bond issuances and provide immutable records of project impacts. Artificial intelligence (AI) and big data analytics would enable banks and investors to assess environmental risks and opportunities associated with green investments. Fintech innovations such as digital platforms for trading green bonds and impact measurement tools can streamline processes and attract a broader investor base.

Looking ahead, over the next two decades, FinTechs will be instrumental in driving the progress in transition finance, climate finance and nature-based solutions. Strengthening regulatory frameworks, enhancing investor awareness and fostering public-private partnerships will be critical. By harnessing the transformative power of technology and promoting innovation in sustainable finance, India can accelerate its transition towards a resilient and low-carbon economy. We have to put our heads together to achieve sustainable growth and environmental stewardship for the future generations.

Priority 5: Global Integration and Cooperation

India has engaged actively in international fora and bilateral agreements to foster economic cooperation. Going forward, strengthening financial infrastructure, including cross-border payment systems, will be key focus areas. India, with its tech talent and evolved fintech ecosystem, holds the potential to serve as a global hub for digital innovation and fintech startups. Building and strengthening strategic partnerships, reinforcing our commitment to international cooperation, developing institutions of excellence in the areas of technology and innovation across a wide spectrum of areas, including financial services, would give the right impetus for our journey towards 2047.

Based on the encouraging response we have received from several jurisdictions, we are now focusing on making the UPI and RuPay truly global. The deployment of UPI-like infrastructure in foreign jurisdictions, facilitating QR code-based payment acceptance through UPI apps at international merchant locations, and interlinking UPI with Fast Payment Systems (FPS) of other countries for cross-border remittances are on top of our agenda. Notable progress in this direction has already been made in countries like Bhutan, Nepal, Sri Lanka, Singapore, the UAE, Mauritius, Namibia, Peru, France and a few other countries.[9] These endeavours underscore collaborative efforts for adoption of India's initiatives across the globe. I would like to compliment the NPCI and my colleagues in the Reserve Bank for what has been achieved so far, but we must resolve to do more in this national endeavour.

India's CBDC, which is in pilot stage, is another example of possible international co-operation. We are now utilising features like programmability to provide credit or government assistance to landless tenant farmers and carbon credits to farmers through CBDC. While we have successfully demonstrated the interoperability of CBDC with retail fast payment systems like UPI, we continue to gain from our experimentation on off-line solutions. As we make progress, we would be happy to co-operate with other nations in their CBDC efforts.

II. Technologies for the Future

Looking towards the future of India's financial landscape, the integration of cutting-edge technologies

[9] Notable developments include UPI QR code acceptance in Bhutan, France, Mauritius, Singapore, Sri Lanka, Nepal, and UAE. Similarly, RuPay card acceptance spans Nepal, Bhutan, Singapore, Mauritius, and UAE, with cards from these countries also accepted in India. The integration of UPI with FPS in Singapore for peer-to-peer remittances and agreements with regulators in UAE, Nepal, Namibia, and Peru for deploying UPI-like solutions signify the progress made so far in obtaining global financial connectivity.

promises transformative advancements across various facets of our life. Artificial Intelligence and Machine Learning (AI/ML) are poised to revolutionise financial services in unprecedented ways. AI algorithms are already being deployed for fraud detection. Machine learning models are increasingly being employed in credit scoring, leveraging predictive analytics to assess creditworthiness, and expand access to credit. AI-driven chatbots and virtual assistants are steadily enhancing customer service experiences by providing personalised recommendations, resolving queries promptly, and improving overall satisfaction. As AI and ML capabilities continue to evolve, their potential applications in regulatory compliance, investment advisory services, and algorithmic trading are expected to further redefine the financial landscape.

Simultaneously, we should also fully understand the risks posed by AI and facilitate calibrated and responsible adoption. Players in the financial sector, Central banks and governments should facilitate the development of trustworthy AI, keeping in mind the concerns surrounding data privacy, explainability, accountability and transparency. What can be a desirable model for governing technologies like AI, may perhaps be a key issue for discussion among the experts assembled here.

The Internet of Things (IoT) represents another frontier of opportunity for the financial sector. IoT devices, embedded with sensors and connectivity capabilities, are reshaping the payments ecosystem by enabling seamless transactions through connected devices, such as wearables and smart appliances. Further, IoT-driven data analytics offer insurers real-time insights into policyholders' behaviour and risk profiles. They can facilitate personalised insurance offerings and dynamic pricing models. IoT-enabled devices in supply chain finance and asset tracking have the capacity to streamline operations, enhance transparency, and mitigate risks. As IoT adoption grows, collaboration between fintech innovators and IoT developers will be crucial to harnessing its full potential.

Quantum Computing holds great promise as a game-changing technology with profound implications for cryptography, financial modelling and risk management. Its potential to perform complex calculations at great speed and scale, poses both opportunities and challenges. In cryptography, quantum-resistant algorithms are being developed to safeguard sensitive financial data from quantum-enabled cyber threats. In financial modelling, quantum computing's ability to process vast amounts of data and simulate complex scenarios promises to revolutionise portfolio optimisation, trading strategies and risk assessment. Moreover, quantum computing's potential to solve optimisation problems could enhance real-time decision-making processes and improve predictive analytics in risk management.

As these future technologies continue to evolve, their integration into India's financial ecosystem will require strategic investments in research and development, collaboration across sectors, and proactive regulatory frameworks to ensure ethical deployment and mitigation of potential risks. The Reserve Bank is fully conscious of all these issues and giving due attention to these areas.

III. Regulatory Architecture

Finally, let me touch upon the regulatory approach for the fintech Sector. Sustainable and orderly development of the fintech sector requires an appropriate balance between innovation and prudence. Our endeavour is to carefully craft regulations to achieve this delicate balance, while simultaneously ensuring trust, security, accessibility, risk management and competition.

In this context, I would like to mention that several regulatory guidelines have been issued in the recent past after wide ranging consultations with stakeholders. These include the 'Guidelines on

Digital Lending' (September 2022) ; 'Master Direction on Outsourcing of Information Technology Services' (April 2023) ; and 'Master Directions on Cyber Resilience and Digital Payment Security Controls for non-bank Payment System Operators' (July 2024).

A preferred approach for achieving balance between innovation and prudent regulation involves self-regulation within the fintech sector. Self-Regulatory Organisations (SROs), comprising industry participants and having a good understanding of the sector's unique challenges and opportunities, would be in a position to give appropriate suggestions to the Regulators on regulations that are both practical and effective. The announcement of a framework for recognition of Self-Regulatory Organisations for FinTech (SRO-FT) by the Reserve Bank marks a pivotal step forward in this direction. It may be recalled that in last year's GFF, I had announced our desire to see at least one FinTech Sector SRO taking shape by GFF, 2024. I am happy to announce that of the three industry bodies/entities who have applied for recognition as SRO, the Reserve Bank has granted recognition to one entity. Of the remaining two applications, one application has been returned with a provision for resubmission after meeting certain requirements. The third application is under examination. Through regular consultations, feedback mechanisms and policy dialogues, the SROs would facilitate open communication and enable fintechs to stay informed about regulatory expectations and priorities. Just to illustrate the depth of our engagement with fintechs over the past one year, I would like to mention that the officials and teams from various departments of the Reserve Bank have engaged in about 750 interactions bilaterally and held about 50 structured meetings with fintech players. I reiterate our commitment to fostering a dynamic Fintech sector.

Conclusion

The journey towards India@100 is filled with immense potential and opportunities. The transformative power of FinTech innovations, coupled with our commitment to financial inclusion, sustainability and consumer protection, sets a robust foundation for the future. The seamless integration of emerging technologies will further redefine the financial landscape. Let us embrace this dynamic era with a collective vision and collaborative spirit to ensure that India's financial ecosystem, not only meets the aspirations of our people, but also sets a global benchmark for innovation and growth.

Thank you. Namaskar.

*Inaugural Address at the RBI@90 Global Conference**

Shri Shaktikanta Das

We are celebrating the 90th year of the Reserve Bank of India in the current financial year. This Global Conference on 'Digital Public Infrastructure and Emerging Technologies' is among the marquee events that we are organising to commemorate this significant milestone. It is my pleasure to extend a warm welcome to each one of you to this conference, held in the beautiful and vibrant city of Bengaluru—a city which, for many years now, has been at the forefront of India's technology revolution. I would also like to extend a special welcome to the esteemed participants who have joined us from across the globe. Thank you all for accepting our invitation. I sincerely hope that you will find the deliberations and interactions during the Global Conference enriching and productive.

The theme of this conference - Digital Public Infrastructure (DPI) and Emerging Technologies – is timely and relevant. It will shape the future journey of almost all economies in the world. Over the last decade, the traditional banking system has undergone an unprecedented technological transformation. By all indications, this process is likely to become even more intense in the coming years. In my address today, I would like to highlight the important role that DPI has played in India's digitalisation process and its contribution to inclusivity in Indian society and economy. India's experience provides an effective digitalisation strategy for public authorities including central banks. I would also touch upon certain key issues underpinning Artificial Intelligence systems and the use of DPI in addressing issues in cross-border payments.

* Inaugural Address by Shri Shaktikanta Das, Governor, Reserve Bank of India at the RBI@90 Global Conference on "Digital Public Infrastructure and Emerging Technologies", August 26, 2024, Bengaluru.

Meaning and Positive Impact of DPI

Digital Public Infrastructure refers to basic technology systems, created mainly in the public sector, that are openly available to users and other developers. DPIs are scalable, and thus can support systems that operate on a population-wide scale; they are interoperable, and therefore spur innovation by being accessible to innovators; and they are also cost efficient by virtue of their economies of scale. These three advantages of scalability, interoperability and cost efficiency hold the potential to accelerate financial inclusion and transform the lives of people by overcoming traditional barriers like physical distance, documentation and transaction costs.

It can be said that DPI has enabled India to achieve, in less than a decade, levels of financial inclusion that would have otherwise taken several decades or more. DPI spurs market innovation by reducing transaction costs, democratising access, maintaining competition through interoperability, and attracting private capital. DPI offers a path to effectively manage critical national infrastructure. In times of crisis, as during the COVID-19 pandemic, India and a few other countries were able to leverage digital infrastructure for vaccination programmes and targeted transfer payments.

Notable examples of DPIs in other countries include verifiable digital identity systems such as Colombia's Cédula Digital; Nigeria's National ID or Bank Verification Numbers; the Philippines' PhilSys; Rwanda's digital identity system managed by their National Identity Agency (NIDA); Saudi Arabia's Nafath digital identity management platform; Singapore's Singpass; the United Arab Emirates' UAE-Pass; and the like.

The G20 Digital Economy Working Group (DEWG) developed the Global DPI Repository (GDPIR), which is a comprehensive resource hub, pooling essential lessons and expertise from G20 members and other participating countries. Its primary aim is to bridge

the knowledge gap in the choices and methodologies required for the design, construction, deployment, and governance of DPIs. The final 'Report of India's G20 Task Force on Digital Public Infrastructure' was released on July 15, 2024 which has, among other things, contributed to acceptance of the definition and framework of DPI. This agenda will be taken forward for implementation during the subsequent G20 Presidencies.

India's Experience with DPI

Let me now turn to India's experience with DPIs. India's DPI journey is a unique model, wherein the base technical infrastructure is built, operated and managed in the public sector, while the private sector accesses the DPI to create innovative customer facing services. The advantage of developing DPI in the public sector is that typically private sector would be averse to capital investment to create infrastructure with uncertain returns. Privately created infrastructure may not also be amenable to democratised access or interoperability. The unique approach of India is conducive for designing services and products which are competitive in the open market.

In the area of finance, systems that facilitate digital payments, digital money, digital identity and digital processes are the key components of DPIs. India has carefully crafted its DPI strategy by focusing on three critical dimensions – digital identity, bank accounts and processing infrastructure. Aadhar, India's biometric identity system provides a single and portable proof of identity. Around 1.4 billion[1] Aadhaar numbers have been generated for the residents of India which is near universal for the Indian population. Similarly, access to banking system for the unbanked segments has been enabled through Jan Dhan accounts *i.e.* Basic Savings Bank Deposit (BSBD)[2] Accounts. Under the Jan Dhan scheme, more than half a billion[3] bank accounts have been opened for the beneficiaries. With regard to processing infrastructure, basic connectivity has been ensured through availability of affordable mobile phones and internet. The number of mobile based internet users in India stands at around 0.9 billion[4] in May, 2024, with mobile tele-density at 83 percent. Even in rural areas, the mobile tele-density is around 60 percent. The trinity of Jan Dhan Accounts, Aadhar and Mobile Phones, popularly known as the JAM trinity, has provided the base DPI infrastructure which is being leveraged for multiple value added services. Over 67 percent of the beneficiaries under the JAM trinity initiatives are from rural/semi-urban areas and over 55 percent are women. This clearly demonstrates the role of DPIs in promoting inclusion.

Another example of DPI in India is the Account Aggregator (AA) framework, a regulatory initiative of the Reserve Bank. This framework facilitates consent-based sharing and aggregation of financial information of customers among eligible financial system participants in a secure, transparent, and efficient manner. It enables MSMEs to access cash flow-based financing from lenders with minimal documentation.

The Reserve Bank, over the years, has facilitated the development of robust systems in the country for both retail and wholesale payments by supporting the creation of digital infrastructure like INFINET banking network, SFMS messaging system, RTGS and NEFT payment systems.[5] The current ecosystem of digital

[1] https://uidai.gov.in/aadhaar_dashboard/

[2] In such savings bank accounts, there is no requirement of maintaining any minimum balance. Such accounts also offer certain minimum facilities, free of charge.

[3] https://pmjdy.gov.in/

[4] https://www.trai.gov.in/release-publication/reports/telecom-subscriptions-reports.

[5] **INFINET** (Indian Financial Network): A closed user group network comprising of RBI and financial institutions. This provides the communication backbone for the Indian banking and financial sector.

SFMS (Structured Financial Messaging System) is a secured financial messaging system which is used for both inter-bank and intra-bank communications in India.

RTGS (Real Time Gross Settlement) is a 24×7×365 electronic fund transfer system for large value transactions (₹2 lakh and above) in which transactions are processed continuously on a gross basis (*i.e.* transaction by transaction basis).

NEFT (National Electronics Fund Transfer) is a 24×7×365 retail electronic fund transfer system in which the transactions are processed in batches.

payments in India offers a bouquet of simple, safe, and secure options for instant or quick transfer of funds, both large and small value, for businesses and individuals.

Unified Payments Interface or UPI, a real-time payment system launched in India in April 2016 by the National Payments Corporation of India (NPCI), has played a significant role in the growth of retail digital payments in India. NPCI itself was promoted by banks under the guidance of the Reserve Bank. While initial participants on the UPI platform were banks, non-bank third party app providers and use of QR codes have all combined in popularising UPI. It has since emerged as a robust, cost effective and portable retail payment system and is attracting active interest across the globe.

Continuing on this journey of digitalisation of banking services, last year we launched the pilot of a technology platform which enables frictionless credit. From now on, we propose to call it the Unified Lending Interface (ULI). This platform facilitates seamless and consent based flow of digital information, including even land records of various states, from multiple data service providers to lenders. This cuts down the time taken for credit appraisal, especially for smaller and rural borrowers. The ULI architecture has common and standardised Application Programming Interfaces (APIs), designed for a 'plug and play' approach to ensure digital access to information from diverse sources. This reduces the complexity of multiple technical integrations. It enables borrowers to get the benefit of seamless delivery of credit, quicker turnaround time without requiring extensive documentation. In sum, by digitising access to customer's financial and non-financial data that otherwise resided in disparate silos, ULI is expected to cater to large unmet demand for credit across various sectors, particularly for agricultural and MSME borrowers. Based on our experience from the pilot project, a nation-wide launch of the ULI will be done in due course. Just like UPI transformed the payments ecosystem, we expect that ULI will play a similar role in transforming the lending space in India. **The 'new trinity' of JAM-UPI-ULI will be a revolutionary step forward in India's digital infrastructure journey.**

Central Bank Digital Currency (CBDC) has dominated recent policy discourse across the world. In India, the Reserve Bank launched CBDC pilots in both retail and wholesale segments in late 2022. The retail pilot currently has over 5 million users and 16 participating banks. While the retail pilot started with initial use case of payments, currently both the offline and programmability functionalities are also being tested. The programmability feature of CBDC could serve as a key enabler for financial inclusion by ensuring delivery of funds to the targeted user. Let me illustrate this by an actual pilot that was launched recently[6]. Tenant farmers often find it difficult to access agricultural credit for inputs and raw materials as they do not have the land title to submit to the banks. However, programming the end use for purchase of agricultural inputs can give the required comfort to banks and thus establish the identity of a farmer not through his land holding but through the end use of funds being disbursed. Yet another path breaking use case[7] is farmers getting purpose bound money through programmable CBDC for generation of carbon credits. Other new use cases aimed at testing features such as anonymity and offline availability are proposed to be rolled out gradually.

It is important to emphasise that there should not be in any rush to roll out system-wide CBDC before one acquires a comprehensive understanding of its impact on users, on monetary policy, on the financial system and on the economy. Such understanding would emerge from generation of user data in pilots. Actual introduction of CBDC can be phased in gradually. Undoubtedly, CBDC has the potential to underpin the payment systems of future, both for domestic payments and also cross-border payments.

[6] The pilot was launched by SBI on August 16, 2024 in the states of Odisha and Andhra Pradesh.

[7] IndusInd Bank piloted the same in Maharashtra.

Artificial Intelligence and DPI

Today, as Artificial Intelligence (AI) is making forays in the financial sector in the form of services like chatbots, internal data processing for intelligent alerts, fraud risk management, credit modelling and other processes, integrating this cutting-edge technology into a robust and responsible DPI presents an opportunity to amplify the capabilities and efficiency of DPI even further. As the Report of India's G20 Task Force on DPI states, the seamless fusion of DPI with AI would propel us into a new world of "Digital Public Intelligence". Integration of AI into financial services brings significant opportunities for all stakeholders. For customers, AI enables hyper-personalised products and faster, more relevant services. Financial institutions like lenders benefit from advanced tools for risk and fraud management, streamlined operations, and reduced compliance costs. Regulators gain enhanced oversight and real-time monitoring capabilities, which would improve regulatory enforcement and market stability.

Such advancements, however, come with serious challenges. Data privacy concerns arise from handling vast volumes of personal information. Ethical AI governance is essential to ensure fairness and prevention of bias. Financial institutions must ensure that AI models are explainable, *i.e.*, ability to explain why certain results are produced. AI technology can also be misused to spread misinformation, potentially causing severe damage and disruption to DPIs as well as other digital systems. They can also damage the reputation and operations of financial institutions. Recognising the same, international bodies such as the Organisation for Economic Cooperation and Development (OECD) have outlined core principles governing AI, which include inclusive growth, respect for the rule of law and human rights, transparency and explainability, robustness and safety, and accountability. In December 2023, the Hiroshima AI Process Comprehensive Policy Framework was established. It includes a set of guiding principles and a code of conduct, marking a significant step towards a coordinated global approach for responsible development of AI.

India is the lead chair of the Global Partnership on AI (GPAI) for 2024. This multi-stakeholder initiative, with 29 countries, aims to bridge the gap between AI theory and practice by supporting cutting-edge research and advancing applied activities. The Ministry of Electronics and Information Technology (MeitY) of Government of India has been taking important initiatives in this area, such as setting up AI Research Analytics and Knowledge Dissemination Platform which will focus on developing indigenous AI-enabled products and solutions to tackle India-specific challenges and complex real-life problems. These initiatives underscore India's commitment to not only capitalise on the potentialities of AI technology, but also ensure robust governance.

I am pleased to know that in this conference a panel discussion will focus on emerging technologies. I am sure they will look into various issues associated with technologies like AI. It is important to be pro-active to leverage the capabilities of new technologies, but at the same time it is essential to be abundantly mindful of the associated risks and challenges. It would be prudent to keep in mind the following aspects:

(i) AI is a data driven science. The authenticity of data being used in training the models, possibility of biases, concerns of data privacy need to be carefully examined.

(ii) AI promises to make processes simpler and efficient. It can also emulate decision making to a great extent. However, when it comes to the regulated financial institutions, there should be careful adoption of AI in critical decision-making segments, for example in loan sanctioning. While AI can definitely assist the process, the institutions using them should have proper understanding of the models and ensure accountability of the outcomes.

(iii) Going beyond understanding the risks posed by AI, financial institutions should clearly outline the liabilities and ensure a calibrated and responsible adoption. Central banks and governments, on their part, should foster the development of trustworthy AI, keeping data privacy, explainability, accountability and transparency at its core.

DPI and Cross-border Payments

A recurring agenda of importance across all multilateral settings including the G20 and international standard setting bodies like the Committee on Payments and Market Infrastructures (CPMI) has been to bring efficiency to cross-border payments. A lot of initiatives and experimentation in bi-lateral and multi-lateral arrangements among various countries are already underway. While much efficiency has been achieved in case of wholesale markets, the retail cross-border space is still fraught with multiple layers that add to the cost and delays in cross-border remittances. Needless to say that modern technology offers solutions which can smoothen these frictions. With the emergence of Fast Payment Systems across countries and experimentation around CBDC, new possibilities are opening up to bring in greater efficiency to cross-border payments. Maximum efficiency gains in such initiatives would come from ensuring inter-operability as a key design element.

Ideally, while the legacy payment systems should be able to connect to each other and so should the CBDC systems, one country's legacy system should also be interoperable with another country's CBDC. Actual implementation of interoperability would pose challenges and may involve certain trade-offs. Technical barriers may be surmounted by using common (international) technical standards. Further, the governance structure or management framework for long-term sustainability would also need to be finalised.

In this journey of attaining harmonisation and interoperability among countries, a key challenge could be the fact that countries may prefer to design their own systems as per their domestic considerations. We can overcome this challenge by developing a plug and play system which allows replicability while also maintaining the sovereignty of respective countries. India has made some progress in this direction and would be happy to develop a plug and play system for the benefit of the community of nations.

The UPI system has the potential to evolve into a cheaper and quicker alternative to the available channels of cross-border remittances. A beginning can be made with small value personal remittances as it can be quickly implemented.

Conclusion

India is a vast country with great diversity. A solution that works well in India has the potential to be customised to the unique requirements of any other country. Accordingly, the conference planners have organised a deep dive session on Day-2 on India's UPI, especially for the international delegates. I would request all delegates to participate and derive benefit from the various sessions and also share their experiences which could provide learnings for all. I also invite you to the Conference Exhibition, showcasing some of India's innovations relevant to this conference.

As you may recall, the theme of India's G20 presidency in 2023 was "One Earth, One Family, One Future". It underlies India's thought process in how it sees the world and itself as being part of one family with a common future. At the Reserve Bank of India, we look forward to the journey towards RBI@100 with considerable optimism. We are constantly working on devising policies, approaches, systems and platforms that will make our financial sector stronger, nimble and customer centric. With these words, I wish you all a pleasant stay and productive discussions. I wish this conference all success.

Thank you and Namaskar.

*Financing India's Aspirations**

Michael Debabrata Patra

Namaskar! Good morning,

I am honoured to be here today. This initiative by the CII – the Summit on Financing 3.0 – is perhaps the first of its kind and assumes timely significance in positioning itself as a beacon of light illuminating India's leap towards its future. At the outset, therefore, I would like to express my deep appreciation of CII's role in shaping India's industrial and business landscape since 1895 as arguably the most visible business association in the country today. It is only befitting that I pay tribute to the CII's extraordinary contributions by dwelling on our ambitions as a nation and the role of finance in actualising them.

II. An Aspirational Vision of India

There is a palpable pulsation in the mood of the nation. It is widely believed that this is India's century. A window of opportunity has opened up for striking out on a path that secures for every Indian the best living standards in the world. In the tradition of classical economics, it is a productive workforce that is the true source of value creation; capital is only an organising factor, boosting the productivity of labour and creating conditions for its growth. In that classical sense of the supply side of the economy, every sixth working person in the world is an Indian benefiting from a population that is the youngest in the world. The United Nations projects India's working age population to grow at 9.7 million per annum.[1] This cohort is expected to peak at 68.9 per cent of the total population by the 2030s[2].

On the demand side, India will skill this rising workforce at a rapid pace, given that we are already producing the largest number of STEM[3] graduates in the world – over 20 lakh every year, 43 per cent of whom are women[4]. India is also at the forefront of the digital revolution, among the world's leaders in information and communication technology usage and in start-up ecosystems. Projections suggest that artificial intelligence (AI) could contribute around US$ 1 trillion to the Indian economy by 2035[5]. As the ambition to become a global manufacturing hub and an export powerhouse materialises, the employability of the working age population will go up and India will experience rising incomes and prosperity. In the International Monetary Fund (IMF), economists have showed that reaping the demographic dividend could add about 2 percentage points per annum to India's per capita GDP growth over the next two decades.[6] In fact, recent research confirms the linkages between demographic dividends, digital innovation and economic growth[7]. Sustained by higher saving and investment rates associated with the rise of India's working age ratio, it will become possible to traverse between the GDP levels of today and 2047, as recently envisioned by Niti Aayog[8] and break out into per capita income levels associated with an advanced economy. From a time-varying perspective, a burst of speed is required for just about a decade; thereafter, sheer momentum will propel India forward even at lower growth rates. On the way, we will need to build up world class physical infrastructure and a conducive environment for unleashing innovation energies while

* Keynote Address delivered by Michael Debabrata Patra, Deputy Governor, Reserve Bank of India (RBI) at the Financing 3.0 Summit: Preparing for Viksit Bharat organised by the Confederation of Indian Industries (CII) on September 3, 2024 at Mumbai, India. Valuable comments received from Sunil Kumar, Snehal S Herwadkar, Samir Ranjan Behera, Dhanya V, Rajas Saroy, Sambhavi Dhingra, Gautam, and editorial help from Vineet Kumar Srivastava are gratefully acknowledged.

1 Government of India, Economic Survey, 2018-19, Volume 1, Chapter 7.

2 Ernst and Young, 2023, India@100: Reaping the Demographic Dividend, April 11.

3 Science, technology, engineering, and mathematics (STEM).

4 Government of India, Interim Union Budget, 2024-25.

5 Ministry of External Affairs, 2020, India Launches Hub to Drive AI Innovation in BFSI Sector.

6 Aiyar, S. and Mody, A., 2011, The Demographic Dividend: Evidence from the Indian States, *IMF Working Paper* WP/11/38.

7 Zaman, K. A., U. and Sarkar, T., 2021, Demographic Dividend, Digital Innovation, and Economic Growth: Bangladesh Experience, *Asian Development Bank Institute Working Paper* 1237.

8 From today's GDP of US$ 3.36 trillion to US$ 30 trillion economy by 2047 with a per capita income of US$ 18,000 per annum from today's US$ 2,392 per annum (Niti Aayog, Vision for Viksit Bharat @ 2047-An Approach Paper, August 7, 2024).

moving towards being a greener, cleaner and healthier nation. India will also contribute to reshaping the world order to achieve an equitable, inclusive and sustainable future for humanity.

III. Finance and Growth Revisited

Key to the fulfilment of this vision of 'India Tomorrow' is the role of finance. An animated debate has coursed through the years on the relationship between growth and finance. Economists have argued that it follows either a supply leading or a demand following sequence. In the former premise, financial sector development precedes economic development. For instance, financial depth or the size of the financial sector relative to a country's economic size is found to be a strong predictor of subsequent economic growth, physical capital accumulation and improvements in economic efficiency[9]. In the latter proposition, it is held that the economy should develop and then the financial sector follows. Also, there is a recognition that this relationship may not be linear across countries and periods. At relatively low levels of development, this mutually reinforcing sequence may be transformative, but may taper off at higher levels of development[10]. Advancements in endogenous growth theory support both hypotheses, emphasising the role of finance and financial intermediaries in facilitating investments in innovation and education, lowering transaction costs and managing risks, thereby accelerating the growth process.[11]

The reality is that both strands intertwine and mesh in a manner that they are indistinguishable. While a well-functioning financial sector is a precondition for the efficient allocation of resources and the exploitation of an economy's growth potential, it is also axiomatic that the demand for financial services depends upon growth and the formalisation of various sectors of the economy. On the flip side, business and financial cycles feed, reinforce and amplify each other. There are also leads and lags. In early August, we saw a bloodbath in financial markets worldwide – reminiscent of Black Monday of 1987 – when incoming data were read as portending imminent recession, triggering a widespread sell-off and a global unwinding of carry trade. Analogously, the global inflation surge in the wake of the war in Ukraine provoked a synchronised and aggressive tightening of monetary policy and financial conditions, resulting in bank failures and deposit runs in some jurisdictions in March 2023.

IV. Situating Finance in National Accounting

In the circular flow of income and expenditure that describes the working of an economy, transactions in goods, services, compensations and taxes are matched by flows of saving and investment, which represent inter-sectoral transfers of lendable resources. In India, the household sector typically generates surplus saving relative to its investment which it lends to other sectors. Recently, net financial saving of households has almost halved from its level in 2020-21 due to behavioural changes underway in the form of unwinding of prudential savings accumulated during the pandemic as well as shifts from financial assets to physical assets such as housing. Going forward, boosted by rising incomes, households will likely build back their financial assets – 15 per cent of GDP was observed during the early 2000s up to the global financial crisis. This process has already begun – households' financial assets have increased from 10.6 per cent of GDP during 2011-17 to 11.5 per cent during 2017-23 (excluding the pandemic year). Their physical savings have also risen in the post-pandemic years to over 12 per cent of GDP and could rise further – they had reached 16 per cent of GDP in 2010-11. Accordingly, households will remain the top net lenders to the rest of the economy in the coming

[9] King, R.G. and Levine, R. (1993). Finance and Growth: Schumpeter Might be Right. *The Quarterly Journal of Economics 108*(3), 717-737; Levine, R. and Zervos, S. (1998). Stock Markets, Banks, and Economic Growth. *The American Economic Review 88*(3), 537-558.

[10] Huang, H. and Lin, S. (2009). Non-linear Finance–Growth Nexus. *The Economics of Transition 17*(3), 439-466.

[11] Levine, R., (2004). Finance and Growth: Theory and Evidence, *NBER Working Paper No. 10766;* Romer, P.M., (1990). Endogenous Technological Change, *Journal of political Economy, 98*(5, Part 2), S71-S102.

decades. The private corporate sector has drastically reduced its net borrowings from the rest of the economy[12], reflecting a combination of rising internal accruals and subdued capacity creation. Looking ahead, its net borrowing requirement is likely to rise on the back of a revival in the capex cycle. These financing requirements will largely be met by households and external resources. Net dissaving of the public sector has been moderating *albeit* unevenly; this sector will remain a net borrower in the economy in view of the critical role envisaged for fiscal policy in shaping India's future.

If the nation as a whole has a deficit, it borrows from the rest of the world and the inflow of foreign savings helps finance its investment needs. For India, domestic savings have largely financed the overall investment requirements of growth, with external financing playing a supplemental role as reflected in largely modest current account deficits. As the productive capacity of the economy rises and its ability to absorb foreign resources expands, the volume of external financing and its composition may undergo fundamental shifts, but in the light of past experiences, external debt sustainability will remain a policy priority.

Given natural endowments, including the workforce and its thrift and productivity, it is the rate of investment that provides the turning points in the economy's growth trajectory as well as its structural shifts. As the economy modernises in the quest of its vision as outlined earlier, market financing will likely grow in depth and sophistication. The institutional architecture of financial intermediation may become more diversified while exploiting niches of specialisation and leveraging on technological solutions.

Historically, phases of growth accelerations in India have been accompanied by higher gross domestic investment rates. A key determinant of the desired investment rate, apart from the overall rate of growth, is the efficiency of capital use in terms of the number of units of capital required to produce one unit of GDP. The lower this incremental capital output ratio (ICOR), the higher the productivity of capital or the marginal efficiency of capital. In most developed countries the ICOR is in the neighbourhood of 3. Over the period 2012-19, the ICOR in India averaged 5.0, but in the last three years, it eased to 4.0. As these efficiency gains rise, the workforce gathers skills and the economic structure acquires sophistication and technological progress, it is possible to envisage the ICOR in the range of 3.5 to 4. Accordingly, the required investment over a decade of high growth would be in the range of 33-38 per cent of GDP per annum. This is by no means infeasible if the peak of about 39 per cent achieved in 2010-11 can be reckoned as the potential. It is possible to finance this desired investment rate with saving rates in the range of 32-36 per cent of GDP, again achievable considering the peak of 37.8 per cent achieved in 2007-08[13]. Looking ahead, this aspiration is premised on an improvement in saving potential among all major constituents – households on the back of a growing skilled workforce; businesses benefiting from the thrust on manufacturing and exports; and governments maintaining the consolidation that is underway. The contribution of external financing can change in magnitude and composition, as stated earlier.

In the rest of my address, I hope to draw on available estimates to track some strategic facets of the evolutionary contribution of finance to India's aspirational goals.

V. Infrastructure

Infrastructure plays a critical role in expanding national production capacity, social welfare, and economic development. Spending on infrastructure

[12] From close to 9 per cent of GDP in 2007-08 to under 1 per cent more recently.

[13] A similar aspiration is expressed in NITI Aayog's "Strategy for New India @75", November 2018.

engenders a GDP multiplier of 2.45 in the year of capital expenditure and 3.14 in the next[14]. With an infrastructure investment requirement of at least 8-10 per cent of GDP annually[15], India's infrastructure gap has been estimated at 4.1 per of GDP per annum, rising to 5.3 per cent when adjusted for climate requirements[16]. Over the period 2024-30, it is estimated that infrastructure investment will need to rise to US$ 1.7 trillion (₹143 lakh crore), with about US$ 0.4 trillion in green investments.[17] Going forward, the private sector will move into centre-stage for infrastructure spending, especially in energy and transportation. The sources of financing will be diverse, ranging from debt and equity issuances in the domestic capital markets to external commercial borrowings and foreign direct investment (FDI).

VI. Micro Small and Medium Enterprises

Micro, small, and medium enterprises (MSMEs) are crucial to India's economic and social progress – it is estimated that the MSME sector accounts for around 30 per cent of India's GDP, 45 per cent of exports and 62 per cent of employment in the business sector.[18] MSMEs are expected to grow in number in the coming years. The overall finance demand of India's MSMEs is around US$ 1,955 billion. Of this, the demand for debt-based finance is pegged at US$ 1,544 billion,[19] with half coming from those that prefer financing from informal sources or from financially unviable enterprises. This leaves a debt demand of US$ 819 billion, of which US$ 289 billion demand is currently fulfilled by formal credit lenders like banks. The remaining unfulfilled demand of US$ 530 billion makes up a huge addressable market for banks, FinTechs and NBFCs.

VII. Skilling

Scaling up for the future will require a multi-faceted approach, prominently involving skilling human resources in line with the acceleration in technological transformation. According to the World Economic Forum, 44 per cent of workers' skills globally would be disrupted in the following five years[20]. To skill the workforce of the future effectively, India needs to invest nearly ₹2-3 lakh crore per annum over the next 6 years.[21] This would include infrastructure, training centres and partnerships with private sectors.

Financing skilling requirements could combine performance-based investment instruments such as bonds intended to finance development programmes with a pre-agreed social outcome; redeemable skill vouchers enhancing chances of wage employment; private equity/venture capital funding for tech-based training platforms, e-learning start-ups and the like; direct support from multilateral agencies, social and private foundations in the form of social development programmes and projects; and working capital financing, trade receivables discounting systems in tie ups with banks to offer institutional credit to trainees and service providers.[22] The Union Budget 2024-25 has highlighted a larger role for the private sector in skilling the labour force. As of now only 36 per cent of companies conduct enterprise-based training.[23] The budget proposal for facilitation of internship opportunities for youth in top 500 companies can increase skilling opportunities for the labour force alongside meeting skill demand from industries.

[14] Discussion on Union Budget 2022-23 in the Rajya Sabha, February 11, 2022; Bose, S. and Bhanumurthy, N. R., 2015, Fiscal Multipliers for India. *Margin: The Journal of Applied Economic Research 9*(4), 379-401.

[15] RBI internal estimates.

[16] Asian Development Bank, 2017, Meeting Asia's Infrastructure Needs, February 1.

[17] CRISIL (2023). India's infrastructure spending to double to ₹143 lakh crore between fiscals 2024 and 2030, compared with 2017-2023. Press Release. October 17.

[18] Government of India, Annual Survey of Unincorporated Sector Enterprises (ASUSE), 2022-23; PIB, 2023, Contribution of MSMES to the Country's GDP, Ministry of Micro, Small & Medium Enterprises. December 11; McKinsey Global Institute, 2024, A Microscope on Small Businesses: The Productivity Opportunity by Country, May.

[19] Avendus, 2023, MSME Lending: Unlocking Potential, Realising Dreams, April.

[20] World Economic Forum, 2023, Future of Jobs Report, May.

[21] RBI internal estimates.

[22] KPMG-FICCI, 2023, Skill Financing in India, September.

[23] International Labour Organization, 2024, India Employment Report 2024: Youth Employment, Education and Skills.

VIII. Climate

Fulfilling India's updated nationally determined contributions (NDCs) to adapt to climate change will require investment of ₹30 lakh crore (US$ 0.36 trillion) over the period 2024-2030.[24,25] India's 'National Green Hydrogen Mission', which aims at a production capacity of 5 million metric tonnes per annum, will involve an initial outlay of ₹19,744 crore or US$ 2.4 billion[26]. Furthermore, the financing requirements to achieve the goal of becoming independent of fossil fuel imports by 2047 and achieving net zero by 2070 are estimated at US$10.1 trillion[27].

Drawing on the recent experience, sovereign green bonds (SGrBs) can be used to finance or refinance green projects. SGrBs could also provide a benchmark for the pricing of green bonds by private enterprise in order to attract globally mobile environment, sustainability and governance (ESG) funds. The inclusion of the renewable energy sector, upto certain limit, under priority sector lending (PSL) by the Reserve Bank of India (RBI) and the "Framework for Acceptance of Green Deposits" is expected to facilitate bank funding of green activities/projects. In conjunction, the RBI's draft disclosure framework on climate-related financial risks will work towards curtailing the misplacing of assets and misallocation of capital due to inadequate information. With 100 per cent FDI under the automatic route for the renewable energy sector and relaxed norms for external commercial borrowings for companies raising funds for green projects under the automatic route, the flow of climate finance, both domestic and international, is expected to increase, once a green taxonomy is developed and aligned with global standards.

[24] PIB, 2024: "India needs ₹30 lakh crore investment during FY 2024-2030 to meet its COP Climate Pledges", IREDA CMD at World Bank Webinar, Ministry of New and Renewable Energy, February 15.

[25] This investment will be required in manufacturing capacity for solar photovoltaic cells, electrolysers, wind energy equipment, batteries, transmission and conversion of waste to energy.

[26] PIB, 2023, National Green Hydrogen Mission, Ministry of New and Renewable Energy, January 3.

[27] Council on Energy, Environment and Water (2021). Investment Sizing India's 2070 Net-Zero Target. November 18.

IX. Digitalisation

India is undergoing rapid digital transformation. In the banking sector, digital banking platforms, mobile banking apps and online services are reducing cash dependency and furthering financial inclusion. Several FinTech companies and digital lending platforms offer quick and hassle-free loans to individuals and businesses, using data analytics and AI to assess creditworthiness.

The success of the Unified Payments Interface (UPI) has been a game-changer, making it one of the fastest-growing digital payment platforms globally. Other developments include the central bank digital currency (CBDC) project or e₹ which has the potential for transforming not only the payments landscape, but also the wider financial system. Digital supply chain finance (DSCF) is another emerging segment which seeks to integrate digital financial services into the supply chain, facilitating smoother transactions, reducing risks and enhancing overall efficiency. Digital technologies are also being used in insurance, capital markets and in expanding rural and urban connectivity and access to digital financial services.

According to the Ministry of Electronics and Information Technology, India could become a US$1 trillion digital economy by 2025, with digital financing needs of around 2.3 per cent of GDP.[28] Extrapolating from this near-term goal, the size of India's digital economy in 2047 would be in the range of US$ 5.4 to 6.9 trillion, and the digital infrastructure financing gap would work out to around US$ 124-159 billion by 2047.[29]

Conclusion

To conclude, India will need a transformation in its institutional architecture for intermediating the needs of finance of its aspirational trajectory. The

[28] India requires investment of up to US$ 23 billion by 2025 in physical digital infrastructure to support the growing demand of digital services and rising online traffic (Ernst and Young and Digital Infrastructure Providers Association (2022). Digital Infra Co – Unlocking the Tower Power. January).

[29] RBI internal estimates.

emphasis would be on financing physical, social and digital infrastructure, skilling, green energy, innovative manufacturing and MSMEs. At its core will have to be a robust corporate bond market with adequate secondary market trading liquidity and breadth. External financing will play an increasingly vibrant role in propelling investment and bringing in new technologies, provided the absorptive capacity in respect of external funding expands with the pursuit of reforms that enhance export potential and attract FDI. In India's quest for higher levels of development, financing should be seen as a facilitator, not an obstructer. As Walter Bagehot, the enunciator of the core dictum of central banking, wrote in his Lombard Street, 'the less money lying idle, the greater is the dividend'.[30] Circling back to where I began on the relationship between finance and growth, I can do no better than to quote the late Anand Chandavarkar, among the finest upholders of the hallowed tradition of practitioners of the economics profession in the RBI[31]: *"the debate about whether financial intermediation and development is a "demand-following" or a "supply-leading" phenomenon is comparatively subsidiary to the question: whether (countries) have the necessary insight and economic statesmanship to adopt appropriate policies?"*

Thank you.

[30] Bagehot, Walter, 1873, Lombard Street: A Description of the Money Market, New York: Scribner, Armstong & Co.

[31] Chandavarkar, A., How Relevant is Finance for Development?, IMF e-Library, https://www.elibrary.imf.org>article-A004-en. Jagdish Bhagwati described Anand Chandavarkar as "in a class by himself, a bibliophile, an intellectual, a gifted writer, and a superb economist, and all this without arrogance and with a lot of grace and charm."

*Managing the Challenges in Financing Infrastructure: The Road Ahead for NaBFID**

Shri M. Rajeshwar Rao

Distinguished guests, ladies, and gentlemen,

It is a pleasure to be here today at 'NaBFID's Infrastructure Conclave' which provides an excellent opportunity to interact with the participants who play a critical role in India's infrastructural journey.

Infrastructure can be thought of as the framework of facilities and systems that enables an economy to function efficiently that can then make possible optimal outcomes for the society at large. It is, therefore, a critical catalyst in fuelling a country's economic expansion and holistic development. It lays the foundation for a prosperous and equitable society by enhancing productivity, attracting investment, expanding markets, and improving quality of life. India is the fastest growing major economy in the world and as it embarks on an ambitious journey towards emerging as a global economic powerhouse, the role of solid and reliable infrastructure is becoming paramount. Recognizing this, India has made and committed substantial infrastructural investment during recent years via policy measures such as the National Infrastructure Pipeline (NIP), PM Gati Shakti National Master Plan, Bharatmala Pariyojana and Sagarmala Pariyojana. An allocation of ₹11.11 lakh crore for capital expenditure in the union budget this year, which is 3.4 per cent of GDP, seeks to reinforce this commitment.

Historically, public expenditure has been the cornerstone of infrastructure development in India. However, considering the limits up to which we can depend on public expenditure, the involvement of the private sector becomes crucial in funding the expansion of infrastructure, fostering industrial competitiveness, broadening access to a diverse talent base, and optimising the use of resources. It is in this context that a specialized institution like the National Bank for Financing Infrastructure and Development (NaBFID) with a specific mandate to support long term infrastructure financing in India, can play a transformative role in bridging the funding gap to catalyze participation of the private sector. Against this backdrop, let me briefly reflect on the challenges in infrastructure financing in general and the critical role that can be played by NaBFID in overcoming these challenges. I would also like to flag a few emerging issues that NaBFID should navigate to effectively deliver on its mandate.

Development Finance Institutions

Just to set the context, let me begin by sharing a brief perspective on the concept of development finance institutions (DFIs). In the immediate aftermath of the World War II, when the war-ravaged nations and newly independent countries embarked on the path of rapid industrial development, they quickly realised that the financial systems of the era were not equipped with the necessary skills in pricing and managing risks associated with financing projects with long gestation periods. To address these shortcomings, Development Finance Institutions (DFIs) were set up across the globe by governments to cater to the requirement of financial resources for the developmental effort. These institutions enjoyed government support for underwriting their losses and had access to cheap funds from multilateral and bilateral agencies that were guaranteed by the governments. However, as the governments

* Keynote address delivered by Shri M. Rajeshwar Rao, Deputy Governor at Infrastructure Conclave organised by National Bank for Financing Infrastructure and Development (NaBFID) on September 12, 2024 at Mumbai. Inputs provided by Usha Janakiraman, Akhilesh Gokhale and Shashank Srivastava are gratefully acknowledged.

eventually found it difficult to support them given budgetary constraints and considerations of market efficiency, many of these DFIs were repurposed[1].

Journey of Indian DFIs

The Indian DFIs too traversed a similar path as their global counterparts. It started with the establishment of IFCI in 1948 along with an eco-system of State Finance Corporations (SFCs), followed by the establishment of other term lending and re-finance institutions such as ICICI and IDBI to support development in various sectors of the economy. By providing long-term industrial finance, these organisations played an instrumental role in stimulating capital formation and supporting investment activities within the country for over four decades. However, elevated NPAs coupled with the increased competition from commercial banks, forced DFIs to re-align their strategies. As they found their business model to be unviable, some DFIs converted to commercial banks.

Challenges in Infrastructure Financing

Financing infrastructure presents a unique set of challenges requiring specialised expertise. To begin with, there is a need to have a consensus on the definition of infrastructure itself. The Rangarajan Commission (2001)[2] identified six characteristics of infrastructure sectors: natural monopoly, high sunk costs, non-tradability of output, non-rivalness in consumption up to congestion limits, the possibility of price exclusion, and bestowing externalities on society. Some of these characteristics stem from the inherent challenges of financing the infrastructure sector rather than the nature of the infrastructure itself. High sunk costs coupled with long gestation periods further complicate the financing of infrastructure projects and lead to asset-liability mismatches. Delays in approvals, clearances, land acquisition challenges, and breaches of agreements also add to the risks of project financing and cause further issues like cost overruns.

The interdependence of infrastructure projects further complicates financing, as unlocking the true potential of an infrastructure project is often contingent upon the availability of complementary infrastructure. This interconnectedness or interdependence can convolute the financing process, as impediments or delays in one project can trigger a cascade of causal effects, impacting all interconnected projects. Consequently, the successful fruition of an infrastructure project often hinges on the availability of synergistic infrastructure, comprehensive planning, meticulous synchronization, and proficient execution. This underscores the necessity for having an integrated approach to infrastructure development, where projects are not perceived in isolation but as components of an interconnected matrix.

The long lifecycle of infrastructure projects necessitates the involvement of different financial entities specializing in various phases of the project aiding the process by refinancing, transferring, and taking over of projects between these entities. A comparatively underdeveloped financial system, and a market for raising debt for the infrastructure sector, had made the sector reliant upon banks and NBFCs for its financing needs. However, the spike in the non-performing assets in the banks in the last decade and the debt default by a systemically important NBFC engaged in infrastructure finance, reduced the appetite of these financial intermediaries towards

[1] Examples include China Development Bank (CDB), African Development Bank (AfDB), International Finance Corporation (IFC), Korea Development Bank (KDB), Brazilian National Bank for Economic and Social Development (BNDES), Development Bank of Singapore (DBS) which have shifted focus from industrial development to include private sector development, regional integration, commercial banking in their mandates.

[2] A Commission set up by the Government in January 2000 under the Chairmanship of Dr. C. Rangarajan reviewed the statistical system and the entire gamut of Official Statistics in the country. As part of report, it presented its notion of infrastructure to differentiate from other sectors. (https://www.mospi.gov.in/82-notion-infrastructure)

infrastructure financing. The recent downward trajectory of Non-Performing Assets (NPAs) for banks, coupled with the enhanced resilience of Non-Banking Financial Companies (NBFCs), signifies a positive shift for the sector.

Measures by RBI to Support Infrastructure Finance

Recognizing the importance of infrastructure financing for economic development, the Reserve Bank of India (RBI) has implemented several significant measures within the framework of prudential regulations:

a. NBFCs[3] are permitted to exceed the specified credit exposure limit to a single borrower by an additional 5 percent, if the extra exposure is allocated to infrastructure projects.

b. While the banks are currently asked to ensure that promoter's contribution towards equity capital should come from their own resources and that they should not typically provide advances for purchasing shares of other companies, exceptions are made for financing the acquisition of promoters' shares in infrastructure projects.

c. Banks are also allowed to issue long-term infrastructure bonds to raise market funds. These funds are exempted from Priority Sector Lending requirements and are not subjected to CRR/SLR requirements.

d. Bank's lending to Infrastructure Investment Trust (InvITs) was permitted since 2019.

e. With a view to enable long term providers of funds to invest in the bonds issued for funding projects by corporates/SPVs, banks are allowed to offer Partial Credit Enhancement (PCE).

f. Further, banks, All India Financial Institutions (AIFI) and select NBFCs[4] can act as market makers in credit derivatives as part of RBI's efforts to put in place a market-enabling regulatory framework for the corporate bond market.

Notwithstanding the efforts taken by the Government and the regulatory framework enabled by the Reserve Bank, it is evident that more needs to be done to meet the country's infrastructure needs over the next few decades as we move on the path of aspiration to become a developed economy by 2047. Here an institution like NaBFID can, undoubtedly, play a pivotal role.

Role of NaBFID and Navigating the Challenges Ahead

National Bank for financing Infrastructure and Development or NaBFID was established to support the long-term non-recourse infrastructure financing in India including the development of the bonds and derivatives markets necessary for infrastructure financing. I would like to highlight some areas where we believe NaBFID should focus given its mandate.

Equity Structure and Funding

NaBFID has taken promising strides by sanctioning more than ₹1 lakh crore[5] by the last financial year, along with a substantial increase in the actual disbursal. The initial capital of ₹20,000 crore supplemented with the additional grant of ₹5,000 crore[6] should support loan book growth in the near term. Further, the growth in scale of large institutional investors such as life insurance companies, pension

[3] For entities outside NBFC-UL, all NBFC (other than NBFC-IFC) have exposure limit of 25 percent of their Tier-1 Capital while NBFC-IFC can have exposure up to 30 percent of their Tier-1 Capital. For NBFC-UL, exposure is capped at 20 percent and 25 percent of its eligible capital base for NFBC (other than NBFC-IFC) and NBFC-IFC respectively.

[4] Master Direction – Reserve Bank of India (Credit Derivatives) Directions, 2022.

[5] NaBFID Annual Report.

[6] Source: PIB Press Release dated Feb 29, 2024 on review of NaBFID's performance by Hon. Minister of Finance.

funds *etc.*, presents an opportunity for NaBFID to secure reliable long-term funding for their financing needs, offering a 'natural fit'. Consequently, it should also strive for a strong credit rating which will help it to tap both domestic and global sources of funding in future.

It is also necessary that over the medium-term, plans for self-sustainable operations, under a business model that is not reliant on continuous government support, or regulatory dispensations would need to be in place. The dynamic nature of our times necessitates agile strategies for institutions with focus on sectors prioritized by the government, thereby complementing overall governmental efforts, while retaining the required flexibility to pivot its strategies as per the changing needs of the economy.

Governance

In this context the role of Governance is crucial. RBI has increasingly underscored the significance of governance and assurance functions within financial institutions for the long-term sustainability and growth. The role of the Board is critical in guiding the future path of the institution and attracting long term potential institutional investors. An independent, skilled, and professional management is important enabler for this. As NaBFID is still in its formative phase, the focus must be on equipping itself with the necessary resources, skills and knowledge through concerted efforts on human capital development, institutional strengthening, and adoption of best practices. As with any other entity in the financial services sector, NaBFID must particularly look to strengthening of risk management and the establishment of robust assurance systems from the outset, fostering a sound risk culture going forward.

Developing Expertise and Reputation in Project Appraisal and Evaluation

While NaBFID Act provides various enabling features to attract the best talent and get the best expertise, NaBFID would need to quickly develop project appraisal expertise and establish itself as a leader setting benchmarks in the market for its project selection, appraisal and monitoring to give comfort to lenders and stakeholders.

Learning from Past Mistakes

The absence of a strong post-disbursal monitoring of credit utilization was perhaps a key design failure in the erstwhile DFIs which resulted in sub-optimal outcomes[7]. There is a need to learn from the past episodes and set up dedicated units tasked with the ongoing monitoring and evaluation of funded projects through comprehensive and frequent surveys and assessments, which will not only enable dynamic appraisals for subsequent disbursements but also ensure that the finance and tangible progress in projects are in sync with each other. Furthermore, necessary mechanisms must be put in place for dealing with the liquidation & resolution of the bad assets and sufficient expertise must be built internally towards this end.

Sustainable Finance as Good Practice

There cannot be a more pertinent time than this to stress the importance of the climate risks and the required mitigation. We are witness to the risks that are manifesting and affecting various facets of the economy. The biggest challenge faced by EMDEs, and more so India, is the availability of adequate financing for the development of technologies and requisite infrastructure to cater to the issue of climate change and build a sustainable economic system. Technology and infrastructure will be the fulcrum for driving the crusade against climate change and fostering sustainable growth in the future. Low-Carbon Climate Resilient (LCCR) infrastructure is the way ahead, and the world is looking forward to it in terms of dealing with the climate-related risks.

7 Source: EAC-PM Working Paper Series (EAC-PM-Wp/08/2022) NaBFID - A Vehicle of Infrastructure Financing: Challenges and Opportunities.

Specialised financing institutions like NaBFID can contribute significantly to climate finance[8] and LCCR infrastructure development in the economy by facilitating the investment of public and private funds towards these projects. Specifically, these institutions can provide access to capital through concessional and non-concessional lending, equity investment, climate-specific funds, public-private partnerships, risk-sharing instruments, specific grants and assistances, and technical assistance.

Given the need for supporting technology-enabled ecosystem across the life cycle of infrastructure projects, there is also a requirement to develop specific expertise and focus on fostering an ecosystem of sustainable finance in the country. It can specifically work towards mainstreaming the LCCR development and enable the country to meet its emission targets. It can also aid in symbiotic infrastructure development that has beneficial after-effects on mitigating climate change.

Developmental Role

Let me reflect a bit on as developmental role for the NaBFID as a new age DFI. In addition to its financial objectives, NaBFID can play an important role in several crucial developmental objectives *viz.*, bond market development and the provision of technical assistance/ consultancy services for infra projects. It can strive to become a market maker and provide adequate liquidity to the investors. Further, to ensure that the custodians of the long-term funds *viz.* pension and insurance funds derive comfort in lending to the infra-sector to match their long-dated liabilities, it can think of offering innovative solutions like providing partial credit enhancements through rating upgrades or providing first-loss default guarantees. It could play a critical role in facilitating loan syndication for large ticket loans and a lead role in supporting the SLMA in development of credit markets as well. As NaBFID develops its internal rating model for credit appraisal, it may also be able to offer products such as credit default swaps (CDS) which would go a long way in ushering confidence in the bond market space.

Conclusion

As Indian economy continues to grow, it is imperative that infrastructure is seen as a factor of production like labour and capital to attract necessary focus considering its multiplier effects in capacity building, developmental outcomes, and societal well-being. While the historical challenges and lessons are instructive, I feel that NaBFID has a unique opportunity to play a transformative role in shaping India's infrastructural landscape. The journey ahead necessitates a delicate balance between financial prudence, developmental impact, and long-term vision. As a new generation DFI, NaBFID must strive to remain at the forefront for the task of driving innovation and ensuring that infrastructure development is inclusive and sustainable. I am sure during today's conclave; the delegates will have fruitful discussions on some of these issues.

I extend my best wishes for the success of the conclave.

Thank you and Namaskar.

[8] UNFCC (United Nations Framework Convention on Climate Change) defines climate finance as local, national, or transnational financing–drawn from public, private and alternative sources of financing–that seeks to support mitigation and adaptation actions that will address climate change.

*Deposit Insurance: Keeping Pace with the Changing Time**

Shri M. Rajeshwar Rao

Deputy Governor Swaminathan J, distinguished delegates from International Association of Deposit Insurers (IADI) and global deposit insurers, board members and officers of Deposit Insurance and Credit Guarantee Corporation (DICGC), officers of RBI, ladies and gentlemen, good afternoon to all of you. At the outset, I would like to thank IADI and DICGC for inviting me for delivering the valedictory address at the IADI Asia-Pacific Regional Committee International Conference being held in the beautiful city of Jaipur.

The theme of the Conference *'Navigating the evolving financial landscape: Emerging Challenges for deposit insurers and the significance of crisis preparedness'* is quite contextual for these times, given the rapid innovations and digitalisation seen in the financial services, the expansion of the footprints of financial sector globally as well as the increasing inter-connectedness of the financial services entities that are transforming the landscape for the financial services around the world.

Over the last two days, you would have had enriching panel discussions with diverse perspectives, expert insights, and thought-provoking debates on the emerging challenges and risks that impact the deposit insurers. Whether it is the emergence of central bank digital currencies (CBDC), tokenised deposits, climate change related risks or the future financial systems like Finternet, the evolving and futuristic developments are likely to change the global financial landscape and in turn will transform the deposit insurance function. The key issue which then we need to consider is how we can make the deposit insurance function future ready. The challenges like Finternet, tokenisation of deposits, CBDC/digitalisation *etc.* highlights the need for financial ecosystem to have enhanced technological backbone to support the financial sector activities. But this does not in any way deflect the deposit insurers from their core mandate of providing a backstop for the depositors so as to generate confidence in the financial sector entities who support the real sector and also promote financial stability. As I see it, we should explore the need to examine whether deposit insurance should expand vertically (*i.e.*, increase the cover offered) or horizontally (increase the nature of entities to be covered through insured products) and also explore its role along a third dimension reflecting fintech innovations which changes the way the depositors' liabilities reside within the financial services sector.

In the light of these challenges, let me avail this opportunity to share a few thoughts with an Indian perspective on specific issues, focussing amongst others on adequacy of insurance coverage, funding, risk-based premium, coverage of digital products, timeliness of payments and communication strategy *etc.* which we collectively need to mull on and look for potential solutions going forward.

History of Deposit Insurance in India

Just to set the context for these issues, let me briefly share a historical perspective of deposit insurance in India. Deposit insurance, as we know it today, was introduced in India in 1962. At that point in time, we were the second country in the world to introduce such a scheme after the United States of America (where it was introduced in 1933). We started off with a Deposit Insurance Corporation (DIC). The DIC was later merged with another entity

* Valedictory address delivered by Shri M. Rajeshwar Rao, Deputy Governor on August 14, 2024, at IADI Asia-Pacific Regional Committee International Conference 2024 hosted by Deposit Insurance and Credit Guarantee Corporation (DICGC) at Jaipur. Inputs provided by Latha Vishwanath, Abhinav Pushp, Amruta Prabhu and Mathiyazhagan K are gratefully acknowledged.

the Credit Guarantee Corporation of India Ltd (CGCI). in 1978 to form the DICGC. The merger was intended to bring together the deposit insurance and credit guarantee functions, creating a more cohesive and efficient system. Consequent to the liberalisation of the financial sector, the Credit Guarantee Scheme was discontinued in April 2003. Today deposit insurance remains the principal function of DICGC and the policy objective is to protect the 'small depositors' of banks from the risk of loss of their savings arising from probable bank failures. The aim is to increase the confidence of the depositors in the banking system and facilitate the mobilisation of deposits to accelerate growth and development. When the deposit insurance scheme was introduced in 1962, 287 banks were registered as insured banks, this number has gone up to 1,997 as of end March 31, 2024[1].

Adequacy of Insurance Coverage

An important issue to my mind is going to be the issue of adequacy of insurance coverage for customer deposits. According to an IADI survey[2], the median deposit insurer covers around 41 per cent of the value of eligible deposits. The number for India is slightly higher at 43.1 per cent. In India, the number of fully protected accounts constitute 97.8 per cent as on March 31, 2024 of the total number of accounts in the banking system as against the international benchmark of 80 per cent. While the scope and coverage appear satisfactory at this juncture, there are likely challenges going forward.

Let me elaborate. Today we count India to be amongst the fastest growing large global economies and this healthy growth rate is expected to continue in the near future. A growing and formalizing economy can naturally be expected to see a sharp increase in both primary and secondary bank deposits, driving a wedge between the desirable insurance reserve requirement and the available reserve. At present, limited coverage option is adopted in India with uniform deposit insurance coverage limited to an amount of ₹5,00,000 per depositor of each insured bank. Considering multiple factors like growth in the value of bank deposits, economic growth rate, inflation, increase in income levels *etc.*, a periodical upward revision of this limit may be warranted. This means that the deposit insurer has to be mindful of the additional funding and needs to work out suitable options to meet the same.

Funding and Risk Based Premium

This then brings up the issue of funding the deposit insurance system and whether the premium paid by the financial institutions should be based on their respective risk profile. Globally, more than 96 per cent[3] of the deposit insurance systems, including the one followed by DICGC in India, are *ex-ante* funding systems wherein deposit insurer maintains a deposit insurance fund, primarily financed by premium collected from the insured institutions and the fund is used to pay the depositors in the event of a bank failure.

The deposit insurers collect premium from member financial institutions either at a flat rate or a differentiated rate based on an individual bank's risk profile. Although flat rate premium structure has the advantage of being relatively easy to understand and administer, it does not consider the level of risk that a bank poses to the deposit insurance system and can be perceived as antithetical to the concept of insurance. The primary objective of differential premium systems is to provide incentives for banks to avoid excessive risk taking, minimise moral hazard and introduce greater equity into the premium assessment process. Keeping this objective in view, many jurisdictions are

1 RBI Annual Report 2023-24.

2 IADI Report- The 2023 banking turmoil and deposit insurance systems - Potential implications and emerging policy issues

3 IADI Report -Deposit Insurance in 2024 – Global trends and key issues- (www.iadi.org).

transiting towards Risk Based Premium (RBP). As per IADI, around 55 per cent[4] of deposit insurers use a differential premium system.

In India,[5] several committees, including the Narasimham Committee on Banking Sector Reforms (1998) and the Capoor Committee on Reforms in Deposit Insurance in India (RBI, 1999), Committee on Credit Risk Model (2006) constituted by the DICGC, and the Committee on Differential Premium Systems (2015) had recommended RBP, but that recommendation could not be adopted. IADI Core Principle 9 prescribes certain conditions that need to be ensured if the deposit insurer uses differential premium systems, such as ensuring that the system for calculating premiums is transparent; the scoring/ premium categories are significantly differentiated; and the ratings and rankings resulting from the system pertaining to individual banks are kept confidential. The introduction of RBP to address the issue of fairness in pricing of insurance is a natural corollary. However, it is extremely data driven and relies on a robust model for arriving at the rating of the insured bank and the corresponding insurance premium which in turn depends on the deposit insurance model adopted by a jurisdiction.

Given the diversity in Indian banking sector, ranging from scheduled commercial banks with global operations to co-operative banks operating as a single branch model with limited computerised operations, meeting the data requirements poses a great challenge. There is also a dilemma that introduction of a RBP can render the riskier institutions more vulnerable to deposit flight and shorten the distance to failure. However, we also need to recognise that with greater innovations in product offerings by banks newer risks which can impact deposit growth, the demand for higher coverage for deposits, Risk Based Premium would be a better option for the deposit insurer to ensure robustness of its finances and also enhance its capability to operate in changed financial milieu. It is therefore important for us to carefully examine the option of adopting risk-based deposit insurance cover.

Paybox Plus Mandate for Resolution

In addition to reimbursement of insured deposits, some deposit insurers also provide financial support in cases of mergers of banks. In India, the DICGC Act provides a limited resolution function in terms of financial support in the case of merger of a weak bank with a strong bank after the approval of the merger by the regulator. DICGC assists in mergers by meeting the shortfalls in depositors' claim up to the coverage limit when the acquiring bank is unable to meet this liability in full. Recently, DICGC provided financial support in respect of insured deposits claims of an Urban Co-operative Bank (UCB) pursuant to its amalgamation with another bank. Given the importance of the UCB sector in India, as it has the potential of driving financial inclusion and credit delivery to those with limited means, the role of DICGC in supporting consolidation in this sector is a matter which requires greater focus under least-cost resolution principles.

Insurance Cover for Digital Products

The rapid technological developments in the financial sector have resulted in introduction of various innovative digital financial products and services for the customers. The countries with deposit insurance generally adopt three different approaches for digital "deposit-like" products based on their market structure, legal and regulatory frameworks and their assessment of risks associated with the widespread adoption of these products[6]. While the

[4] IADI report- The 2023 banking turmoil and deposit insurance systems - Potential implications and emerging policy issues

[5] RBI Annual Report- 2020-21- Box VI.6.

[6] Research Paper- Deposit Insurance for Digital Financial Products and Services by Dr. Andreas J. Zimmermann Prof. Dr. Walter Farkas, November 2021, revised September 2022 by Lucas Metzger (esisuisse).

direct approach clearly defines the digital deposit-like products as insured deposits, under the exclusion approach, these accounts are explicitly not covered by the deposit insurance system due to digital payment services accounts being regarded as primarily instruments of temporary value storage to make payments or transfers. The third approach provides deposit insurance cover to these products indirectly if the "float" collected by providers of digital payment services is placed in pooled custodial accounts with an insured depository institution. However, in India, the definition of 'deposit' has an inclusive character to cover all unpaid dues to a depositor by whatever name called.

The innovations in financial sector are generally facilitated by the regulators as they play a critical role in expanding the reach of financial products and services to the hitherto excluded sections of the population. These innovations have also immensely benefited the financial inclusion initiatives. Even as digital products become more pervasive, there would be a need to consider whether coverage of such digital deposit-like products should also be an option for the Deposit Insurer. A committee formed by RBI for review of customer service standards in its regulated entities in its recent report has recommended extending deposit insurance cover to money kept in wallets of pre-paid card issuers. While there is clearly no "one-size-fits-all" solution to cover digital products, we need to choose a suitable approach which is consistent with the primary objective of the deposit insurance function.

Incidentally, the uncertainty associated with climate change related financial risks is higher than ever before and materialising at a fast clip. Climate change may increase the default risk of the financial institutions by impacting the credit quality and repayment capacities of the borrowers. The impact of climate change and risks related therewith on deposit insurance has remained largely undealt with. A 2022 survey[7] of IADI members indicated 60 per cent of deposit insurers do not have a formalised Environment, Social and Governance (ESG) policy that goes beyond existing legal obligations. Therefore, assessing the impact of climate change on risks to deposit insurers and framing a comprehensive policy incorporating elements of climate change may also need to be carried out in all jurisdictions.

Prompt Access to Insured Deposits

A key function of a deposit insurance system is to give depositors prompt access to their insured deposits when a bank is liquidated. In India, the DICGC Act was amended in 2021 to empower DICGC to make interim insurance payment to depositors of banks who are under All-Inclusive-Directions (which restricts the depositors from accessing their deposits) imposed by RBI, without waiting for liquidation of the bank. Unlike the situation prior to the amendment, depositors of stressed banks need not wait for prolonged period for repayment of their deposits.

The timely settlement of claims may become challenging on account of delay in submission of the list of eligible depositors in time, non-availability of complete information with the bank and/or lack of alternate bank accounts of these depositors, particularly in case of smaller co-operative banks. We, therefore, need to contemplate further steps that can be taken to make this process more streamlined and less dependent on the officials of the stressed banks so that eligible depositors can access their funds with the least amount of disruption.

The failure and near-failure of few banks in USA and Europe in 2023, were seminal moments for regulators around the world. While the failures were apparently due to their liquidity mismanagement, flawed business models and concentrative focus on specific class of depositors, it does spark a debate on

[7] IADI Survey Brief on ESG and Deposit Insurance: Taking Stock and Looking Ahead by Bert Van Roosebeke and Ryan Defina.

the financial stability risk arising from a confluence of factors including the quantum of uninsured deposits, adequacy of deposit insurance coverage as well as the role of digitalisation of financial services and the role of social media in the episode. As the deposit run was triggered by the spread of information through social media and the withdrawal of the deposits by the depositors in a coordinated manner at an unprecedented speed, the crisis has brought to fore not just the impact of social media on behaviour of depositors, but also the importance of safety nets such as insurance coverage, the liquidity risk management policies adopted by the insured institutions in the light of changed depositor behaviour and availability of substantial resources with the deposit insurer for effective resolution. It has led to a significant number of deposit insurers and authorities re-evaluating the appropriateness of the scope and level of coverage to minimise the risk of bank runs.

On the face of it, having full insurance cover for deposits appears to be ideal for depositors and also help to avoid bank runs. However, this is likely to be a suboptimal solution given the associated moral hazards and financial non viability. At the same time, we could also examine the possible economic viability of an alternate targeted insurance approach with full coverage for certain sections of the customers like small depositors, senior citizens *etc.* or pools deposits of smaller depositors based on a careful evaluation of the constructs, costs and benefit of such an approach.

Public Awareness

As I have alluded to previously, with the availability of round the clock banking services and increasing influence of social media, the withdrawal of deposits has been enabled much faster than before. Sometimes, even a misinformation may lead to a frenzied reaction from the depositors. Therefore, in order to mitigate the impact of false information, public awareness on deposit insurance needs to be strengthened. Again, citing a recent IADI sponsored study, it is evident that public awareness of deposit insurance can decrease the propensity of depositors to run on their bank by 67 per cent.[8] The deposit insurers must therefore take initiatives to increase awareness about deposit insurance, as educating depositors about the deposit insurance can be of great help in restricting the instinctive response of depositors to rush and withdraw their deposits, which eventually helps in minimising the disruption to the financial system. A nuanced exploration of the best communication strategy which meets the requirement of diverse customer base and its effective implementation would be warranted.

Conclusion

To conclude, let me re-emphasise the fact that deposit insurance and deposit insurers are essential components of a stable and trustworthy financial system. They not only help in maintaining public confidence by protecting depositors but also play a crucial role in promoting overall economic growth. By providing a financial safety net, the deposit insurers contribute significantly to financial stability. It has become imperative for the regulators and the deposit insurers to realign their policies and regulations to enable banks to better manage and enhance their risk management capabilities, especially liquidity risk management. The rapidly changing financial landscape will keep on throwing new challenges in the field of deposit insurance but we need to treat these challenges as opportunities to grow, learn and evolve. It takes a very alert and nimble deposit insurer to keep pace with the changing times.

So, stay alert and be nimble.

Thank you.

[8] IADI Report- The 2023 banking turmoil and deposit insurance systems - Potential implications and emerging policy issues.

*Financing for Sustainable Agriculture**

Shri Swaminathan J.

Distinguished Guests, Dr R. C. Agrawal, Deputy Director General, Indian Council for Agricultural Research; Dr Sunil Gorantiwar, former Director of Research, Agricultural University, Rahuri; Principal, CAB; senior officials from Financial and Academic Institutions; colleagues from RBI; ladies and gentlemen. A very good morning to all of you.

It gives me immense pleasure to address you all today at this international research conference on the topical subject *"Sustainable Financing for Food Security and Farm Income - Opportunities, Challenges, and the Way Forward"*. It is even more fulfilling when it is being done as part of the celebrations of the 90th year of RBI's inception.

Climate change and sustainability are two pressing issues that have captured global attention. In recent years, we have witnessed a surge in extreme weather events, including severe droughts, cloudbursts, flooding, landslides, receding coastlines, and the alarming melting of Arctic ice and Himalayan glaciers. Wildfires have become more frequent and intense. Tragically, the most vulnerable communities–those who have perhaps contributed the least to climate change–are bearing the brunt of its devastating impacts[1].

In this context, sustainable agriculture emerges as a crucial solution. Sustainable agriculture refers to farming practices that meet today's food needs while preserving resources for future generations. This means adopting methods that protect the environment, reduce reliance on chemical inputs, use water and land efficiently, and ensure social and economic equity for farmers.

Looking ahead, achieving agricultural sustainability will be a key priority for all economies where agriculture is a major sector. This will involve transforming conventional farming practices into technology-driven systems, enhancing agricultural commodities' processing and preservation techniques, contributing to value addition at the farm level. We also need to align crop production systems with climate-smart agriculture. And there is a need to ensure adequate and timely finance as well to sustain all of these.

Challenges faced by Indian Agricultural Sector

In the Indian context, agriculture is not just an economic activity; it is the foundation of our nation's food security and livelihood. The sector employs a significant portion of our population. Yet, despite its critical importance, Indian agriculture continues to face several structural challenges. Let me briefly elaborate on some of these challenges that are holding back the sector from realising its full potential.

Low Productivity

Firstly, India's agricultural productivity remains low compared to many crop-producing nations. This low yield–measured as the quantity of crop produced per unit of land–is due to various factors, including a lower rate of seed replacement[2], inefficient fertiliser use and limited adoption of advanced technologies.

Predominance of Small and Marginal Landholdings

Secondly, the overwhelming dominance of small and marginal landholdings creates its own set of challenges. This fragmented land structure

* Keynote Address by Shri Swaminathan J, Deputy Governor, Reserve Bank of India at the International Research Conference hosted by the College of Agricultural Banking (CAB), Pune on September 11, 2024.

[1] Climate Change 2023, Synthesis Report, Intergovernmental Panel on Climate Change (IPCC).

[2] Seed Replacement Rate is the percentage of area sown out of total area of crop planted in the season by using certified/quality seeds other than the farm saved seed.

negatively impacts the viability of farming. With lower marketable surplus and holding capacity, small farmers often have limited bargaining power, face higher transaction costs, and struggle with the marketing of their produce. These factors further hinder their ability to invest in new technologies or improve productivity.

Dependence on Monsoons/Rainfall

Thirdly, India's heavy reliance on rainfed agriculture is another critical challenge. Approximately 45 per cent of the country's agricultural land remains dependent on rainfall, making farmers highly vulnerable to the unpredictable nature of the monsoon. This over-reliance on rainfed farming leads to inconsistent agricultural output, exposing farmers to significant risks. The challenge lies in optimising the use of existing water resources while expanding irrigation coverage. Ensuring more predictable and stable agricultural output will require a focus on efficient water management, irrigation infrastructure, and climate-resilient farming practices.

Inadequate Agricultural Processing capacity

Fourthly, limited processing infrastructure poses a significant barrier to agricultural growth. Without adequate processing and preservation facilities, a large portion of agricultural produce is lost post-harvest, reducing the overall supply and farmer incomes. Low value addition means farmers often receive lower prices for their raw produce, missing out on the potential earnings from processed goods. Additionally, the lack of processing capabilities hampers access to both domestic and international markets, limiting export opportunities and reducing the competitiveness of Indian agricultural products globally.

Low Level of Farm Mechanisation

Fifthly, the low level of farm mechanisation poses a significant obstacle to enhancing agricultural productivity in India. Labour shortages during peak farming seasons, combined with demand for higher wages, further aggravate this issue, making it difficult for farmers to maintain optimal output. Additionally, Indian agriculture faces a demographic challenge, with the average age of farmers now at 50.1 years, underscoring the need to attract younger generations to the sector. Modern farming techniques and increased mechanisation will not only boost productivity but also play a pivotal role in empowering women. By alleviating the physical demands of traditional farming, mechanisation and agro-processing can open up new opportunities for women, enabling them to make a greater impact on agricultural productivity and the broader rural economy.

Agriculture and Climate Change

When we consider the various sectors of the Indian economy, the agricultural sector stands out as one bearing the heaviest burden of climate change. Today, agriculture is at the confluence of three of the greatest challenges of the 21st century – sustaining food and nutrition security, adaptation and mitigation of climate change and sustainable use of critical resources such as water, energy and land.

Climate change is already reshaping traditional agricultural practices and even affecting our food choices today. For instance, South Korea's famous kimchi, traditionally made with napa cabbage grown in cooler mountainous regions, is under threat as rising temperatures spoil the cabbage crop. Similarly, French winemakers are concerned about the future of Merlot due to increasing heat, and lobster populations off the US east coast are shifting to cooler waters, impacting local industries. The impact is far-reaching highlighting the urgency for farming and the food industry to adopt greener practices and contribute to climate mitigation[3].

[3] Edit, T. (2024, September 6). Kimchi bites. Times of India Blog. https://timesofindia.indiatimes.com/blogs/toi-editorials/kimchi-bites/(last accessed on September 8, 2024).

Financing for Sustainable Agriculture

While sustainable agricultural practices are necessary, they are often more expensive to implement than conventional methods. Sustainable practices like organic farming, climate-smart technologies, and modern irrigation systems may seem costly upfront, but they offer long-term benefits by improving productivity, resilience, and environmental stewardship. Without accessible and affordable financing options, the much-needed shift to sustainable farming practices will remain a distant dream for many.

Many farmers, especially those in rural or underserved regions, struggle with economic, institutional, and social constraints that limit their access. Therefore, sustainable finance should not only promote environmentally friendly practices but also ensure that financial resources are available to the farmers who need them most, providing equitable access to tools, technology, and knowledge.

Institutional credit to agriculture reached an all-time high of ₹25.10 lakh crore during 2023-24[4], reflecting the importance of financing in driving agricultural growth. Approximately 7.4 crore active Kisan Credit Cards[5] have emerged as vital tools for providing timely and flexible credit, especially for short-term needs. However, addressing regional disparities in access to credit remains critical. If we can ensure that all farmers, irrespective of their location, have access to adequate and timely financing, we will be better positioned to address the challenges of sustainability and resilience in agriculture.

Traditional lending practices have certain limitations in catering to the needs of the agricultural sector. Agriculture is inherently seasonal, and returns are often delayed or reduced. Innovative financial solutions are necessary– ones that are flexible and tailored to the specific needs of farmers. This coupled with crop insurance products that cover weather-related risks can help mitigate the uncertainties farmers face. Additionally, blended finance models– where public funds are used to leverage private investments–can be instrumental in providing the necessary capital for sustainable transitions. This would not only mobilise resources from multiple sources but also distribute the risks and returns more equitably.

In this context, I would like to highlight five solutions which could go a long way in addressing the issue of financing sustainable agriculture.

Role of Collectives

Farmer Producer Organisations or FPOs have emerged as a crucial mechanism for addressing the specific challenges faced by small and marginal farmers. Their growth has been significant, with over 24,000 Farmer Producer Companies (FPCs) formed by March 31, 2023[6].

These organisations are instrumental in scaling up the adoption of sustainable farming technologies developed by research institutions. By aggregating farmers, FPOs enhance their bargaining power as well as improve their access to technology and increase market opportunities for their output.

To support financing to these organisations, RBI regulations provide that loans to FPOs engaged in agriculture and allied activities, up to an aggregate limit of ₹2 crore per entity, qualify as priority sector lending. If FPOs engage in farming with assured marketing of their produce at predetermined prices, loans of up to ₹5 crore qualify as PSL.

Value Chain Financing

The value chain financing model integrates various stakeholders–farmers, aggregators, traders,

[4] NABARD Annual Report – 2023-24; PP80.

[5] NABARD Annual Report – 2023-24; PP10.

[6] NAFPO. 2023. Farmer producer organisations in India: state of sector report. National Association of Farmer Producer Organisations, New Delhi.

processors, and financial institutions–into a coordinated system that improves efficiency across the agricultural process. With changing consumer preferences towards branded, well-packed, safe, and healthy food, there is a need for increased focus on structured agriculture value chains and their financing. For financial institutions, access to various participants in the value chain offers additional business opportunities.

Warehouse Financing

Agricultural price volatility is a recurring challenge in India, often forcing farmers to sell their produce at lower prices during peak harvest due to immediate financial needs. Warehouse receipt financing allows farmers to store their produce in warehouses, delaying the sale until market prices become favourable. During this waiting period, farmers can access much-needed funds through commodity financing from banks. This form of financing helps stabilise the prices of agricultural commodities, helps farmers in managing marketing risks, while providing banks with diverse financing opportunities. However, for this form of business to flourish, the country needs more robust third-party warehousing agencies.

Financing Technology Adoption

Technology adoption in agriculture offers immense potential to boost productivity and sustainability. Expanding irrigation infrastructure, promoting micro-irrigation systems, and encouraging farm mechanisation can significantly increase farm income and improve efficiency. Currently, the area under micro-irrigation in India is just 12.54 million hectares, *i.e.* about 9 per cent of the net sown area[7], indicating a large scope for expansion. Convergence with Centrally Sponsored Schemes such as "Per Drop More Crop" can increase the flow of institutional credit for installing micro-irrigation systems.

Protected cultivation, which can increase crop yields by 5 to 8 times per unit area, also offers substantial benefits such as saving 50 per cent on water and 25 per cent on fertilisers and pesticides. With only about 3 lakh hectares under protected cultivation, there is a significant opportunity to expand this practice using modern techniques which enable year-round cultivation of high-value crops, irrespective of climatic conditions.

Capital Formation through Convergence with Government Schemes

The Indian government is driving capital formation in agriculture by promoting investments through capital subsidy schemes and interest subventions. The ₹1 lakh crore Agri-Infrastructure Fund supports institutional credit in alignment with schemes like PM-KUSUM for solar pumps, the Sub-Mission on Agricultural Mechanisation (SMAM), and the Mission for Integrated Development of Horticulture (MIDH). Other initiatives, such as the Agricultural Marketing Infrastructure (AMI) and programs like Pradhan Mantri Formalisation of Micro Food Processing Enterprises Scheme (PMFME), Animal Husbandry Infrastructure Development Fund (AHIDF), and Pradhan Mantri Matsya Sampada Yojana, further enhance agricultural growth. Converging institutional credit with these schemes will help scale up modern technologies and strengthen the agricultural ecosystem.

Leveraging Technology

Technology and data-driven insights can enhance financing models. Financial institutions must leverage technology to improve access to credit and mitigate risks. Collaboration with digital platforms that track crop yields, weather patterns, and soil health can provide real-time data that financial institutions can use to assess risk more accurately. These platforms can also help farmers make more informed decisions and boost productivity while reducing their environmental impact.

[7] Agricultural Statistics at a Glance, 2022.

The RBI has taken several initiatives to facilitate digital public infrastructure and make institutional arrangements apart from policy initiatives aimed at promoting innovation while ensuring safety and stability. Last year, RBI announced the Public Tech Platform initiative through the RBI Innovation Hub, aiming to provide frictionless credit by enabling the seamless flow of digital information to lenders. This open, plug-and-play digital platform, now renamed Unified Lending Interface allows financial sector players to connect effortlessly. Recently, NABARD collaborated with RBI Innovation Hub to integrate the e-KCC loan origination system into the platform, significantly reducing the turnaround time for agricultural loans from weeks to minutes.

Way forward

In conclusion, the challenges are significant, but so are the opportunities. Going forward, two critical issues must be addressed: promoting sustainable agriculture and ensuring adequate funding for it. Institutional credit has grown significantly, but regional disparities persist. Value chain financing and warehouse financing offer potential solutions, while government initiatives like the Agri Infrastructure Fund, PMFME, and AHIDF are helping drive agricultural growth. A concerted focus on addressing regional imbalances, enhancing credit access, and integrating value chain financing is crucial for a more sustainable and resilient future for Indian agriculture.

I hope that this conference will provide a valuable opportunity to the delegates from academia, researchers, and financial institutions to delve deep into the various issues facing the Indian Agricultural Sector, analyse it in the backdrop of emerging climate change challenges and come up with alternate solutions, approaches and policy suggestions.

With this, I would like to convey my best wishes for fruitful exchanges over the next two days to explore solutions that can shape the future of sustainable agriculture and its financing.

Thank you.

*Transforming Financial Landscapes: Building Resilience for Economic Stability**

Shri Swaminathan J.

Shri V Anantha Nageswaran, Chief Economic Advisor, Ms. Shereen Bhan, Managing Editor, CNBC TV 18, Ms. Latha Venkatesh, Executive Editor CNBC TV 18, Managing Directors & Chief Executive Officers of Banks and Non-Banking Financial Companies, leaders from the Fintech industry, distinguished guests, ladies, and gentlemen. A very good evening to all of you.

I am indeed delighted to be present here amongst you today to speak to you about the evolving banking landscape and the imperative need to build and sustain financial sector resilience if India is to achieve her aspirations of becoming a developed economy by 2047.

Importance of Financial Stability for Economic Growth

In a developing economy like India where private capital sources are limited, it is the banking system led financing model that comes to drive capital expenditure. The financial institutions, therefore, must maintain a sound financial position and strong balance sheet to support significant investments in infrastructure, industry, and innovation to fuel India's economic growth.

Thankfully, the financial health of both corporates and financial institutions is at its strongest level in decades. However, for sustaining this financial stability, the sector must prioritise financial and operational resilience alongside strong corporate governance. Further, banks and financial institutions need to strengthen their internal defence mechanisms, namely their assurance functions, cultivating a culture of compliance and fair play to ensure they retain the regulators', and more importantly, their customers' trust, at all times.

The Regulator is an Enabler

Towards ensuring as well as preserving financial system stability, the Reserve Bank has been taking many definitive steps. Today, I would like to walk you all through a few of those enabling steps by the Reserve Bank.

Consultative Approach to Regulations

Globally, and especially in India, regulatory approaches have evolved to become more consultative, incorporating stakeholder feedback to develop balanced and effective regulations. The establishment of the Regulation Review Authority 2.0[1] in 2021 is a testament to RBI's commitment to streamline regulatory instructions, reduce compliance burden, and eliminate obsolete requirements, thus fostering a more efficient regulatory environment.

Having served as the Chair of the Advisory Group representing the industry at that time, I can personally attest to the regulator's responsiveness and sensitivity of the industry's concerns.

The implementation of various recommendations of RRA 2.0, coupled with the tireless efforts of the many Inter Departmental groups within Reserve Bank, has already led to the issuance of several harmonised, consolidated and updated Master Directions as well as withdrawal of over 1,000 circulars, apart from doing away with many regulatory and supervisory returns that have become redundant. These measures have significantly reduced the compliance burden on the regulated entities.

* Keynote Address by Shri Swaminathan J, Deputy Governor, Reserve Bank of India - August 30, 2024 - at the 'Banking Transformation Summit - Season 2' organised by CNBC TV 18 in Mumbai.

[1] Previously, the Reserve Bank of India had set up a Regulations Review Authority (RRA) initially for a period of one year from April 1, 1999 for reviewing the regulations, circulars, reporting systems, based on the feedback from public, banks and financial institutions. RRA 2.0 was set up in May 1, 2021 and it submitted its report in June 2022.

Towards Ensuring Good Governance

History is replete with examples, both in India and abroad, as to how apparently successful business ventures quickly folded up due to poor governance and excessive greed. Therefore, the Reserve Bank has taken up this as one its focus areas to create awareness as well as to ensure adherence to good corporate governance practices. We are having more frequent and direct engagements with boards and top management of regulated entities as well as self-regulatory organisations. Through these dialogues, we share our concerns and priorities, and also strive to understand the challenges faced by the industry so that appropriate regulatory measures can be taken up.

Instilling a Culture of Compliance

An essential element for sustaining longevity of financial institutions is that a culture of compliance should prevail across the institution. The recent direct engagement with the Heads of Assurance functions as well as CFOs and Auditors is testimony to Reserve Bank's efforts to strengthen the internal defence mechanisms within our financial institutions. The independence and professional conduct of assurance functionaries, strongly backed by the Board and Top Management is essential to preserve this culture. I am glad to share with you that these initiatives have been very well received and I would like to thank the heads of our financial institutions for prioritising these initiatives in their organisations.

Industry is Cyclical, this is the Best Time for Prudent and Decisive Action

The financial industry, like any other sector, experiences cycles, and it is currently riding a high wave. Therefore, this is the right time to strengthen our institutions, enhancing their financial and operational resilience, and ensuring the long-term stability of our financial system. For those wondering why now, I emphasize that taking decisive action now, even if it means swallowing some bitter pills, is crucial to ensuring our financial institutions remain strong enough to support the national goal of becoming a developed economy by 2047.

It is not only important to simplify, harmonise and modernise but also to strengthen the regulatory and supervisory frameworks. Recent drafts on expected credit loss, project finance and liquidity coverage ratio exemplify this approach, aiming to reflect the needs of the industry while seeking to step up financial strength and stability.

Regulatory Initiatives at Promoting Innovation

The RBI has undertaken several initiatives to support the development of digital public infrastructure and establish robust institutional frameworks, complemented by various policy measures aimed at enhancing the financial sector.

In 2019, the RBI introduced the 'Regulatory Sandbox' framework to provide a controlled environment for testing new financial products, services, or business models with real customers under regulatory oversight. This initiative facilitates collaboration among regulators, innovators, and financial service providers to assess the benefits and risks of emerging technologies. Since its inception, five cohorts of the sandbox have evaluated various ideas, with some proving to be feasible. To address situations where a product or service might fall under multiple financial sector regulators, an interoperable regulatory sandbox mechanism was introduced in 2022.

Complementing these efforts, the RBI has also organized global hackathons under the 'HaRBInger' initiative, which not only rewards winners generously but also provides stipends to shortlisted teams to support the prototyping of their solutions. The third edition, HaRBInger 2024, themed 'Innovation for Transformation,' invites solutions aimed at achieving 'Zero Financial Frauds' and creating 'Divyang Friendly' technologies.

In 2021, the RBI established the Reserve Bank Innovation Hub, which has been instrumental in

advancing digital solutions, such as the fully digital and streamlined delivery of Kisan Credit Card (KCC) farm loans. Last year, it launched the pilot on Public Tech Platform, now renamed as ULI, designed to facilitate frictionless credit by enabling seamless flow of digital information to lenders. This platform features an open architecture and open Application Programming Interfaces (APIs), allowing financial sector participants to connect in a 'plug and play' model.

Regulator is a Disruptor?

Having covered extensively on some of the initiatives that show cases the Reserve Bank as an enabler, I now would like to deal with some commentary of regulatory disruption that plays out in the market, thankfully only by a few, but it is still necessary for us to examine these.

One such narrative is that the regulator's actions may curb innovation or intrude excessively into business operations. There is also a feeling that Regulators must be more supportive of risk taking. What needs to be understood here is that while businesses can be adventurous and inclined to take on greater risks in pursuit of profits and investor returns, the regulators have the responsibility to protect depositor and customer interests and preserve financial stability. The role of the regulator is to establish guardrails or a balanced framework that encourages innovation while ensuring that risks are managed prudently.

For example, the Fintech platforms often provide customers with a seamless, efficient experience. By leveraging digital public infrastructure, these platforms can reach a wider customer base, including those who previously had limited access to financial services, thereby advancing financial inclusion and empowering underserved communities. They help reducing the cost of customer acquisition as well as transaction costs. Digitisation also allows banks and NBFCs to leverage data for greater insights into their customers requirements and behaviour which can be used for developing bespoke products apart from facilitating better risk management and compliance. Reserve Bank has been playing an encouraging role all through such initiatives.

However, this digital shift also introduces risks that must be properly identified, mitigated and managed to maintain a stable and secure financial ecosystem. The integration of disparate entities delivering a digital product, often results in complex structures with overlapping responsibilities. In many instances, the actual lender may not even be visible to the borrower, despite regulatory requirements for transparency. While fintech platforms drive innovation and revenues, credit, and operational risks along with consequent losses still primarily rest with the regulated lenders who collaborate with these platforms. This can create a disconnect between the service providers and those bearing the risks, leading to potential vulnerabilities for the individual lender as well as the financial system collectively.

For instance, while loan sanctioning and disbursement have become increasingly digital, effective collection and recovery still require a 'feet on the street' and empathetic approach. Many fintech platforms operate on a business model that involves extending small-value loans to customers often times with poor credit profiles. Unfortunately, this is often followed by aggressive recovery tactics, such as invading customers' privacy by accessing their contacts and personal data. These practices can seriously damage the reputation of the regulated lenders associated with these platforms. According to RBI regulations on outsourcing, even though a regulated entity may rely on third parties to perform certain activities, it remains ultimately accountable for the actions of its outsourced agents.

Another narrative I would like to address today is the perception that supervisors are overly eager to impose business restrictions, sometimes being portrayed as "trigger-happy." This misconception creates an impression that regulators are constantly

looking for opportunities to clamp down on financial entities. We are sometimes asked by the media, "Who is next?"—implying that supervisory actions are routine in nature.

In reality, the decision to impose business restrictions is never taken easily. Strong supervisory actions are brought in only after careful onsite examinations, offsite data analysis, and extensive engagement with the regulated entities concerned for remediation, often times stretching into several months. Our primary goal is to ensure the stability and integrity of the financial system and not to hinder business operations. Out of the over 150 banks, over 9,000 non-banking financial companies as well as about 1,500 UCBs and other entities we supervise, stringent actions have been taken only in a handful of cases. That too, the most outlier in each category has been called out for such punitive actions so that it has a demonstrative effect on the rest of the industry. These measures are not about penalising but rather about protecting the interests of depositors, customers, and the broader financial system.

Despite these efforts, it is disheartening to see innovative misinterpretation of regulations. A recent case in point is that of Peer-to-Peer (P2P) lending regulations. The regulations as originally conceived, envisaged the platforms to function like online marketplaces connecting lenders with borrowers, with no credit risk borne by the platform and no co-mingling or retention of funds. However, the supervisory findings over the last one year revealed that some of these platforms adopted practices which were violative of both the letter and spirit of the regulations. Instructions issued earlier this month on P2P lending platforms are nothing new but are merely responding to the egregious violations observed in some cases. However, it is being presented in some quarters as if these 'new' regulations will 'kill' this industry. On the contrary, the differentiated licensing and light touch regulations that were granted to such entities are intended to help them set up a unique platform and not mimic banks or NBFCs that are more robustly capitalised and stringently regulated.

Conclusion

In conclusion, despite occasional brickbats, regulatory frameworks have been adopting a consultative approach which has helped shape a resilient financial sector. Over the past few decades, the Indian banking sector has navigated many challenges, including the Asian Financial Crisis, the Global Financial Crisis, and, most recently, the COVID-19 pandemic. Each time, the Indian financial sector has emerged stronger, thanks not only to the efforts and adaptability of the industry but also to the prudence and foresight of the regulatory framework.

All of us are partners in this journey towards realising the vision of Viksit Bharat 2047. However, dreams cannot be built on weak foundations, which is why it is the regulator's responsibility to set up both enablers and guardrails that will ensure we reach our destination safely and securely, and keep going.

Rather than viewing regulators as disruptors, I would urge industry to see the regulator as a partner towards a stable and prosperous financial ecosystem. It is therefore essential to appreciate the intent behind regulations, which are designed to protect customers, ensure fairness, and maintain stability. Let us channel our creativity into innovating products and services that not only comply with regulations but also enhance the overall health and inclusivity of the financial system. Let us focus on developing solutions that add genuine value, rather than seeking ways to bypass the rules or to do more of the same. By aligning innovations with regulatory objectives, we can build a stronger, more trustworthy financial sector that benefits everyone.

With this I thank the audience for their patient listening and CNBC TV 18 for inviting me to this summit and giving me an opportunity to address you today.

*Local to Global: The Role of the Financial Sector in MSME's Development**

Shri Swaminathan J.

Distinguished guests, ladies, and gentlemen. A very good evening to all of you.

It is a great honour to speak to this august gathering on FEDAI's Annual Day. Through its tireless efforts in clarifying the complexities of inter-bank foreign exchange business and serving as a crucial voice with regulators, FEDAI has played a pivotal role in shaping the rules of foreign exchange business in India. So, when Mr. Sindhwani, Chief Executive invited me to this event, I knew it was an opportunity I could not miss.

As we celebrate FEDAI's achievements, it is also an opportune moment to reflect on the broader vision for India's economic future. In 2022, as our nation commemorated 75 years of independence, the Hon'ble Prime Minister outlined five key resolves for the country, one of which was the ambitious goal of transforming India into a developed nation by 2047. Realising this vision will require a unified effort across all sectors, with Micro Small and Medium Enterprises (MSMEs) playing a pivotal role in driving economic output and boosting exports. MSMEs, often referred to as the backbone of our economy, hold immense potential to become national champions—potential that remains largely untapped. With this in mind, I have chosen the theme *'Local to Global: The Role of the Financial Sector in India's Development'* for my address today.

* Speech by Shri Swaminathan J, Deputy Governor at the Annual Day of the Foreign Exchange Dealers Association of India (FEDAI) held in Mumbai on August 21, 2024.

The Role of MSMEs in India's Economic Growth

With a vast network of approximately 63 million units, MSMEs contribute nearly one-third of the nation's GDP and account for around 40 per cent of its manufacturing output[1].

More importantly, it is the MSME sector's ability to foster entrepreneurship and create substantial employment opportunities –the key factors in realising India's demographic dividend. Additionally, as critical ancillary units, MSMEs support larger industries and significantly contribute to the secondary and tertiary sectors. With millions of jobs generated, the MSME sector stands as one of the most significant sources of employment in India, underscoring its importance in sustaining livelihoods and driving inclusive growth.

The MSME sector's impact extends beyond domestic boundaries. In the realm of international trade, these enterprises have proven their competitiveness, contributing more than 40 per cent to India's exports. This growing presence in global markets reflects the increasing acceptance and demand for Indian MSME products and services, positioning the sector as a key player in enhancing India's global economic footprint.

Despite these achievements, the sector faces significant challenges, notably the issue of the *"missing middle"*. While micro-enterprises make up most of the MSME employment, they often struggle to transition into small or medium-sized firms. This limitation hampers their ability to achieve economies of scale, invest in fixed assets, and adopt innovative technologies. In my address today, I will focus on

[1] As per press release dated December 11, 2023 by the Ministry of Micro, Small and Medium Enterprises, the share of MSME Gross Value Added (GVA) in all India Gross Domestic Product (GDP) was 29.15 per cent for FY 2021-22 and the share of MSME manufacturing GVA in all India Manufacturing GVA was 40.83 per cent for the same period. The percentage share of Export of MSME related products in All India Exports was 43.59 per cent for FY 2022-23.

these challenges and explore how the financial sector can play a crucial role in addressing them, thereby supporting the growth and development of MSMEs into larger corporations.

Challenges Faced by MSMEs

Let me discuss a few challenges that MSMEs face today. I am sure you are aware of most of them, so I will limit myself to briefly stating four key issues.

Access to Finance

The first issue is access to affordable finance. Credit is crucial for the growth of MSMEs, and affordable funds can boost their competitiveness. Banks often use asset-based lending, which relies on collateral rather than cash flow. However, many MSMEs lack adequate assets for collateralization, particularly for working capital needs, often leaving smaller businesses excluded from funding opportunities from the formal banking sector. Further, as many MSMEs mainly operate in the informal space, assessing their creditworthiness can be difficult due to information asymmetry, particularly with respect to the financial performance of their businesses. Although initiatives like GST and digital payments aim to facilitate digitisation among MSMEs, the adoption of formal digital documentation methods remains limited, which impedes an efficient credit underwriting process.

Delayed Payments

Secondly, MSMEs commonly encounter a persistent issue of delayed payments. The delay in receiving payments prolongs their operating cycles and diminishes their capacity to fulfil existing orders or secure new ones. Despite the existence of statutory provisions which entail penalties for delayed payments by buyers, MSMEs often refrain from invoking these provisions. Their reluctance stems from a combination of weak bargaining power and the fear of losing future business opportunities.

Infrastructure Bottlenecks

Thirdly, despite attempts to enhance infrastructure, MSME clusters, especially micro enterprises, lack vital support systems. This deficiency not only obstructs their day-to-day operations but also hinders their future growth potential. Developing MSME clusters can provide shared infrastructure, services, and access to larger markets, which can significantly enhance their growth potential.

Requirements of Compliance

As businesses transition from an informal to a formal entity, they encounter significant rise in regulatory obligations and cost of compliance. Sometimes these requirements involve the interpretation of laws, knowledge of compliance procedures, *etc.* Instances of difficulties with financing entities are not uncommon as the MSMEs attempt to scale up. The Government and Regulators have been taking various initiatives to reduce difficulties and ease the cost of doing business.

The Financial Sector's Role in Empowering MSMEs

Having discussed some of the key challenges being faced by the MSME sector, taking advantage of the large audience that is present here from the financial sector, I would like to highlight some of the ways in which we can support its growth and development.

Digitisation and Innovative Financing Solutions

With more MSMEs adopting digital payment systems, mobile banking, and online accounting tools, the resultant digital footprint allows financial institutions to gather more accurate and comprehensive data on an MSME's financial health, transaction history, and cash flow patterns.

We have seen significant traction towards end-to-end digitalisation of credit delivery in the past few years, largely in Retail and to some extent in MSME sector. I would urge bankers to explore these opportunities further for greater digitalisation of their transactions with MSMEs. Digital applications and

platforms reduce the paperwork and administrative burden associated with traditional lending, and also brings in complete transparency. By using digital tools for application processing, verification, and disbursement, financial institutions can expedite approval times and significantly lower the costs of availing credit.

The data derived from the enlarged digital footprint would enable a better risk assessment and the development of customized financing products. Indeed, extending finance after a proper understanding of the cash flows of MSMEs, including factoring in the possible delayed payments from their buyers, will ensure a proper reading of the actual working capital cycle and ensure adequate financing. Inadequate understanding of the actual cash flows and its timings may result in the repayment schedules not keeping up with the reality.

On its part, the RBI has taken various initiatives to promote innovation in financing to MSMEs. Recently, the third cohort of the RBI Regulatory Sandbox[2] was dedicated for MSME lending, where five ideas were found viable. Earlier, to address the issue of delayed payments to MSMEs, RBI had initiated the Trade Receivables Discounting System (TReDS) in 2014. The scheme facilitates the financing of trade receivables of MSMEs from corporate and other buyers, including government departments and Public Sector undertakings (PSUs) through multiple financiers electronically. While there has been an uptick in transactions in the last couple of years, there is a long way to go in onboarding by more corporate buyers and MSME sellers on the platform to reap its full potential. RBI is engaging with the Government on this aspect, I would also urge bankers to leverage their corporate relationships to encourage larger corporates to get themselves onboarded on the TReDs platforms.

Capacity Building and Financial Literacy

Apart from access to finance and digital tools, enhancing financial literacy among MSMEs is equally important. Many small business owners lack the knowledge and skills to effectively manage their finances, which can hinder their growth.

While RBI has been facilitating capacity building on MSME finance for bankers under the NAMCABs[3] programme, I believe the financial sector can play a vital role in providing capacity-building programs tailored to the needs of MSMEs.

These programs could include training on financial management, understanding credit and forex products, and using digital tools effectively. By equipping MSMEs with the right knowledge and skills, we can help them make informed financial decisions, optimise their operations, and reduce the risk of default. Partnerships between financial institutions, government agencies, and industry bodies can ensure that these capacity-building initiatives reach the businesses that need them most.

As you may be aware, the Government of India has adopted the Cluster Development approach as a key strategy for enhancing the productivity and competitiveness as well as capacity building of Micro and Small Enterprises (MSEs). In this connection, RBI has advised convenors of all State Level Bankers' Committees (SLBC) to incorporate credit requirements of these identified clusters in their Annual Credit Plans. To further support this initiative, I would request banks to consider opening more MSE-focused branch offices preferably with forex facility, within these clusters. These specialised branches will not only facilitate easier access to credit for MSEs but will also serve as Counselling Centres, offering tailored financial advice and capacity-building services to these enterprises.

[2] The RBI has put in place an enabling framework for Regulatory Sandbox to facilitate live testing of new products or services in a controlled/test regulatory environment for which regulators may (or may not) permit certain regulatory relaxations for the limited purpose of the testing. There have been five cohorts under the framework since its issuance in August 2019.

[3] National Mission for Capacity Building of Bankers (NAMCABs).

Boosting MSME Exports

The financial sector can play a crucial role in boosting MSME exports by offering targeted support and tailored services that address the unique challenges these businesses face in the global market.

Beyond traditional products like pre- and post-shipment finance, factoring, and invoice discounting, the sector can significantly aid MSMEs in managing risks through export credit insurance and currency risk hedging solutions. These financial instruments not only protect against payment defaults and currency fluctuations but also provide MSMEs with the confidence to explore and expand into new international markets.

Current regulations mandate that forex needs, including cash and hedging products, must be met through authorised dealers, with scheduled commercial banks playing a dominant role. These banks, holding a privileged position, have a fiduciary duty to act fairly and transparently, particularly with smaller clients like MSMEs.

The introduction of the FX-Retail platform in 2019 aimed to enhance transparency and fairness in retail foreign exchange transactions has seen only a limited success. I would request banks to take proactive steps to increase awareness and facilitate higher customer participation on the FX-Retail platform.

Sensitivity Towards the Sector

Finally, considering the key role that MSMEs play in the economy, the financial sector should adopt a more sensitive and empathetic approach towards them. While financial discipline is crucial, the unique challenges faced by MSMEs—such as low capital base, lack of scale, cash flow constraints from delayed payments, fluctuating market conditions, and external economic pressures—necessitate a more nuanced approach to assessment as well as follow up.

While timely repayment of dues is crucial to maintain the health of the financial system, financial institutions should focus on deploying supportive measures such as restructuring options, grace periods, and tailored repayment plans that give MSMEs the breathing space they need to recover and get back on track while encountering difficult situations.

Collaboration and dialogue between lenders and borrowers can help create solutions that protect both the financial interests of the lender and the viability of the MSMEs.

Conclusion

In conclusion, the journey of India's economic transformation cannot be complete without the robust development of our MSME sector. MSMEs are not just the backbone of our economy—they are the engines of growth, innovation, and employment. However, for these enterprises to truly thrive and scale up, the financial sector must step up with innovative solutions, sensitivity, and a forward-looking approach. This is not just about providing credit; its about enabling these enterprises to compete globally, drive exports, and contribute to the nation's goal of becoming a developed economy by 2047. While financial instruments and support mechanisms are crucial, the way we engage with the MSME sector—our sensitivity to their challenges and our commitment to their success—will ultimately determine the strength and sustainability of this partnership.

With this I thank FEDAI for inviting me and wish it continued success in its role as a catalyst for the smooth functioning of foreign exchange markets through close coordination with stakeholders. Thank you all for your attention.

ARTICLES

*State of the Economy**

Global economic activity is slowing down while the pace of disinflation remains sluggish, provoking caution among monetary policy authorities. In India, domestic drivers – private consumption and gross fixed investment – were robust and net exports remained sequentially positive in their support to gross domestic product (GDP) growth in Q1:2024-25. The underperformance of agriculture was compensated for by a buoyant manufacturing sector and resilient services. Household consumption is poised to grow faster in Q2 as headline inflation eases, with a revival of rural demand already taking hold. Consumer price index (CPI) inflation came in below the Reserve Bank's target for the second consecutive month in August, although in light of the recent experience, food price volatility remains a contingent risk.

Introduction

The theme score of the 1961 American film Come September was a rage across the world. It even inspired several Hindi and Tamil songs and films, so much so that the month of September became synonymous with music. But September is also the cruellest month for markets in the west from where, in the recent period, almost all global spillovers seem to be erupting. As people return from the summer vacation to begin trading again in a rejuvenated reach for returns, volatility heightens to a crescendo. Hedging against September seasonality soon costs more than it saves.

This September is living up to its reputation with a flurry of actions by leading central banks – the European Central Bank (ECB) implemented its second rate cut of the year, followed by a 50 basis points (bps) cut by the United States (US) Federal Reserve, while the Bank of England and Bank of Japan diverged, maintaining *status quo*. Quickly recovering from a turbulent August 2 release of US non-farm payrolls data, which unleashed a bloodbath in markets worldwide as yen carry trades unwound, investors had regained poise, repositioning portfolios and re-building leverages. Once again, however, on a single data release on September 3 – the US Institute for Supply Management (ISM) manufacturing index – recessionary fears resurfaced, setting off a rout in US equity markets that quickly spread to Asia and Europe. Thus, as markets recalibrate their expectations of central banks pivoting from divergence to convergence, a Russian roulette seems to be playing out. Every incoming data dispels the gathering good feeling of a soft landing and sparks fears of a thudding end to disinflationary monetary policy pathways. Overall, however, markets have demonstrated substantial resilience in the face of high volatility. The speed of recovery has been remarkable, and magnitudes of exchange rate changes were not outsized when compared to past episodes. Trading remained orderly, enabled by liquidity conditions that accommodated large changes in margins in central counterparties.

All around, indicators point increasingly to slowing global economic activity, more so on the eastern shores of the Atlantic, which vindicated the ECB's September rate cut to secure a soft landing. In the US, the now famous remark – "The time has come for policy to adjust" – has built up expectations that the economy is gaining prominence in monetary policy discourse[1]. In China, even though consumer inflation has picked up modestly due to supply constraints related to extreme weather,

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[1] Jerome Powell in his keynote speech at the Fed's annual economic conference in Jackson Hole, Wyoming. He went on further to say that "The direction of travel is clear, and the timing and pace of rate cuts will depend on incoming data, the evolving outlook, and the balance of risks."

weakening producer prices are fuelling concerns that deflationary forces are taking root. A rising number of manufacturing industries face lacklustre demand alongside a deep property market downturn now into its third year. As discussed in Section II, our world monitor assesses that global growth has lost some speed in the first half of 2024 relative to the preceding semester, and momentum has slackened further in the third quarter.

Among more recent high frequency indicators of global economic activity, job growth is getting softer than initially anticipated as labour markets continue to slow down, unemployment rates are ticking up and wage growth is easing, although historically high immigration is providing some offset. Consumer confidence surveys show a deterioration in sentiment about jobs. Equity prices are still stretched but the crash in Nvidia's stock in early September wiped out about US$ 300 billion in market value, hinting that the artificial intelligence (AI) overhype may be tapering off and expectations are catching up with reality. Overseas investors also aggressively withdrew from Asian tech stocks, although India seems to have bucked that sell-off supported by buying interest in the primary market. Short-term yields have fallen below longer-term ones in a reversal of the yield curve inversion and along with swap curves, they seem to suggest that monetary policy easing is due. Parched returns are drying up the venture capital ecosystem. Record volumes of corporate debt are being issued to head off the volatility triggered by worsening macroeconomic data, and to benefit from falling borrowing and refinancing costs. OPEC *plus* has decided to delay a planned output increase as crude prices slumped below US$ 70 per barrel briefly on September 10, but it still plans to revive 2.2 million barrels per day of idle supplies over the course of 2025. Meanwhile, non-OPEC supplies are rising faster, and as the International Energy Agency warns in its September 2024 report, global oil demand is slowing sharply – electric vehicles are already displacing 1.8 million barrels of oil every day – and this is fuelling the sell-off in oil markets. In metal markets, the copper-gold price ratio is closing on to 4 – a rising ratio indicates higher industrial demand and hence a positive growth outlook.

Although upside pressures have likely been seen off, the pace of disinflation remains sluggish, provoking caution among monetary policy authorities about the pace of easing. In fact, the Governing Council of the ECB noted in its September meeting that inflation is expected to rise again in the latter part of this year, partly because previous sharp falls in energy prices will drop out of the annual rates. Hence, it is judged that inflation remains high as wages are still rising at an elevated pace. Expressing determination to ensure that inflation returns to its 2 per cent medium-term target in a timely manner, it decided to keep policy rates sufficiently restrictive for as long as necessary to achieve this aim. In the US, it is argued that the Fed's modest success in disinflation is at risk because the US is moving from a regime of monetary dominance to fiscal dominance[2]. In fact, the US Treasury's debt issuance strategy may be providing indirect interest rate cuts estimated at the equivalent of a one percentage point cut in the Federal Funds rate with 70 per cent of new debt raised through short-term bills. All in all, "the limits of our knowledge….demand humility and a questioning spirit focused on learning lessons from the past and applying them flexibly to our current challenges."[3]

Defying gravity, global merchandise trade volume continued to recover in the third quarter of 2024, according to the latest World Trade Organization (WTO) Goods Trade Barometer, amidst rising geopolitical tensions, ongoing regional conflicts,

[2] Livemint, "The Fed Is No Longer the Only Game in Town" August 31, 2024. https://www.livemint.com/economy/the-fed-is-no-longer-the-only-game-in-town-11725044399193.html

[3] Powell, J., speech on "Review and Outlook", at the economic symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming, August 23, 2024.

shifting monetary policy in advanced economies (AEs) and weakening export orders. As Section II points out, barring the sub-par performance of electronics, other components of global trade such as automotive products, container shipping and air freight are all firmly above trend, but new export orders are turning down, and raw materials have declined – causes for concern going forward. According to the WTO, global trade growth is expected to pick up gradually over the next two years as lower inflation and rising incomes lift real wages and boost demand for goods, including imports. The volume of merchandise trade is expected to increase by 2.6 per cent in 2024 and 3.3 per cent in 2025. The outlook is also positive for commercial services trade and digitally delivered services. Asia will make the biggest contribution to trade growth. The outlook for 2025 is more positive, with all regions contributing to export and import growth, but risks to this forecast are substantial. In its 2024 World Trade Report, the WTO has argued that trade helps to widen the circle of global growth by being a key part of the solution to creating a more inclusive global economy. Yet, some economies and regions have failed to harness the growth-giving properties of trade either because they are not sufficiently integrated into the global economy or because they are limited to exporting low valued added or highly volatile commodities amidst challenges from high trade costs, weak institutional capacity, infrastructure deficits and some types of trade policies such as protective tariffs. For instance, it is increasingly believed that the era of mega deals is coming to an end on geopolitical considerations. The battle to secure critical metals and supremacy in semiconductor and green technologies is getting progressively disruptive.

Against this backdrop, the WTO makes the case for promoting an open, rules-based and predictable multilateral system for expanding inclusiveness within economies and for facilitating catch-ups and income convergence across economies. Others argue, however, that deglobalisation is a myth that hides the real shifts[4]. This is evident in the renewed expansion of world trade since the start of 2024, after the post-pandemic rebound when supply chains declogged and consumers turned away from goods towards services. Among the real shifts is that export growth for emerging market economies (EMEs) has far outstripped that of AEs even before the pandemic, suggesting that globalisation is, in fact, continuing. Another shift is in the ratio of global trade in goods to industrial production, which has been declining and being read as deglobalisation. This is, however, predominantly a China phenomenon. This ratio, when calculated by excluding China, has been rising and has accelerated through the post-pandemic rebound. It is currently above its long-term trend. Thus, what could be happening are geographical shifts in the pattern of trade rather than deglobalisation. Yet another factor is the containerisation of cargo movement that has ushered in a new era of global transportation. Although constituting only about 17 per cent of global maritime trade volume, this fast growing segment accounts for almost two-thirds of global trade by value, led by Asia.

In another gravity challenging development described as 'the rise of the rest', EMEs are building up a growth rate lead over AEs to levels not seen in 15 years. Projections suggest that the proportion of EMEs other than China in which per capita GDP is likely to rise faster than the US is on course to surge from 48 per cent over the past five years to 88 per cent in the next five years[5]. These EMEs have far lower budget and current account deficits than the US, leaving them with greater capacity to invest and drive future growth. In the coming decade, their exports are likely to be particularly strong for green

[4] Baader Klause, *The myth of deglobalisation hides* the *real shifts*, Financial Times, August 23, 2024.

[5] Sharma, Ruchir, What Went Wrong with Capitalism, Allen Lane, 2024.

technologies and raw materials required to build them, like lithium and copper that are supplied mainly by them. The AI boom is already boosting exports of chips from existing suppliers such as Taiwan and Korea, and investments are increasing in countries like India, Malaysia and Mexico. Corporate earnings are growing at an annual rate of 19 per cent in these EMEs as against 10 per cent in the US and they are also ahead in earnings forecasts in the April-June 2024 quarter. Consequently, profit margins have also improved. Their stock markets are catching the scent of this revival and in a few of them, this is powered by a strong and rapidly expanding base of domestic investors. In the recent period, the US dollar has weakened; historically, this has led to greater capital flows to emerging markets. Investors are not likely to lump EMEs under the broad brush of a single asset class – they will look for a select group of stars that are able to draw strength from favourable trends forming in global trade, the US dollar, economic reforms and political change. "They emerge from obscurity, and the deeper the shadows from which they spring, the more drama surrounds their comeback."[6]

Turning to domestic developments and the evolution of risks, more needs to be read into the slowing of India's GDP in Q1:2024-25 than just disappointment. As pointed out in Section III, domestic drivers – private consumption and gross fixed investment – were robust and net exports remained sequentially positive in their support to GDP. The seasonally adjusted momentum of Q1 GDP was strong. Gross value added (GVA) growth actually rose sequentially in Q1, but the increase in subsidies – 3.6 per cent by the Union government and 26 per cent by the states – offset the gains from showing up in GDP growth.

Household consumption is poised to grow faster in Q2 as headline inflation eases, with a revival of rural demand already taking hold. The demand for fast moving consumer goods (FMCG) is also accelerating as companies target older customers with healthy lifestyle products in response to rising longevity and affluence and younger ones with premiumisation. Yet another consumption booster is the ramping up of hiring by e-commerce majors ahead of the festival season, not just in the metros but in tier 2 and 3 cities as well. Logistics hiring is also rising to support increased transportation, warehousing and delivery activities. According to TeamLeaseServices, about 62 per cent of companies across telecom, internet service providers and allied industries intend to expand their workforce in this year.

As regards net exports, the widening trade deficit and a spurt in overseas travel by Indians is likely to swing the current account balance from a small surplus in January-March 2024 to a deficit of 1-1.2 per cent of GDP in the first half of 2024-25. Capital flows in the form of portfolio debt flows, net FDI and non-resident deposits are providing comfortable financing. Merger and acquisitions deals have been on the decline in the Asia-Pacific region in 2024, but India has emerged as a bright spot with an increase in volumes.

On the supply side, agriculture suffered in Q1:2024-25 as India experienced the highest number of heatwave days in the summer of 2024, surpassing the previous high in 2010. Hence, the policy-driven prioritisation of agriculture sector development assumes significance, especially the focus on climate resilience, productivity, innovation and value added exports. Only about 25 per cent of agricultural exports are processed as against the global average of 50 per cent. Attracting large, globally competitive firms to produce in, and export from India can grow strong Indian brands, increase global market presence, create employment and boost farmers' income. Alongside, interventions such as the AgriStack – a farmer-centric digital infrastructure – will create comprehensive and

[6] The Financial Times, "The World Should Take Notice – the Rest are Rising Again", August 24, 2024.

authenticated databases on farmer demographics, land holdings, crop sowing, livestock ownership and details of schemes and benefits. The Krishi Decision Support System will integrate information on crops, soil, weather and water resources to provide a comprehensive geospatial system.

The underperformance of agriculture in Q1 was compensated for by a buoyant manufacturing sector and resilient services. In fact, sustained growth in operating profits and deceleration in interest expenses enabled the corporate interest coverage ratio to touch a 9-quarter high, which bodes well for the year ahead. There is also evidence of a drastic shortening of the working capital cycle – the time a company takes to convert current assets like inventory into sales. The increase in online payments has contributed significantly to this better use of working capital, supported by increasing formalisation. This suggests that working capital could play a larger role in profitability going forward.

Financial markets are undergoing shifts. In the primary equity market, there is a surge of interest in small and medium enterprises (SMEs) initial public offerings (IPOs), including from domestic mutual funds, with massive oversubscriptions. 54 per cent of IPO shares allotted to investors were sold within a week of listing.[7] September is set to be the busiest month for IPOs – mainboard and SME – in 14 years, with over 28 companies entering the market so far. A growing number of listed companies are turning to qualified institutional placements for raising capital, estimated at around ₹60,000 crore in the first eight months of 2024. With intermittent corrections on global cues, benchmark indices in the secondary market have moved up, and the outlook remains bullish.

Global funds have been investing heavily in the Indian debt market for the fifth month in a row since May 2024. On the other hand, corporate debt issuances remained low during the financial year so far despite easing yields as issuers awaited the US rate cut.

In the credit market, with deposit mobilisation becoming a challenge, banks continue to rely heavily on certificates of deposit to meet funding needs so that lagging deposit growth does not constrain credit. Banks are also offering higher interest rates on deposits, with more than two-thirds of term deposits earning 7 per cent and above. The gap between credit and deposit growth is, however, beginning to narrow. Non-banking financial companies are increasingly turning to offshore bonds. Microfinance institutions are facing some asset quality issues, warranting slowing down the pace of loan growth.

As large risk capital investors tread cautiously, the early stage investment landscape is seeing an increasing number of micro venture capital firms and founder-led funds. Despite guardrails and concerns about interconnectedness with the regulated financial system, the footprint of private credit – non-bank lending in high-yielding and illiquid debt-like instruments - is gradually expanding to cater to customised requirements of borrowers that are underserved by traditional sources of capital. Rough estimates place private credit assets under management at around US$ 15 billion. Fintech lenders, which are reported to have captured over 52 per cent of the market share of personal loans, are increasingly turning to private credit to raise funds and diversify borrowing sources. The resilience of private credit in a credit downturn, however, remains untested.

Headline CPI inflation came in below the Reserve Bank's target for the second consecutive month in its August reading. This is a positive development,

[7] SEBI Study (2024), "Analysis of Investor Behavior in Initial Public Offerings (IPOs)", Department of Economic and Policy Analysis, September.

especially as the index has remained flat between July and August. Some vegetable price shocks have begun to reverse, and if this continues and broadens, the persistence that characterised food inflation developments in the first quarter of 2024-25 may be behind us. An unfavourable base effect may haunt the September number. The outlook for international crude prices has turned benign and may be sustained, given developments relating to OPEC *plus* alluded to earlier and weak demand. The prospects of headline inflation averaging 4.5 per cent in the second half of 2024-25, as set out in the August 2024 resolution of the monetary policy committee, have improved. Nonetheless, in light of the recent experience, food price volatility remains a contingent risk.

Set against this backdrop, the remainder of the article is structured into four sections. Section II covers the rapidly evolving developments in the global economy. An assessment of domestic macroeconomic conditions is set out in Section III. Section IV encapsulates financial conditions in India, while the last Section sets out concluding remarks.

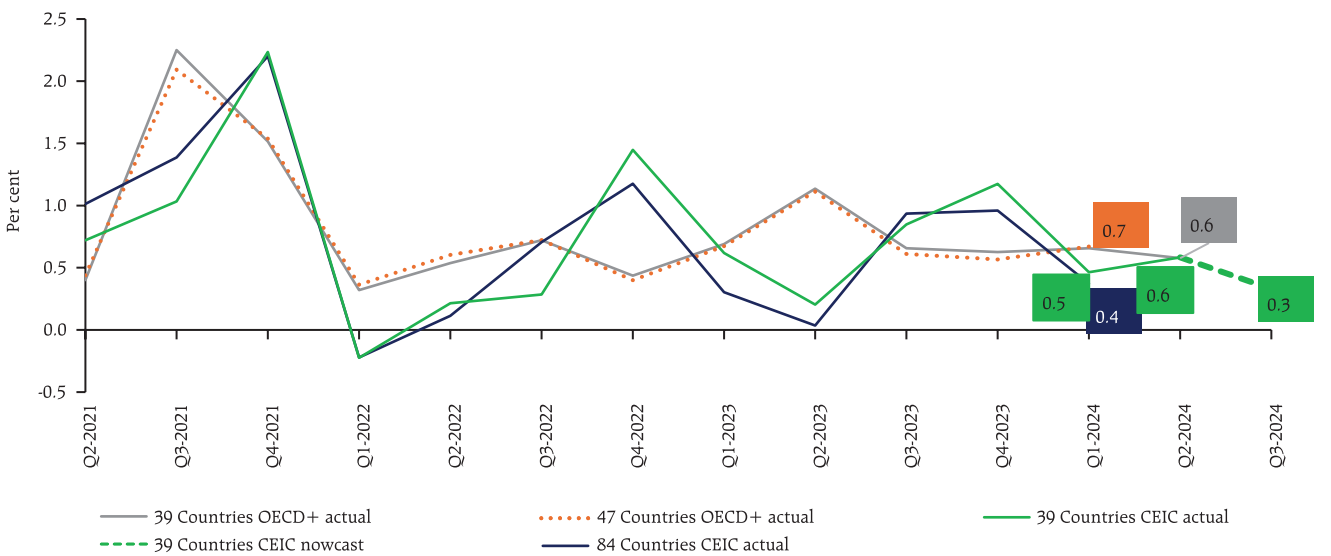
II. Global Setting

The global growth outlook is rendered uncertain in an environment of cooling labour markets, ongoing geopolitical tensions and decline in commodity prices. Growing expectations of monetary policy easing by major central banks, however, continue to instill confidence about a soft landing. Our model-based nowcast points towards a tapering of global growth momentum during Q3:2024 (Chart II.1).

The global supply chain pressures index (GSCPI) increased in August 2024, rising above its historical average for the first time since November 2023 (Chart II.2a). Geopolitical risks remained high due to continued tensions in the Middle East, *albeit* with a sequential moderation in August 2024 (Chart II.2b). Supply disruptions have kept container shipping costs elevated, although they recorded some moderation during August-September 2024 from the peak levels recorded in July (Chart II.2c).

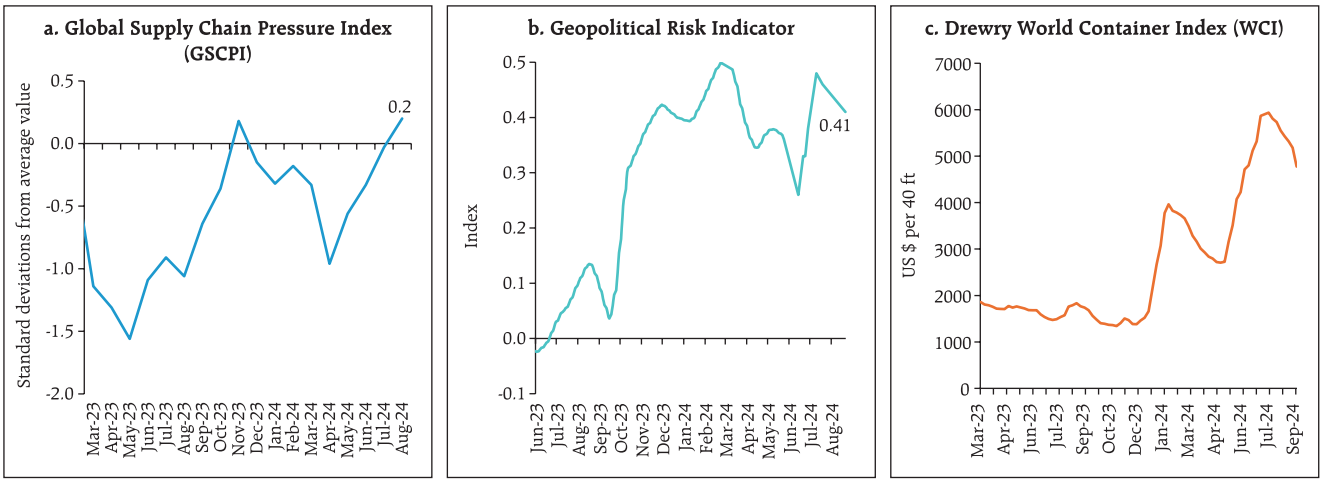
Consumer sentiment was divergent across geographies, increasing in the US for the first time in five months while it worsened in the Euro area (Chart II.3a). Financial conditions eased in both AEs and EMEs (Chart II.3b).

Chart II.1: Global GDP Growth Nowcast (Q-o-Q)



Sources: CEIC; OECD; and RBI staff estimates.

Chart II.2: Trends in Global Supply Chain Pressures and Geopolitical Risks



Notes: 1. GSCPI reflects data on transportation costs and manufacturing indicators.
2. The WCI assessed weekly by Drewry reports actual spot container freight rates for major east west trade routes. The composite represents a weighted average of the 8 shipping routes by volume and is reported in USD per 40-foot container.

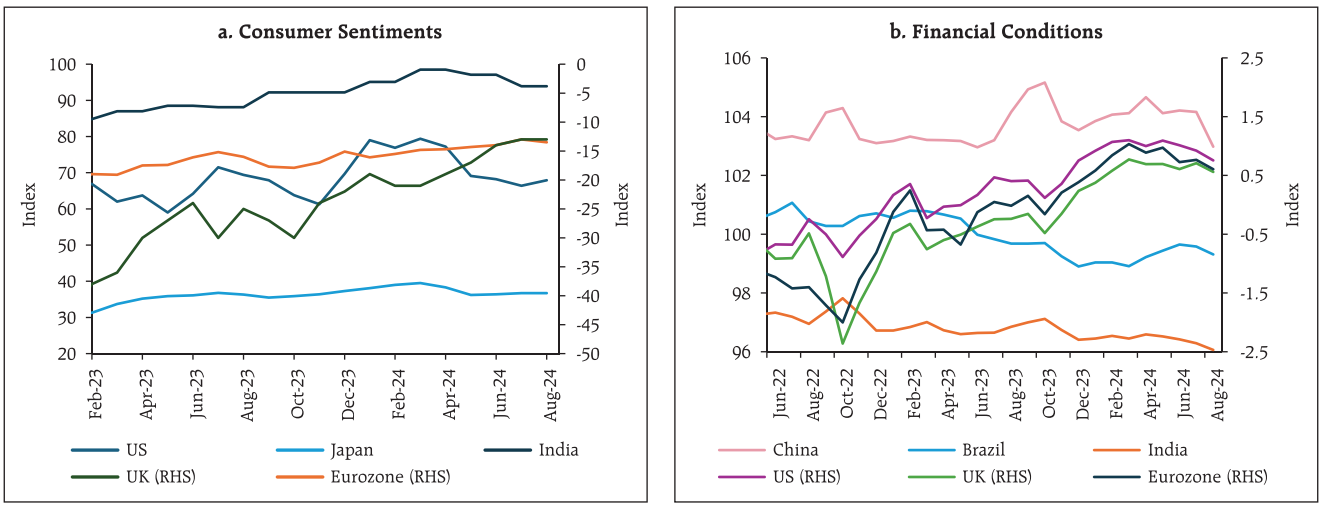
Sources: Federal Reserve Bank of New York; BlackRock Investment Institute, August 2024; and Bloomberg.

The global composite purchasing managers' index (PMI) increased marginally in August, with a robust expansion in services activity offset by weakness in manufacturing (Chart II.4). While the services PMI was driven by steepest gains in new business since June 2023, the manufacturing PMI fell to an eight-month low in August due to contraction in new orders and output growth.

The composite PMI for export orders declined at a faster rate in August (Chart II.5). Although new exports expanded at a faster pace in case of services, manufacturing export orders declined markedly in August 2024 leading to a contraction in overall exports.

Global commodity prices softened in August 2024. The Bloomberg commodity index declined by

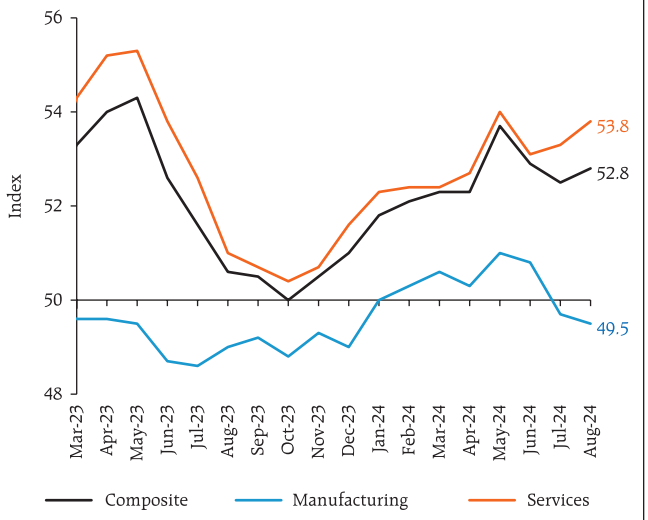
Chart II.3: Consumer Sentiment and Financial Conditions



Notes: 1. Japan: A score above 50 indicates consumer optimism, below 50 shows lack of consumer confidence and 50 indicates neutrality.
2. Eurozone and UK: -100 indicate extreme lack of confidence, 0 denotes neutrality while 100 indicates extreme confidence.
3. India and US: Higher the index value, higher is the consumer confidence.

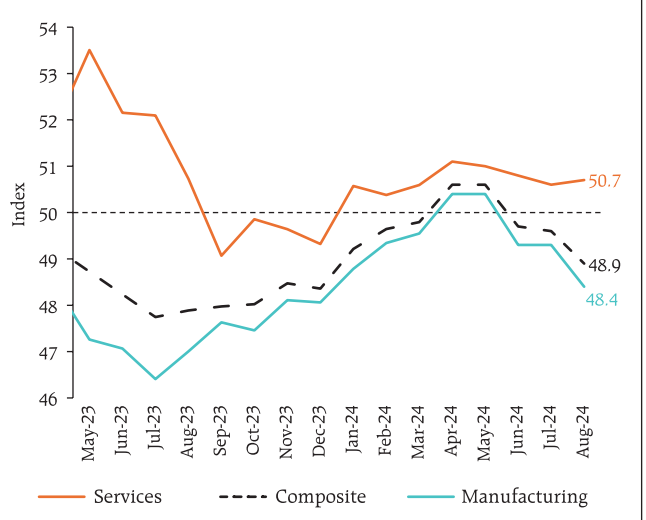
Source: Bloomberg.

Chart II.4: Global PMI



Note: A level of 50 corresponds to no change in activity and a reading above 50 denotes expansion and *vice versa*.
Source: S&P Global.

Chart II.5: Global PMI: Export Orders

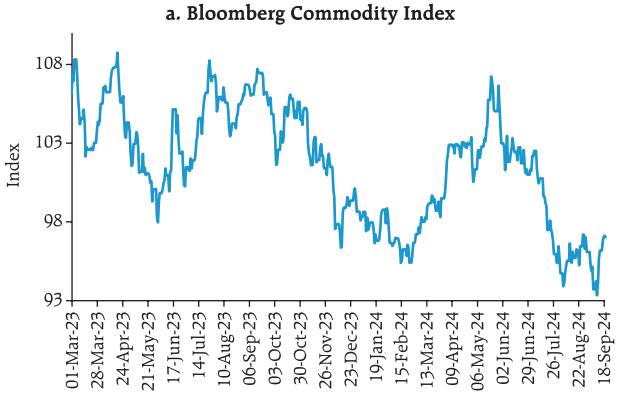


Note: A level of 50 corresponds to no change in activity and a reading above 50 denotes expansion and *vice versa*.
Source: S&P Global.

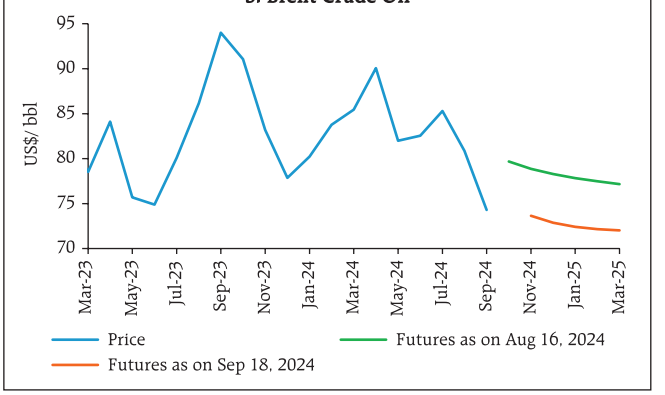
0.4 per cent (m-o-m) in August (Chart II.6a). Brent crude oil prices declined by 1.9 per cent (m-o-m) in August as weak demand more than offset the supply disruption caused by the oil blockade in

Chart II.6: Commodity and Food Prices

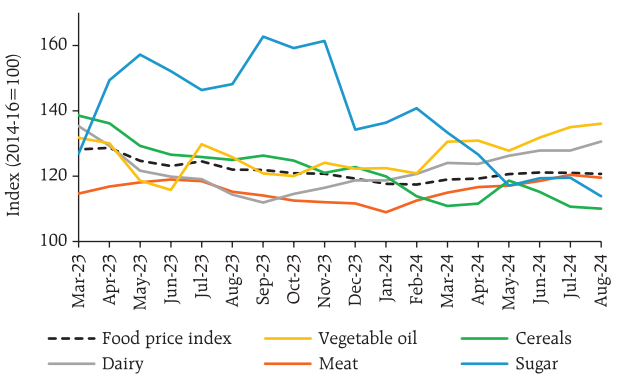
a. Bloomberg Commodity Index



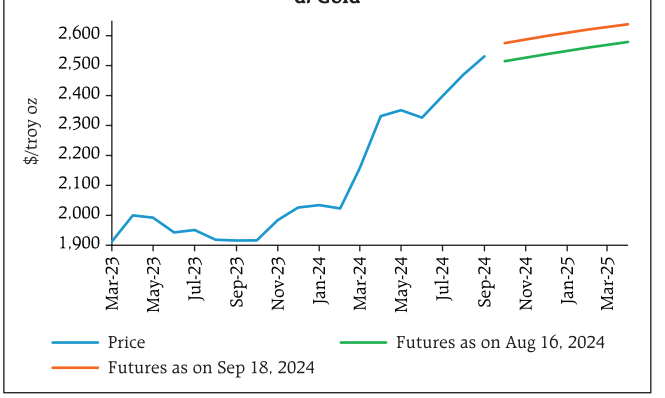
b. Brent Crude Oil



c. Food Prices



d. Gold



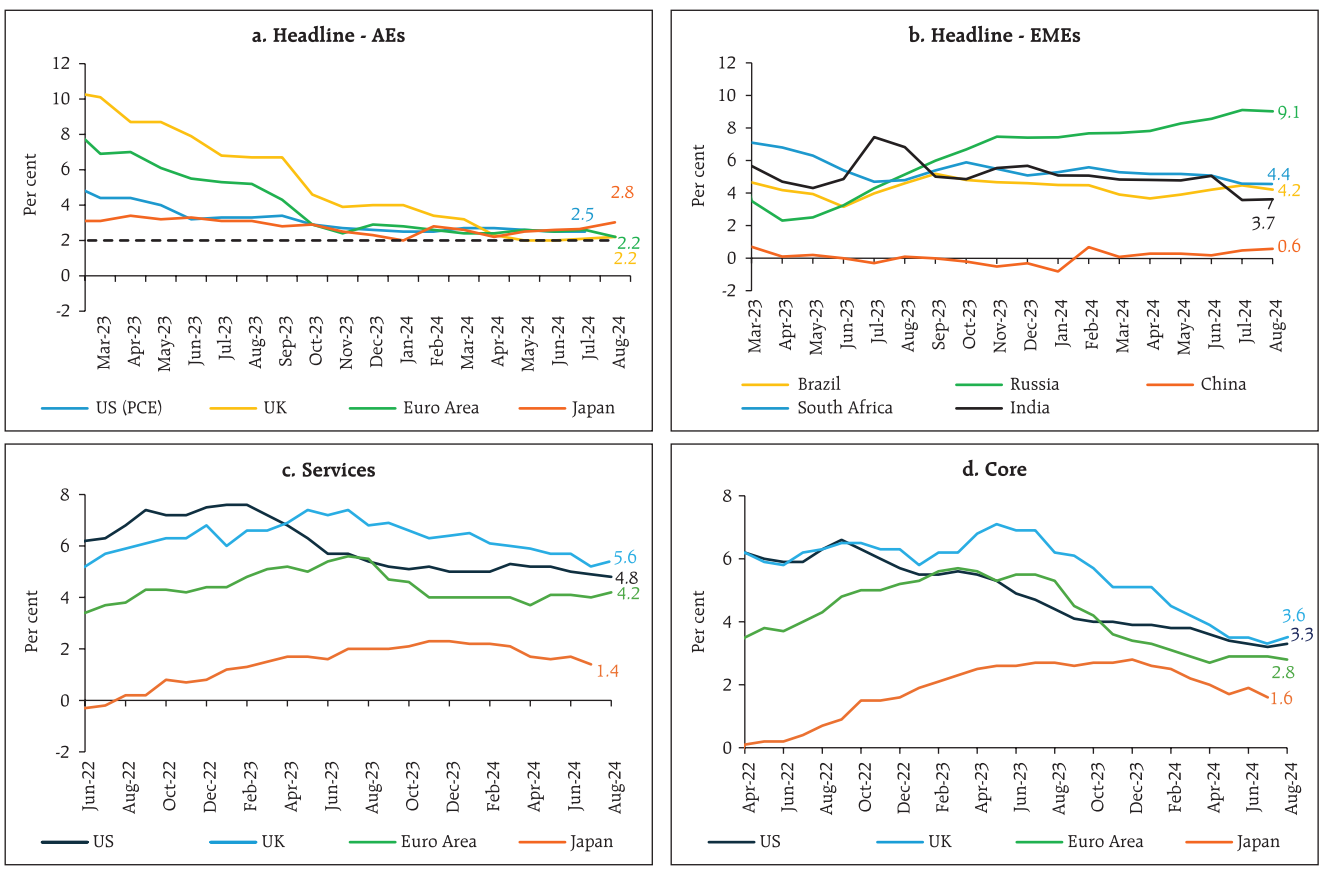
Sources: Bloomberg; World Bank Pink Sheet; and FAO.

Libya (Chart II.6b). Oil prices continued to decline in early September, dipping below US$ 70 for the first time since December 2021 as demand sentiments continued to weaken. The Food and Agriculture Organization's (FAO's) food price index registered a marginal decline in August 2024 as decreases in the price indices for sugar, meat and cereals outweighed increases in vegetable oils and dairy products (Chart II.6c). Gold prices, however, increased by 4.3 per cent in August (m-o-m), backed by expectations about rate cuts and safe haven demand amidst geopolitical tensions (Chart II.6d).

Inflation declined across major economies, although at a slow and uneven pace. In the US, CPI inflation moderated to 2.5 per cent (y-o-y) in August from 2.9 per cent in July. US headline personal consumption expenditure (PCE) inflation, however, remained steady at 2.5 per cent in July. As per flash estimates, Euro area inflation decelerated to 2.2 per cent in August from 2.6 per cent in July. Headline inflation in the UK remained steady at 2.2 per cent in August while inflation in Japan (CPI excluding fresh food) edged up to 2.8 per cent (Chart II.7a). Among EMEs, inflation increased in China, softened in Brazil and South Africa, and remained steady in Russia in August (Chart II.7b). Core and services inflation trended downwards in major AEs although it remained higher than the headline (Chart II.7c and 7d).

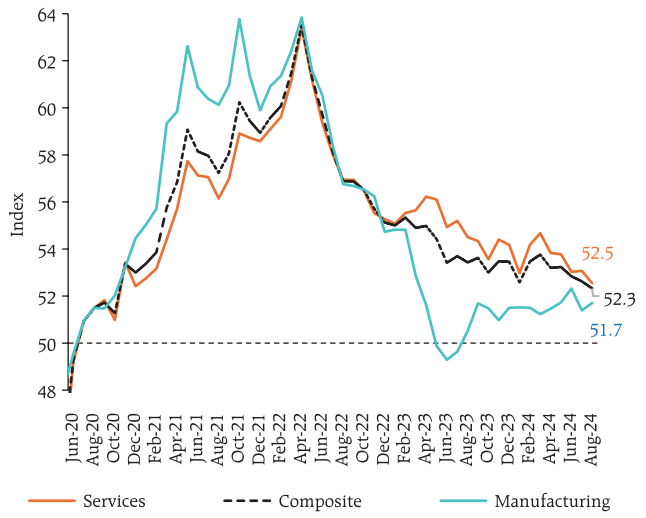
The decline in global inflationary pressures is also captured by the PMI for selling prices (Chart II.8). Globally, prices charged for goods and services rose at the slowest rate in nearly four years in August 2024.

Chart II.7: Inflation - AEs and EMEs



Sources: Bloomberg; and OECD.

Chart II.8: Global PMI: Selling Prices



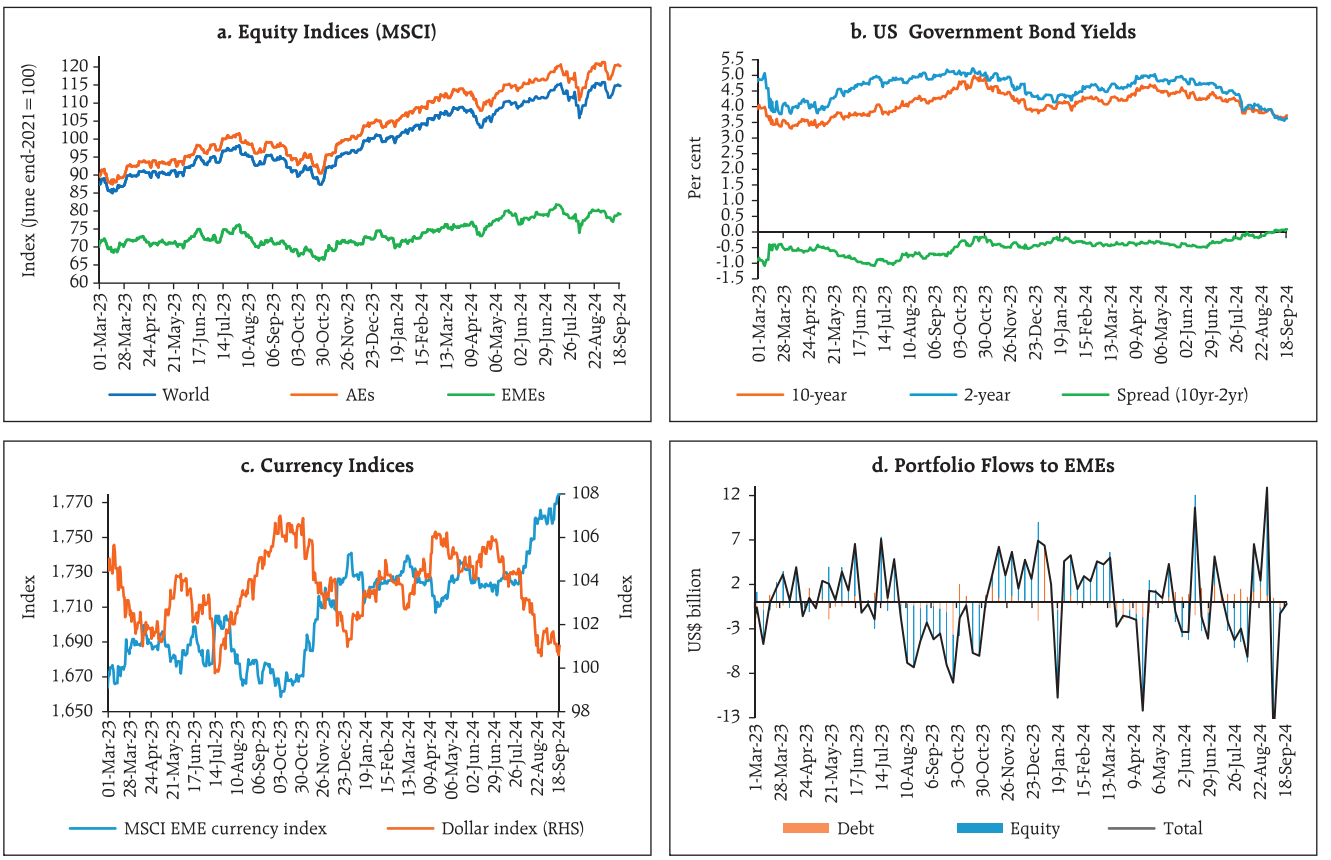
Note: A level of 50 corresponds to no change in activity and a reading above 50 denotes expansion and *vice versa*.
Source: S&P Global.

Global equity markets rebounded from the heavy selling in the first week of August as expectations of rate cuts by major central banks outweighed concerns over slowing economic activity. Accordingly, the Morgan Stanley Capital International (MSCI) world index recorded a 2.4 per cent increase m-o-m in August (Chart II.9a). After a downturn in the first week of September driven by weak labour market data in the US, equity markets continued their rally over the rest of September following the release of better than expected US CPI data.

US government securities yields on 10-year and 2-year bonds softened by 13 bps and 32 bps, respectively, in August. The yield curve inversion (negative spread between 10-year and 2-year yields) reverted in early September as financial markets factored in expectations of rate cuts (Chart II.9b).

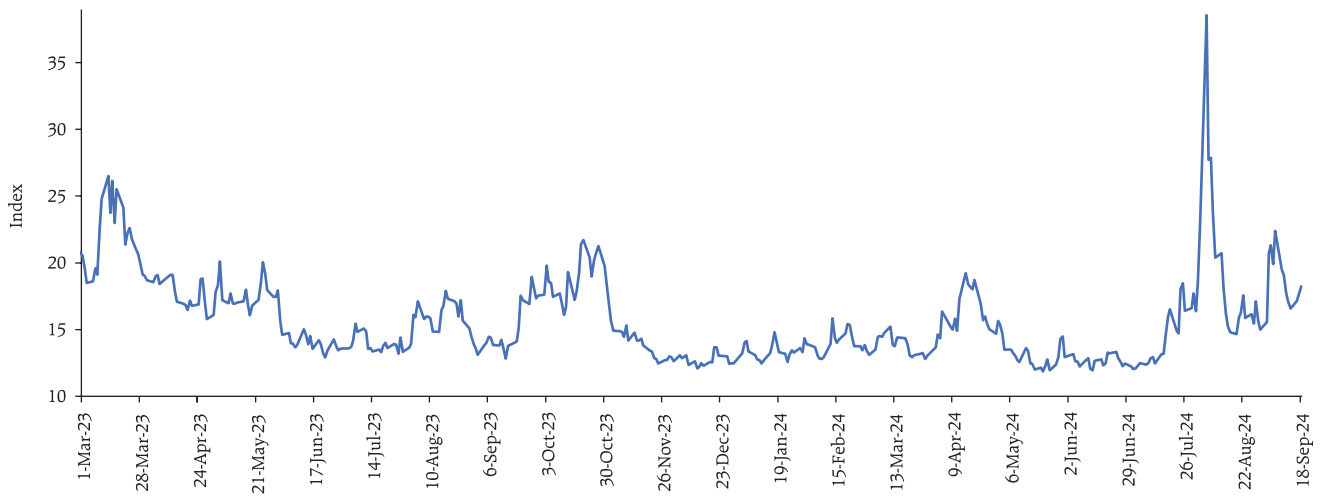
In the currency markets, the US dollar weakened by 2.3 per cent in August, despite some strengthening

Chart II.9: Global Financial Markets



Sources: Bloomberg; and Institute of International Finance (IIF).

Chart II.10: VIX Index



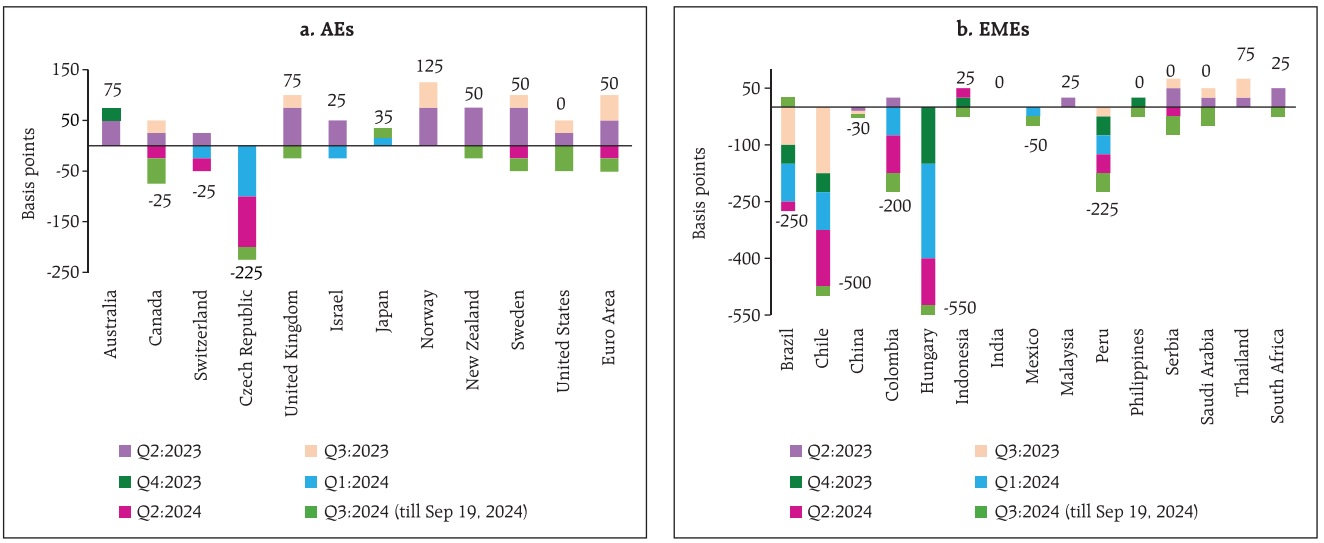
Note: The VIX Index is a financial benchmark designed to be an up-to-the-minute market estimate of the expected volatility of the S&P 500 Index and is calculated by using the midpoint of real-time S&P 500 Index (SPX) option bid/ask quotes.
Source: Bloomberg.

in the last week. Concomitantly, the MSCI currency index for EMEs increased by 2.0 per cent in August due to capital inflows (Chart II.9c and II.9d).

There was a marked decline in US stock market volatility index (VIX) in the later part of August following the sharp increase over unwinding of Yen carry trade, although it increased again in the first week of September (Chart II.10).

Among AE central banks, the US Fed cut its target range by 50 bps to 4.75-5.0 per cent in September, marking its first cut in four years. Both the ECB and the Bank of Canada lowered policy rates by 25 bps while BoE and Japan held policy rates unchanged in their September meetings (Chart II.11a). New Zealand cut its benchmark rate by 25 bps in its August meeting, marking the first cut since March 2020 while Sweden and the Czech Republic reduced policy rates in August. On the other hand, other AE central banks such as

Chart II.11: Changes in Policy Rates



Sources: Bloomberg; and RBI staff estimates.

Israel, Iceland, Norway and South Korea maintained *status quo* in their policy rates. Among EME central banks, Chile, Peru and Indonesia cut their key rates by 25 bps, whereas Brazil and Russia hiked their policy rates by 25 bps and by 100 bps, respectively, in September. Philippines, Mexico and Romania reduced their key rates by 25 bps during their August meetings. (Chart II.11b).

III. Domestic Developments

The Indian economy experienced headwinds from supply chain pressures, which rose above historical average levels (Chart III.1a). Our economic activity index (EAI)[8], based on a range of high frequency indicators, projects GDP growth at 7.0 per cent in Q2:2024-25 on the back of a ticking up of momentum relative to the preceding quarter (Charts III.1b and III.1c).

Table III.1: Baseline Projections

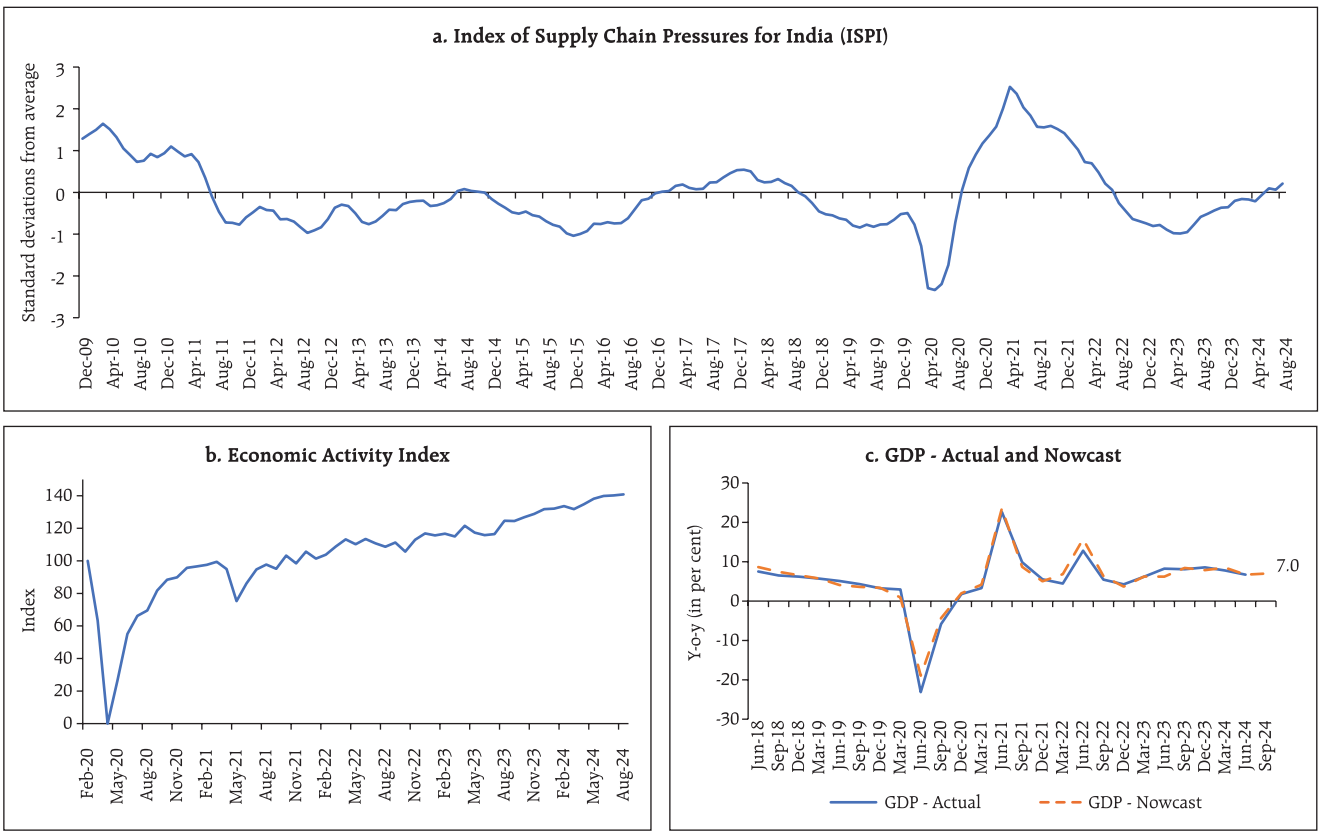
(y-o-y in per cent)

Periods	GDP Growth	CPI Inflation
Q3: 2024-25	8.4	4.4
Q4: 2024-25	6.6	4.6
FY 2024-25	7.3	4.6
Q1: 2025-26	8.0	4.1
Q2: 2025-26	6.4	3.9
Q3: 2025-26	6.4	3.8
Q4: 2025-26	6.2	3.7
FY 2025-26	6.7	3.9

Source: RBI staff estimates.

The in-house dynamic stochastic general equilibrium (DSGE) model projects GDP growth at 7.3 per cent (y-o-y) and headline CPI inflation at 4.6 per cent (y-o-y) during 2024-25 (Table III.1 and Chart III.2). During 2025-26, GDP is projected to grow at 6.7 per cent, with headline CPI inflation softening to 3.9 per cent.

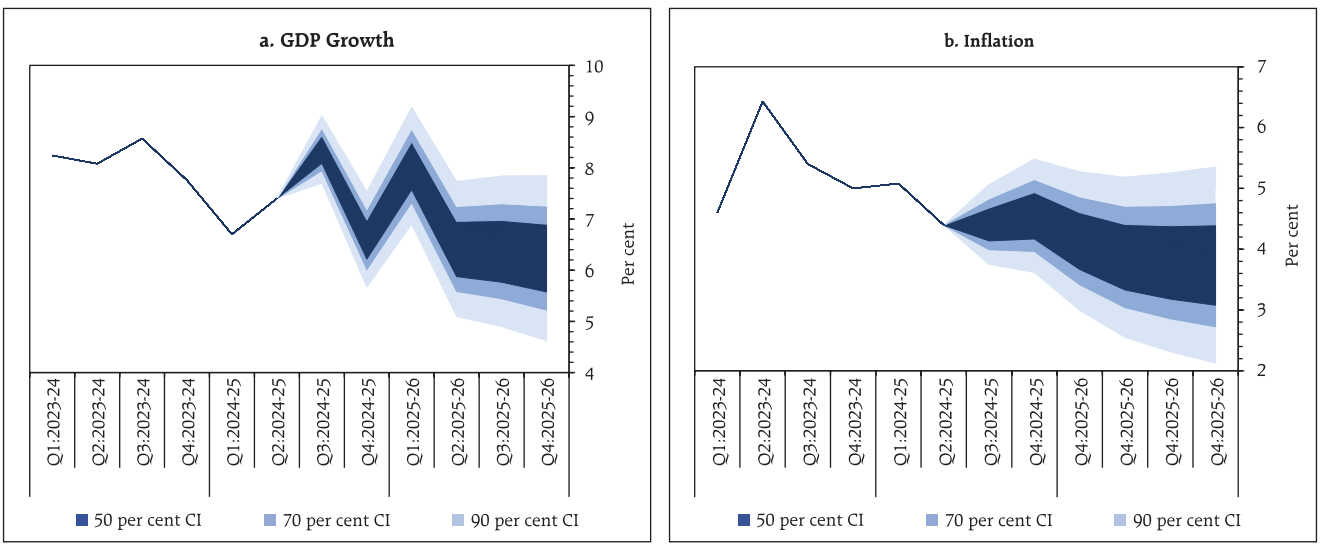
Chart III.1: Economic Activity and GDP Growth Nowcast



Note: The economic activity index (EAI) was constructed by extracting the common trend underlying twenty-seven high frequency indicators of economic activity using a Dynamic Factor Model. EAI was scaled to 100 in February 2020 and 0 in April 2020, the worst affected month due to mobility restrictions.
Sources: National Statistical Office (NSO); Consumer Confidence Survey (CCS); RBI; and RBI staff estimates.

[8] The index extracts the dynamic common factor underlying 27 monthly indicators representing industry, services, global and miscellaneous activities.

Chart III.2: GDP Growth and CPI Inflation Fan Chart

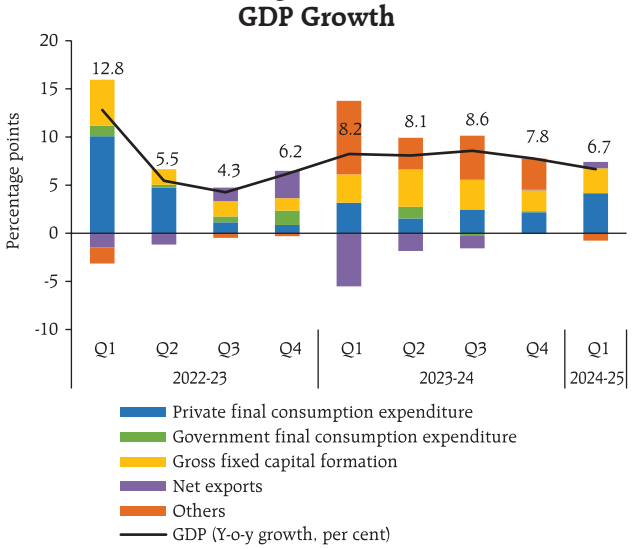


Note: CI: Confidence Interval.
Source: RBI staff estimates.

Aggregate Demand

Real GDP growth softened to 6.7 per cent in Q1:2024-25 in relation to 8.2 per cent in Q1:2023-24 (7.8 per cent in Q4:2023-24). The deceleration in growth is reflective of a contraction in government final consumption expenditure (GFCE) by 0.2 per cent in Q1:2024-25 ahead of the general elections (Chart III.3). Private final consumption expenditure (PFCE) growth accelerated to a seven-quarter high of 7.4 per cent in Q1:2024-25 due to resilient urban demand and improving rural demand conditions. Growth in gross fixed capital formation (GFCF) at 7.5 per cent in Q1:2024-25 pushed the share of GFCF in GDP to 34.8 per cent – the highest since Q2:2012-13. On the external front, exports expanded by 8.7 per cent in Q1:2024-25, while imports registered a relatively modest growth of 4.4 per cent. Accordingly, net exports contributed positively by 0.7 percentage points to GDP growth in Q1:2024-25.

Chart III.3: Weighted Contribution to GDP Growth

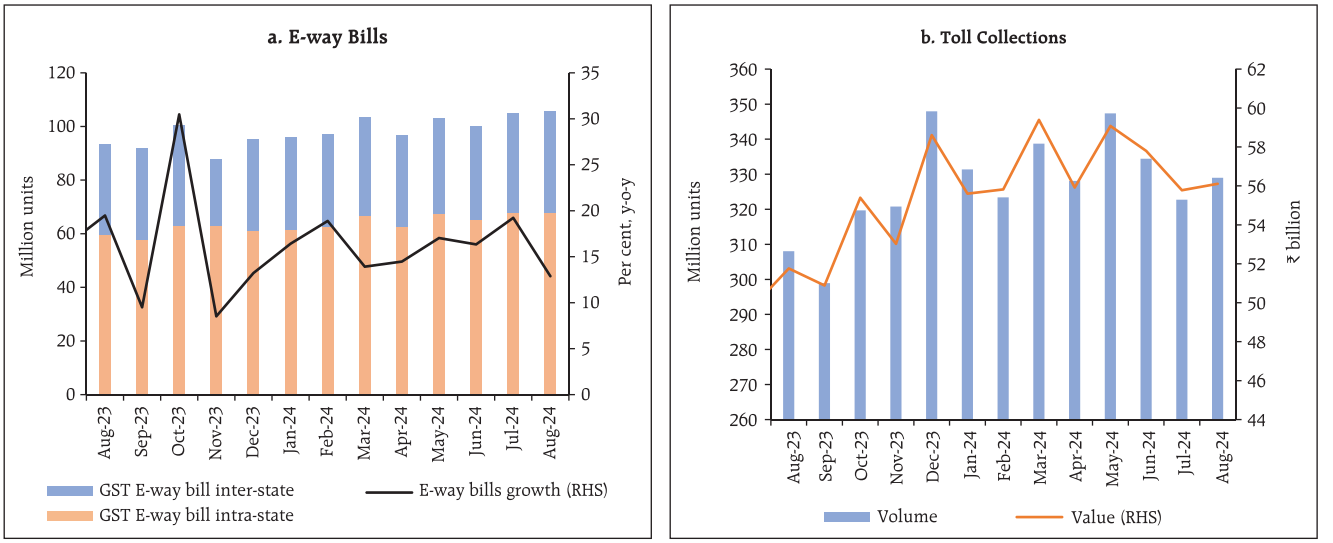


Note: Others include change in stock, valuables and statistical discrepancies.
Source: NSO.

High-frequency indicators show that demand remained firm in August 2024, with e-way bills reaching a record high, though the growth rate slowed compared to the previous month (Chart III.4a). Toll collections, however, moderated to 6.8 per cent (y-o-y) in August from 9.4 per cent (y-o-y) in the previous month (Chart III.4b).

Automobile sales recorded a growth of 7.5 per cent (y-o-y) in August 2024, supported by two-wheelers (Chart III.5a). Domestic tractor sales contracted by 5.8 per cent (y-o-y) in August after registering three consecutive months of expansion (Chart III.5b). After recording double digit growth in July, vehicle registrations moderated in August due to contraction

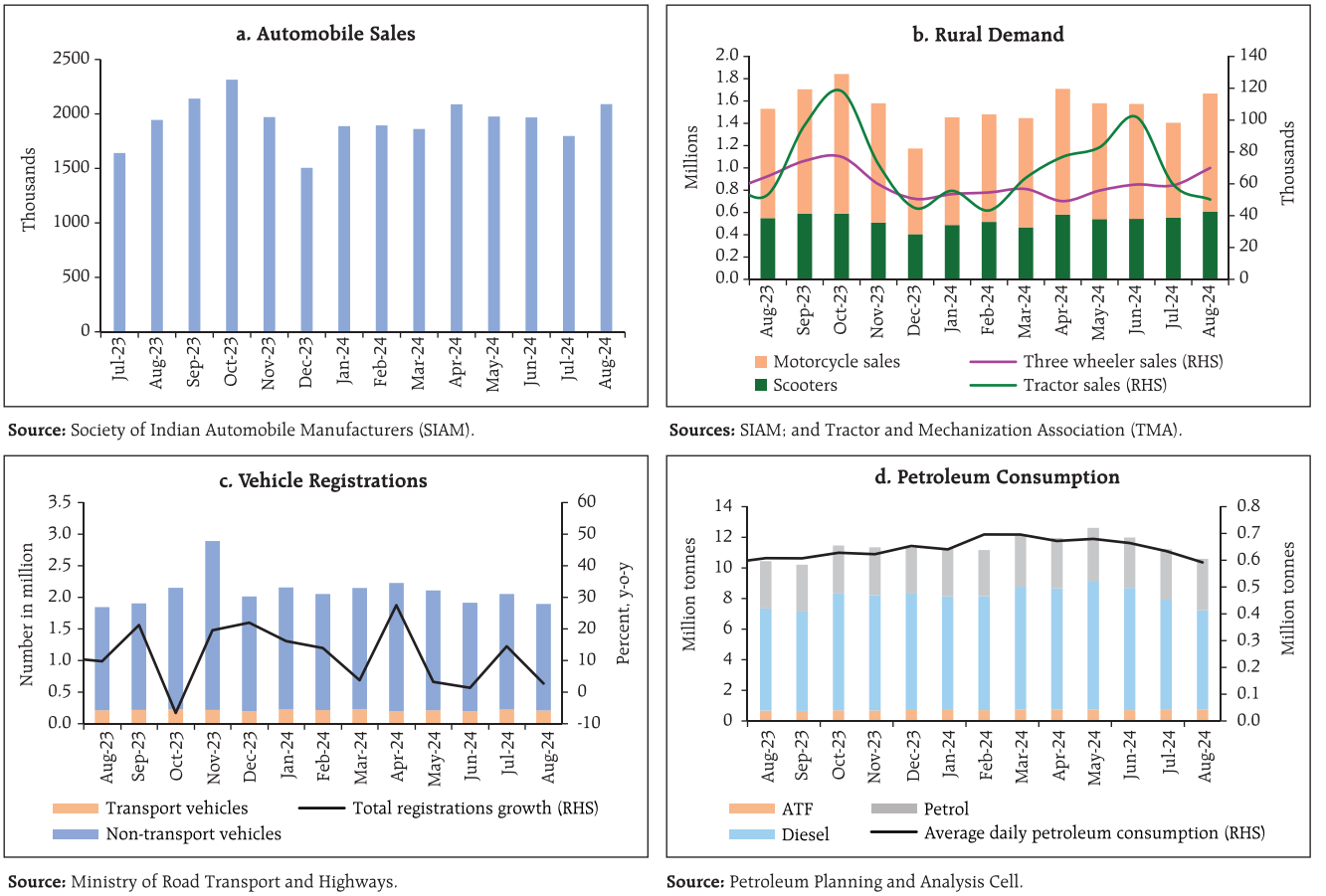
Chart III.4: E-way Bills and Toll Collections



Sources: GSTN; and RBI.

in the transport vehicles segment (Chart III.5c). Average daily petroleum consumption contracted by 2.6 per cent (y-o-y) in August 2024, driven by a decline in diesel consumption (Chart III.5d).

Chart III.5: Automobile Sector Indicators



Source: Society of Indian Automobile Manufacturers (SIAM).

Sources: SIAM; and Tractor and Mechanization Association (TMA).

Source: Ministry of Road Transport and Highways.

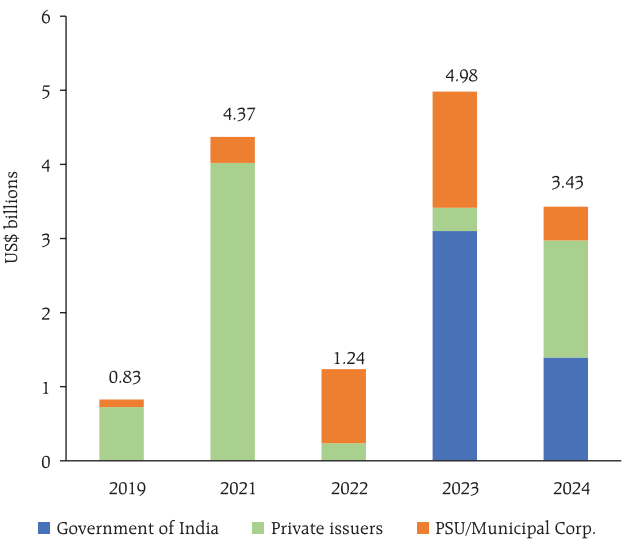
Source: Petroleum Planning and Analysis Cell.

In order to meet India's updated nationally determined contributions (NDC) goals[9] by 2030, the investment required in manufacturing capacity for solar energy, electrolysers, wind and batteries, and green hydrogen is estimated at ₹30 lakh crore over the period 2024-2030. Green bonds in domestic and international capital markets by both private and public sector entities worth US$ 3.43 billion have been issued so far, with the Government of India's sovereign green bonds (SGrBs) being the largest contributor (Chart III.6).

The Reserve Bank has included bank loans up to a limit of ₹30 crore for purposes like solar-based power generators, biomass-based power generators, windmills, micro-hydel plants, and renewable energy-based public utilities, under priority sector lending. As of March 31, 2024 scheduled commercial banks (SCBs') credit limits for the non-conventional energy sector stood at ₹1.19 lakh crore with a total outstanding of ₹75,251 crore (Chart III.7). Further, the loan portfolio of Indian Renewable Energy Development Agency Ltd. (IREDA), which provides financial assistance for renewable energy sources, reached ₹63,207 crores in 2024 so far upto June, recording a y-o-y growth of 33.9 per cent. Going forward, IREDA plans to expand green financing to ₹1.36 lakh crore by the financial year 2030.

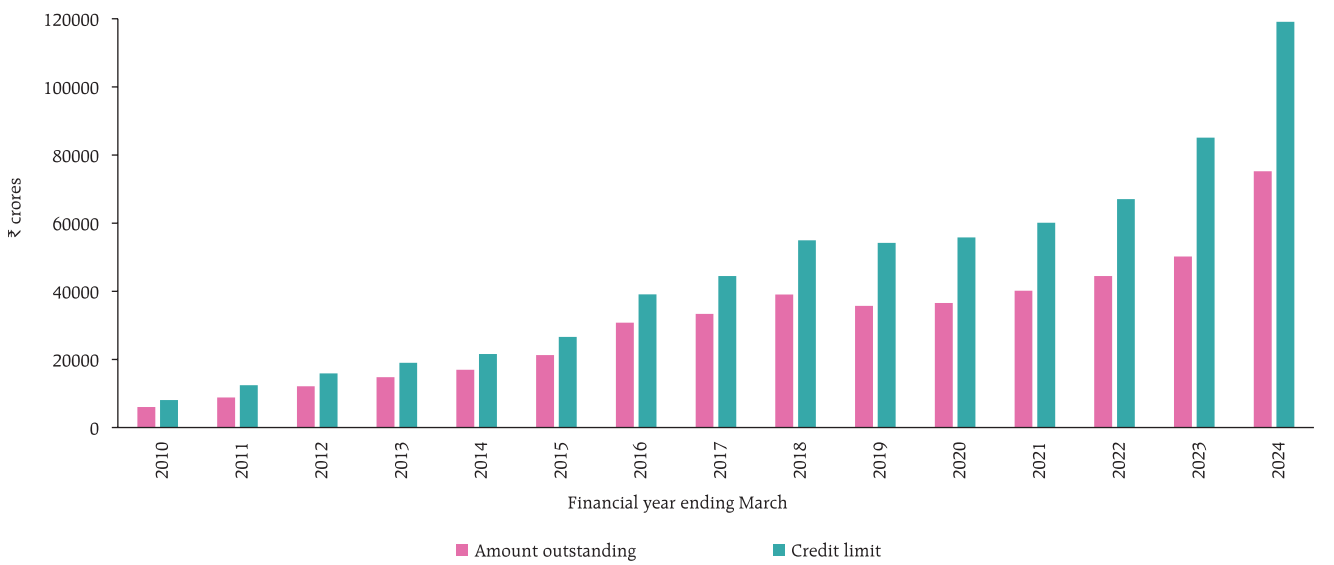
Electric vehicles adoption in India has been gathering pace over the recent years (Chart III.8).

Chart III.6: Green Bond Issuances



Source: Eikon.

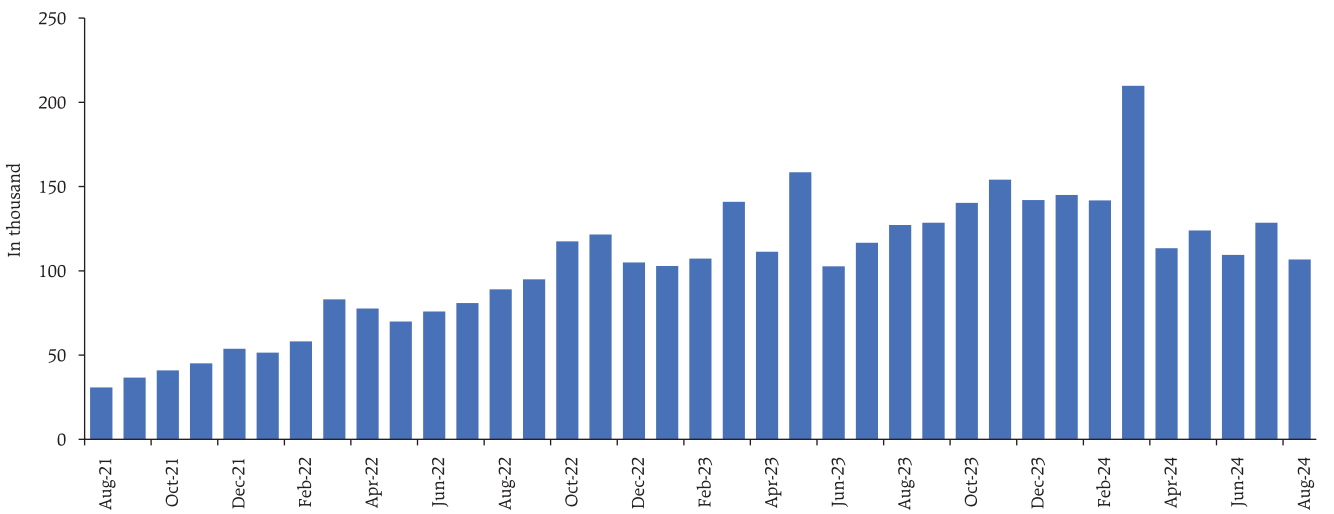
Chart III.7: Credit to Non-Conventional Energy Sector by SCBs



Source: RBI.

[9] These include increasing the capacity of non-fossil fuel-based energy resources such as solar, wind, hydro, and the creation of additional carbon sinks among others.

Chart III.8: Electric Vehicles Registrations



Source: Ministry of Road Transport and Highways.

To expedite this process further, the union cabinet approved the Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) scheme[10] on September 11, 2024 with an outlay of ₹10,900 crore.

As per the latest Periodic Labour Force Survey (PLFS) data[11], the Labour Force Participation Rate (LFPR) and the Worker Population Ratio (WPR) in urban India declined marginally during April-June 2024 in relation to the previous quarter (January - March 2024). The unemployment rate in urban areas decreased to 6.6 per cent during April-June 2024 from 6.7 per cent in the previous quarter (Chart III.9).

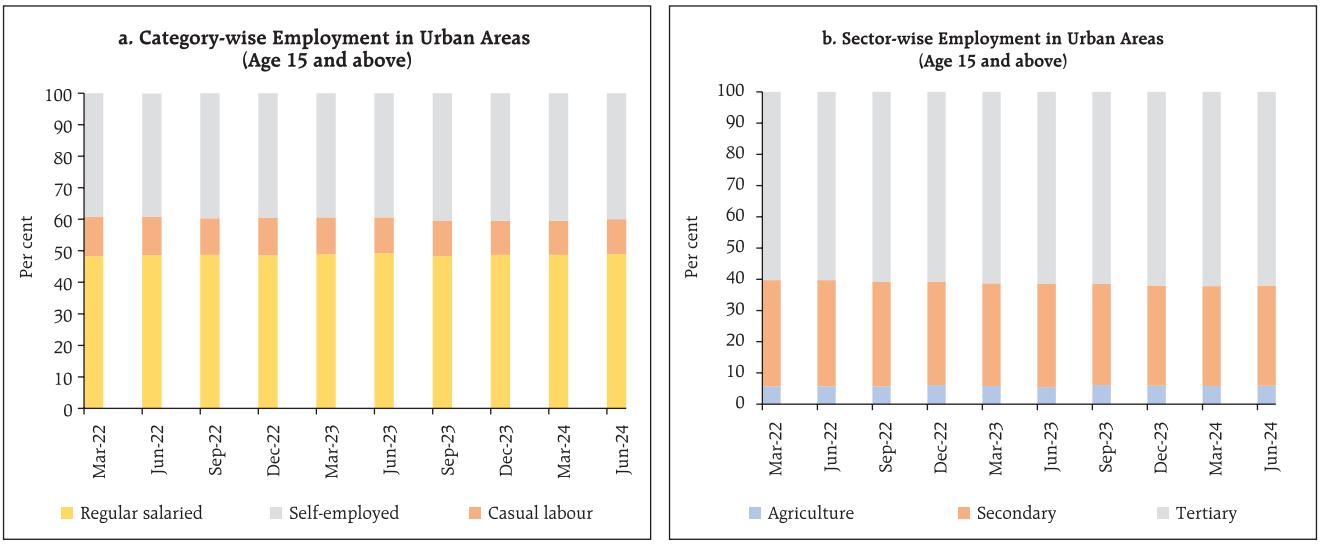
Chart III.9: PLFS Quarterly (Age 15 and above)

Source: Ministry of Statistics and Programme Implementation (MoS&PI).

[10] https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2053959.

[11] Quarterly Bulletin PLFS April-June 2024.

Chart III.10: PLFS Quarterly (Employment by Category and Sector)



Note: Construction sector is included in Secondary in Chart III.10b.
Source: MoS&PI.

There was an increase in the share of regular salaried and casual labour in total employment, while that of self-employed workers declined in April-June 2024 from the previous quarter (Chart III.10a). Overall, employment in the tertiary sector contributed 62.4 per cent of total urban employment during April-June 2024 (Chart III.10b).

As per the PMI employment indices, organised manufacturing employment recorded its sixth consecutive month of expansion in August 2024, with robust growth in the intermediate goods segment. Job creation in both manufacturing and services sectors continued to expand, *albeit* at a moderate pace (Chart III.11).

Households' demand for work under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) contracted for the third month in a row in August, reflecting higher demand for agricultural

Chart III.11: PMI Employment Indices

Note: A PMI value above 50 indicates expansion.
Source: S&P Global.

Chart III.12: Households Demand for Work under MGNREGA

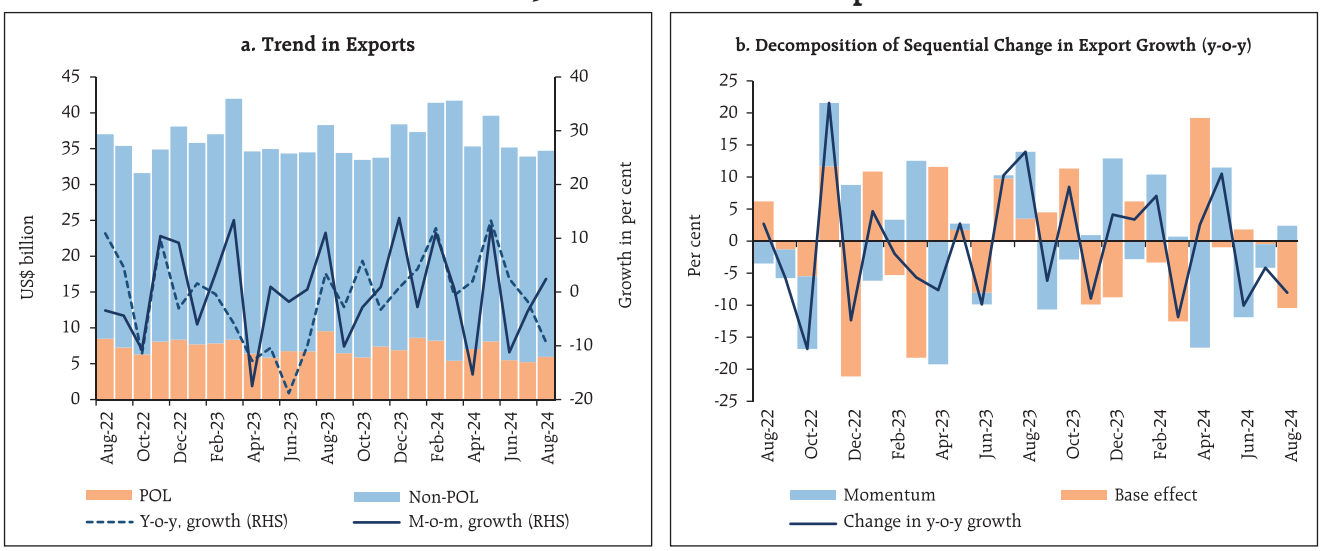
Source: Ministry of Rural Development, GoI.

labour during the *kharif* sowing season. On a y-o-y basis, it recorded a decline for six consecutive months, indicating increased availability of jobs in rural areas on farms and in construction (Chart III.12).

India's merchandise exports at US$ 34.7 billion contracted by 9.3 per cent (y-o-y) in August 2024 mainly due to an unfavourable base effect which more than offset the positive momentum (Chart III.13).

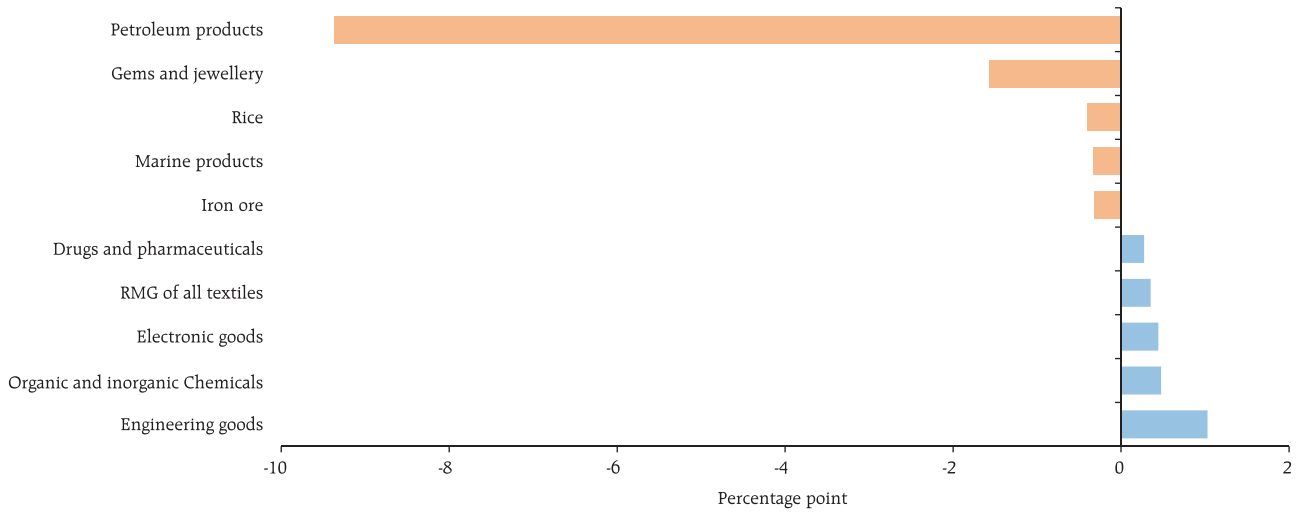
Exports of 11 out of 30 major commodities (accounting for 37.8 per cent of the export basket) contracted on a y-o-y basis in August. Petroleum products, gems and jewellery, rice, marine products, and iron ore contributed to the contraction, while engineering goods, organic and inorganic chemicals, electronic goods, ready-made garments (RMG), and drugs and pharmaceuticals supported export growth

Chart III.13: India's Merchandise Exports



Note: POL: Petroleum, oil and lubricants.
Sources: Press Information Bureau (PIB); DGCI&S; and RBI staff estimates.

Chart III.14: India's Merchandise Exports – Relative Contribution (August 2024 over August 2023)



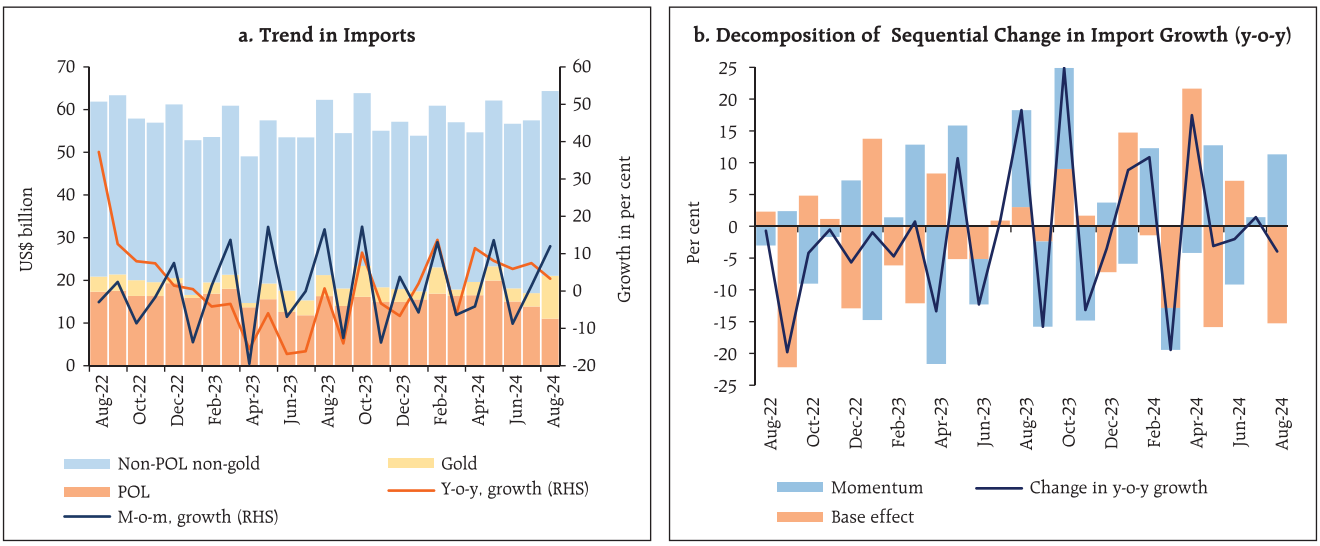
Sources: PIB; and RBI staff estimates.

in the month (Chart III.14). During April-August 2024, however, India's merchandise exports expanded by 1.1 per cent to US$ 178.7 billion, primarily led by electronic goods, engineering goods, drugs and pharmaceuticals, RMG of all textiles, and organic and inorganic chemicals, while petroleum products, gems and jewellery, rice, marine products, and iron ore dragged exports down.

Exports to 12 out of 20 major destinations contracted in August 2024 whereas during April-August 2024, 11 out of 20 major destinations recorded an expansion in exports. Notably, India's exports to top 3 destinations, *viz.*, the US, the UAE, and the Netherlands increased during April-August 2024.

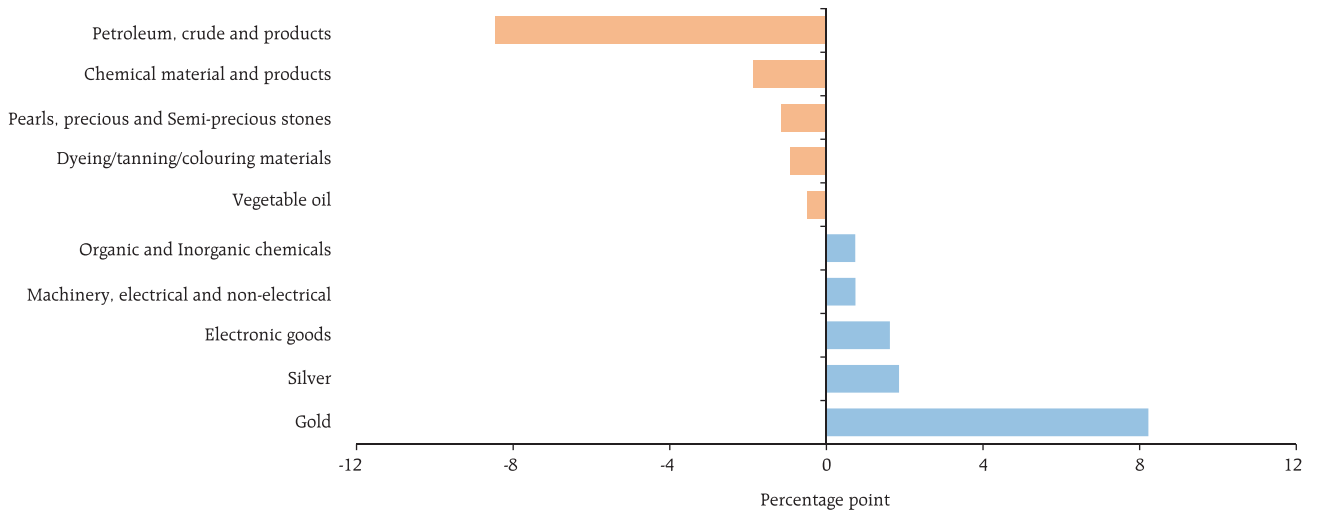
Merchandise imports at US$ 64.4 billion expanded by 3.3 per cent (y-o-y) in August, aided by a positive momentum (Chart III.15). Out of 30 major

Chart III.15: India's Merchandise Imports



Sources: PIB; DGCI&S; and RBI staff estimates.

Chart III.16: India's Merchandise Imports – Relative Contribution (August 2024 over August 2023)



Sources: PIB; and RBI staff estimates.

commodities, 18 commodities (accounting for 54.1 per cent of the import basket) registered growth on a y-o-y basis.

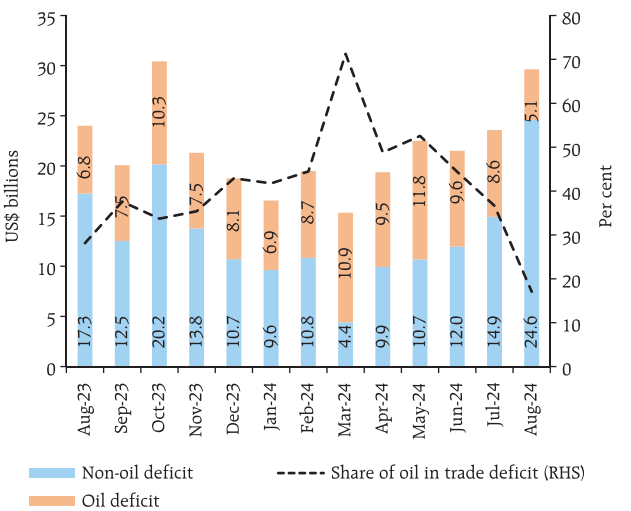
Gold, silver, electronic goods, machinery, and chemicals contributed positively, while POL, chemical materials and products, pearls, precious and semi-precious stones, dyeing, tanning and colouring materials, and vegetable oil contributed negatively to overall import growth (Chart III.16). During April-August 2024, India's merchandise imports increased by 7.1 per cent (y-o-y) to US$ 295.3 billion, led by petroleum, crude and products, gold, electronic goods, transport equipment, and silver, while pearls, precious and semi-precious stones, chemical material and products, coal, coke and briquettes, fertilisers, and dyeing, tanning and colouring materials contributed negatively.

Imports from 9 out of 20 source countries expanded in August 2024 on a y-o-y basis. Imports from 14 out of 20 source countries increased during April-August 2024 with imports from top 3 source countries, *viz.*, China, Russia, and the UAE, recording an expansion.

The merchandise trade deficit rose to a 10-month high at US$ 29.6 billion in August 2024. The share of POL in the total merchandise trade deficit declined to 17.1 per cent in August 2024 from 28.1 per cent a year ago (Chart III.17).

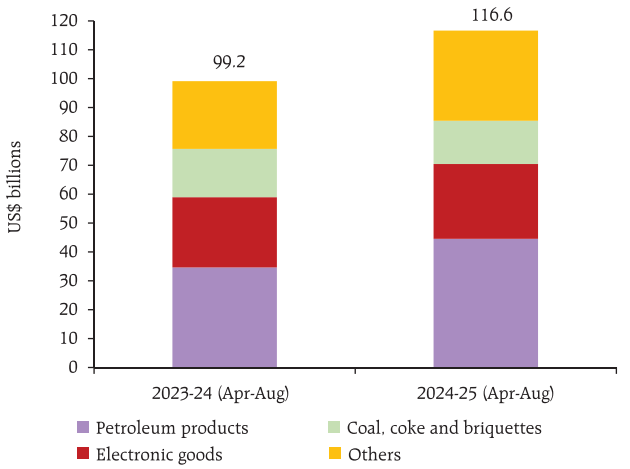
During April-August 2024, India's merchandise trade deficit widened to US$ 116.6 billion from US$ 99.2 billion a year ago. Petroleum products were the

Chart III.17: Decomposition of India's Merchandise Trade Deficit



Sources: PIB; and DGCI&S.

Chart III.18: Commodity-wise Merchandise Trade Deficit



Note: Coal, coke and briquettes exports in August 2024 are assumed to be at the same level as in July 2024.
Sources: PIB; DGCI&S; and RBI staff estimates.

largest source of the deficit, followed by electronic goods (Chart III.18).

Services exports at US$ 30.6 billion grew by 16.6 per cent (y-o-y) in July 2024 and services imports rose by 15.7 per cent (y-o-y) to US$ 15.9 billion (Chart III.19). Consequently, net services export earnings increased by 17.6 per cent (y-o-y) to US$ 14.7 billion during the month. In 2023, India was the seventh largest services exporter, with a share of 4.3 per cent in world services exports.

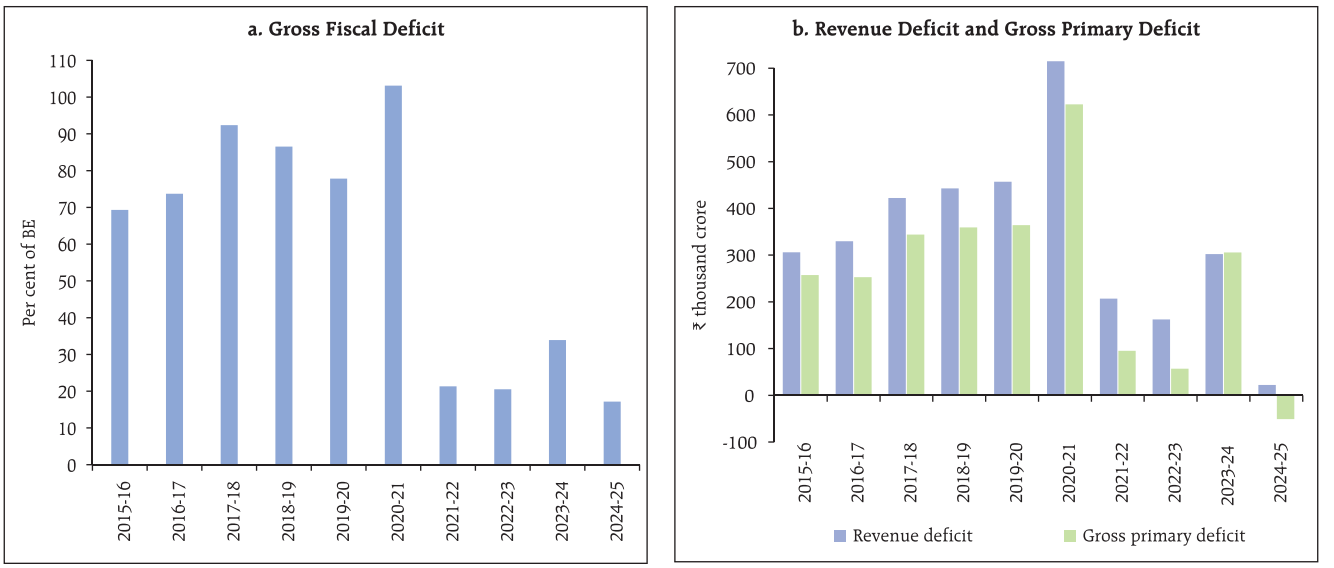
All major key deficit indicators of the Union government, *viz.*, the gross fiscal deficit (GFD), the revenue deficit (RD) and the primary deficit (PD) improved during April-July 2024 [both in absolute terms as well as per cent of budget estimates (BE)] relative to the corresponding period of the previous year (*i.e.*, April-July 2023).[12] During April-July 2024, the GFD has come down to 17.2 per cent of the BE, the lowest in more than a decade (Chart III.20a). Moreover, a primary account surplus was posted during April-July 2024 (Chart III.20b). This improvement in the financial position of the Union government during April-July 2024 occured on the back of growth in revenue receipts. On the other hand, the total expenditure of the Union government contracted by 5.8 per cent during April-July 2024 on a y-o-y basis, largely attributable to the model code of conduct imposed due to the general elections held in Q1:2024-25.

Chart III.19: Services Exports and Imports: Growth Rates

Source: RBI.

[12] Latest data released by the Controller General of Accounts (CGA) pertaining to the financial position of the Union government.

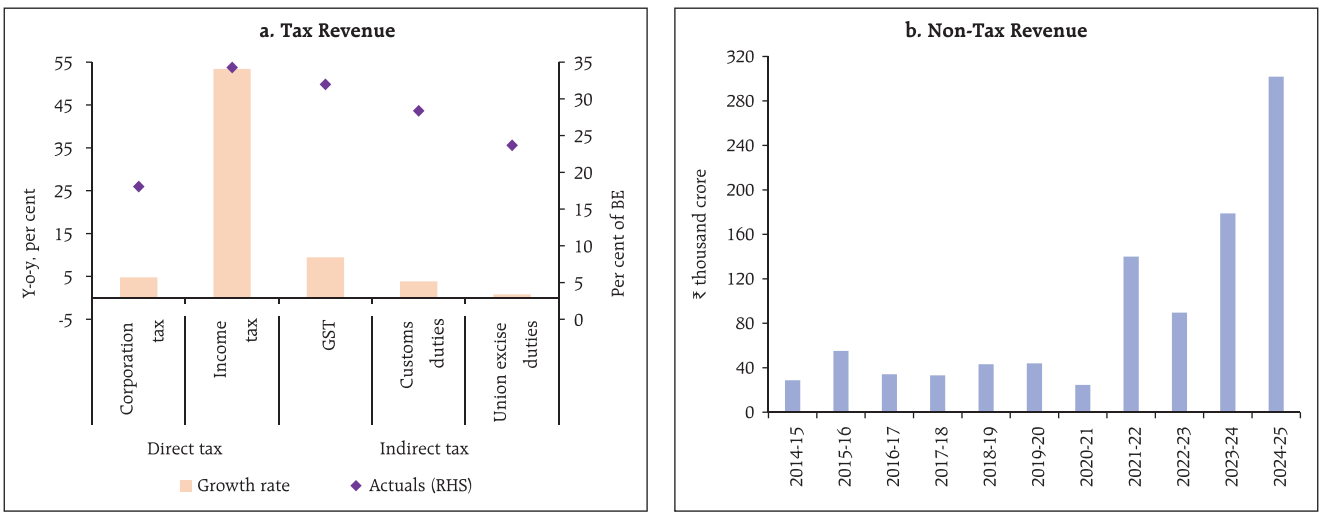
Chart III.20: Budgetary Deficits (April-July)



Source: CGA.

On the receipts side, gross tax revenue recorded a growth of 21.3 per cent during April-July 2024, with direct and indirect taxes registering an increase of 35.4 per cent and 7.6 per cent, respectively, on a y-o-y basis. Under direct taxes, income tax registered double digit growth rate of 53.4 per cent (y-o-y). Under indirect taxes, goods and services tax (GST) collections recorded a growth rate of 9.5 per cent (Chart III.21a). With the surplus transfer of ₹2.11 lakh crore from the Reserve Bank, non-tax revenue receipts recorded a y-o-y growth of 68.8 per cent during April-July 2024 over the corresponding period of the previous year (Chart III.21b). On the other hand, the non-debt capital receipts registered a

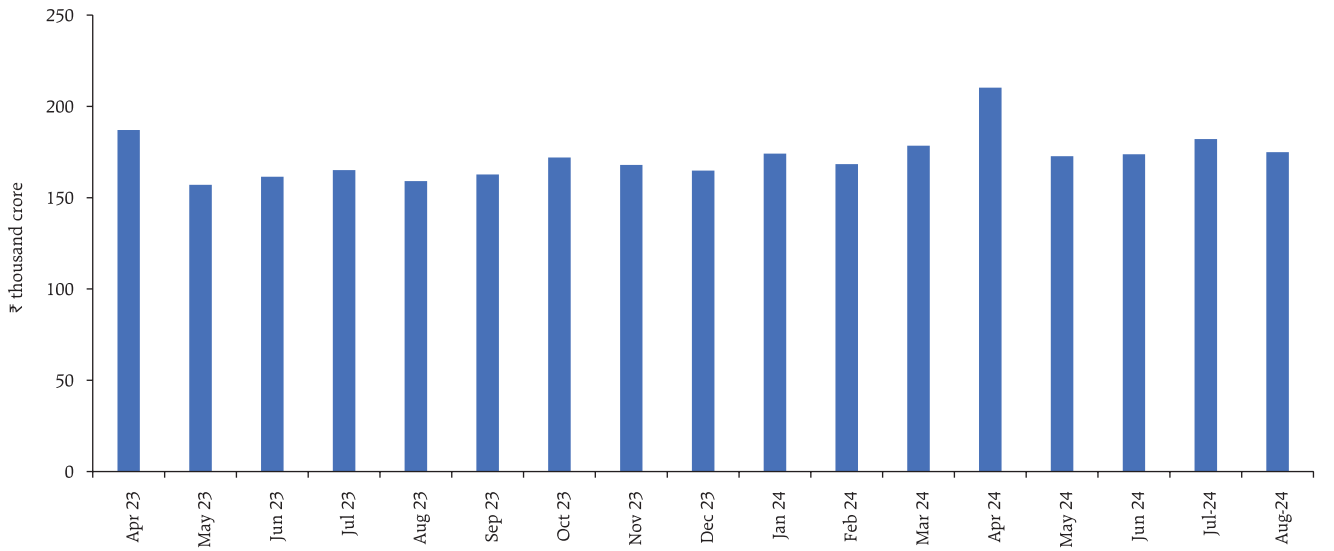
Chart III.21: Revenue Receipts of the Union Government (April-July)



Note: The Reserve Bank changed its accounting year from July-June to April-March, starting April 1, 2021. Accordingly, since 2021-22 the Reserve Bank's surplus is transferred to the Union government in the month of May rather than in August.

Sources: CGA; and Union Budget Documents.

Chart III.22: Monthly GST Revenue



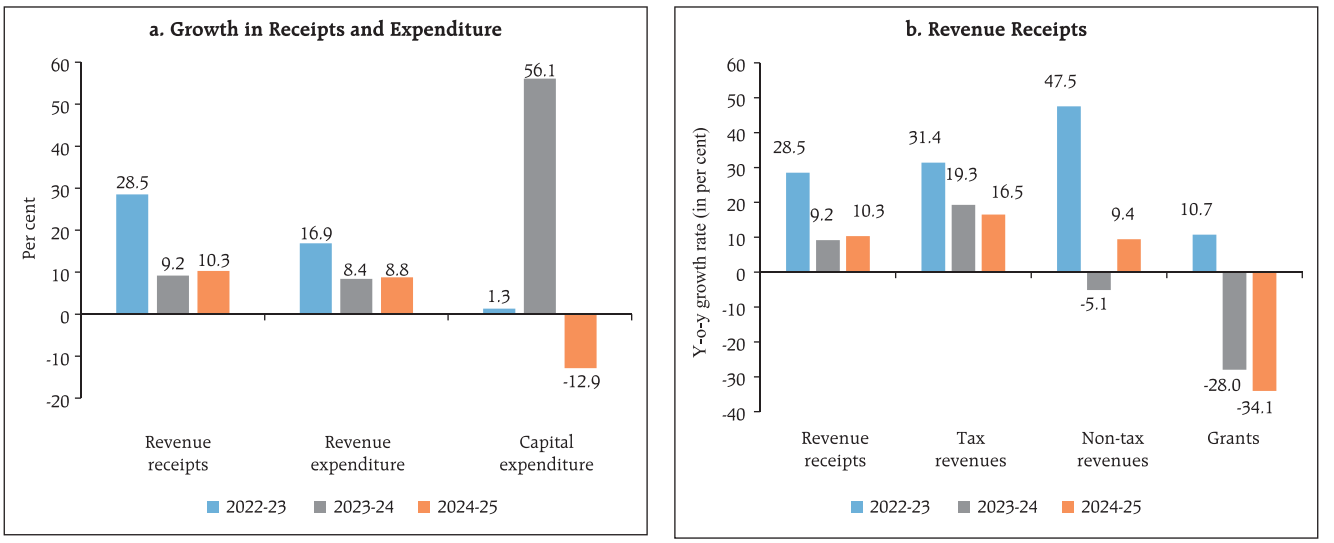
Sources: PIB; and GST Portal.

contraction of 53.4 per cent during April-July 2024 on a y-o-y basis (including disinvestment). Overall, total receipts recorded a y-o-y growth of 32 per cent.

Gross GST collections (Centre *plus* States) for the month of August 2024 stood at ₹1.75 lakh crore, registering a growth of 10 per cent on a y-o-y basis (Chart III.22). After accounting for refunds, net GST collections stood at ₹1.51 lakh crore, growing at 6.5 per cent on a y-o-y basis.

Accounts data for April-July 2024 indicate that States' GFD declined by 13.2 per cent and their RD fell by 14.9 per cent (y-o-y). This consolidation was achieved through an increase in revenue receipts and contraction in capital expenditure (Chart III.23a).

Chart III.23: States' Key Fiscal Performance Indicators (April-July)



Note: Data pertains to 23 States.
Source: CGA.

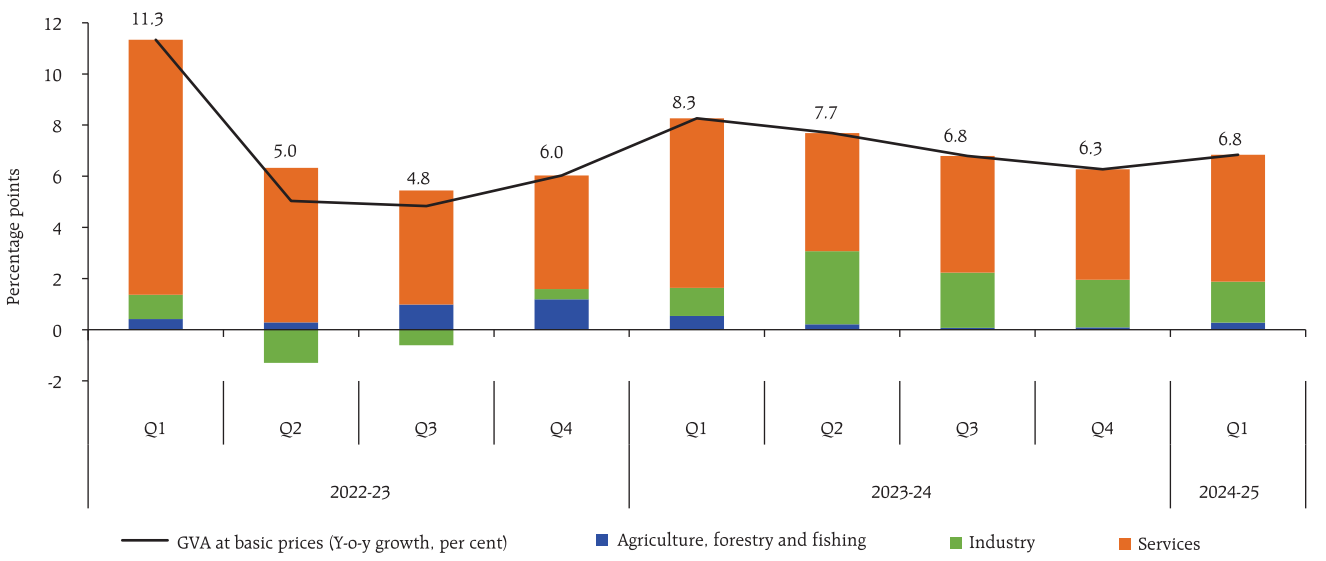
States' revenue receipts increased marginally on account of growth in tax and non-tax revenues, even as grants from the Union Government contracted (Chart III.23b). Within States' own tax revenues, growth in goods and services tax (SGST) moderated, while excise duties and sales tax/value added tax (VAT) were higher than a year ago.

On the expenditure side, growth in revenue expenditure picked up, while capital expenditure declined during April-July 2024. Going forward, capital expenditure is expected to pick up owing to the Union government's provision of special assistance of ₹ 1.5 lakh crore long term interest free loans.

Aggregate Supply

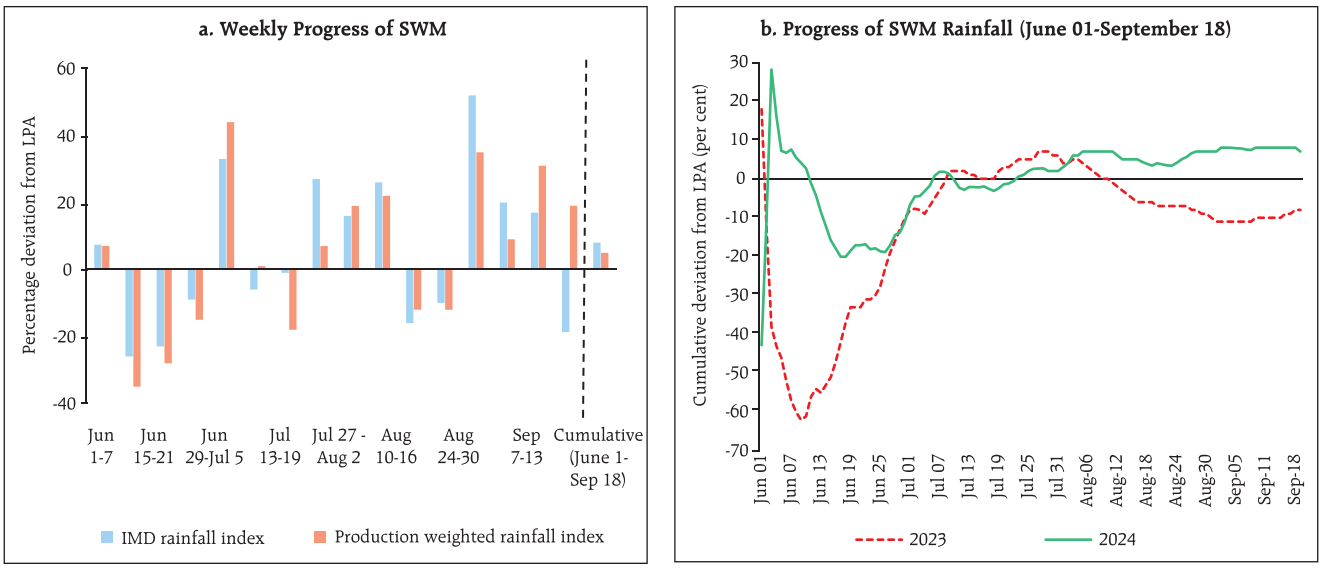
Aggregate supply – measured by gross value added (GVA) at basic prices – expanded by 6.8 per cent in Q1:2024-25 as against a growth of 8.3 per cent a year ago. Real GVA growth was propelled by the industrial sector and resilience in the services sector (Chart III.24). The growth in agriculture moderated to 2.0 per cent on a y-o-y basis in Q1:2024-25 as compared with a growth of 3.7 per cent a year ago, as *rabi* foodgrain production declined on account of lower water levels in major reservoirs and river basins. Within the industrial sector, manufacturing – the dominant component – recorded a strong growth of 7.0 per cent while activity in mining and quarrying increased on account of higher production of coal and natural gas. The services sector also remained buoyant, clocking a growth of 7.7 per cent in Q1:2024-25, which was broad-based across sub-sectors. The construction sector registered growth of 10.5 per cent, primarily due to a double digit growth in finished steel consumption. Growth in trade, hotels, transport, communication and services related to broadcasting moderated while growth in financial services remained robust, supported by steady profit margins of information technology (IT) companies and continued credit and deposit growth. Public administration, defence, and other services (PADO) recorded an impressive growth of 9.5 per cent in Q1:2024-25 driven by an upbeat growth in other

Chart III.24: Weighted Contribution to GVA Growth



Sources: NSO; and RBI staff estimates.

Chart III.25: Progress of Southwest Monsoon (SWM)



Sources: IMD; and RBI staff estimates.

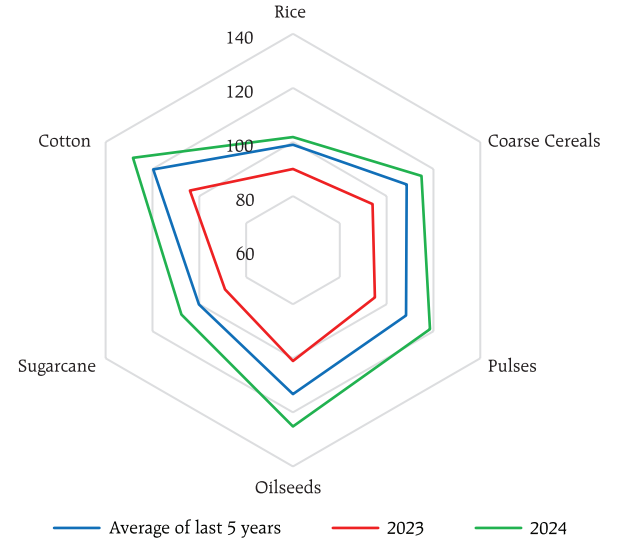
services while public administration and defence – proxied by government revenue expenditure net of interest payment and subsidies – exhibited a contraction during the quarter.

Agriculture growth prospects were boosted by the progress of southwest monsoon (SWM) rainfall. The cumulative SWM rainfall was 7 per cent above the LPA this year so far (June 1 to September 18), as against 8 per cent below the LPA a year ago (Chart III.25a). Cumulative rainfall consistently remained above the normal LPA since mid-July, unlike last year when it tapered off during the latter half of the SWM (Chart III.25b).

The production weighted rainfall index (PRN) stood marginally lower at 106 per cent of LPA but it remained 'above normal' for all the major crops except for rice for which it was normal as on September 18, 2024. Also, all major crops recorded PRN higher than their levels in the corresponding period last year (Chart III.26).

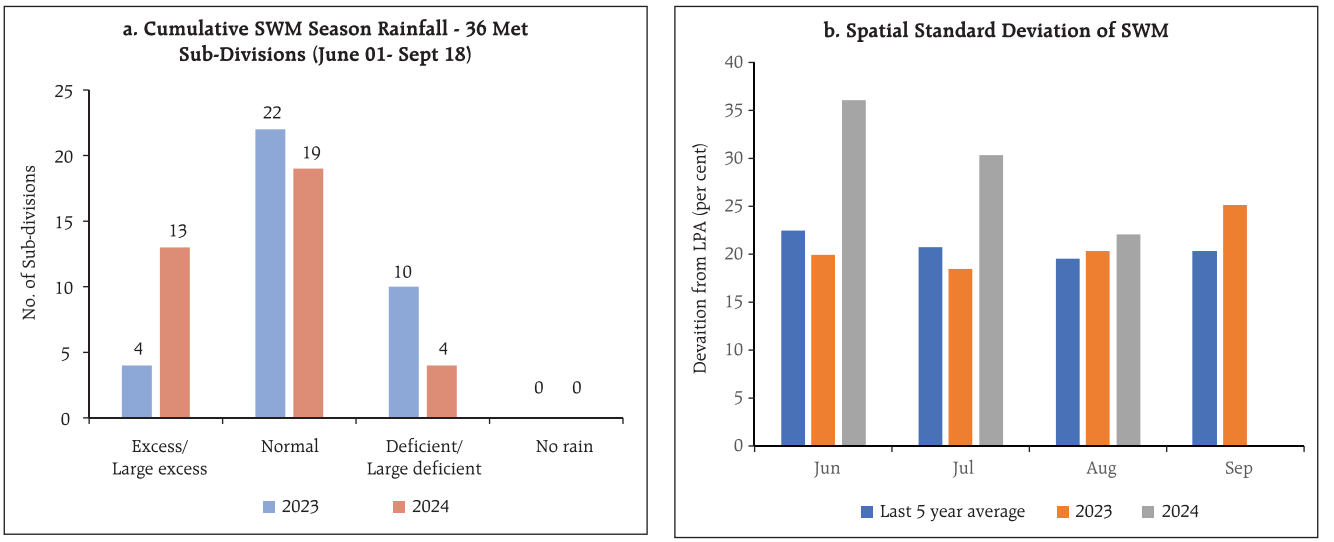
During the current SWM season so far, 19 out of the 36 meteorological sub-divisions recorded normal rainfall (Chart III.27a). The number of sub-divisions receiving excess/large excess rainfall increased to 13 in the current year from 4 a year ago, which is reflected in the higher spatial variation in rainfall across the country *vis-à-vis* last year (Chart III.27b). Deficient rainfall was mainly observed in states such as Arunachal Pradesh, Nagaland, Manipur, Bihar and Punjab.

Chart III.26: Crop-wise PRN



Sources: IMD; and RBI staff estimates.

Chart III.27: Spatial Distribution of SWM



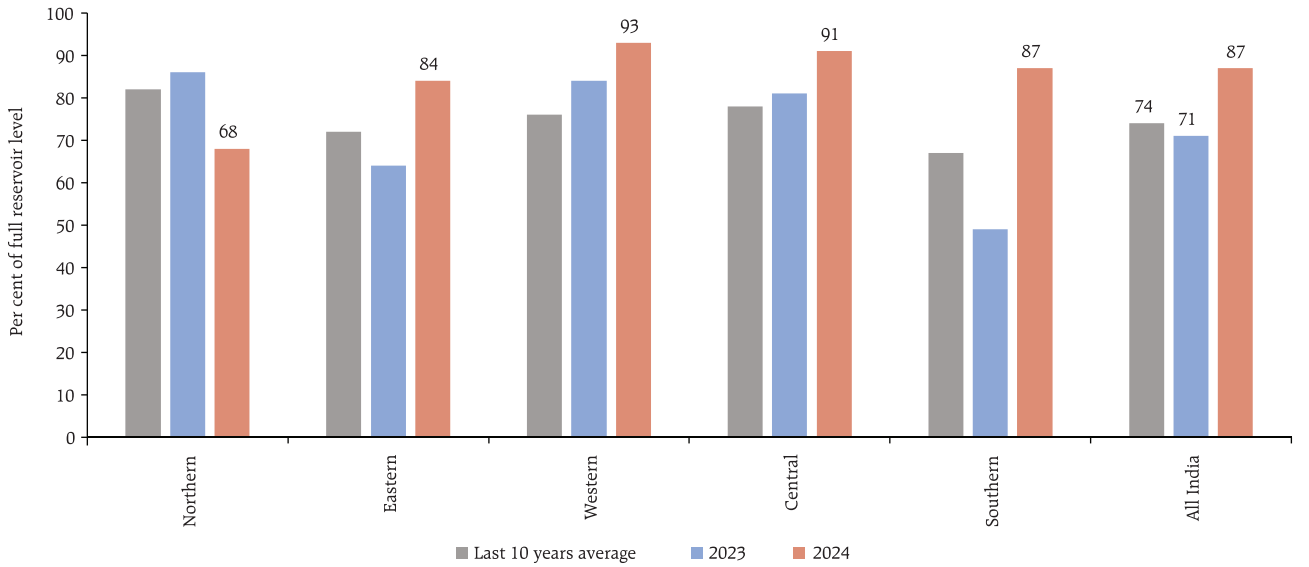
Sources: IMD; and RBI staff estimates.

Reservoir levels have been replenished to 87 per cent of capacity (as on September 19, 2024) as compared with 71 per cent in the corresponding period last year, which boosts *rabi* sowing prospects (Chart III.28). The live storage of 155 major reservoirs stood at 123 per cent of the level in the corresponding period of last year and 118 per cent of the last 10 years' average.

As per Indian Meteorological Department (IMD), monthly rainfall for September 2024 over the country as a whole is most likely to be above normal (Chart III.29). Further, it predicts that the neutral Indian Ocean Dipole (IOD) conditions are likely to continue until the end of monsoon season.

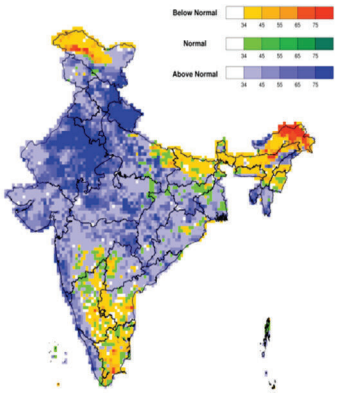
Total area sown stood at 1096.6 lakh hectares (as on September 13, 2024), which is 2.2 per cent

Chart III.28: Reservoir Level (as on September 19)



Source: Central Water Commission.

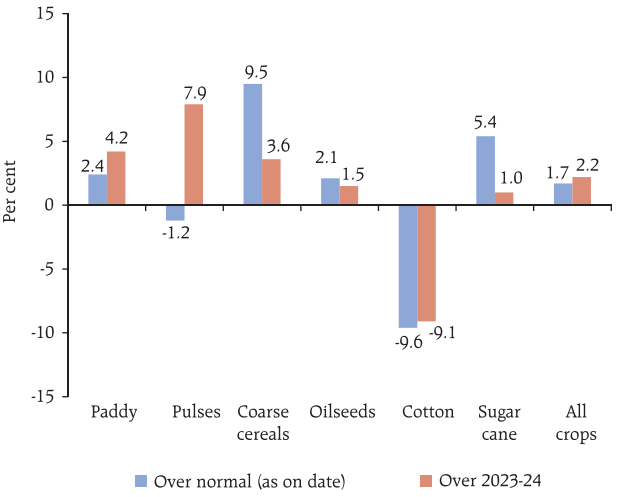
Chart III.29: Southwest Monsoon Forecast for September 2024



Notes:
1. Chart denotes probability forecast of tercile categories (below normal, normal and above normal) for the rainfall over India during September 2024.
2. The figures illustrate the most likely categories as well as their probabilities.
3. Tercile categories have equal climatological probabilities of 33.33 per cent each.
4. Maps are for illustrative purposes only.

Source: IMD.

Chart III.30: *Kharif* Acreage (As on September 13, 2024)

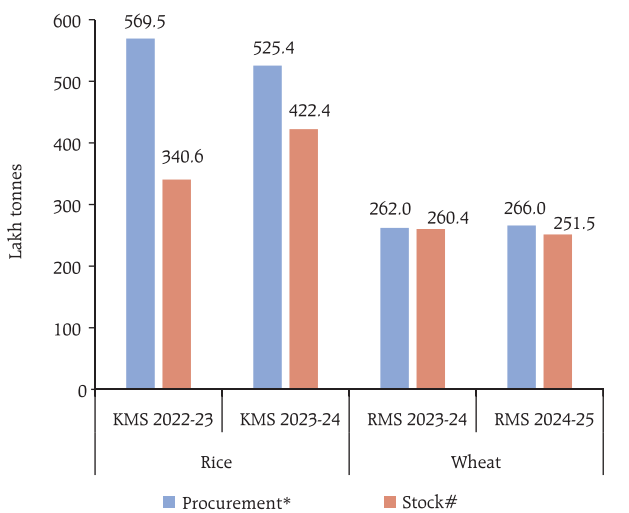


Source: Ministry of Agriculture and Farmers' Welfare

higher than last year and 1.7 per cent higher over the normal area as on date (Chart III.30). Except cotton, area under all major crops has increased over last year. Pulses recorded the highest increase in area at 7.9 per cent over last year. Acreage under rice, the key *kharif* crop which accounts for almost 37 per cent of the *kharif* area, increased by 4.2 per cent y-o-y. *Kharif* sowing of onions increased by 61 per cent while the area under tomatoes lagged behind, with key producing states reporting lower sowing due to extended heatwave condition till June.

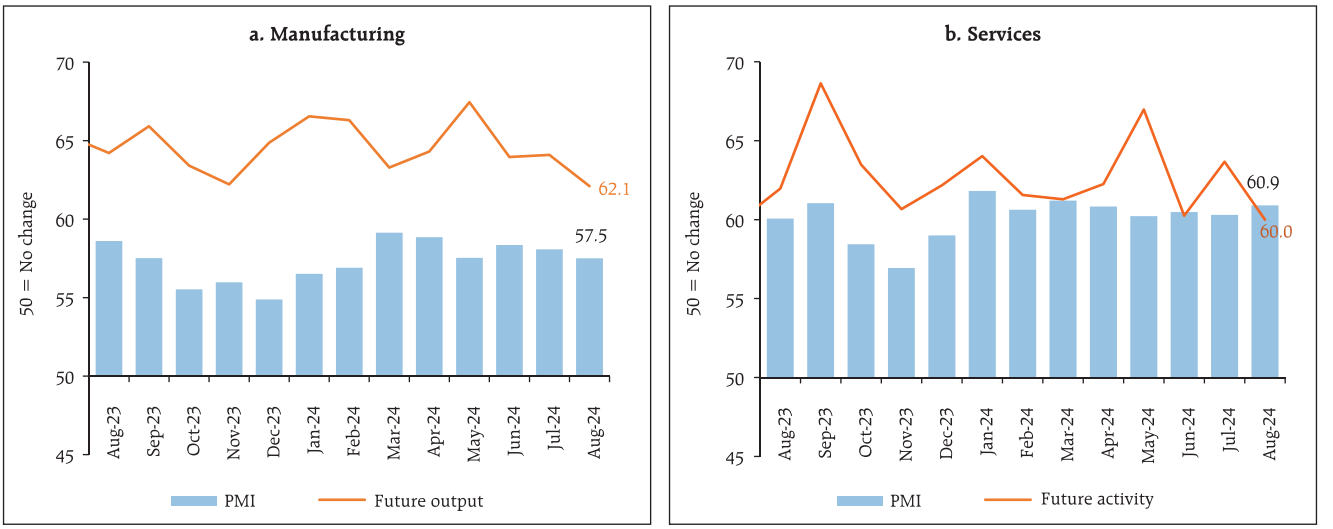
As on September 17, 2024 the government has procured 525 lakh tonnes of rice in *kharif* marketing season (KMS) 2023-24, which is 8 per cent lower than the procurement in the last season. The stock of rice with the Food Corporation of India (FCI) stood at 422 lakh tonnes as on September 01, 2024, which is 24 per cent higher than the corresponding period last year. To reduce the excess stock of rice before the commencement of the new procurement season starting from October 1, 2024, distilleries have been allowed to purchase 23 lakh tonnes of rice from the FCI for ethanol production at the rate determined through the weekly e-auctions. Procurement of wheat at 266 lakh tonnes in *rabi* marketing season (RMS) 2024-25 was 1.6 per cent higher than the last season. The stock of wheat as on September 01, 2024 stood at 252 lakh tonnes and remained 3.4 per cent lower than last year. The buffer norm for rice and wheat stock for July-September quarter is 135.4 lakh tonnes and 275.8 lakh tonnes, respectively (Chart III.31).

Chart III.31: Central Public Distribution System



Note: *:- Cumulative procurement as on September 17; #:- As on September 01.
Sources: FCI; and Centre for Monitoring Indian Economy.

Chart III.32: Purchasing Managers' Index (PMI)



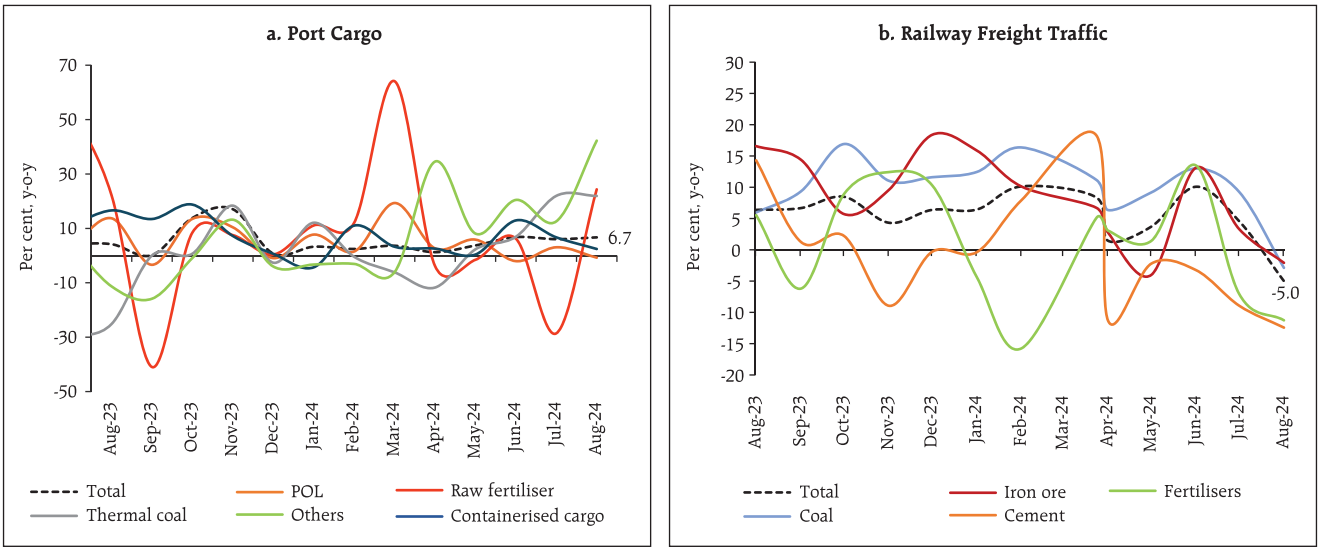
Note: A level of 50 corresponds to no change in activity and a reading above 50 denotes expansion and vice versa.
Source: S&P Global.

India's manufacturing PMI eased to 57.5 in August 2024 from 58.1 in July due to deceleration in the pace of expansion in output and new businesses (Chart III.32a). The services sector PMI, increased to 60.9 in August, aided by a robust expansion in new business activities (Chart III.32b). Business expectations under both manufacturing and services, however, moderated to their lowest in over a year.

Port traffic increased by 6.7 per cent (y-o-y) in August 2024, boosted by fertiliser and other miscellaneous cargo (Chart III.33a). Railway freight traffic, on the other hand, recorded a y-o-y decline in August, led by cement (Chart III.33b).

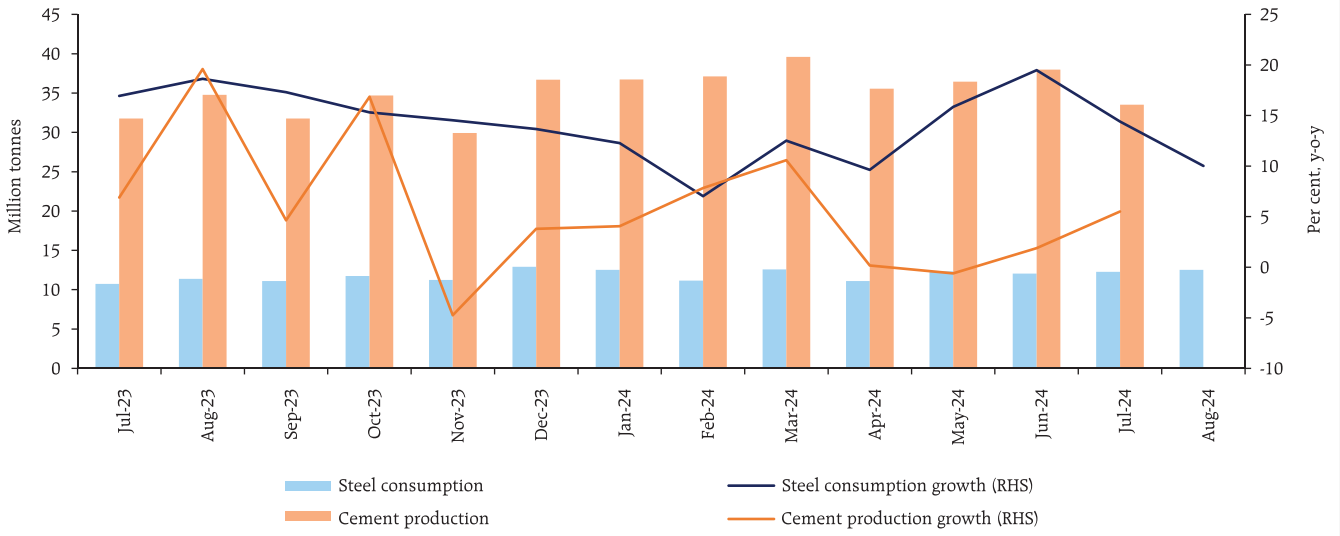
Within the construction sector, steel consumption expanded by 10.0 per cent (y-o-y) in August (Chart III.34). Cement production rose by 5.5 per cent in July 2024.

Chart III.33: Port Cargo and Railway Freight Traffic



Sources: Indian Ports Association; and Ministry of Railways.

Chart III.34: Steel Consumption and Cement Production



Sources: Joint Plant Committee; and Office of the Economic Adviser, Ministry of Commerce and Industry.

Available high frequency indicators for the services sector reflect the resilience of activity in August 2024, supported by port cargo, international air passenger traffic and steel consumption (Table III.2).

Table III.2: High Frequency Indicators- Services

(Y-o-y, per cent)

Sector	Indicator	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24
Urban demand	Passenger Vehicles Sales	17.3	4.3	3.2	13.9	5.7	8.9	1.2	4.3	4.9	-2.0	-1.8
Rural demand	Two-Wheeler Sales	20.1	31.3	16.0	26.2	34.6	15.3	30.8	10.1	21.3	12.5	9.3
	Three-Wheeler Sales	42.1	30.8	30.6	9.5	8.3	4.3	14.5	14.4	12.3	5.1	8.0
	Tractor Sales	-4.3	6.4	-19.8	-15.3	-30.6	-23.1	-3.0	0.0	3.6	1.6	-5.8
Trade, hotels, transport, communication	Commercial Vehicles Sales	3.2			-3.8			3.5				
	Railway Freight Traffic	8.5	4.3	6.4	6.4	10.1	8.6	1.4	3.7	10.1	4.5	0.0
	Port Cargo Traffic	13.8	16.9	0.6	3.2	2.1	2.7	1.3	3.8	6.8	6.0	6.7
	Domestic Air Cargo Traffic*	10.6	9	8.7	10	11.5	8.7	0.3	10.3	10.3	8.8	-13.1
	International Air Cargo Traffic*	15	4.9	12.2	19.3	30.2	22.5	16.2	19.2	19.6	24.4	7.4
	Domestic Air Passenger Traffic *	10.7	8.7	8.1	5	5.8	4.7	3.8	5.9	6.9	7.6	6.7
	International Air Passenger Traffic*	17.5	19.8	18.1	17	19.3	15	16.8	19.6	11.3	8.8	10.5
	GST E-way Bills (Total)	30.5	8.5	13.2	16.4	18.9	13.9	14.5	17.0	16.3	19.2	12.9
	GST E-way Bills (Intra State)	30.0	22.7	14.2	17.9	21.1	15.8	17.3	18.9	16.4	19.0	13.1
	GST E-way Bills (Inter State)	31.2	-16.2	11.4	13.8	15.0	10.7	9.6	13.6	16.3	19.6	12.5
	Hotel occupancy rate@	62.5	63.0	70.0	66.6	72.5	64.4	62.3	60.3	62.0	63.1	
	Average revenue per room	14.8	15.9	12.8	11.0	4.1	6.7	4.8	1.8	2.8	7.6	
	Tourist Arrivals	19.8	16.8	7.8	10.4	15.8	8.0	7.7	0.3	9.0		
Construction	Steel Consumption	15.3	14.5	13.7	12.3	7.0	12.5	9.6	15.9	19.5	14.4	10.0
	Cement Production	17.0	-4.8	3.8	4.0	7.8	10.6	0.2	-0.6	1.9	5.5	
PMI Index#	Services	58.4	56.9	59.0	61.8	60.6	61.2	60.8	60.2	60.5	60.3	60.9

<< Contraction ---------- Expansion >>

Notes: #: Data in index levels. *: August 2024 data are based on the monthly average of daily figures. @: Data in rate, not in y-o-y rate of growth. The heat-map is constructed for each indicator for the period July-2021 till date.

Sources: SIAM; Ministry of Railways; Tractor and Mechanisation Association; Indian Ports Association; Office of Economic Adviser; GSTN; Airports Authority of India; HVS Anarock; Ministry of Tourism; Joint Plant Committee; and IHS Markit.

Inflation

Headline inflation, as measured by y-o-y changes in the all-India CPI[13], edged up to 3.7 per cent in August 2024 from 3.6 per cent in July 2024 (Chart III.35). The marginal increase in inflation came entirely from an unfavourable base effect of around 5 bps while the index remained unchanged at the previous month's level (zero momentum). Both CPI fuel and CPI core (*i.e.*, CPI excluding food and fuel) groups recorded positive momentum of 34 bps and 27 bps, respectively, while the CPI food group recorded a negative momentum of 30 bps.

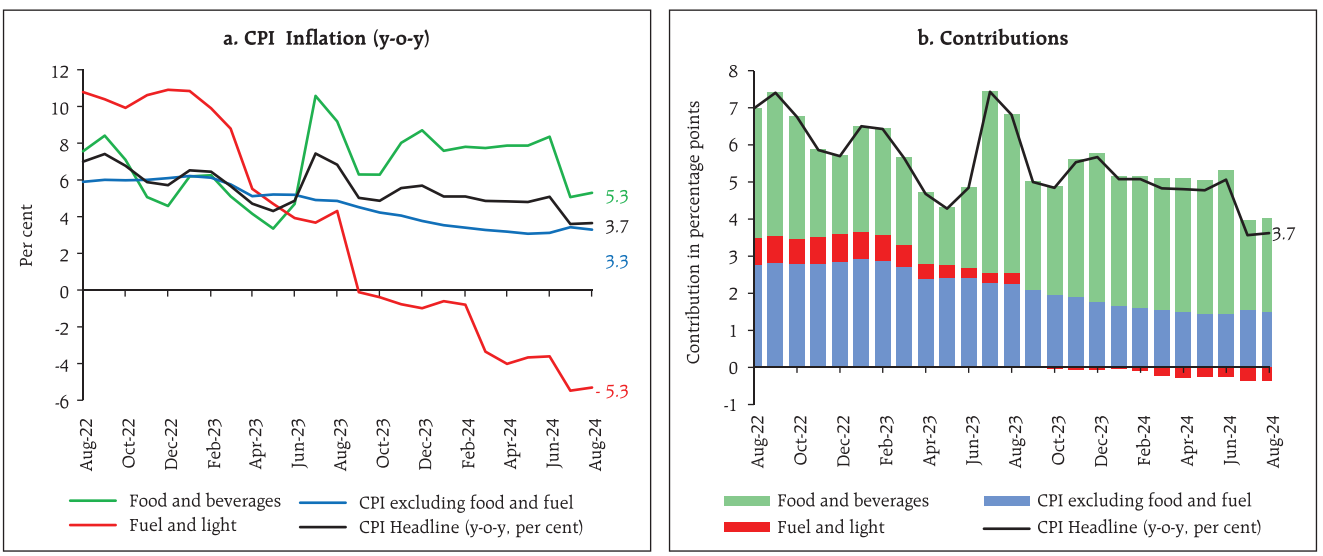
Food inflation (y-o-y) firmed to 5.3 per cent in August from 5.1 per cent in July as a negative momentum of 30 bps was more than offset by an unfavourable base effect of 52 bps. In terms of sub-groups, inflation in eggs, fruits, vegetables and non-alcoholic beverages picked up while it softened in cereals, meat and fish, pulses, and sugar. Edible oils and fats recorded a lower rate of deflation while deflation in spices deepened. Milk prices continued to record a modest inflation of 3.0 per cent for the third consecutive month (Chart III.36).

Fuel and light recorded deflation of (-)5.3 per cent in August 2024 (as against (-)5.5 per cent in July) primarily on account of the decline in LPG prices by 24.6 per cent (y-o-y). Other items in the fuel group, however, recorded positive inflation in August.

Core inflation moderated to 3.3 per cent in August from 3.4 per cent in July. Inflation increased in case of transport and communication, education, recreation and amusement, and household goods and services while it remained steady for sub-groups such as clothing and footwear, housing, and health. Personal care and effects, and pan, tobacco and intoxicants recorded a moderation (Chart III.37).

In terms of regional distribution rural inflation at 4.2 per cent was higher than urban inflation at 3.1

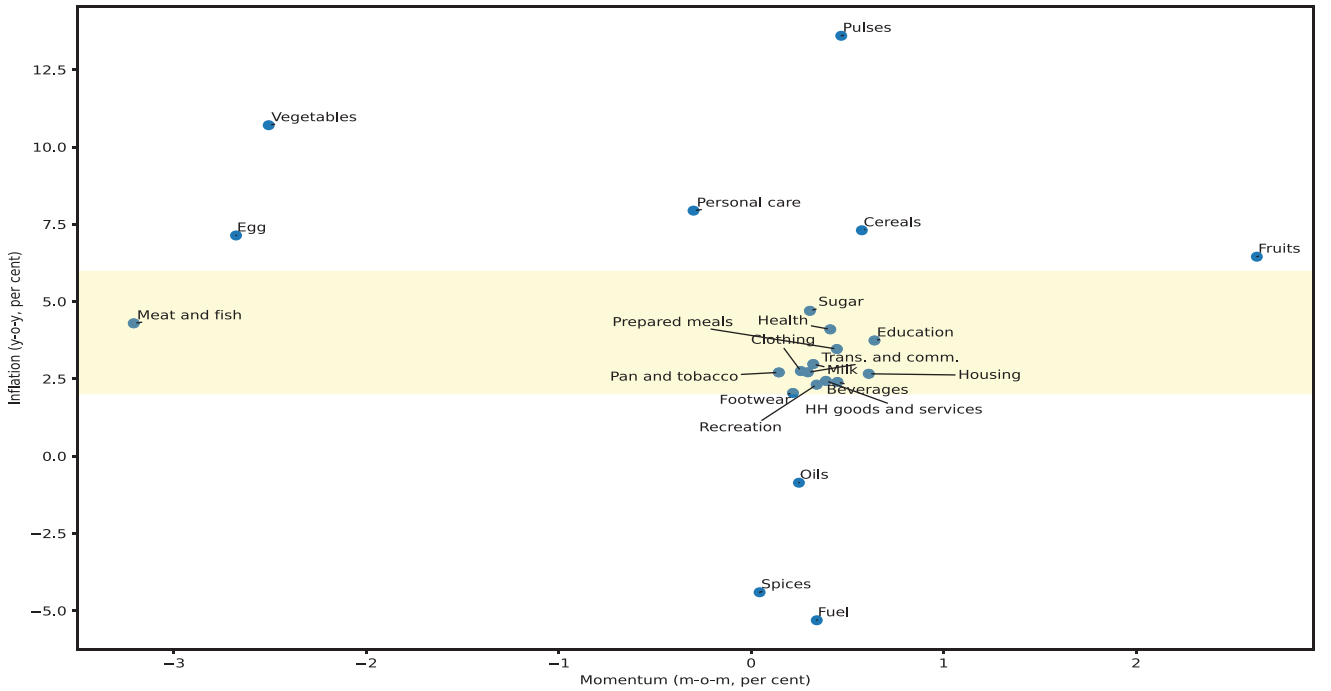
Chart III.35: Trends and Drivers of CPI Inflation



Sources: NSO; and RBI staff estimates.

[13] As per the provisional data released by the NSO on September 12, 2024.

Chart III.36: Annual Inflation (y-o-y) and Momentum (m-o-m) across Sub-groups

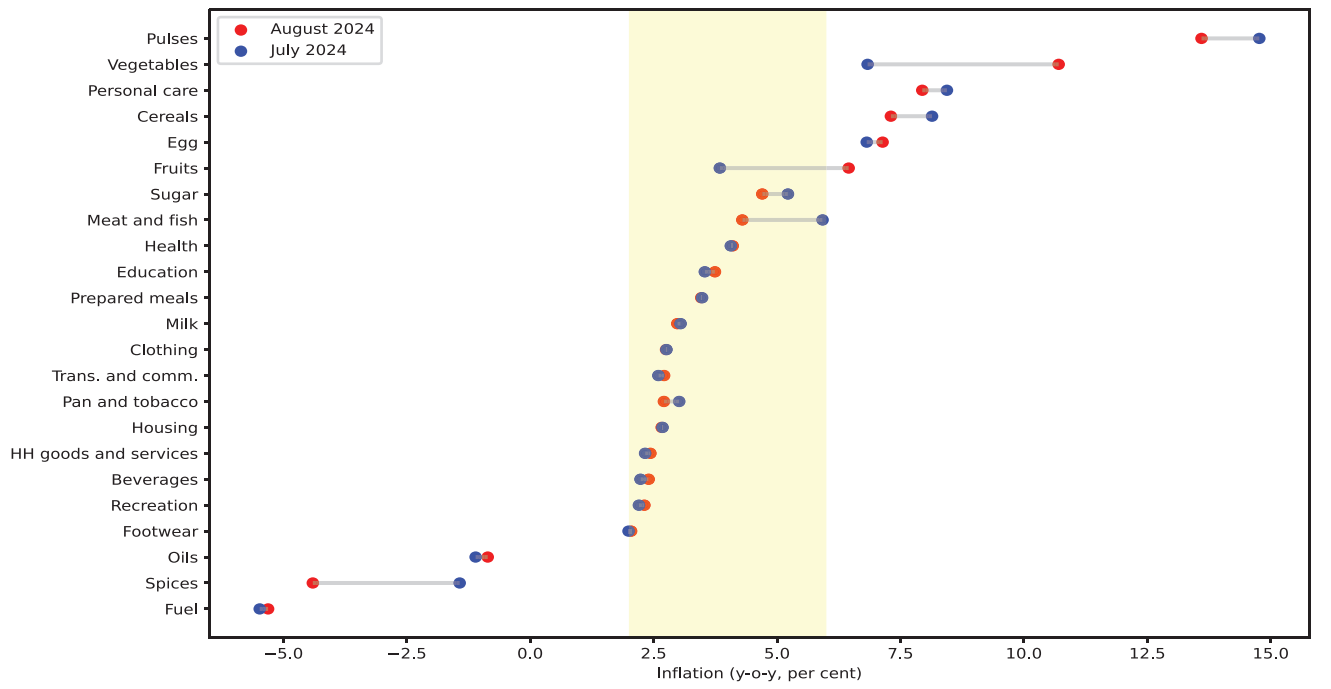


Sources: NSO; and RBI staff estimates.

per cent. Majority of the states registered inflation below 6 per cent (Chart III.38).

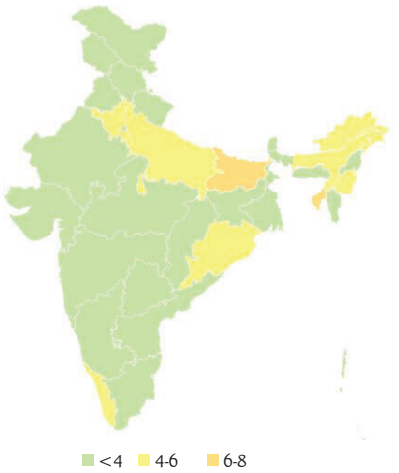
High frequency food price data for September so far (up to 18th) indicate a moderation in the

Chart III.37: Annual Inflation across Sub-groups (August 2024 *versus* July 2024)



Sources: NSO; and RBI staff estimates.

Chart III.38 : Spatial Distribution of Inflation: August 2024 (CPI-Combined, y-o-y, per cent)



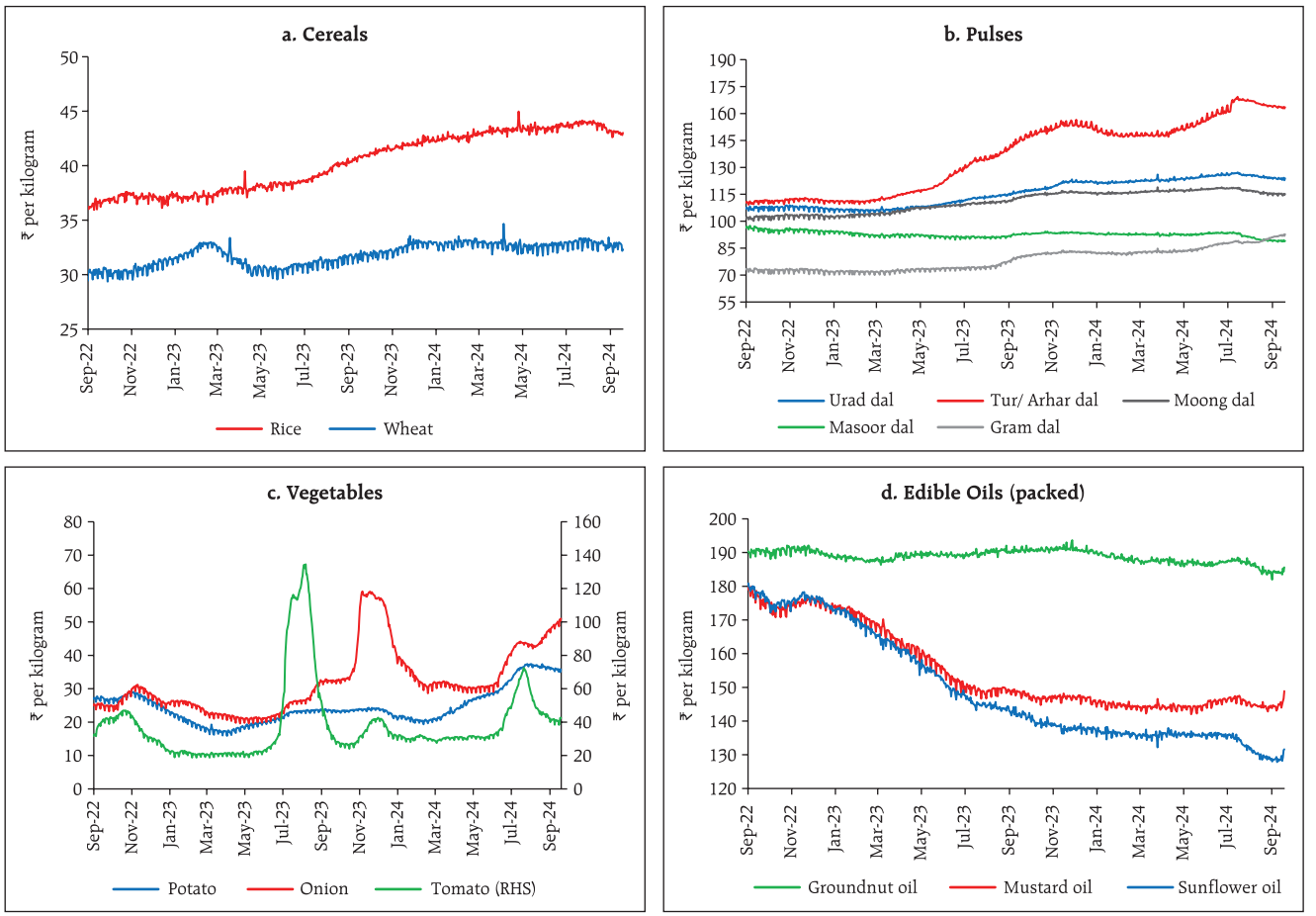
Note: Map is for illustrative purposes only.
Sources: NSO; and RBI staff estimates.

prices of cereals (mainly for rice) and pulses (except for gram). Among vegetables, potato and tomato prices fell, while those of onion recorded an increase. Edible oil prices remained steady (Chart III.39).

Retail selling prices of petrol and diesel were kept unchanged in September so far (up to 18th). LPG prices also remained unchanged while subsidised kerosene prices witnessed a reduction (Table III.3).

The PMIs for August 2024 indicated that the rate of expansion of input costs and selling prices moderated for both manufacturing and services.

Chart III.39: DCA Essential Commodity Prices



Sources: Department of Consumer Affairs, GoI; and RBI staff estimates.

Table III.3: Petroleum Products Prices

Item	Unit	Domestic Prices			Month-over-month (per cent)	
		Sep-23	Aug-24	Sep-24^	Aug-24	Sep-24^
Petrol	₹/litre	102.92	100.97	100.97	0.0	0.0
Diesel	₹/litre	92.72	90.42	90.42	0.0	0.0
Kerosene (subsidised)	₹/litre	54.89	46.65	45.78	0.0	-1.9
LPG (non-subsidised)	₹/cylinder	913.25	813.25	813.25	0.0	0.0

^: For the period September 1-18, 2024.

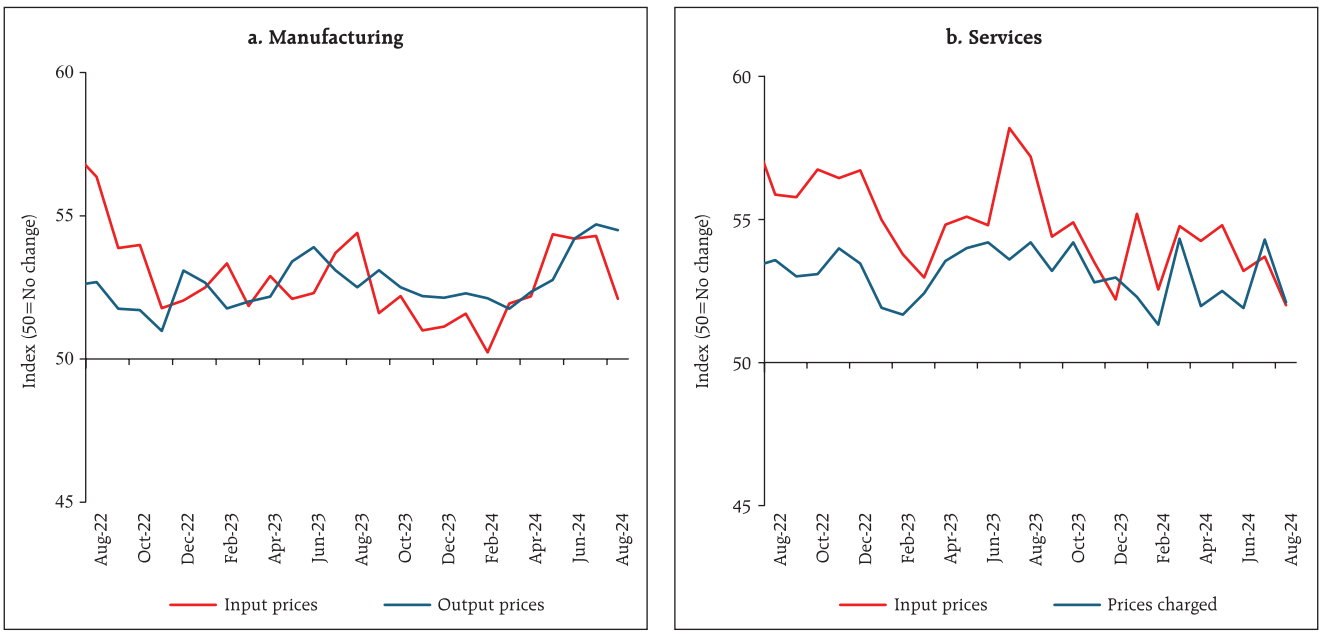
Note: Other than kerosene, prices represent the average Indian Oil Corporation Limited (IOCL) prices in four major metros (Delhi, Kolkata, Mumbai and Chennai). For kerosene, prices denote the average of the subsidised prices in Kolkata, Mumbai and Chennai.

Sources: IOCL; Petroleum Planning and Analysis Cell (PPAC); and RBI staff estimates.

Manufacturing PMI input costs declined to a five-month low, while the services sector witnessed the slowest increase in input prices in four years (Chart III.40). Within manufacturing, the gap between selling prices and input costs widened to the highest level since April 2020.

During Q1:2024-25, the all-India house price index (HPI)[14] increased by 3.3 per cent (y-o-y) from 4.1 per cent growth in the previous quarter and 5.1 per cent a year ago. On a sequential (q-o-q) basis, all-India HPI increased by 1.8 per cent in Q1:2024-25 with nine of the ten major cities included in the index exhibiting a rise (Chart III.41).

Chart III.40: PMI: Input and Output Prices

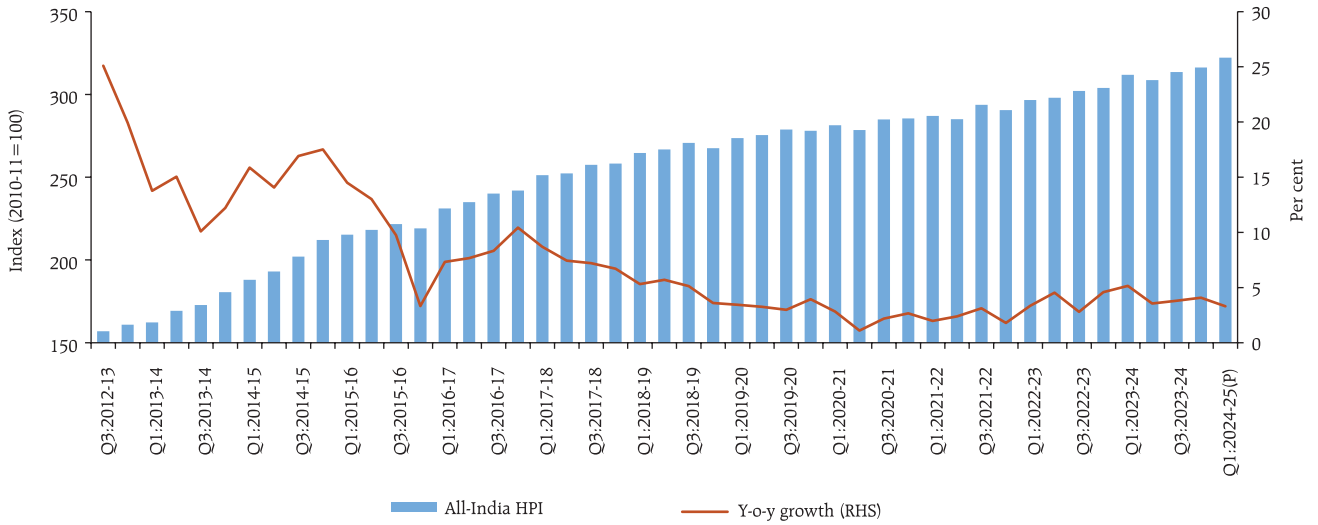


Note: A level of 50 corresponds to no change in activity and a reading above 50 denotes expansion and *vice versa*.

Source: S&P.

[14] House price index (base: 2010-11=100) is compiled based on transaction-level data received from the registration authorities in ten major cities (*viz.*, Ahmedabad, Bengaluru, Chennai, Delhi, Jaipur, Kanpur, Kochi, Kolkata, Lucknow, and Mumbai).

Chart III.41: Movement of House Price Index



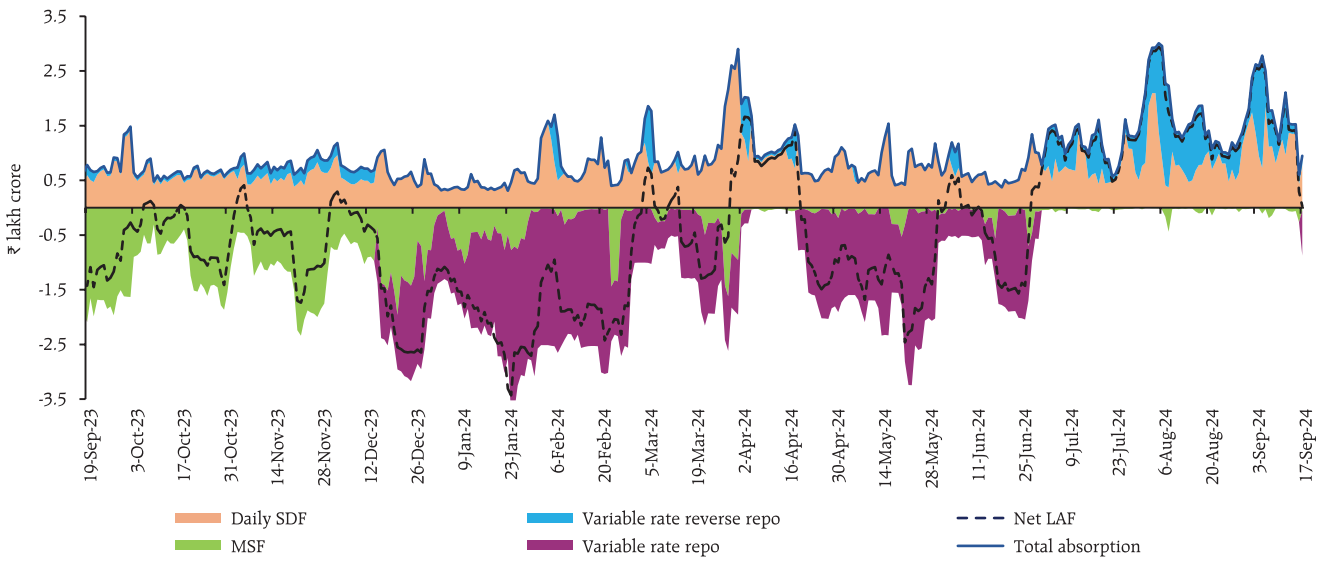
Note: P: Data are provisional.
Sources: Registration authorities of State governments; and RBI.

IV. Financial Conditions

Surplus liquidity in the banking system moderated in the latter half of August, driven by build-up of government cash balances due to GST payments. In early September, however, a pick-up in government spending led to the return of liquidity to the banking system. Overall, the average daily net absorption under the liquidity adjustment facility (LAF) decreased to ₹1.45 lakh crore during August 16 to September 17, 2024, from ₹1.52 lakh crore during July 16 and August 15, 2024 (Chart IV.1).

Of the average total absorption of ₹1.58 lakh crore from August 16 to September 17, 2024, placement of funds under the standing deposit facility (SDF) accounted for about 63 per cent. The Reserve Bank conducted two main and fourteen fine-tuning variable rate reverse repo (VRRR) operations,

Chart IV.1: Liquidity Operations



Source: RBI.

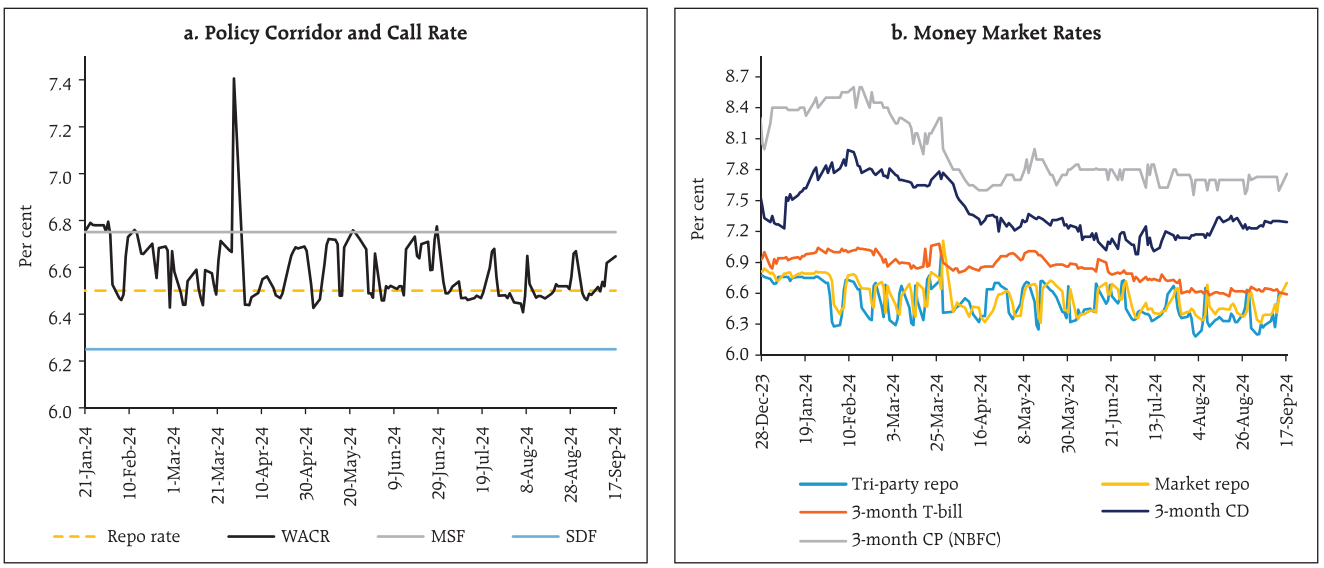
with maturities ranging from overnight to 7 days, cumulatively absorbing ₹5.41 lakh crore from the banking system. Banks have shown reluctance to part with liquidity for longer tenors, as evidenced by lower offer-cover ratios in the main operations.[15] One variable rate repo (VRR) operation of 3-day maturity was also conducted on September 17, 2024, injecting ₹0.83 lakh crore into the banking system. Average daily borrowings under the marginal standing facility (MSF) were at ₹0.05 lakh crore during August 16 to September 17, 2024 as compared with ₹0.04 lakh crore during July 16 and August 15, 2024.

The weighted average call rate (WACR) averaged 6.53 per cent during August 16 and September 17 as compared with 6.51 per cent during July 16 to August 15, 2024 (Chart IV.2a). In the collateralised segment, the tri-party repo rate and the market repo rate moved in tandem with the WACR, averaging 13 basis points (bps) and 5 bps, respectively, below the policy repo rate during the same period (Chart IV.2b).

In the short-term money market segment, yields on 3-month commercial paper (CP) issued by non-banking financial companies (NBFCs) and 3-month treasury bills (T-bills) remained broadly stable. In contrast, the rates on 3-month certificates of deposit (CDs) increased (Chart IV.2b). The average risk premium in the money market (spread between 3-month CP and 91-day T-bill rates) was at 107 bps during the period August 16 - September 17, 2024, 3 bps higher than during July 16 to August 15, 2024.

In the primary market, CD issuances grew by more than 65 per cent (y-o-y) to ₹4.51 lakh crore during 2024-25 (up to September 6), significantly higher than ₹2.72 lakh crore in the corresponding period of the previous year to meet funding requirements of banks to bridge the gap between credit and deposit growth (Chart IV.3). CP issuances also increased to ₹6.28 lakh crore during 2024-25 (up to August 31), higher than ₹5.88 lakh crore in the corresponding period of the previous year. With the Reserve Bank increasing risk weights on bank loans to NBFCs, CP issuances by NBFCs increased as they diversified their funding sources beyond banks.

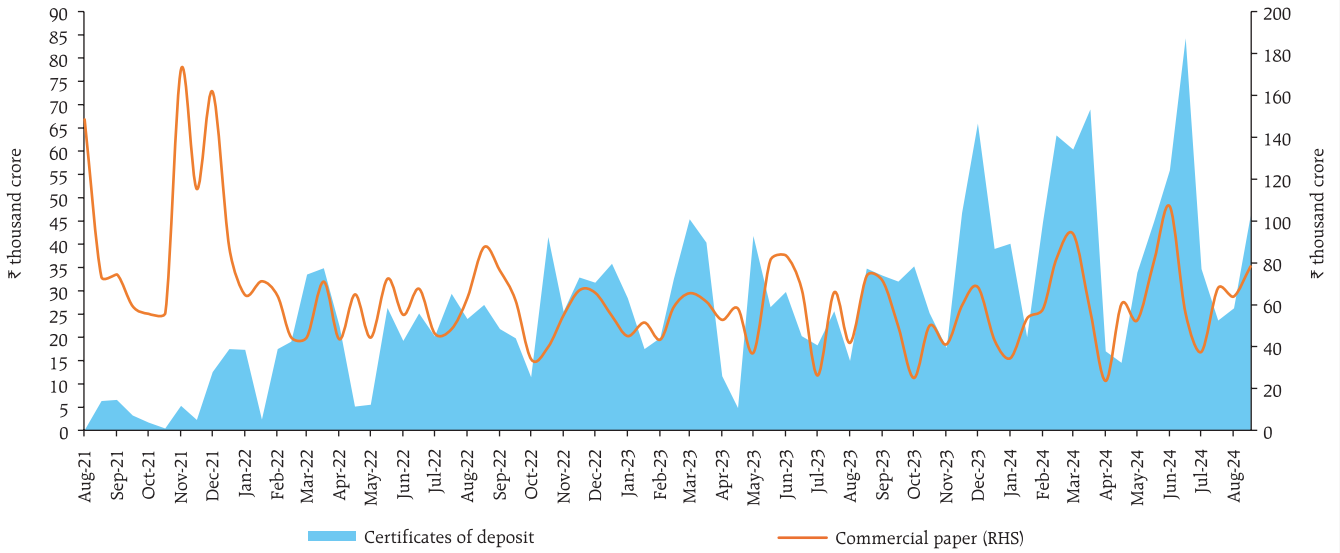
Chart IV.2: Policy Corridor and Money Market Rates



Sources: RBI; CCIL; and Bloomberg.

[15] The 14-day VRRR auctions conducted on August 23 and September 6 attracted bids amounting to ₹20,377 crore and ₹17,083 crore, respectively against the cumulative notified amount of ₹1.50 lakh crore.

Chart IV.3: Certificates of Deposit (CDs) and Commercial Paper (CP) - Fortnightly Issuances

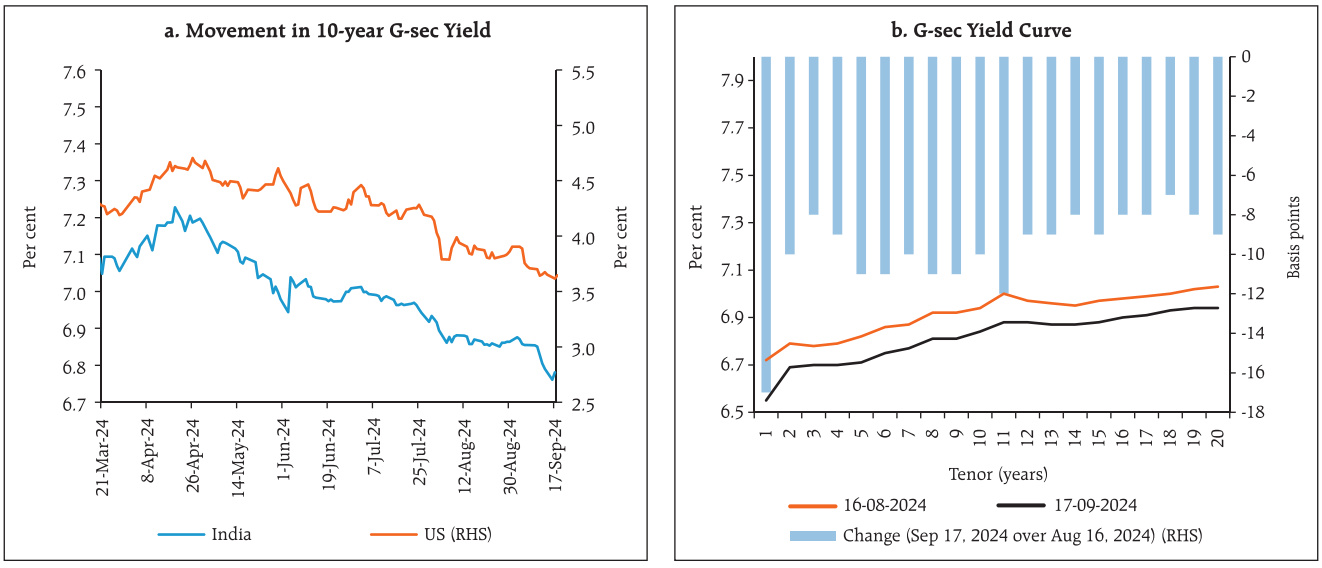


Source: RBI.

In the fixed income segment, domestic bond yields generally softened in August and September (up to September 17). The yield on the 10-year Indian benchmark government security (G-sec) moved in a narrow range of 6.76 - 6.87 per cent (Chart IV.4a). During August 16 - September 17, the average term spread (10-year *minus* 91-day T-bills) softened to 22 bps from 26 bps during July 16 - August 15. Overall, the fall in G-sec yields across the term structure was broadly manifested in a downward shift of the yield curve (Chart IV.4b).

Corporate bond yields exhibited mixed movements, while associated risk premia generally increased during August 16 - September 16, 2024 (Table IV.1). During 2024-25 (up to July), corporate bond issuances were lower at ₹2.53 lakh crore than

Chart IV.4: Developments in the G-sec Market



Sources: Bloomberg; CCIL; and RBI staff estimates.

Table IV.1: Financial Markets - Rates and Spread

Instrument	Interest Rates (per cent)			Spread (basis points) (Over Corresponding Risk-free Rate)		
	Jul 16, 2024 – Aug 14, 2024	Aug 16, 2024 – Sep 16, 2024	Variation	Jul 16, 2024 – Aug 14, 2024	Aug 16, 2024 – Sep 16, 2024	Variation
1	2	3	(4 = 3-2)	5	6	(7 = 6-5)
Corporate Bonds						
(i) AAA (1-year)	7.69	7.94	25	80	113	33
(ii) AAA (3-year)	7.83	7.81	-2	88	95	7
(iii) AAA (5-year)	7.76	7.75	-1	79	86	7
(iv) AA (3-year)	8.53	8.56	3	158	170	12
(v) BBB- (3-year)	12.12	12.14	2	517	528	11

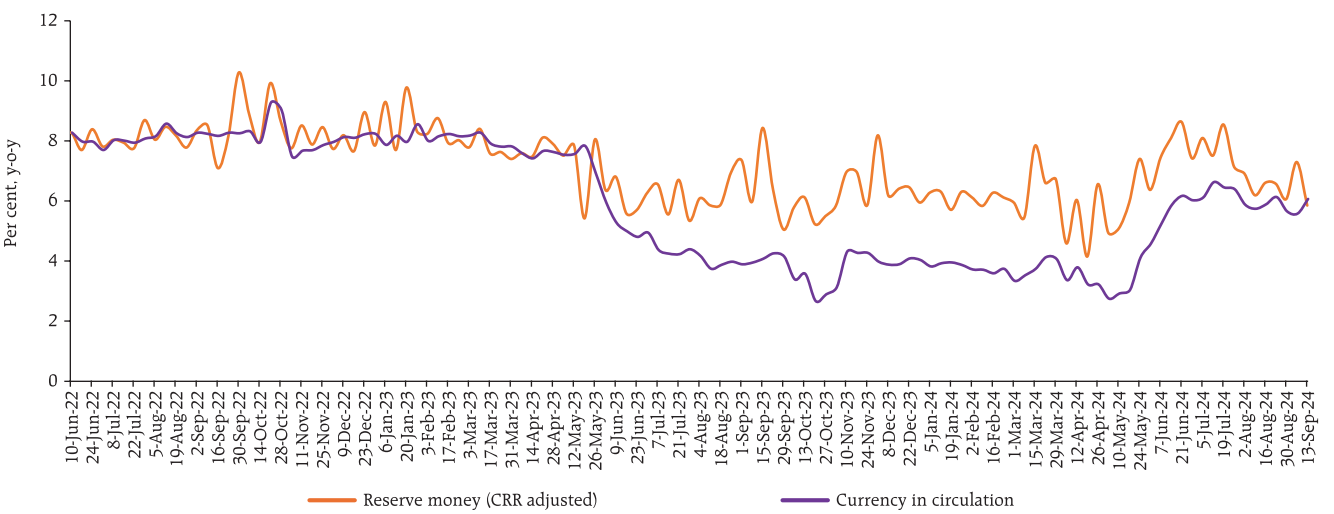
Note: Yields and spreads are computed as averages for the respective periods.
Sources: FIMMDA; and Bloomberg.

₹2.90 lakh crore during the same period of the previous year. Corporate bond issuances, however, increased to ₹94,306 crore during July 2024, recording the highest monthly issuance in 2024-25 so far and nearly double of ₹54,269 crore a year ago.

Reserve money (RM), excluding the first-round impact of changes in the cash reserve ratio (CRR), recorded a growth of 5.9 per cent (y-o-y) as on September 13, 2024 (8.4 per cent a year ago) [Chart IV.5]. Growth in currency in circulation (CiC), the largest component of RM, increased to 6.1 per cent (y-o-y) as on September 13, 2024, from 3.0 per cent as on May 17, 2024, on account of the base effect of the withdrawal of ₹2000 banknotes[16], 97.96 per cent of which has been returned to the banking system, mostly in the form of deposits (as on August 31, 2024).

On the sources side (assets), foreign currency assets (accounting for more than 90 per cent of NFA) continued to record double-digit growth of 15.9 per

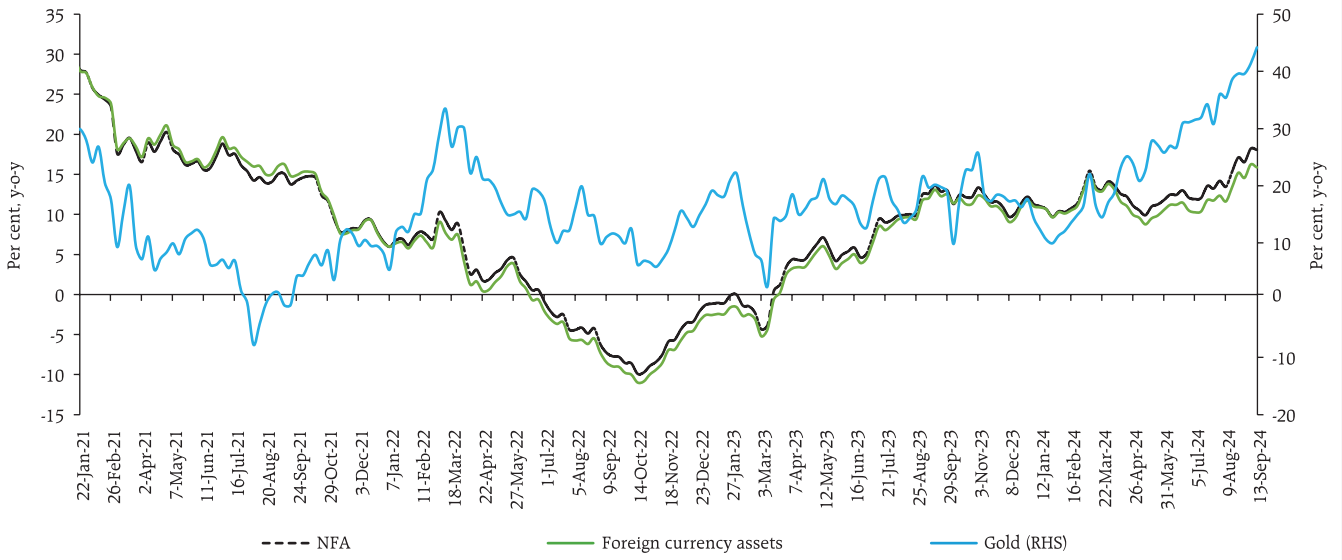
Chart IV.5: Growth in Reserve Money and Currency in Circulation



Note: The latest data for reserve money pertains to September 13, 2024.
Source: RBI.

[16] Announced on May 19, 2023.

Chart IV.6: RBI's Net Foreign Exchange Assets (NFA) - Growth

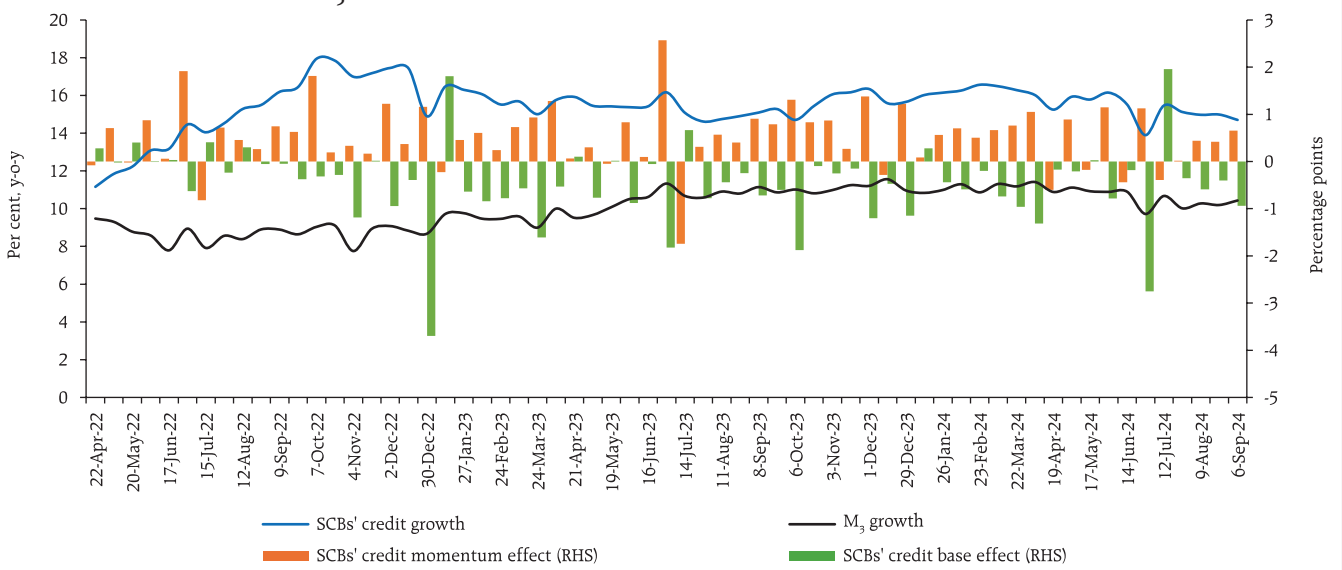


Source: RBI.

cent (y-o-y) as of September 13, 2024. Gold – the other major component of NFA – grew by 44.2 per cent, which is the highest since December 2020, mainly due to revaluation gains on account of a rise in gold prices (Chart IV.6).

Money supply (M_3) rose by 10.4 per cent (y-o-y) as on September 6, 2024 (11.1 per cent a year ago).[17] Aggregate deposits with banks, accounting for around 86 per cent of M_3, increased by 11.1 per cent (12.3 per cent a year ago). SCBs' credit growth stood at 14.7 per cent as on September 6, 2024 (15.1 per cent a year ago) [Chart IV.7].

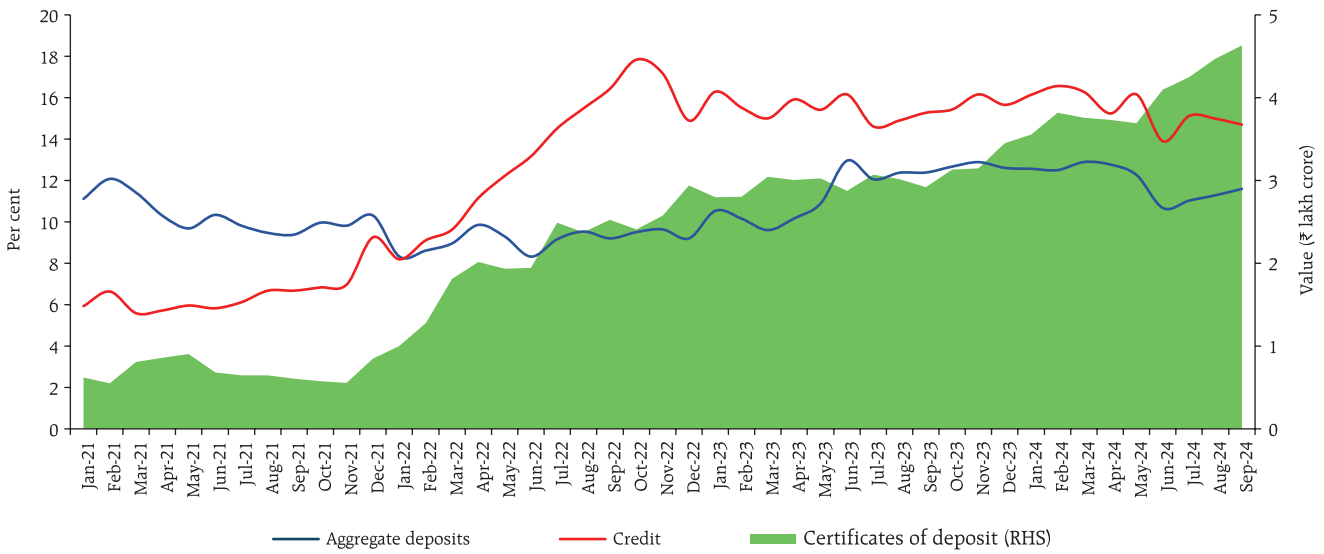
Chart IV.7: M_3 Growth and Credit Growth of SCBs - Base Effect and Momentum



Source: RBI.

[17] Excluding the impact of the merger of a non-bank with a bank (with effect from July 1, 2023).

Chart IV.8: SCBs' Aggregate Deposits, Credit Growth and Outstanding Certificates of Deposit



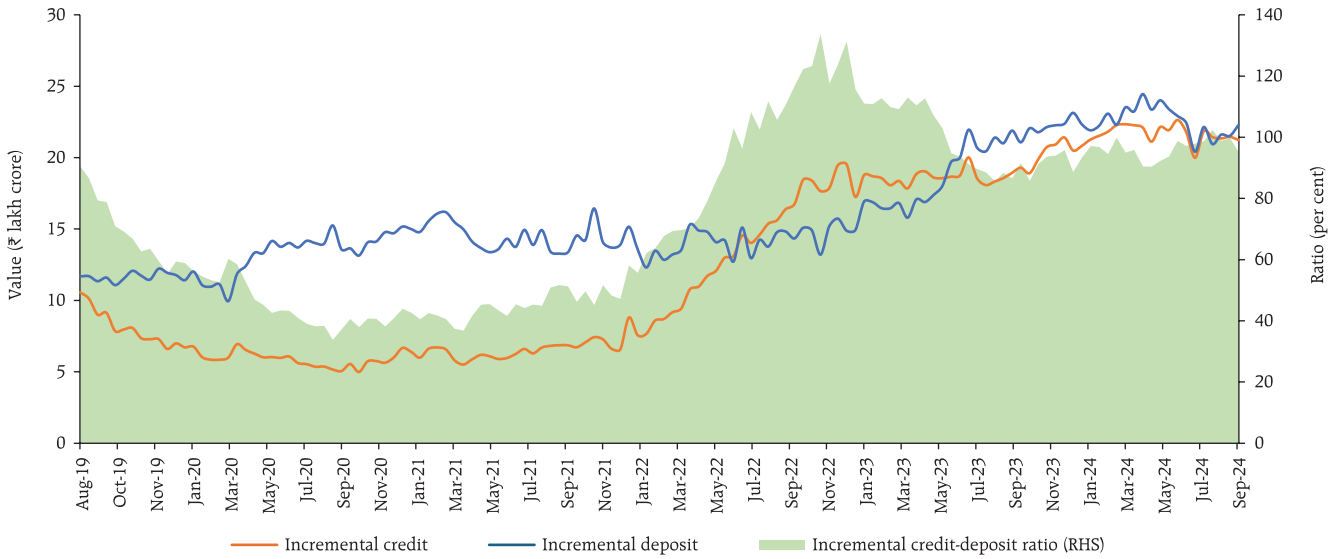
Source: RBI.

SCBs' deposit growth[18], which increased after the withdrawal of ₹2000 banknotes, has remained in double digits since April 2023 (Chart IV.8). CD issuances supplement the deposit base.

SCBs' incremental credit-deposit ratio declined from 95.8 as at end-March 2024 to 95.3 as on September 6, 2024 (Chart IV.9). With the statutory requirements for CRR and statutory liquidity ratio (SLR) at 4.5 per cent and 18 per cent, respectively, around 77 per cent of deposits were available with the banking system for credit expansion as on September 6, 2024.

Credit by SCBs continued to grow at robust pace (Chart IV.10). Though the growth in the personal loan segment (housing and non-housing) has moderated

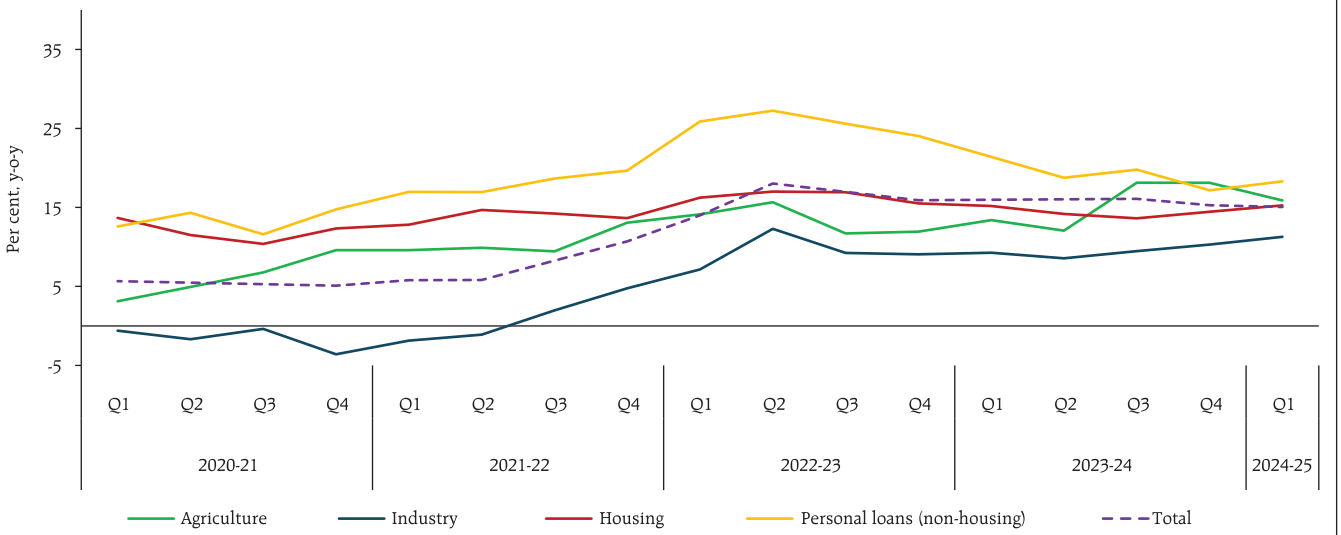
Chart IV.9: Incremental Credit-Deposit Ratio



Source: RBI.

[18] Excluding the impact of the merger.

Chart IV.10: Annual Growth in Bank Credit - Major Sectors



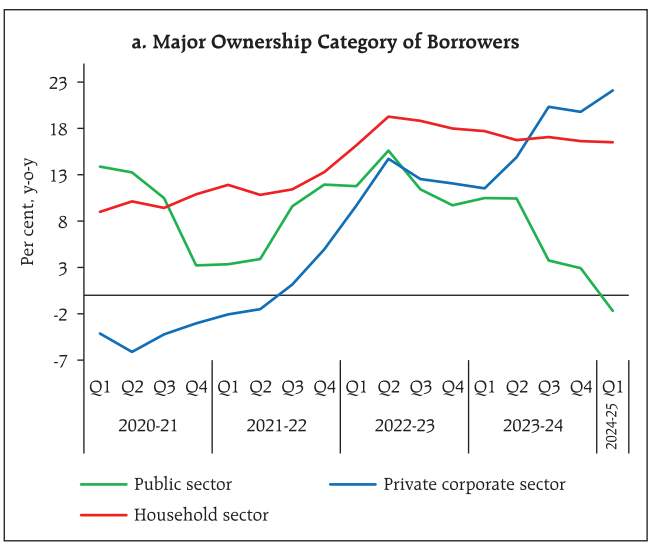
Note: Data exclude the impact of merger of a non-bank with a bank since July 2023.
Source: RBI.

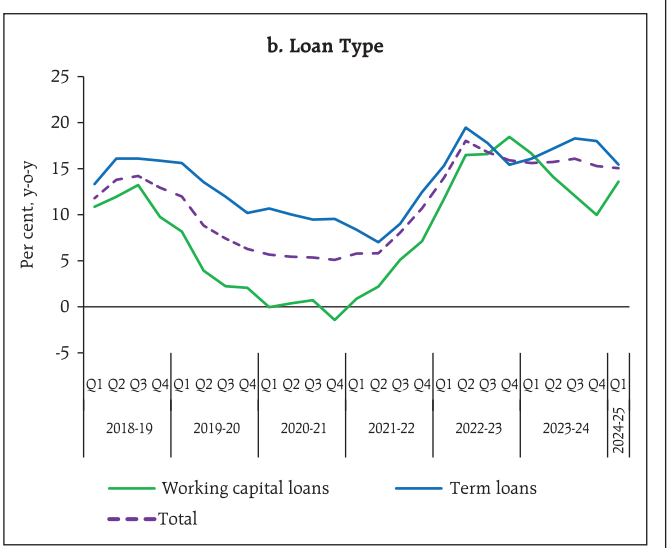
in the recent past, it remains the prime driver of overall credit expansion and continues to exceed the headline credit growth. Advances to industry have moved up to record double digit growth in the last quarter.

SCBs' credit to the private corporate sector, accounting for nearly one fourth of total advances, continued its robust growth while lending to public sector entities moderated in Q1:2024-25 (Chart IV.11a). Both working capital and term loans have boosted bank credit growth (Chart IV.11b).

In response to the 250 bps hike in the policy repo rate since May 2022, banks have revised upwards their repo-linked external benchmark-based lending rates (EBLRs) by a similar magnitude. The 1-year median marginal cost of funds-based

Chart IV.11: Annual Growth in Bank Credit





Note: Data exclude the impact of merger of a non-bank with a bank since July 2023.
Source: RBI.

Table IV.2: Transmission to Banks' Deposit and Lending Rates

(Variation in bps)

Period	Repo Rate	Term Deposit Rates		Lending Rates			
		WADTDR – Fresh Deposits	WADTDR- Outstanding Deposits	EBLR	1-Yr. MCLR (Median)	WALR - Fresh Rupee Loans	WALR- Outstanding Rupee Loans
Easing Phase Feb 2019 to Mar 2022	-250	-259	-188	-250	-155	-232	-150
Tightening Period May 2022 to July* 2024	+250	245	189	250	170	189	119

Notes: 1. Data on EBLR pertain to 32 domestic banks.
2. *: Data on EBLR and MCLR pertain to August 2024.
3. **WALR**: Weighted Average Lending Rate. **WADTDR**: Weighted Average Domestic Term Deposit Rate; **MCLR**: Marginal Cost of Funds-based Lending Rate; **EBLR**: External Benchmark based Lending Rate.

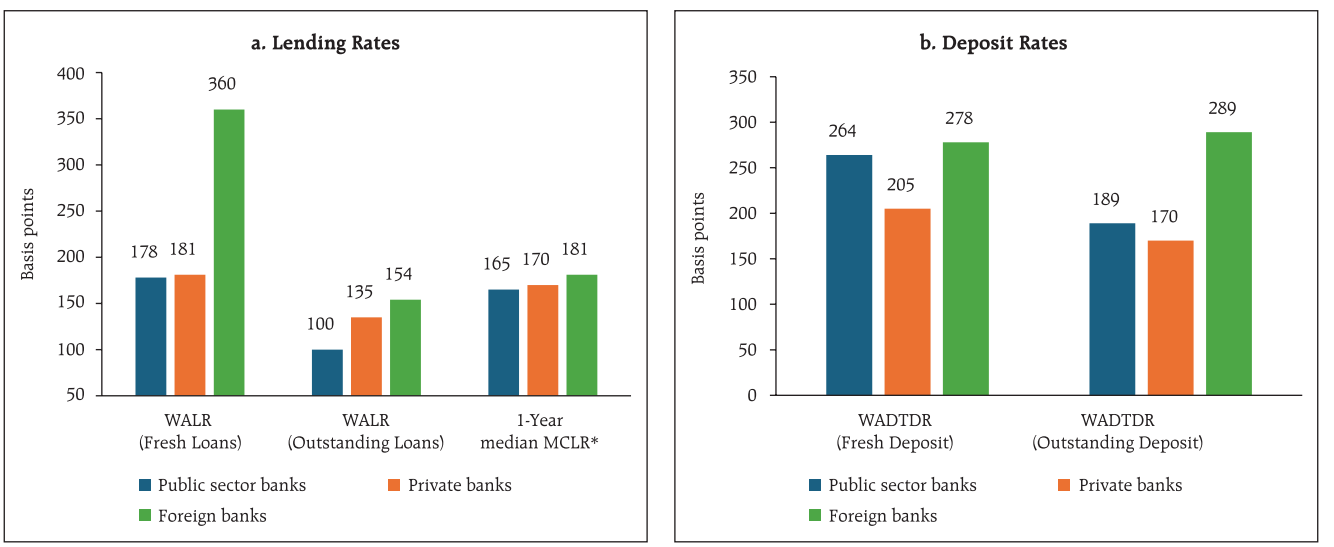
Source: RBI.

lending rate (MCLR) of SCBs increased by 170 bps during May 2022 to August 2024. Consequently, weighted average lending rates (WALRs) on fresh and outstanding rupee loans increased by 189 bps and 119 bps, respectively, during May 2022 to July 2024. On the deposit side, the weighted average domestic term deposit rates (WADTDRs) on fresh and outstanding rupee term deposits increased by 245 bps and 189 bps, respectively, during the same period (Table IV.2).

Transmission across bank groups indicates that the increase in lending rates was higher in the case of private banks than among public sector banks (PSBs); however, in case of deposits, it was higher for PSBs during the same period (Chart IV.12).

Consistent with rising returns on term deposits, there has been higher accruals (16.6 per cent y-o-y growth in June 2024) [Chart IV.13]. The share of savings deposits in total deposits has come down to 29.8 per cent in June 2024 from 31.8 per cent a year ago.

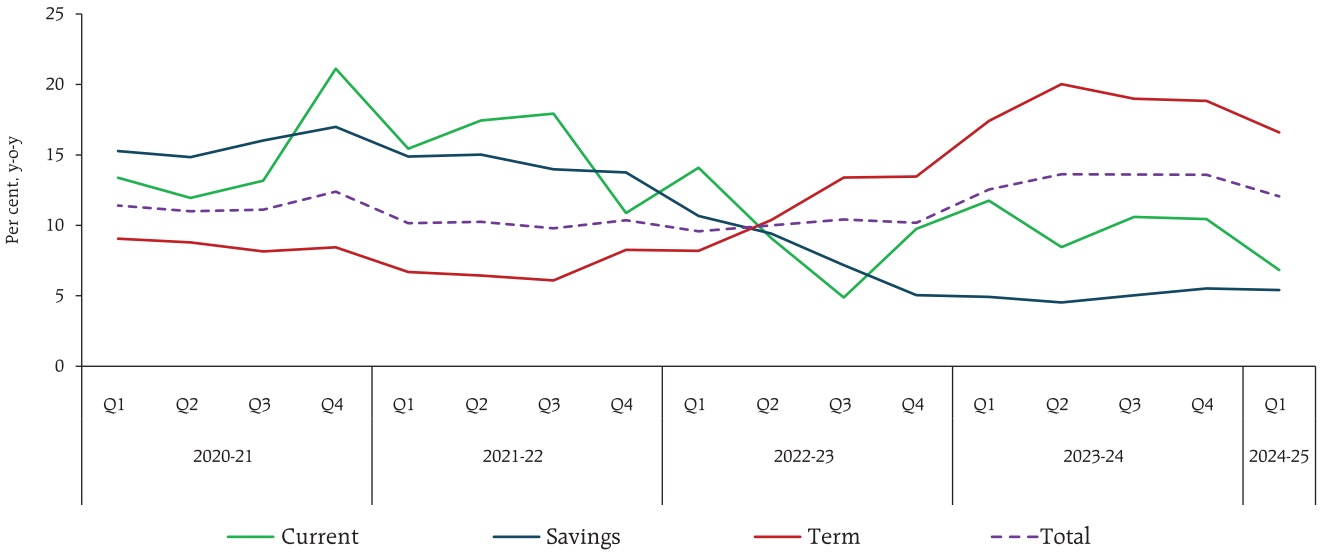
Chart IV.12: Transmission across Bank Groups (May 2022 to July 2024)



Note: *Data on 1-year median MCLR pertain to May 2022 to August 2024.

Source: RBI.

Chart IV.13: Annual Growth in Aggregate Deposits - Type of Deposits

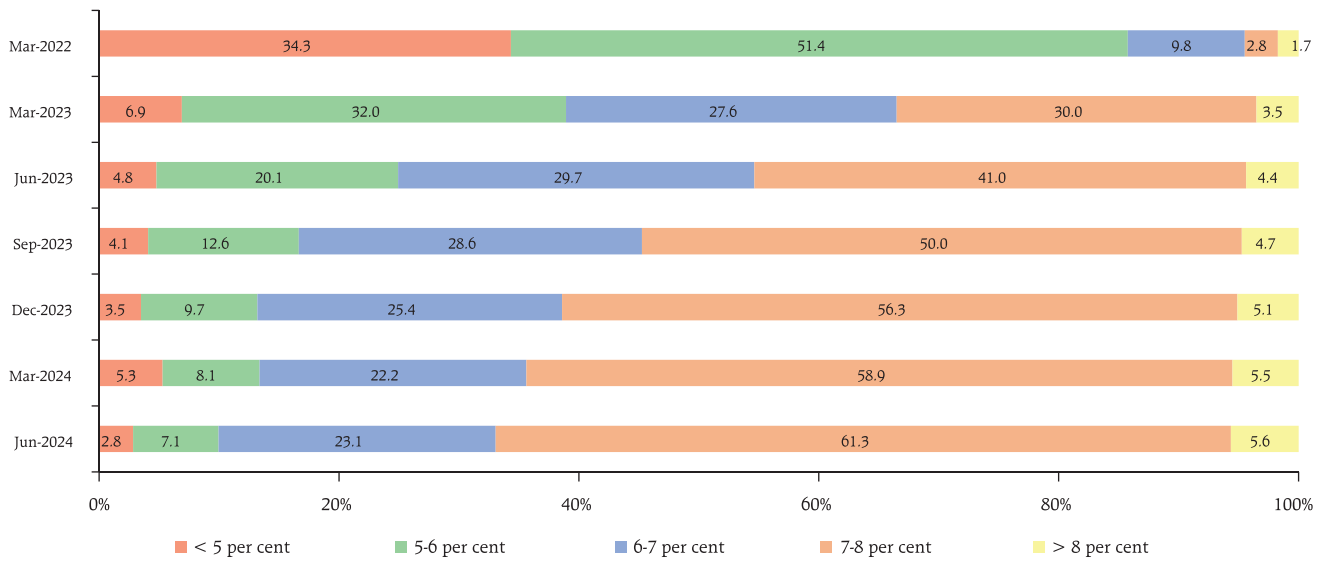


Source: RBI.

As alluded to in the Introduction, the share of term deposits offering interest rates over 7 per cent increased to 66.9 per cent in June 2024, from 33.5 per cent in March 2023 and 4.5 per cent in March 2022 (Chart IV.14).

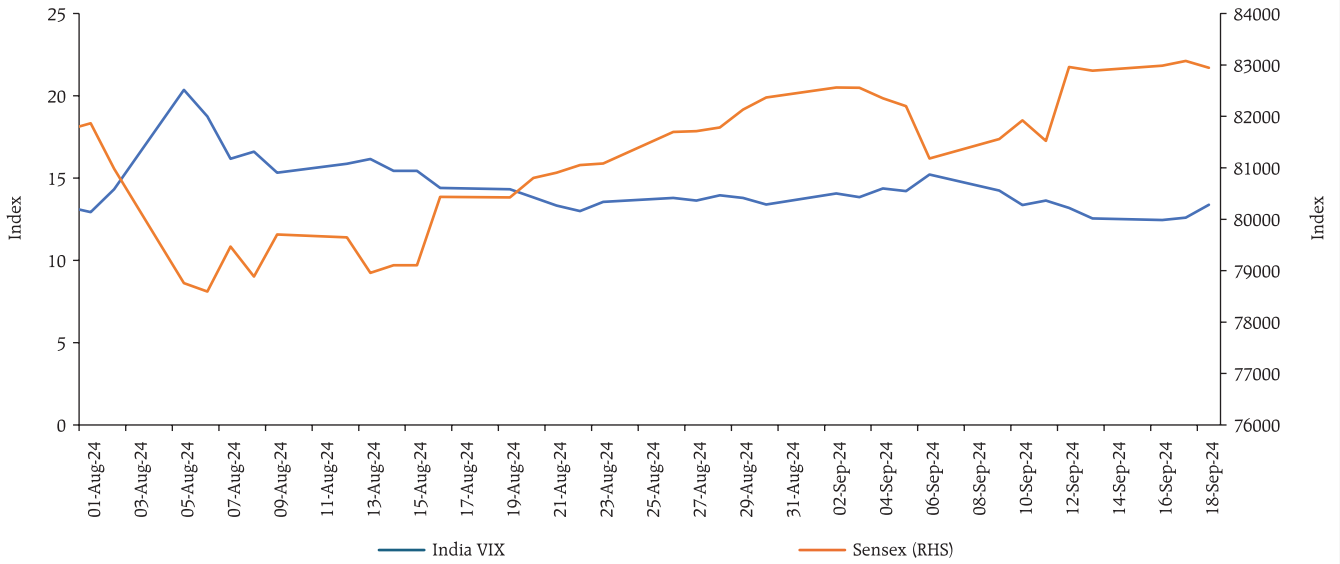
Indian equity markets scaled fresh highs in the second half of August, despite geopolitical concerns, on expectations of a US Fed rate cut after the release of the dovish US Federal Open Market Committee (FOMC) minutes and remarks by the US Fed Chairman at the Jackson Hole Economic Symposium (Chart IV.15). The benchmark index closed higher in ten consecutive sessions. Markets, however, declined in early September, tracking negative global cues as concerns over global growth and a sell-off in technology stocks dented investors' sentiments. Thereafter, markets

Chart IV.14: Interest Rate wise Share of Term deposits of Banks



Source: RBI.

Chart IV.15: Trends in Equity Markets

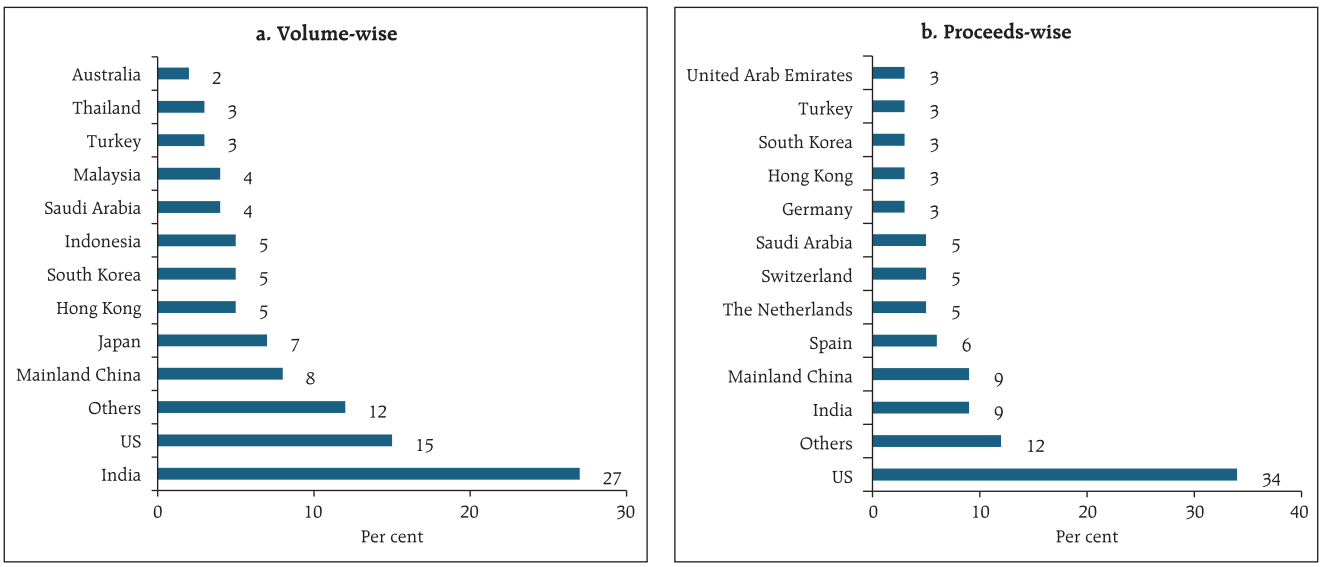


Source: Bloomberg.

rebounded and scaled fresh all-time highs mirroring bullish trends in global equity markets. Overall, the BSE Sensex gained 6.9 per cent since August 15, 2024 to close at 84,544 on September 20, 2024.

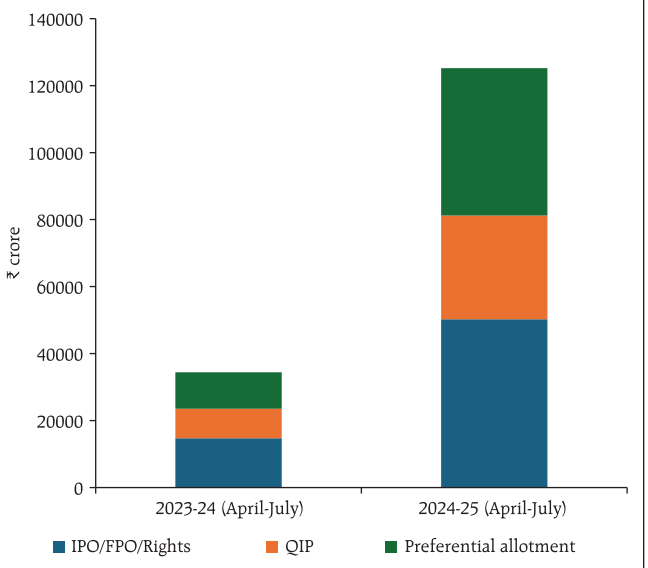
Resource mobilisation through initial public offerings (IPOs) has remained robust in 2024 so far, as India accounted for the highest number of IPOs globally (27 per cent by volume) in H1:2024, led by public offerings of small and medium enterprises (SMEs). In terms of the amount raised, India accounted for 9 per cent of total proceeds raised through IPOs (Charts IV.16a and 16b). Investor enthusiasm in the primary segment can be gauged by the fact that the IPO of a housing finance company in the second week of September garnered bids of over ₹3 lakh crore.

Chart IV.16: Share of Countries in Global IPOs in H1: 2024



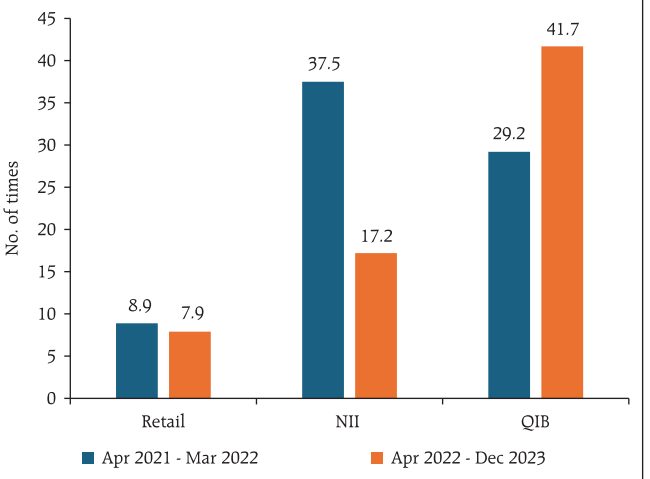
Source: EY Global IPO Trends Q2 2024 Report.

Chart IV.17: Equity Market Resource Mobilisation



Source: SEBI.

Chart IV.18: Category-wise Oversubscription in Mainboard IPOs



Note: NII refers to Non-Institutional Investors and QIB refers to Qualified Institutional Buyers.

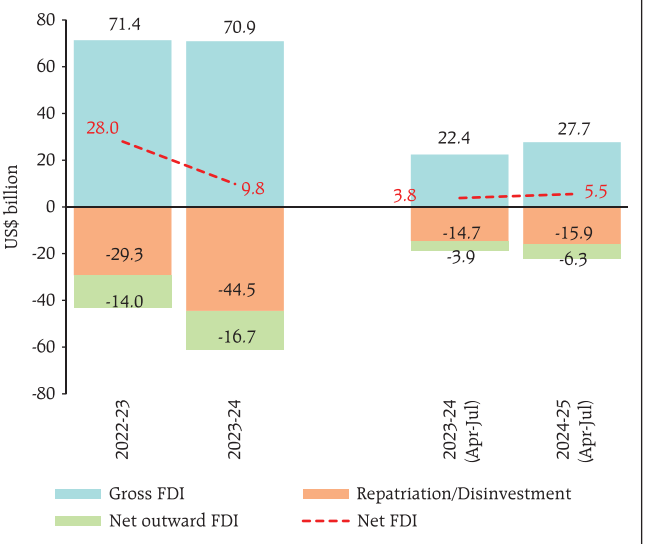
Source: SEBI.

Resource mobilisation through other modes, like Qualified Institutional Placements (QIPs) and Preferential allotment, have also shown a significant uptick in 2024-25 so far[19], facilitated by conducive market conditions (Chart IV.17).

There has been heightened investors' interest in IPOs in recent years.[20] While the vitality in the primary market has helped companies raise capital, it has also raised concerns about promoters utilising the opportunity to offload their holdings at elevated prices, especially in the SME segment.[21] It may be noted that regulatory changes like the ceiling on IPO funding[22] by NBFCs and the shift from a proportionality-based allotment method to a lottery-based allotment method[23] have helped contain massive oversubscription rates seen earlier in mainboard IPOs (Chart IV.18). The persistence of the proportionality-based allotment method in the SME segment partly explains the massive oversubscription rates witnessed in public offerings of the SME segment in recent times.

Gross inward FDI rose to US$ 27.7 billion during April-July 2024 from US$ 22.4 billion a year ago (Chart IV.19). Manufacturing, financial services,

Chart IV.19: Foreign Direct Investment Flows



Source: RBI.

[19] https://www.moneycontrol.com/news/business/markets/qips-gain-traction-to-hit-four-year-high-in-july-12791779.html#google_vignette

[20] https://www.sebi.gov.in/reports-and-statistics/research/sep-2024/study-analysis-of-investor-behavior-in-initial-public-offerings-ipos-_86385.html

[21] https://www.sebi.gov.in/media-and-notifications/press-releases/aug-2024/advisory-regarding-investment-in-securities-of-the-companies-listed-on-the-sme-segment-of-stock-exchanges_86205.html

[22] https://rbidocs.rbi.org.in/rdocs/Notification/PDFs/NT1127AD09AD866884557BD4DEEA150ACC91A.PDF

[23] From April 1, 2022, the pro-rata or proportionality based allotment method was changed to a lottery system.

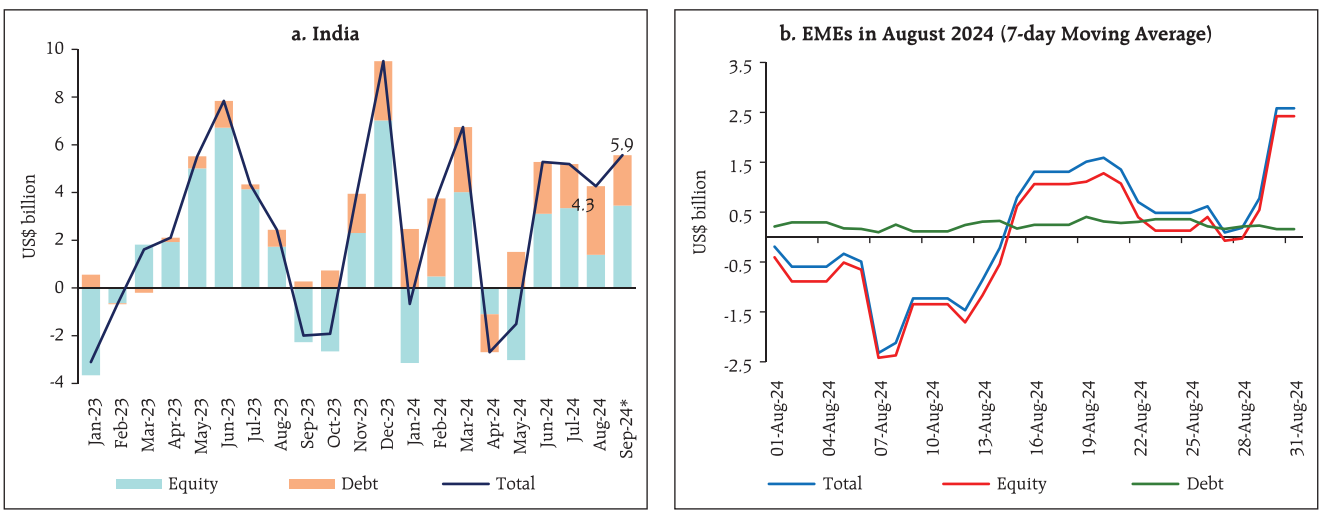
communication services, computer services, and electricity and other energy sectors accounted for more than three-fourths of the gross FDI inflows. With more than three-fourths of the flows, the major source countries were Singapore, Mauritius, the Netherlands, the US, Belgium and Japan. Net FDI rose to US$ 5.5 billion during April-July 2024 as compared to US$ 3.8 billion a year ago, due to an increase in gross FDI flows.

Net foreign portfolio investment (FPI) was to the tune of US$ 4.3 billion during August 2024, the third consecutive month of net inflows (Chart IV.20a). In the equity segment, they slowed to US$ 1.4 billion in August 2024 on account of rising global concerns over a possible US recession and unwinding of the yen carry trade. The slowdown was broad-based, negatively affecting FPI flows in EMEs, with large sell-offs at the beginning of the month, followed by a recovery since the middle of the month (Chart IV.20b). Within Indian equities, financial services and metals and mining recorded the highest outflows while healthcare, consumer durables and consumer services received the highest FPI inflows in August 2024. The debt segment with net inflows of US$ 2.9 billion dominated FPI flows during August 2024. In a cross-country perspective, Indian debt remained attractive since the announcement of the inclusion of Indian government bonds in the JP Morgan's GBI-EM index in September 2023. During September 2024 (up to September 16), net FPI inflows were to the tune of US$ 5.9 billion.

Non-resident deposits recorded net inflows of US$ 5.8 billion during April-July 2024 as compared with US$ 3.0 billion a year ago, with higher inflows in all three accounts namely, Non-Resident (External) Rupee Accounts [NR(E)RA], Non-Resident Ordinary (NRO) and Foreign Currency Non-Resident [FCNR(B)] accounts.

Registration of external commercial borrowings (ECB) increased in July 2024 (m-o-m). During April-July 2024, however, it was lower by 37.5 per cent over the corresponding period, last year (Chart IV.21a). Both gross disbursements (US$ 12.3 billion) and net ECB inflows (US$ 2.8 billion) during 2024-25 so far were lower than in the corresponding period, last year. The overall cost of ECB loans increased by 40 bps during

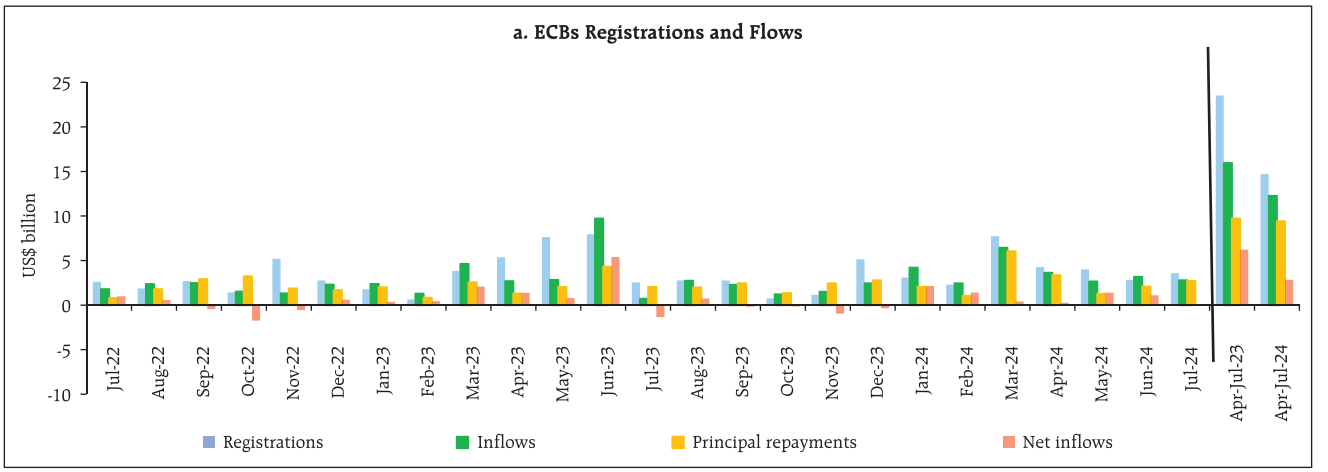
Chart IV.20: Net Portfolio Investments

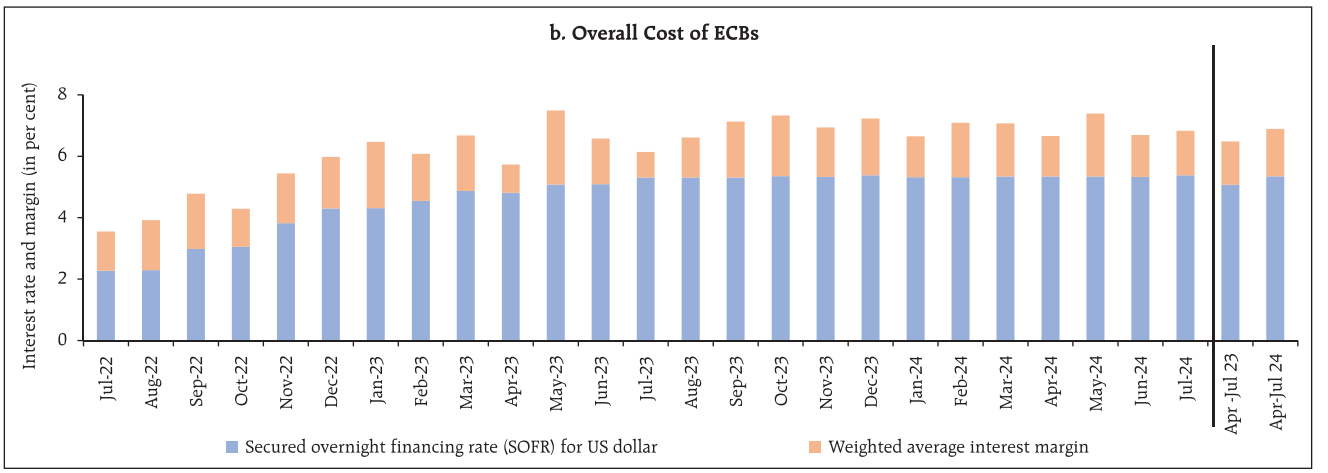


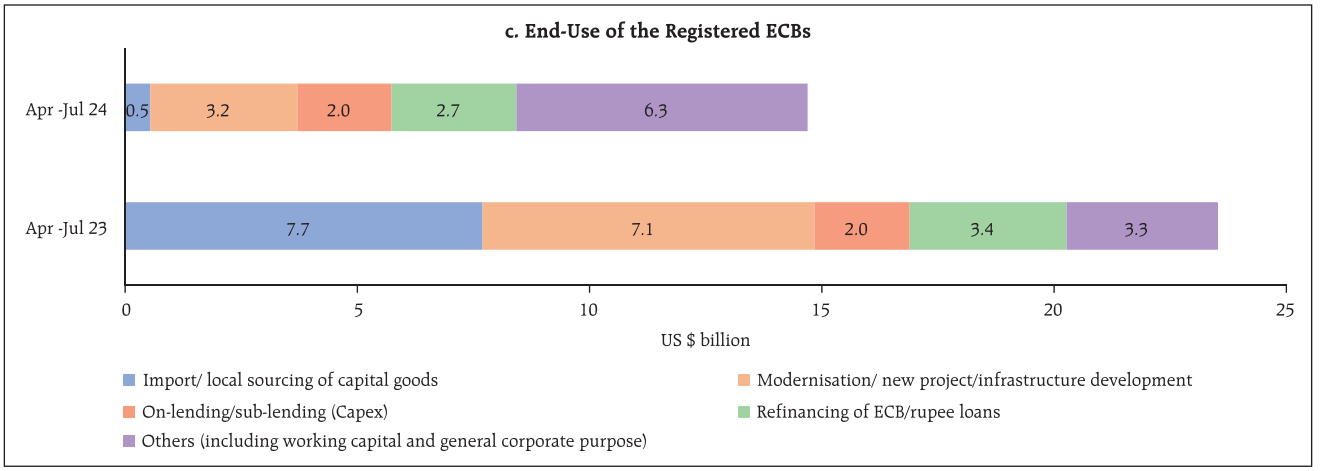
Notes: 1. Debt includes investments under the voluntary retention route and hybrid instruments.
2. *: Data up to September 16, 2024.

Sources: National Securities Depository Limited (NSDL); and Institute of International Finance.

Chart IV.21: External Commercial Borrowings



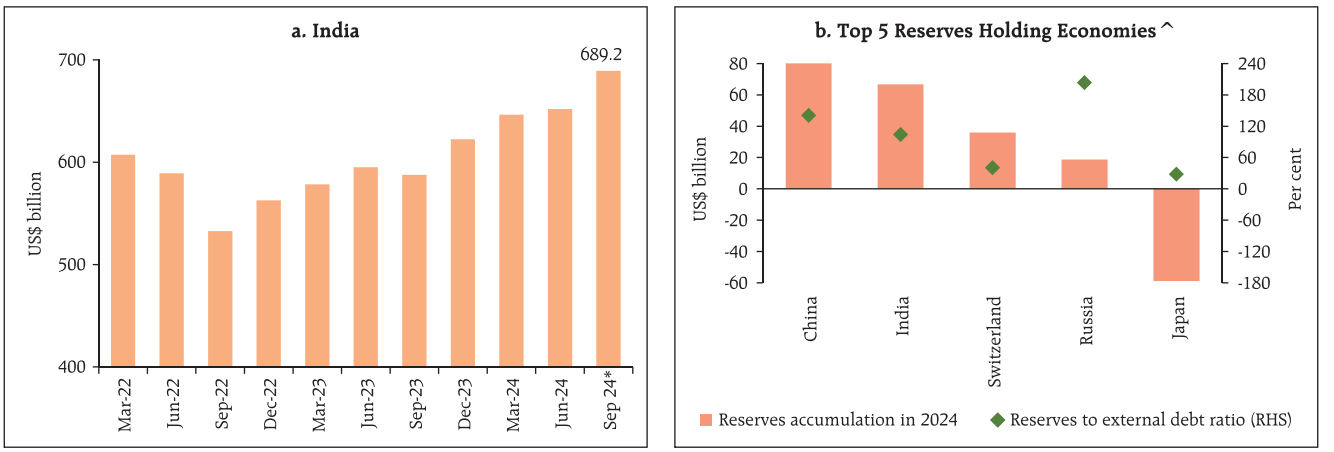




Source: Form ECB, RBI.

April–July 2024 *vis-à-vis* the corresponding period last year (Chart IV.21b). Nearly two-fifth of the total ECB loans contracted this year so far were intended for capital expenditure (including on-lending and sub-lending for capex) [Chart IV.21c].

Chart IV.22: Foreign Exchange Reserves



Notes: 1. *: Data for September 6, 2024.
2. ^: Countries are arranged in the decreasing order of reserves accumulation in 2024. Data for India and Russia are for September 6, 2024, end-July for Switzerland, and end-August for other countries. The ratio of reserves to external debt is calculated using latest available reserves and external debt at end-March 2024 for each country.

Sources: RBI; respective central bank websites; and RBI staff estimates.

As on September 6, 2024, India's foreign exchange reserves rose to an all-time high of US$ 689.2 billion, equivalent of more than 12 months of imports for 2023-24 and more than 103 per cent of total external debt outstanding at end-March 2024 (Chart IV.22a). India accumulated US$ 66.8 billion in 2024 so far (as on September 6), the second highest among major foreign exchange reserves holding countries (Chart IV.22b).

The Indian rupee (INR) exhibited the least volatility among major currencies during August 2024, depreciating by 0.4 per cent (m-o-m) *vis-à-vis* the US dollar (Chart IV.23).

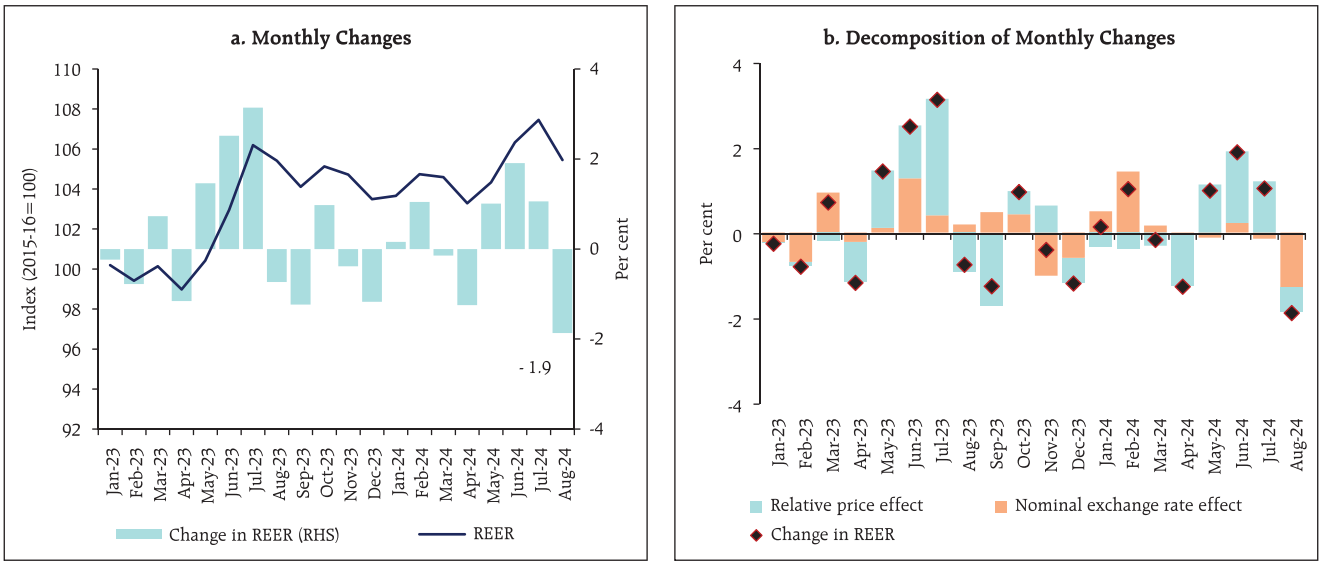
The INR depreciated by 1.9 per cent (m-o-m) in August 2024 in terms of the 40-currency real effective exchange rate (REER) on account of the depreciation of the INR in nominal effective terms and negative relative price differentials (Chart IV.24).

Chart IV.23: Movements of the Indian Rupee and Major Currencies against the US Dollar (August 2024 over July 2024)

Note: US dollar (DXY) measures the movements of the US dollar against a basket of major currencies (Euro, Japanese yen, British pound, Canadian dollar, Swedish krona, Swiss franc).

Sources: FBIL; Thomson Reuters; and RBI staff estimates.

Chart IV.24: Movements in the 40-Currency Real Effective Exchange Rate



Source: RBI.

Payment Systems

Digital transactions exhibited healthy growth in August 2024 across major payment modes, including Real Time Gross Settlement (RTGS), National Electronic Funds Transfer (NEFT), Unified Payments Interface (UPI), Bharat Bill Payment System (BBPS), and National Automated Clearing House (NACH) (Table IV.3). The volume of UPI Person-to-Merchant (P2M) transactions accounted for 62 per cent of total UPI transactions in August 2024, an increase from 58 per cent in the previous year. The value of UPI transactions accelerated by 35 per cent during April-August 2024, reaching ₹101 lakh crore. The UPI ecosystem is also experiencing widespread adoption of its new features, including IPO on UPI[24], Autopay, and cross-border P2M payments in Nepal[25]. The creation of UPI IPO mandates nearly trebled, with the rate of successful mandate execution reaching 100 per cent in August 2024, up from 98 per cent

Table IV.3: Growth in Select Payment Systems

(y-o-y in per cent)

Payment System Indicators	Transaction Volume				Transaction Value			
	Jul-23	Jul-24	Aug-23	Aug-24	Jul-23	Jul-24	Aug-23	Aug-24
RTGS	12.0	16.4	16.0	8.9	13.6	21.7	17.8	15.8
NEFT	36.3	46.2	35.6	41.2	16.1	20.1	19.1	14.5
UPI	58.4	44.9	60.8	41.3	44.2	34.6	46.9	30.7
IMPS	6.3	0.1	4.8	-7.3	15.2	15.8	15.3	12.4
NACH	30.3	0.9	14.1	23.9	23.3	17.5	17.9	25.6
NETC	11.3	9.4	13.3	6.8	19.7	12.0	21.9	8.4
BBPS	25.9	75.4	23.9	86.1	46.0	177.6	46.5	258.6

Note: **RTGS:** Real Time Gross Settlement, **NEFT:** National Electronic Funds Transfer, **UPI:** Unified Payments Interface, **IMPS:** Immediate Payment Service, **NACH:** National Automated Clearing House, **NETC:** National Electronic Toll Collection, **BBPS**: Bharat Bill Payment System.
Source: RBI.

[24] A facility wherein UPI ID can be used for blocking of funds and making payments in the public issue process.
[25] This enables Indian consumers to make UPI payments across various business stores in Nepal.

in August 2023. In August 2024, the creation and execution of mandates under UPI Autopay increased by 178 per cent and 173 per cent, respectively. UPI P2M transactions in Nepal exceeded one lakh transactions since its launch in March 2024.[26] The growth in overall UPI transactions is expected to go up further with the launch of the UPI Circle feature at the Global FinTech Festival (GFF) 2024, which enables primary users to delegate UPI payments to up to five secondary users.

Transactions under the BBPS rose on account of growth in the volume and value of credit card bill payments and utility bill payments including DTH, gas, and electricity. The introduction of Bharat BillPay for Business at GFF 2024 is anticipated to streamline and automate business-to-business payments and collections through a centralised, interoperable platform, regardless of business size. The inclusion of auto-replenishment of FASTags and National Common Mobility Card (NCMC) under the e-mandate framework for recurring transactions is likely to boost the NETC and card transactions, respectively.

The FinTech ecosystem is demonstrating vibrancy, with total funding increasing by 41 per cent during April-August 2024 from a 57 per cent contraction in the corresponding period of 2023.[27] Looking ahead, with innovations in the ecosystem, new business models and evolving technology, the volume of digital payments is projected to increase threefold to reach 481 billion transactions in 2028-29.[28]

V. Conclusion

Recent research on the energy outlook indicates that energy transition has accelerated in recent years, with the pace of clean technology deployment and capital investment surging to record levels. The era of fossil fuels' dominance is coming to an end, with renewables expected to cross 50 per cent share of electricity generation globally by the end of this decade. Cleaner power generation can drive bulk of the aggressive emissions cuts that are urgently needed, enabling more time to tackle 'hard-to-abate' areas like steelmaking and aviation, where cost-competitive low-carbon solutions have yet to scale. A net-zero pathway hinges on renewables capacity tripling between now and the end of the decade. On the energy supply side, for every US dollar that goes to fossil fuels, an average of US$ 3 needs to be invested in low-carbon energy over the remainder of the decade – up from parity today. A fully decarbonised global energy system by 2050 is projected to come with a US$ 215 trillion price tag.

In this context, the inaugural evaluation of the financial sector outlook for emerging market and developing economies (EMDEs) assumes significance.[29] The World Bank finds that in the face of relatively higher climate-related financial sector risks and financing gaps than AEs, regulatory authorities in EMDEs are adopting novel approaches such as customised climate risk assessments, directed lending and interest rate adjustments to enable climate finance. On a durable basis, however, deep and well-functioning capital and insurance markets are essential for long-term green funding, with development banks and credit guarantee institutions providing crucial and targeted gapfills and backstops. Furthermore, climate policies based on subsidies are found to be increasingly ineffective in curbing emissions and instead, a balanced combination of financial incentives, regulations and taxes is preferred. The enabling conditions are falling into place - most banks in these countries appear relatively sound and resilient, with sufficient buffers to withstand sizable credit and sovereign risk shocks, except in some lower-income vulnerable countries.

[26] National Payments Corporation of India Press Releases. August 09, 2024.

[27] Tracxn Database. Accessed as on September 04, 2024.

[28] PwC India. (2024). The Indian Payments Handbook – 2024-2029.

[29] World Bank, Finance and Prosperity, 2024

There have been improvements in financial inclusion and efforts are underway to green the financial sector amidst the search for a right balance between the role of public policy interventions and market-based competition. On the downside, EMDE banks have substantially increased their holdings of government debt, which can pose risks to financial stability in the face of a 'sovereign-bank nexus' tail risk which regulatory standards do not take adequate account of.

Ahead of the 29th session of the Conference of the Parties (COP 29) to the United Nations Framework Convention on Climate Change (UNFCCC), there is widespread alarm that greenhouse gas emissions remain stubbornly high, particularly on per capita basis in AEs. There is still time for the world to get on track if decisive action is taken now with an even faster ramp-up of everything from renewables to green fuels.[30]

[30] BloombergNEF, The New Energy Outlook, 2024.

Synchronisation of Indian States' Business Cycle

by Satyananda Sahoo, Kunal Priyadarshi, Chaitali Bhowmick, Sapna Goel and Preetika ^

Economic activity in the Indian states is impacted by national and state-level policies as well as global developments. Output is thus subject to both common and idiosyncratic shocks. Synchronisation of national and sub-national cycles is probed through trend-cycle decomposition of regional gross state domestic product using alternate filters. A more disaggregated analysis of factors driving the synchronsiation follows using correlations from state-level cycles. The study finds stronger co-movement of western and southern regions with the national cycle since the 2000s and larger bearing of common components on the regional cycles. The study also underscores the positive role of geographical proximity on synchronisation of business cycles.

Introduction

The Indian economy functions under a well-established federal structure in which states are governed by both centralised policies (for example, monetary policy, fiscal policy, external trade policy), as well as state-specific policies adopted by individual state governments. Indian states exhibit distinct macroeconomic and social structures reflected in widely varied sectoral compositions, inflation dynamics, physical and social infrastructure, the level of financial literacy and so on. Reflecting these dynamics, states are subject to common and idiosyncratic shocks. The complex amalgamation of all these factors warrants a probe into how synchronised state-level economic aggregates are *vis-à-vis* the national gross domestic product (GDP) cycle, and how the common and state-specific factors and spillover effects across states play around in determining the overall macro dynamics of Indian states.

Most of the research on growth dynamics of Indian states has focused on growth convergence or divergence, overlooking the dynamics of business cycles altogether. Much of the empirical work on business cycles at state or regional level exists in the context of the United States (US), Australia and the European Union (EU). The analysis of business cycles at sub-national level in emerging market economies (EMEs) is scant primarily due to non-availability of long time series data on the relevant macro aggregates. In view of the above, this paper aims to fill this gap by exploring the growth dynamics and the nature of co-movement of business cycles of Indian states over the past four decades. The paper also attempts to understand the extent to which fluctuations in state economic activity are driven by common factors impacting all states in unison and idiosyncratic shocks which may include an event of drought or any other natural calamity in some state, or state-specific fiscal or regulatory measures. The spillover of shocks across states is examined in terms of dynamic cross-correlation of state business cycles.

The period of study spans from 1980-81 to 2019-20 based on availability of common data set and excluding COVID-19 pandemic aberrations. The Baxter-King's (B-K) band-pass filter and Kalman filter under the unobserved component model (UCM) framework are used for trend-cyclical decomposition of the states. Synchronisation of national and sub-national cycles is examined by aggregating major Indian states and union territories (UTs) into five regional groups according to their geographical

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settings for brevity. Furthermore, factors underlying the dynamics of business cycle synchronisation have been explored at a more disaggregated level using state-level cycles. In particular, the study attempted to explore whether geographical location and the economic structure of the states matter to the dynamics of synchronisation of cycles using ordinary least squares (OLS) regression. States with similar economic structures might get impacted by similar type of shocks which may result in co-movement in their cycles. On the other hand, forward and backward linkages and sectoral spillovers across states could be strong enough to influence cycles of states with differing economic structures but sharing complementarities. Therefore, how economic structure of a state plays a role in shaping its business cycle appears equivocal and, warrants an empirical exploration.

The study finds evidence of increasingly higher synchronisation of cycles post 2000 for the western and southern regions with the national business cycle and larger bearing of common components on regional cycles. In contrast, for the northern, eastern and central regions, the degree of synchronisation with national cycle has weakened, which might be, *inter alia*, reflective of the prevalence of idiosyncratic shocks and/or growing divergence in sectoral compositions of these regions *vis-à-vis* the national level. Moreover, both regional and state-level analysis highlighted substantial impact of geographical proximity of states on business cycle synchronisation.

Set against this backdrop, the paper is organised in six sections. Section II underscores the major stylised facts regarding growth dynamics of Indian states over the last four decades. Section III discusses the relevant literature followed by data description and methodology in section IV. Section V presents the major findings from the analysis. Section VI concludes the paper.

II. Stylised Facts

Gross state domestic product (GSDP) of twenty states and four UTs[1], accounting for more than 95.0 per cent of India's real GDP has been considered for the analysis, the data for which are sourced from the National Statistical Office (NSO). For succinctness, the select states, based on their geographical locations, are aggregated into five different regions based on the Zonal Councils of India (Table 1 and Chart 1). North eastern region has not been included due to unavailability of longer time series of select north-eastern states *viz.*, Mizoram, Nagaland and Sikkim.

In sync with India' growth story, the compound annual growth rates (CAGR) across regions accelerated markedly during 2000s. The western region, comprising Goa, Gujarat and Maharashtra, outperformed other regions between the 1980s and

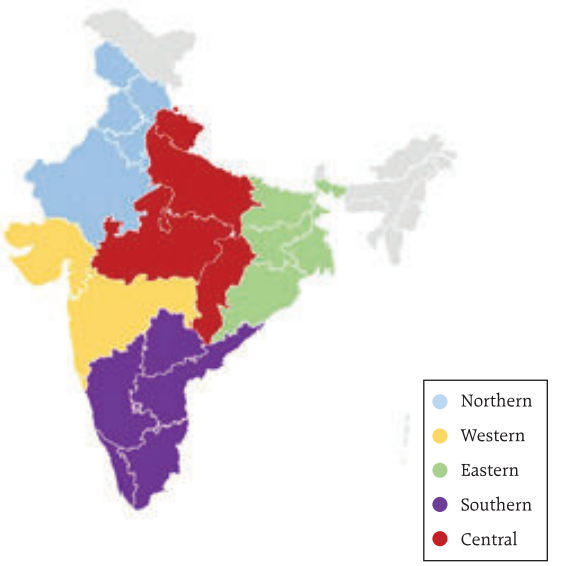
Table 1: Regional Classification of Indian States and Union Territories

Northern	Western	Eastern	Southern	Central
Chandigarh	Goa	Bihar	Andhra Pradesh	Chhattisgarh
Delhi	Gujarat	Jharkhand	Karnataka	Madhya Pradesh
Haryana	Maharashtra	Odisha	Kerala	Uttarakhand
Himachal Pradesh		West Bengal	Puducherry	Uttar Pradesh
Jammu and Kashmir			Tamil Nadu	
Punjab			Telangana	
Rajasthan				

Source: Zonal Councils of India.

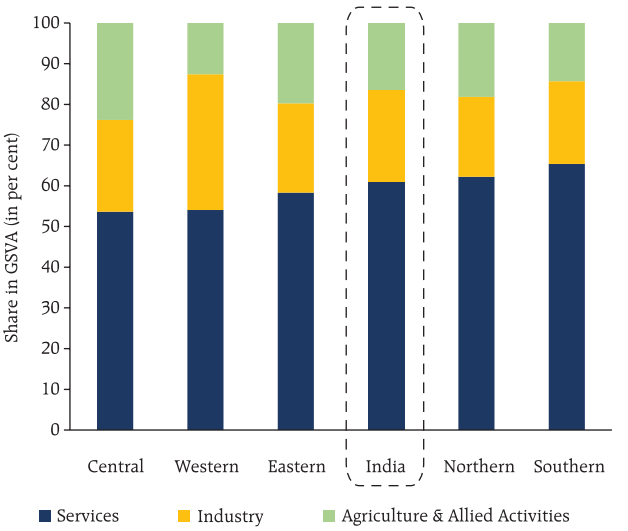
[1] Chandigarh, Jammu and Kashmir, National Capital Territory (NCT) of Delhi and Puducherry.

Chart 1: Regional Classification of Indian States



Source: Zonal Councils of India.

Chart 2: Sectoral Composition of Economic Activity – 2011-12 to 2019-20



Sources: NSO; and authors' calculations.

2010s, the CAGR in the southern region surpassed the western states in the last decade (2010-11 to 2019-20). In level terms, GSDP at constant prices of the southern region exceeds that of the western region by 27.6 per cent in 2019-20 (Table 2).

An overview of economic activity composition exhibits that in the last decade, services have been contributing more than 50.0 per cent to gross state value added (GSVA) on average in all regions. While services comprise on average 65.4 per cent of the activity in the southern region, central region has the lowest share at 53.6 per cent. In comparison to other zones and national level, the western region has the largest proportion (roughly one-third of the region's economy) contributed by industry; in Gujarat the average share of industry is closer to twice of the national level. Both central and eastern regions have on an average 20 per cent share of agriculture and allied activities in their GSVA [Chart 2]. Amongst all, the northern region, closely mirrors the national sectoral structure.

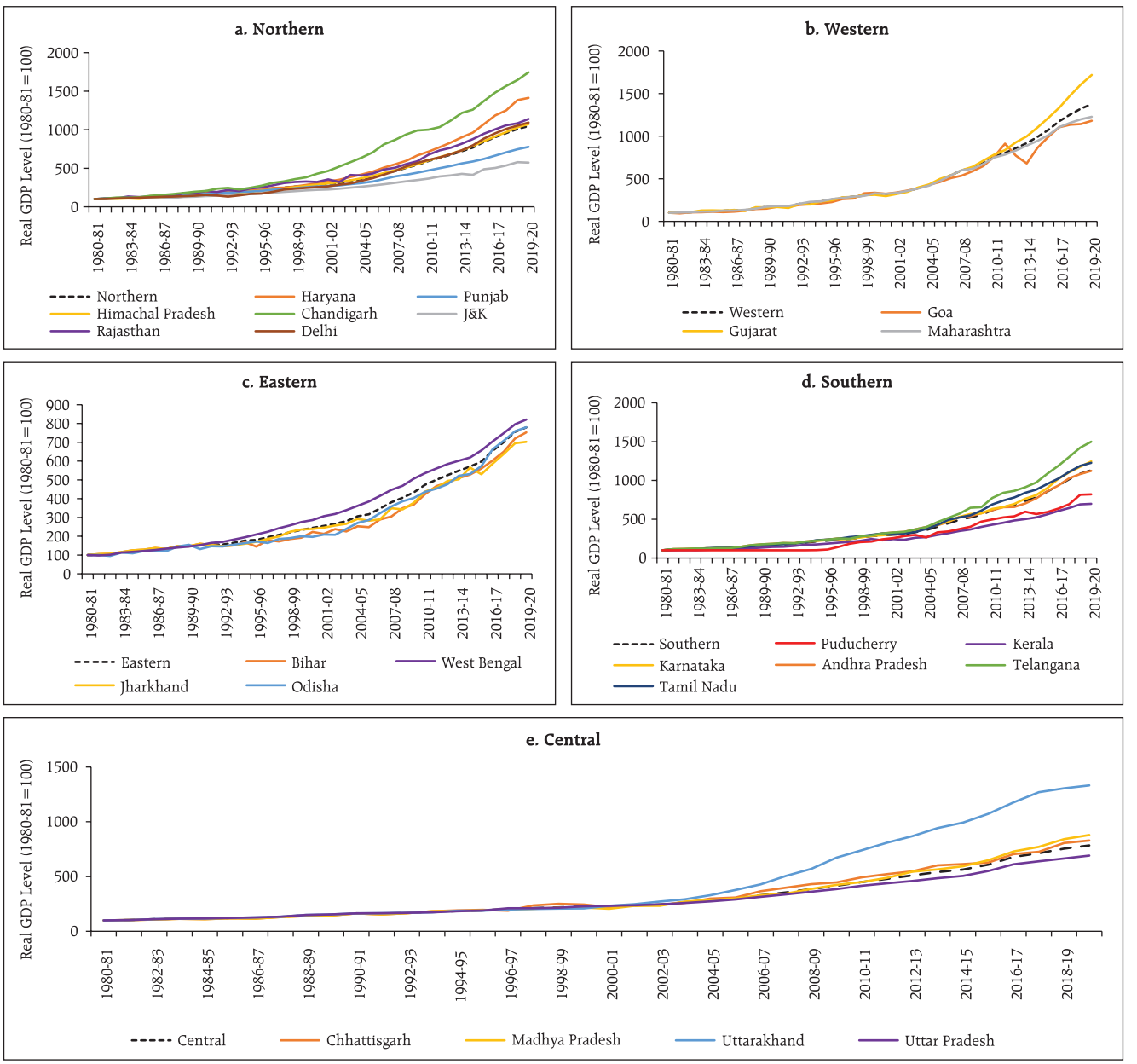
Delving further into the states in the respective regions, Rajasthan has the maximum share in northern region GSDP followed by the NCT of Delhi; Maharashtra has the largest share in GSDP of the western region followed by Gujarat; in the eastern region, West Bengal is followed by Bihar and Odisha; Tamil Nadu and Karnataka hold a major share in the southern region. In the central region, Uttar Pradesh holds more than half of the region's GSDP share. Differences in growth across states have widened disparities in some regions, while in others, growth has remained largely synchronised (Chart 3). The differences in the economic structures across states and regions can, *inter alia*, contribute to growth variations (Chart 4).

Table 2: CAGR of Real GSDP (in per cent) – Region-wise

	Northern	Western	Eastern	Southern	Central	India
1981-82 to 1989-90	5.4	6.0	4.4	5.3	4.7	5.6
1990-91 to 1999-2000	5.4	6.7	4.7	5.9	4.1	5.7
2000-01 to 2009-10	7.1	7.8	6.4	7.1	6.3	6.3
2010-11 to 2019-20	6.7	7.2	6.0	7.3	6.5	6.6

Sources: NSO; and authors' calculations.

Chart 3: Real GDP across Regions – State-wise

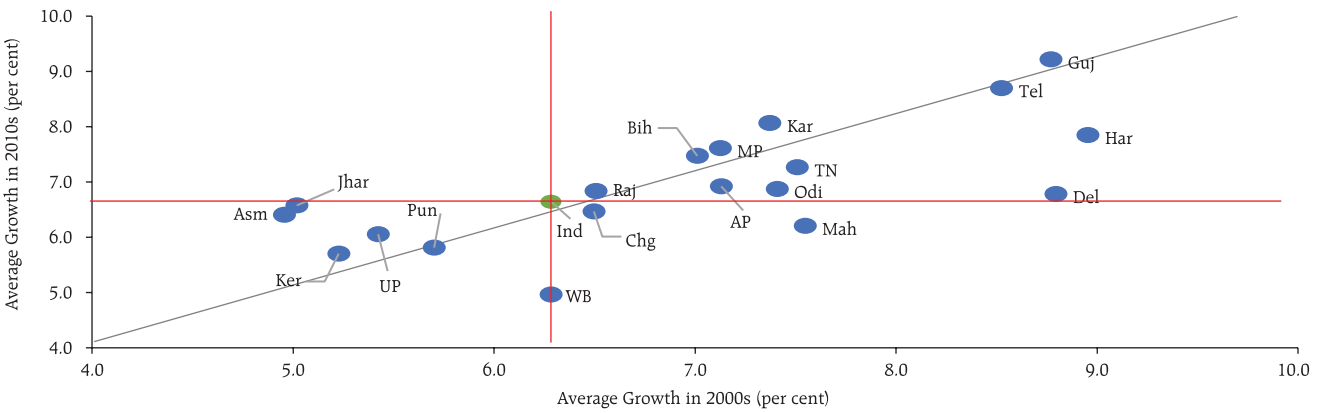


Sources: NSO; and authors' calculations.

III. Literature Review

Business cycles are the outcome of movements in multitude of economic variables interacting with each other. Research on business cycles has an extensive history concerning both theory and empirical work. Classical techniques of business cycle analysis dates to the pioneering work by researchers at the National Bureau of Economic Research (NBER) [Mitchell (1927); Mitchell and Burns (1938); and Burns and Mitchell (1946)]. Empirical research related to business cycles primarily centres on two key questions – first, how to identify and distinguish alternative phases *i.e.*, the peaks and troughs of the business cycle and identify the turning points? and,

Chart 4: GDP Growth across Decades



AP: Andhra Pradesh; Asm: Assam; Bih: Bihar; Chg: Chhattisgarh; Del: Delhi; Guj: Gujarat; Har: Haryana; Ind: India; Jhar: Jharkhand; Kar: Karnataka; Ker: Kerala; MP: Madhya Pradesh; Mah: Maharashtra; Odi: Odisha; Pun: Punjab; Raj: Rajasthan; TN: Tamil Nadu; Tel: Telangana; UP: Uttar Pradesh; WB: West Bengal.

Notes: 1. The 45° line indicates equal average growth in both the decades. A state lying above (below) the line indicates higher (lower) average growth in 2010s as compared to 2000s.

2. The axes passes through the India dot at an average growth of 6.3 per cent and 6.6 per cent in 2000s and 2010s, respectively.

Sources: NSO; and authors' calculations.

second, how to explain the observed co-movement of specific time series with the aggregate business cycle? Kaldor's (1957) focus on stylised facts of growth in terms of long-term trend movement of an economy and later Lucas's (1976) stylised facts of movements about trends in gross national product led the foundation of long traditions of research on business cycles in context of advanced economies (AEs).

Much of the empirical work on business cycles has focused on the US, Australia, the EU and the African region. Magrini *et al.* (2013), using data for 48 co-terminus US states between 1990 and 2009, analysed the degree of synchronisation by means of trade openness, financial integration and industrial specialisation along with their interlinkages, and found a possible circular relationship between the degree of synchronisation and a general index of sectoral specialisation. Kouparitsas (2002) found that while spillovers of region-specific shocks account for a not statistically significant share of business cycle variation of regional per capita income, common shocks have a large and statistically significant share. A study on regional business cycles of Australia too finds the enormous effect of common components such as fluctuations in world demand or terms of trade on co-movement of state business cycles as compared to state-specific or idiosyncratic shocks (Norman and Walker, 2007).

Agénor *et al.* (2000) explored the main stylised features of macroeconomic fluctuations for twelve developing countries based on cross-correlations between domestic industrial output and various macroeconomic variables such as wages, inflation, money, credit and exchange rates. A study based on a larger sample of thirty-two developing countries finds that output, consumption, investment, government revenue and expenditure of developing countries were more volatile and less persistent in comparison to developed countries whereas real interest rates were less volatile (Male, 2010). Although India is included as one of the countries in the sample, such studies do not show the changing nature of business cycle of any specific country over time.

Ghate *et al.* (2013) focused exclusively on Indian data to study the properties of Indian business cycle over two periods – pre and post liberalisation. The

findings suggest that properties of the cycle had moved closer to AEs mainly due to the transition of the economy from agricultural to a market based industrial economy post liberalisation. Extensive work exists on measurement, dating and drivers of the Indian business cycle (Pandey *et al.*, 2016, 2018). Both these studies focus on the chronology of the Indian business cycle in the post-reform period and observed that the average duration of expansion is estimated to be around twelve quarters while that of recession is around nine quarters with amplitude of recession being higher than that of expansion. In the aftermath of 2008 global financial crisis, economic cycles in the Indian states displayed stronger co-movement with the national cycle and growth cycles have been more pronounced in non-agricultural states relative to agricultural states (Ahmad *et al.*, 2018).

Majority of the work on Indian states focused on convergence or divergence in the growth rates, overlooking the business cycles altogether. Ahmad *et al.* (2018), while touching upon growth cycles at state-level, do not delve into detailed dynamics of the observed trends.

IV. Data and Methodology

One of the prerequisites of any robust macroeconomic analysis is the availability of consistent time series of macroeconomic variables of suitable length. Our study involves a period spanning 1980-81 to 2019-20. Prime motive for choosing such a time period is the availability of a common dataset for all states considered. The period prior to the 1980s is not considered as it was marked by a series of domestic (such as drought) and external shocks (*e.g.* oil price spikes) which prevented the interplay of investment-inventory fluctuations that creates business cycles (Pandey *et al.*, 2018). Moreover, GSDP data are subject to multiple base revisions, and during the period of our study, GSDP data are available at five different base years namely, 1980-81, 1993-94, 1999-2000, 2004-05 and 2011-12. Therefore, GSDP series at a single base year 2011-12 has been generated for the entire period using the standard splicing method.[2] During the period of study, four states were bifurcated – Uttarakhand, Jharkhand and Chhattisgarh from Uttar Pradesh, Bihar and Madhya Pradesh, respectively, in 2000 and Telangana from Andhra Pradesh in 2014. Hence, to generate the series where data are not available, the growth rate of the combined state has been assumed for both the bifurcated states. Further, to avoid pandemic induced aberrations which disrupted the usual trend-cycle properties, post-COVID years are excluded.

Following the standard business cycle literature, this study emphasises on growth cycle,[3] as India being a high growing economy, the evidence of classical cycles are non-existent and the same holds true at the state-level. Among available filtering techniques for trend-cycle decomposition from GSDP data, the B-K band-pass filter which introduces less distortion compared with other popular filters *viz.*, the Hodrick-Prescott (HP) filter has been used to decompose the trend and cyclical components of the regions/states. Furthermore, we have also followed the unobserved component (UCM) approach for the trend-cycle decomposition of regional economic fluctuations. Following Watson (1986) and other business cycle literature, this study assumes that logarithm of GSDP for region i at time t denoted by y_{it} comprises

[2] The splicing method involves re-scaling of the past base-year values by their respective linking factors, derived based on data available for an overlapping period at two different base years.

[3] As per the OECD definition, the 'classical cycle' refers to fluctuations in the level of the economic activity (*i.e.*, measured by GDP); the 'growth cycle', also known as the 'deviation cycle', refers to fluctuations in the economic activity around the long-run potential level, or fluctuations in the output-gap (*i.e.*, measured by the de-trended GDP); and; the 'growth rate cycle' refers to fluctuations of the growth rate of economic activity (*i.e.*, GDP growth rate).

a trend and a cyclical component (Equation 1); the trend of y_{it} has a random walk with drift where the drift term is denoted by δ_{it} (Equation 2); and the cyclical component is a stationary second-order autoregression process (Equation 3). μ_{it} is the random error component of region *i's* GSDP at time *t*.

$$y_{it} = \tau_{it} + c_{it} \quad (1), \text{ for } i=1\ldots5.$$

$$\tau_{it} = \delta_{it} + \tau_{it-1} + \mu_{it} \quad (2),$$

$$c_{it} = \rho_1 c_{it-1} + \rho_2 c_{it-2} + \varepsilon_{nt} \quad (3)$$

The synchronisation of business cycles is studied by juxtaposing the regional cycles against the national GDP cycle. The observations from visual representation of cycles are further corroborated by correlation analysis. The dynamics of synchronisation of cycles have been evaluated through rolling window correlations between the national and regional cycles. Given the annual frequency of data, the window length has been set at ten years which is a period sufficient to capture a complete full-length business cycle – from peak-to-peak or trough-to-trough.

Furthermore, examining deeper into the nature of synchronisation, observed co-movement of cycles could be either due to some common factors such as policy changes at the national level which affect all regions simultaneously, or spillover of idiosyncratic shocks across regions. The hypothesis whether geographical proximity and sectoral composition of constituent states leads to stronger transmission of regional shocks has been studied by comparing cross-correlations across regions. In case of spillovers, any event in a particular region will influence the business cycle of that region with immediate effect but will gradually transmit to other regions through various economic transactions or sentiments and impact cycles of other regions with a lag. Therefore, the spillover effect could be gauged by lead-lag correlations of cycles across region. In our study, the spillover effect is examined by one-year lag cross-correlation of cycles across regions assuming that one year period is adequate enough for transmission of idiosyncratic shocks from one region to the other.

Finally, state-level analysis is carried out to explore how varied shocks and their spillover effects impact business cycle synchronisation. Two hypotheses have been tested in an OLS regression framework in this regard.

Hypothesis I: Geographical proximity strengthens co-movement of business cycles.

Hypothesis II: Economic structure of states influences business cycles synchronisation through sectoral linkages and complementarities.

Pair-wise correlation coefficients of states have been considered as dependent variable for the stated hypotheses. With a total of twenty states and four UTs, 276 observations of pair-wise correlations have been found. Geographical proximity is defined by whether two states share at least one common geographical border and is included in the model as a dummy variable which assumes a value one if the states share borders and, zero otherwise. The economic structure of a state is defined in terms of the sector contributing the highest to the state's GSVA *vis-à-vis* the share of that sector at the national level. For instance, a state is termed as an agricultural state if the difference between the share of agriculture in state's GSVA and national share of agriculture in GVA is the highest when compared with the same for industry and services sector. The dummy variable relating to economic structure used in the model assumes a value one if two states share similar structure (say, both being agricultural states), and zero otherwise. Additionally, an interaction of the two dummies has been added as a variable to gauge the impact on synchronisation.

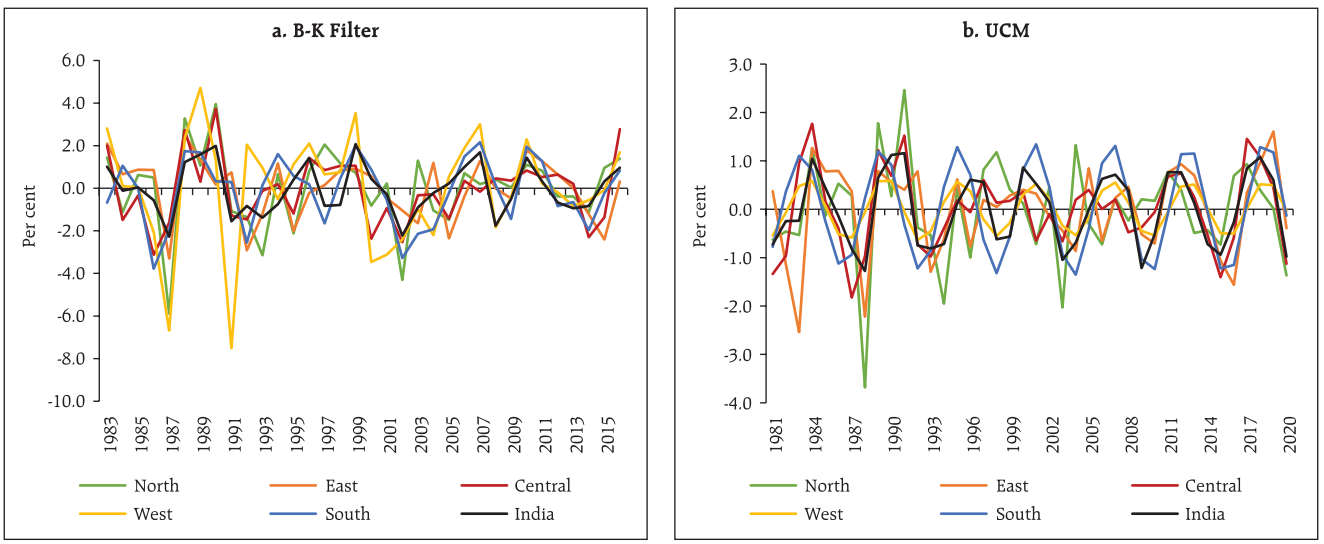
V. Findings

Regional business cycles derived from both B-K filter and UCM show moderate synchronisation with the national cycle and cyclical fluctuations tend to diminish over time as reflected in slightly lower amplitudes of cycles over the later period (Charts 5a and 5b). As cycles derived from the B-K filter and UCM display similar movement, the rest of the analysis is based on cycles generated from the UCM approach. Cyclicality is more pronounced in case of western and southern regions in comparison with other regions. These two regions also appeared as the major drivers of the national GDP cycle, probably, because the nine major states and UTs comprising western and southern regions considered in this study account for more than half of the national GDP. Central region with leading share of agriculture in overall GSVA also depicts relatively higher co-movement (Chart 6).

The observed patterns of cyclicality from the visual representation have been reinforced by the correlation analysis (Table 3). All regions present high and statistically significant correlation with the national cycle as well as high cross-correlation across regions, except a few. For the overall period, central region portrays the highest correlation with the national cycle followed by western and southern regions. Cross-correlations indicate that geographical proximity and sectoral composition of the constituent states have an influence over synchronisation of regional cycles. The northern region with relatively lower share of industrial activity and in relatively closer proximity with eastern and central regions exhibited a higher cross-correlation among them. Similarly, many of the states belonging to the western and southern regions share their borders and are more industrialised compared to other regions which might explain higher cross-correlation between these two regions. The not statistically significant correlation between the northern and the southern regions could be reflecting the innate structural and compositional differences across them.

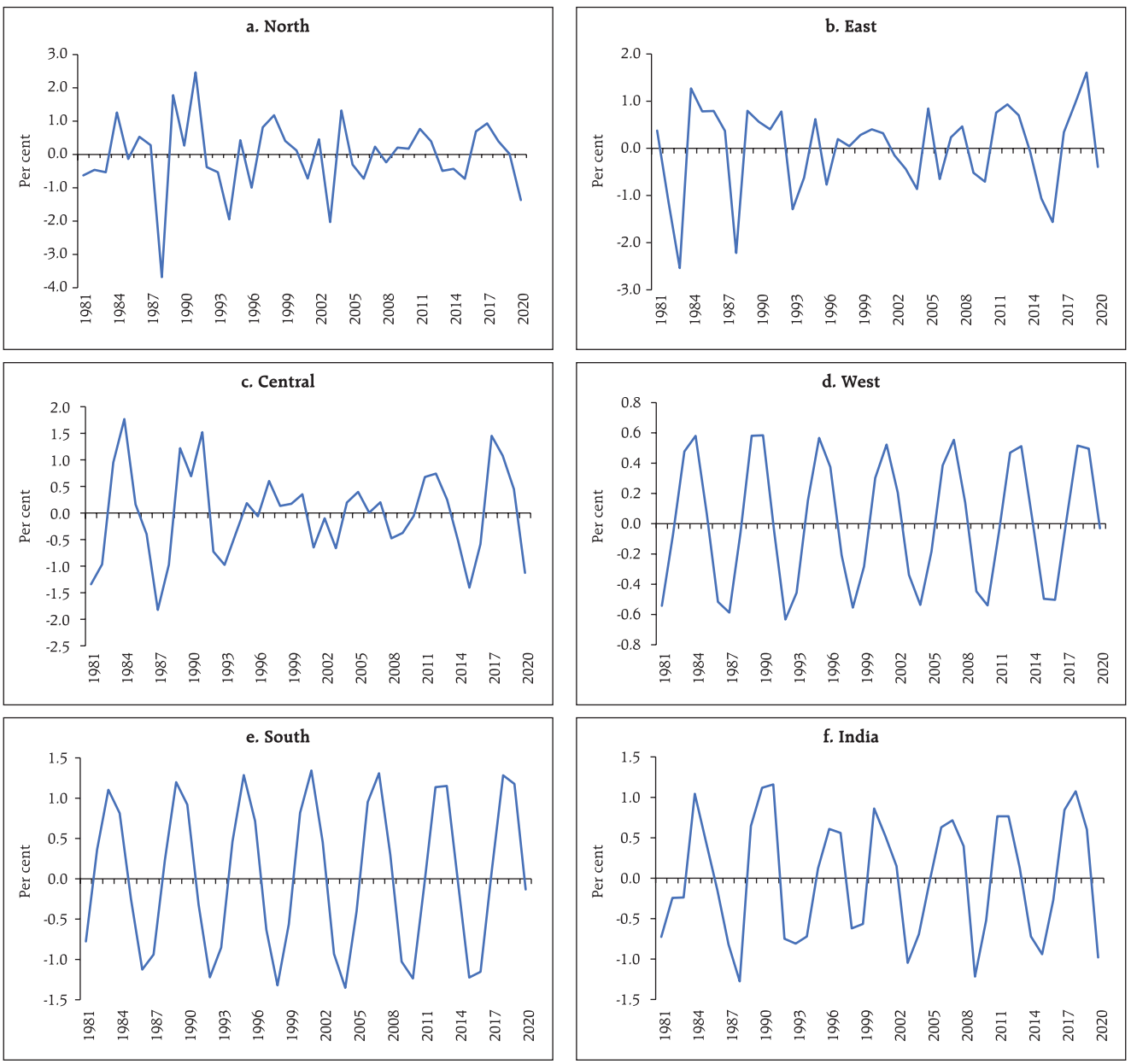
The degree of synchronisation over time has been evaluated in terms of rolling window correlations

Chart 5: Business Cycles



Sources: NSO; and authors' calculations.

Chart 6: Regional Cycles



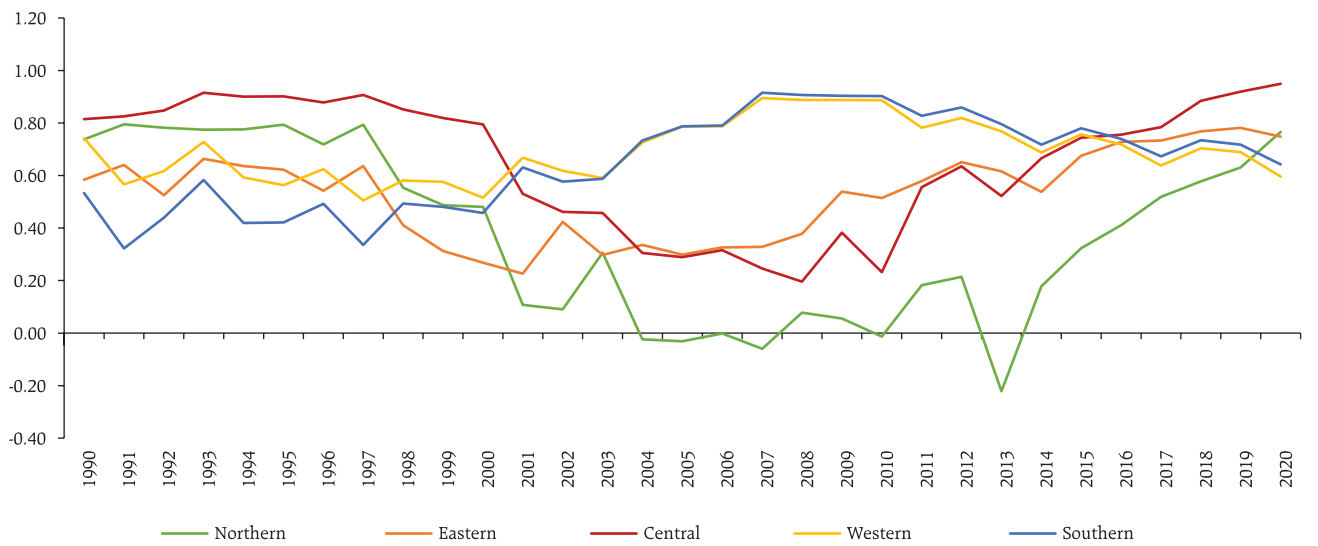
Sources: NSO; and authors' calculations.

Table 3: Cross-Correlation across Regions

	Northern	Eastern	Central	Western	Southern	India
Northern	1.00					
Eastern	0.47***	1.00				
Central	0.60***	0.39**	1.00			
Western	0.02	0.28*	0.55***	1.00		
Southern	-0.06	0.24	0.45***	0.98***	1.00	
India	0.51***	0.55***	0.75***	0.70***	0.64***	1.00

Note: ***, ** and * indicate statistical significance at 1 per cent, 5 per cent and 10 per cent, respectively.
Sources: NSO; and authors' calculations.

Chart 7: Rolling-Window Correlations of the Regional Cycles with the National Cycle

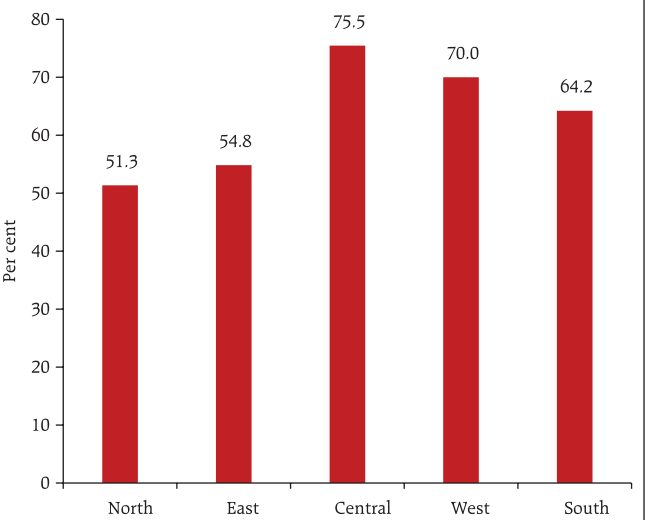


Sources: NSO; and authors' calculations.

between cycles of each region with the national cycle. The correlation coefficients computed for each of the 10-year rolling window starting from 1981-82 are placed against the last year of the window (Chart 7). The synchronisation of cycles appears to be largely governed by the income levels, as in the initial years till the mid-2000s, the relatively richer northern states dominated the overall cyclical movement. In the subsequent period, the western and southern regions, by virtue of fast-paced growth, gradually surpassed the northern and central regions to gain larger influence over the national cycle. Post 2014, however, the northern region has caught up with the two regions quite well. For the overall period, the central, western and southern regions exhibited higher synchronisation[4] with the national cycle (Chart 8).

To explain the co-movement of cycles, the framework followed in Norman and Walker (2007) has been adopted which interprets the observed cyclical co-movement as a result of either common shocks, spillovers of idiosyncratic shocks, or a combination of the two (described in section IV). A higher correlation between activity in one region with lagged activity in another as compared with

Chart 8: Measure of Synchronisation with the National Cycle



Source: Authors' calculations.

[4] The degree of synchronisation has been measured by computing cosine similarity for each region's cycle with the national cycle to see how much the regional cycle overlaps with the national cycle. A similarity score of values closer to 1 indicate strong alignment and values closer to 0 indicate little to no alignment. It has been calculated as:

$$Cosine\ Similarity = \frac{\sum(X * Y)}{\left(\sqrt{\sum X^2}\right) + \left(\sqrt{\sum Y^2}\right)}$$

where X denotes the regional cycle and Y denotes the national cycle.

Table 4: One-year Lagged Correlations

	Northern	Eastern	Central	Western	Southern	India
Northern lagged	-0.23	-0.30*	0.23	0.11	0.02	0.08
Eastern lagged	0.23	0.03	0.72***	0.37**	0.29*	0.47***
Central lagged	-0.07	-0.47***	0.32**	0.20	0.19	0.11
Western lagged	-0.16	-0.11	0.25	0.46***	0.57***	0.23
Southern lagged	-0.15	-0.07	0.17	0.34**	0.47***	0.19
India lagged	0.03	-0.17	0.45***	0.37**	0.35**	0.32**

Note: ***, ** and * indicate statistical significance at 1 per cent, 5 per cent and 10 per cent, respectively.
Sources: NSO; and authors' calculations.

their contemporaneous correlations would suggest that spillovers are more important than common shocks. Majority of contemporaneous correlations (Table 3), however, turn out to be higher than lagged correlations (Table 4) for all regions suggesting a higher influence of common components such as national policies, domestic shocks like deficient rains/adverse climate events, or shocks to global variables *etc.* The central and southern regions displayed significant lagged correlation with other regions. In particular, the central region had the highest one-year lagged correlation with the eastern region. Higher spillover from the central region might reflect the impact of climate-related disruptions such as Uttarakhand floods of 2013, droughts and heatwaves in Uttar Pradesh, Madhya Pradesh and Chhattisgarh during 2002, 2009 and 2015-16, affecting the agriculture-intensive states of central region and gradually spilling over to other regions.

Having analysed the regional cycles, further insights regarding the factors shaping these cyclical movements have been drawn using state-level data focusing, particularly, on two aspects – geographical location and economic structure of the states. As already expounded, the economic structure of a state is based on the sector contributing the highest share in its GSVA relative to the share of that sector in the national GVA. If sector-specific shocks are prominent, they are likely to reflect in higher co-movement of cycles of structurally similar states. On the other hand, strong inter-sectoral linkage would reflect in better synchronisation of business cycles of states with different sectoral orientations. The cross-correlation matrices of state business cycles for all possible combinations of economic structure have been used to explore these factors.

Among the cohorts with similar sectoral orientation, business cycles appear to be stronger among agricultural states as compared to the industrial and services-oriented states (Tables 5a, 5b and, 5c). This could be due to the agricultural sector being relatively more prone to climate related disruptions such as droughts, excess or erratic rainfall which impact farming activity. Geographical location of the states does not seem to have any impact on co-movement of cycles in agricultural states. Uttar Pradesh, one of the leading farming states in India displayed significantly strong business cycle correlation with states such as Andhra Pradesh, Rajasthan, Madhya Pradesh and Haryana. In services-oriented states, the geographical proximity might be crucial as the correlation of cycles is significantly high among services-oriented states like Karnataka, Tamil Nadu, Kerala and Telangana.

The synchronisation of cycles between the agriculture-industry pair and agri-services pair is significantly high for several states – both

Table 5: Cross-Correlation across Similar Sectoral Orientation

a. Agriculture

Agriculture	Har	Pun	Raj	WB	UP	MP	AP
Har	1						
Pun	-0.17	1					
Raj	0.35**	-0.10	1				
WB	0.15	-0.12	0.13	1			
UP	0.37**	0.02	0.43***	0.31*	1		
MP	0.23	0.11	0.41***	0.09	0.31**	1	
AP	0.26	0.40**	0.22	-0.21	0.66***	0.27*	1

b. Industry

Industry	HP	Jhar	Odi	Chg	UK	Goa	Guj	Mah	Pudu
HP	1								
Jhar	0.05	1							
Odi	0.51***	0.03	1						
Chg	0.31*	0.01	0.34**	1					
UK	0.12	0.18	0.01	-0.16	1				
Goa	0.04	0.10	-0.00	0.19	0.12	1			
Guj	0.42***	0.27*	0.32**	0.01	0.30*	0.11	1		
Mah	0.45***	-0.22	0.25	0.45***	0.04	0.04	0.05	1	
Pudu	-0.39**	0.18	-0.20	-0.33**	-0.14	0.16	-0.11	-0.94***	1

c. Services

Services	J&K	Cha	Del	Bih	Kar	Ker	TN	Tel
J&K	1.00							
Cha	0.09	1						
Del	0.04	0.91***	1					
Bih	0.27*	-0.03	0.03	1				
Kar	-0.02	-0.84***	-0.70***	0.09	1			
Ker	0.22	-0.40**	-0.56***	-0.26	0.22	1		
TN	0.25	-0.73***	-0.78***	0.14	0.58***	0.52***	1	
Tel	0.04	-0.77***	-0.60***	0.15	0.75***	0.23	0.54***	1

Note: (i) AP: Andhra Pradesh; Bih: Bihar; Cha: Chandigarh; Chg: Chhattisgarh; Del: Delhi; Guj: Gujarat; Har: Haryana; J&K: Jammu and Kashmir; Jhar: Jharkhand; Kar: Karnataka; Ker: Kerala; MP: Madhya Pradesh; Mah: Maharashtra; Odi: Odisha; Pudu: Puducherry; Pun: Punjab; Raj: Rajasthan; TN: Tamil Nadu; Tel: Telangana; UK: Uttarakhand; UP: Uttar Pradesh; WB: West Bengal.

(ii) ***, ** and * indicate statistical significance at 1 per cent, 5 per cent and 10 per cent, respectively.

Source: Authors' calculations.

neighbouring as well as far-way states (Tables 6a and 6b). This could be due to national level policies including price controls and subsidies, or diffusion of technology and infrastructure development resulting in better economic ties across agricultural and services states. Maharashtra, a major industrial state, also depicted strong correlations with the services oriented southern states (Table 6c).

The role played by geographical location and economic structure in synchronisation of state business cycles has been further probed through OLS regression analysis. Pair-wise correlation of state cycles is taken as the dependent variable while dummy variables related to state borders and economic structure as defined previously, along

Table 6: Inter-Sectoral Cross Correlations

a. Agriculture

Industry	Har	Pun	Raj	WB	UP	MP	AP
HP	0.36***	0.45***	0.36**	-0.12	0.10	0.18	0.36**
Jhar	0.25	-0.24	0.25	0.21	0.10	-0.02	0.03
Odi	0.20	0.26	0.31*	0.20	0.12	0.11	0.24
Chg	-0.04	0.45***	0.17	0.03	-0.06	0.57***	0.10
UK	0.45***	-0.01	0.29*	0.13	0.75***	0.08	0.54**
Goa	0.14	0.04	0.28*	0.33**	0.45***	0.30*	0.21
Guj	0.30*	0.02	0.70***	0.05	0.29*	0.20	0.18
Mah	-0.16	0.99***	-0.09	-0.13	0.08	0.12	0.44***
Pudu	0.13	-0.92***	0.07	0.18	-0.12	-0.06	-0.50***

b. Agriculture

Services	Har	Pun	Raj	WB	UP	MP	AP
J&K	0.47***	-0.07	0.31**	0.52***	0.36**	0.06	0.05
Cha	0.14	-0.96***	0.08	0.17	-0.09	-0.08	-0.47***
Del	0.15	-0.98***	0.11	0.09	0.01	-0.11	-0.33**
Bih	0.39**	-0.07	0.10	0.16	0.22	-0.16	0.10
Kar	-0.22	0.76***	-0.07	-0.11	0.19	-0.14	0.49***
Ker	0.23	0.52***	0.15	0.13	0.04	0.49***	0.14
TN	0.07	0.77***	-0.04	0.39**	0.15	0.03	0.24
Tel	0.12	0.67***	0.14	-0.13	0.50***	0.22	0.83***

c. Services

Industry	J&K	Cha	Del	Bih	Kar	Ker	TN	Tel
HP	0.17	-0.42***	-0.45***	0.13	0.21	0.23	0.40**	0.41***
Jhar	0.08	0.20	0.22	0.33**	-0.09	-0.04	-0.06	-0.12
Odi	0.26	-0.21	-0.24	-0.14	0.33**	0.25	0.29*	0.24
Chg	0.01	-0.37**	-0.48***	-0.15	0.17	0.47***	0.35**	0.20
UK	0.26	-0.10	0.05	0.42***	0.12	-0.23	0.04	0.36**
Goa	0.25	0.09	-0.14	0.06	-0.15	0.34**	0.20	0.05
Guj	0.33**	-0.10	-0.02	0.15	0.12	0.10	0.05	0.16
Mah	-0.07	-0.98***	-0.98***	-0.02	0.79***	0.49***	0.77***	0.72***
Pudu	0.01	0.99***	0.86***	-0.05	-0.85***	-0.34**	-0.69***	-0.79***

Notes: (i) AP: Andhra Pradesh; Bih: Bihar; Cha: Chandigarh; Chg: Chhattisgarh; Del: Delhi; Guj: Gujarat; Har: Haryana; J&K: Jammu and Kashmir; Jhar: Jharkhand; Kar: Karnataka; Ker: Kerala; MP: Madhya Pradesh; Mah: Maharashtra; Odi: Odisha; Pudu: Puducherry; Pun: Punjab; Raj: Rajasthan; TN: Tamil Nadu; Tel: Telangana; UK: Uttarakhand; UP: Uttar Pradesh; WB: West Bengal.

(ii) ***, ** and * indicate statistical significance at 1 per cent, 5 per cent and 10 per cent, respectively.

Source: Authors' calculations.

with their interaction constitute the explanatory variables used to test the relevant hypotheses. To ensure robustness and consistency of results, three regressions covering alternative time periods have been specified in order – 1980-2020, 1980-2010 and latest 1991-2020 period with an overlapping period (1991-2010) in the latter two (Table 7).

The regression analysis suggests that higher the proximity of states, the higher the correlation of their business cycles for all time periods, though the relationship has weakened marginally for the relatively recent period covered in regression 3. On the other hand, the economic structure of states seems to have no statistically significant influence

Table 7: Regression Analysis

Dependent Variable: Pair-wise correlation across states			
	(1)	**(2)**	**(3)**
Independent Variables	**1980-2020**	**1980-2010**	**1991-2020**
Sharing Border	0.144** (0.07)	0.163** (0.07)	0.127* (0.07)
Economic Structure	-0.052 (0.05)	-0.049 (0.05)	-0.056 (0.06)
Sharing Border * Economic Structure	0.029 (0.10)	0.009 (0.10)	0.068 (0.11)
Constant	0.092*** (0.03)	0.061** (0.03)	0.097*** (0.03)
Observations	**276**	**276**	**276**
F Statistic	**3.48****	**3.65****	**2.78****
R-squared	**0.0313**	**0.0328**	**0.0243**

Notes: (i) ***, ** and * indicate statistical significance at 1 per cent, 5 per cent and 10 per cent, respectively.
(ii) Figures in parentheses denote the standard errors.
Source: Authors' calculations.

on the correlation of cycles. The interaction term denoting neighbouring states with similar economic structure, also turned out to be not statistically significant. For instance, both industry-oriented states of Maharashtra and Gujarat have insignificant cross-correlation (Table 5b).

VI. Conclusion

Although prevalent in advanced economies, the research related to business cycles in Indian context is limited to national level primarily due to non-availability of high frequency data (at least at quarterly frequency) which is ideal for business cycle analysis. Given the distinct economic characteristics of the Indian states, this paper contributes to the sparse literature on Indian business cycle by probing into factors driving the synchronisation of state business cycles over the last four decades. Synchronisation of national and sub-national cycles has been assessed by aggregating states GSDP to geographical regions and extracting cycles from the ensuing regions using B-K filter and UCM framework. A detailed analysis using state-level data follows where role of factors such as geographical location and economic structure of states has been explored in influencing the synchronisation of cycles.

Synchronisation between national and regional cycles has increased overtime with western and southern regions showing stronger co-movement with the national cycle since 2000s. High correlations among regional cycles could be due to a larger bearing of common factors such as monsoon and weather shocks, global crude oil and commodity price shocks, global demand and global financial market spillovers, fiscal policy, monetary policy and exchange rate fluctuations, impacting all the regions simultaneously. Nonetheless, moderately high one-year lagged cross-correlations also underscore the presence of spillover effects of idiosyncratic shocks across certain regions. Geographical proximity of the constituent states is likely to have an influence over synchronisation as regions comprising bordering states showed higher cross-correlations. Agricultural states showed more synchronisation among themselves as compared to industrial and services-oriented states. Geographical proximity appears to plays an important role for interlinkages with industrial and services states. The regression analysis validates the positive role of geographical proximity on synchronisation of business cycles, *albeit* with

smaller magnitude in relatively recent period. The sectoral composition of the states, however, has no influence over the synchronisation of cycles.

The business cycle correlation analysis, as undertaken in this study, can aid in formulation of counter-cyclical policies to mitigate economic fluctuations in the economy as well as help collaborate on strengthening regional infrastructure investment to facilitate trade and labour mobility. In view of the relevance of business cycles for effective policy making, strengthening of sub-national accounts assumes paramount importance, including aspects relating to consistency in compilation between states and national accounts, a defined data release calendar similar to national accounts, compilation of sub-national accounts from a bottom-up approach and availability of data from demand side (private and government consumption, and fixed investment).

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Priority Sector Lending: The Indian Experience

by Sambhavi Dhingra, Arpita Agarwal, and Snehal S. Herwadkar ^

Priority sector lending (PSL) in India has been used as a policy intervention tool to direct credit to the needy sectors of the economy. Leveraging quarterly bank-level data from March 2006 to March 2023, the empirical analysis suggests that the introduction of priority sector lending certificates increased priority sector lending. The analysis further suggests that PSL is responsive to its asset quality and higher PSL growth appears to improve banks' overall asset quality.

Introduction

Commercial banking forms a dominant part of India's financial system, with an ever-widening scope and reach. The prevalence of informal credit institutions and unequal access to banking services necessitated initiating financial inclusion policies. In India, priority sector lending (PSL) falls under the overall structure and plan of furthering the inclusion objective. Primarily, sectors of the economy that impact large sections of the population and are employment-intensive fall under the priority sector umbrella (RBI, 2007). These mainly constitute loans for agriculture and allied activities, micro and small enterprises (MSE), housing, exports, education, and priority sector loans to weaker sections. PSL guidelines in India have been reviewed and revised periodically to align them with emerging national priorities and bring a sharper focus on inclusive development.

The aim of this article is to examine the trends of the PSL programme in India, while evaluating its major drivers. It also gauges the impact of PSL on the asset quality of banks. The rest of the article is arranged as follows. Section II provides an overview of literature on the rationale for directed lending and the cross-country experience. Section III outlines the evolution of PSL in India and the performance so far. Section IV presents the research methodology along with the empirical analyses, while section V concludes the article.

II. Review of Literature

The prevalence of high transaction costs and information asymmetries can restrict credit flows to the relatively risky but economically productive activities and borrowers. In the absence of complete information about expected project returns, banks tend to base their lending decisions on observable risk characteristics and/or the availability of good collateral, keeping credit flowing to the traditionally viable borrowers. This risk of underserving such projects, which already have marginalised access to credit, can prompt governments to implement PSL-type programmes (Mundra, 2017).

The problem of asymmetric information curtailing provision of credit becomes even more pronounced in the agriculture sector. Agriculture plays a critical role in economic development by generating employment, ensuring food security, and alleviating poverty, especially in emerging market economies (EMEs) like India. However, given the inherent uncertainty in agricultural yield and prices due to their heavy dependence on rainfall and recurrent climate shocks, farmer borrowers can often face restricted access to credit (Calomiris and Himmelberg, 1993). In the absence of formal credit, it becomes even more essential to bring them under the wing of directed lending programmes (Chakrabarty, 2012).

Similarly, small-scale industries are often 'informal' in nature and the lack of adequate documentation is a major constraint in financing them. These industries, that usually have low capital-output ratio and are labour intensive, may

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not necessarily be amongst the preferred clientele of commercial banks and, therefore, could be credit-starved. Directing credit to such industries is especially beneficial in labour-surplus developing economies, as it generates employment and reduces income inequality (Kohli, 1997).

There are divergent views on efficacy of directed lending, particularly regarding its commercial viability. For instance, a study conducted in Tamil Nadu for 1984-86 showed that nationalised banks, which lent heavily to agriculture, participated substantially in government loan schemes, and directed significant amounts to borrowers from weaker sections and scheduled castes/ scheduled tribes (SC/ST), had the highest recovery rates (Narayana, 1992). PSL does not adversely impact banks' non-performing assets (NPA) ratios (Gaur and Mohapatra, 2020). On the other hand, according to some studies, labour and administrative costs associated with lending to the priority sector were higher than that of lending in the unreserved sector for four Indian public sector banks (PSBs), and such loans contributed more than proportionately to the NPAs of banks (Banerjee and Duflo, 2000; Banerjee and Duflo, 2014).

The potential macroeconomic effects of priority lending have elicited a wide range of responses in existing literature. Under certain conditions, government intervention in the form of directed credit programmes would not only usher in financial development, but also provide important guidelines in ensuring sustainability of institutions (Chakrabarti *et al.,* 2019). However, another study shows that small firms sacrificed their expansion to have access to priority sector lending (Bhue *et al.*, 2019).

By enhancing employment opportunities and promoting social equity, directed credit for priority sectors also bears a spillover impact for non-priority sectors, ensuring balanced economic growth (Gaur and Mohapatra, 2020). Such programmes play a significant role in addressing the welfare objectives of reducing income inequality and dependence on informal credit, as well as poverty alleviation (Federal Reserve Bank of San Francisco, 2014). As Muhammad Yunus (1987) commented, if the implementation of PSL is faulty and NPAs are high, "one should not be quick to blame the people of the recipient country for the failure; rather one should blame the designer of the credit institution that failed to do the job."

The mechanisms of directing credit take various forms, such as interest subsidies, interest rate caps, direct credit by government, government guarantees, lending quotas for banks, lending through development finance institutions (DFIs) or a combination of these methods. Some form of PSL exists in many countries, especially EMEs. Indonesia, for instance, directs priority lending to small and medium enterprises (SMEs), with quota of 20 per cent of its total portfolio (ILO, 2019). Malaysia and Vietnam implemented interest rate discounts for lending to priority sectors (Federal Reserve Bank of San Francisco, 2014).

The policy to direct credit was an important factor contributing to strong economic performance in the East Asian countries (World Bank, 1993). The Japan Development Bank was instrumental in increasing incremental lending from private banks, providing improved access of credit to new firms and in generating new investment in post-war Japan (Horiuchi and Sui, 1993). In Korea, government-led direction of credit helped overcome pervasive market imperfections and channelled new borrowings into investments, which led to further economic growth (Cho and Hellman,1993; Werner, 2002). French loan guarantee program significantly impacted the development of newly created firms and enabled the targeted firms to systematically raise more external finance, pay lower interest expenses, and enjoy higher growth rates than other similar firms (Lelarge *et al.*, 2010).

In the US, while directed lending programmes have succeeded in increasing credit to the targeted group, they have not necessarily led to an increase in investment by that group (Schwarz, 1992). In some cases, inefficient implementation has also led to increased income inequality instead of promoting a more equitable distribution of resources, like in

Costa Rica, where subsidised credit increased income accruing to the wealthiest 10 per cent of the population instead of the target group (Vogel, 1984). In many countries, these programmes proved to be particularly costly for the banking industry in terms of high NPAs, lower profitability, and higher variable costs involved in accomplishing targets, along with bearing moral hazard concerns. In Indonesia, the banking system's SME loan portfolio exhibited inferior asset quality compared to the aggregate portfolio (Federal Reserve Bank of San Francisco, 2014).

In South Korea and Japan, directed lending programmes are generally viewed to have been efficaciously implemented, with multiple factors being responsible for their success. Interventionist policies in these countries have been supplemented by appropriate institutional mechanisms. In Japan, once a firm got priority access to credit, they were restricted from further borrowing under the PSL and credit was extended to new borrowers. In Korea, if performance standards were not met by the beneficiaries, loans were either recalled or new credit was denied. Strict performance standards, accompanied with effective monitoring mechanisms, ensured the success of these programmes.

To summarise, the available literature presents a range of views on the efficacy of directed lending programmes. The analysis undertaken in the article adds to the existing literature in the following ways. First, while most of the earlier papers in the Indian context were either theoretical or case studies, this article empirically evaluates the drivers of PSL. Second, the literature on the impact of PSL on asset quality of banks is scanty, especially for India; this article fills this gap. Third, it uses bank-level quarterly supervisory data, which adds more granularity to the analysis.

III. Priority Sector Lending in India

III.1 History and Evolution

Priority sector lending in India has been a mainstay of credit control policies since the nationalisation of banks in 1969. In 1972, the description of priority sector and areas that qualified as such were formalised based on the recommendations of an informal study group of the Reserve Bank, and in 1974, a target of 33.33 per cent of total credit was fixed for the same, to be achieved by 1979. The target was further enhanced to 40 per cent in 1980, along with specific sub-targets for lending to agriculture and weaker sections, to be achieved by 1985. Since then, the guidelines have undergone further changes in terms of varying applicability to different types of banks, quantum of credit, targeted sectors and sub-targets, and treatment of shortfall by banks. Since April 2007, PSL requirement is being specified as a per cent of bank's adjusted net bank credit (ANBC)[1] or credit equivalent of off-balance sheet exposures (CEOBE), whichever is higher.

In its present form, the PSL guidelines require domestic commercial banks [excluding regional rural banks (RRBs), and small finance banks (SFBs)] and foreign banks (FBs) to lend 40 per cent of their ANBC or CEOBE, whichever is higher, to the priority sector.[2] Out of the total target, 18 per cent is prescribed for agriculture [10 per cent for small and marginal farmers (SMFs)[3]], 7.5 per cent for micro enterprises, and

[1] ANBC = Bank credit + outstanding deposits under Rural Infrastructure Development Fund (RIDF) and other eligible funds with National Bank for Agriculture and Rural Development (NABARD), National Housing Bank (NHB), Small Industries Development Bank of India (SIDBI) and Micro Units Development and Refinance Agency (MUDRA) Ltd in lieu of non-achievement of priority sector lending targets/sub-targets + outstanding PSLCs + other investments eligible to be treated as priority sector + bonds/ debentures in non-statutory liquidity ratio (SLR) categories under held to maturity (HTM) category - bills rediscounted with RBI and other approved financial institutions - eligible amount for exemptions on issuance of long-term bonds for infrastructure and affordable housing - advances extended in India against the incremental foreign currency non-resident bank [FCNR (B)]/ non-resident external (NRE) deposits, qualifying for exemption from cash reserve ratio (CRR)/SLR requirements - investments made by PSBs in the recapitalisation bonds floated by Government of India - face value of securities acquired and kept under HTM category under the targeted long-term repo operations (TLTRO) 2.0.

[2] FBs with less than 20 branches have to lend 40 per cent of ANBC or CEOBE, whichever is higher, to priority sector, out of which 32 per cent can be to exports and not less than 8 per cent can be to other priority sectors. RRBs and SFBs are required to lend 75 per cent of their ANBC or CEOBE, whichever is higher, to priority sector.

[3] As per the Reserve Bank's circular issued on September 4, 2020, the sub-target for SMFs was increased from 8 per cent in 2020-21 to 9 per cent in 2021-22, 9.5 per cent in 2022-23 and 10 per cent in 2023-24.

12 per cent for weaker sections.[4] The scope of PSL has gradually been widened to incorporate sectors that have assumed prominence in contemporary times. Accordingly, credit extended for promoting social infrastructure and renewable energy was included in PSL in 2015.

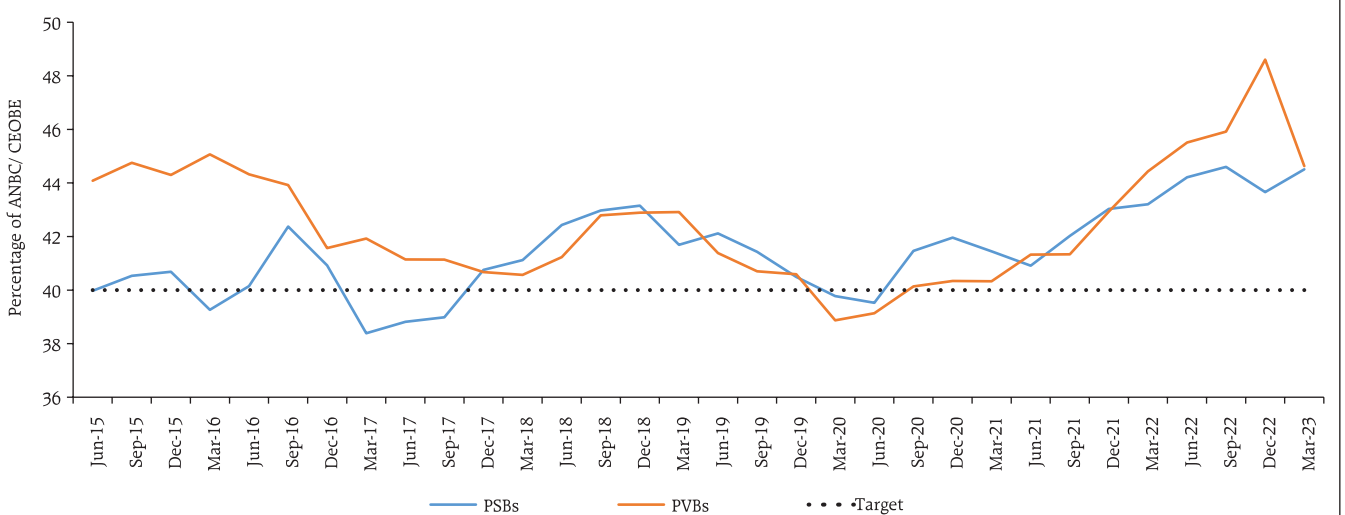
COVID-19 led to a refocus of priorities, and the importance of investing in health and education infrastructure, along with increasing access to digital services, came to the fore. According to the latest PSL guidelines, loans up to ₹5 crore per borrower for setting up schools, drinking water and sanitation facilities, and loans up to ₹10 crore per borrower for building health care facilities (including under *'Ayushman Bharat'*) in Tier II to Tier VI centres are eligible for priority sector classification.[5]

III.2 Achievement of Targets and Sub-Targets

Depending upon their risk profile and existing clientele, banks may resort to indirect routes, such as inter-bank participation certificates (IBPCs) and securitisation of priority sector loans, as well for achieving priority sector target and sub targets. In addition, PSL certificates (PSLCs) were introduced in April 2016, as recommended by the Raghuram Rajan Committee on Financial Sector Reforms (2009), to enable banks to achieve the PSL target and sub-targets in the event of a shortfall while incentivising surplus lending to the categories under priority sector. This also provides banks trading in PSLCs the advantage of specialising in their area of expertise and disbursing loans more efficiently. Trading of PSLCs is allowed for the four categories that have mandated targets under the Reserve Bank's guidelines - agriculture, SMF, micro enterprises and general. Banks that still have shortfalls are required to contribute to the RIDF and other funds with NABARD/ NHB/ SIDBI/ MUDRA Ltd.

Lending to the priority sector has generally remained above 40 per cent across time periods and bank groups, and the exact proportion is contingent upon, *inter alia*, the bank's overall business strategy, reach, asset quality of such loans, and their expertise (Chart 1).

Chart 1: PSL Target Achievement



Note: Annual PSL target achievement is measured as an average of the four quarters. Thus, deviation from target in each quarter in the chart need not be interpreted as a shortfall.
Source: RBI.

[4] The sub-target for weaker sections was increased from 10 per cent in 2020-21 to 11 per cent in 2021-22, 11.5 per cent in 2022-23 and 12 per cent in 2023-24.

[5] The latest guidelines can be accessed at https://www.rbi.org.in/Scripts/BS_ViewMasDirections.aspx?id=11959

Chart 2: PSL Sub-Target Achievement

Note: Annual PSL sub-target achievement is measured as an average of the four quarters. Thus, deviation from sub-target in each quarter in the chart need not be interpreted as a shortfall.
Source: RBI.

In case of agriculture, PSBs, on most occasions, have fulfilled their target of 18 per cent; private sector banks (PVBs), which were earlier consistently short of the target, have in recent years aligned to the target. On the other hand, PVBs have fared better than PSBs in achieving the sub-target of lending 7.5 per cent of their ANBC or CEOBE to micro enterprises. Both PSBs and PVBs have met their targets for lending to weaker sections, with PSBs ahead of their private sector counterparts (Chart 2).

IV. Empirical Analysis

The empirical analysis is divided into two parts. First, despite the common regulatory mandate requiring banks to allocate 40 per cent of their ANBC/ CEOBE to the priority sector, significant variations exist among different banks. This section of the study investigates the potential factors that can influence the extent of banks' PSL. Second, the study examines the impact of PSL on banks' overall asset quality.

IV.1 Drivers of Priority Sector Lending

An exercise to determine the factors that affect PSL by banks is undertaken using fixed effects panel regression models. Quarterly data of PSBs and PVBs are used for the period March 2006 to March 2023. All the data are sourced from supervisory returns of the Reserve Bank. The following panel regression equation is estimated:

$$PSL\ share_{it} = \beta_1\ PSL\ share_{it-1} + \beta_2\ PSL\ GNPA\ ratio_{it-1} + \beta_3\ Branches\ to\ assets\ ratio_{it} + \beta_4\ log(assets)_{it-1} + \beta_5\ PSLC\ dummy_t + \beta_6\ March\ dummy_t + \alpha_y + \vartheta_i + \varepsilon_{it} \quad (I)$$

where $PSL\ share_{it}$ is the share of priority sector loans in gross loans and advances[6] for bank i at time t, $PSL\ share_{it-1}$ refers to the one period lagged value of *PSL share*, $PSL\ GNPA\ ratio_{it-1}$ is the lagged asset quality indicator for priority sector loans, $Branches\ to\ assets\ ratio_{it}$ is a proxy for bank's reach, and $log(assets)_{it-1}$ is an indicator of the bank's size. The *PSLC dummy* takes value 1 for all quarters starting June 2016 to capture the impact of the introduction of PSLCs. As the PSL shortfall calculations are based on data at the end of every financial year, a $March\ dummy_t$ is introduced, which takes value 1 for all quarters ending March[7]. This is to account for the possibility that banks may be accelerating their PSL in the last quarter to achieve their annual targets. α_y are year fixed effects, ϑ_i are bank fixed effects[8], and ε_{it} are standard errors clustered at bank level and adjusted for heteroscedasticity. Three alternate specifications are evaluated, with the dependent variables being the entire PSL share in total credit, PSL to agricutlure to total credit and PSL to MSEs[9] to total credit.

Results of the empirical estimation suggest that the asset quality of the priority sector portfolio plays a significant role in determining the PSL share of banks. Although PSL is mandated by regulatory requirements, banks take into consideration the usual risk-return trade-off when extending these loans.

Wider bank reach, measured by bank branches-to-assets ratio, is positively associated with higher share of loans disbursed to the priority sector. Banks with greater brick-and-mortar presence are better placed to extend priority credit at grass-roots level. In the agriculture and MSE PSL specifications, rural branches-to-assets ratio and urban branches-to-assets ratio, respectively, have been used as explanatory variables. Results indicate that banks with bigger branch network in urban areas lend a greater share of their loans to priority MSEs. However, the results are not significant for priority sector agricultural loans for banks with a higher rural presence, possibly reflecting the presence of RRBs, SFBs and rural co-operative banks in these areas, which have greater expertise in

Table 1: Determinants of PSL Share

Variables	PSL share	Agriculture PSL share	MSE PSL share
	(1)	(2)	(3)
PSL share (L1)	0.678*** (0.0435)		
Agriculture PSL share (L1)		0.810*** (0.0462)	
MSE PSL share (L1)			0.628*** (0.0486)
PSL GNPA ratio (L1)	-0.225*** (0.0609)		
Agriculture PSL GNPA ratio (L1)		-0.0971*** (0.0201)	
MSE PSL GNPA ratio (L1)			-0.200*** (0.0386)
Branches to assets	0.436* (0.251)		
Rural branches to assets		-0.0572 (0.253)	
Urban branches to assets			1.340*** (0.458)
Log (assets) (L1)	-1.453** (0.533)	-0.636*** (0.220)	-0.580* (0.292)
PSLC dummy	1.606** (0.658)	-0.139 (0.390)	1.603*** (0.425)
March dummy	1.465*** (0.346)	0.471** (0.184)	1.149*** (0.164)
Constant	25.83*** (6.717)	9.049*** (2.436)	8.411** (3.324)
Observations	2,162	2,162	2,161
Adjusted R-squared	0.626	0.762	0.698
Number of banks	33	33	33
Bank fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes

Notes: 1. Figures in parentheses indicate robust standard errors clustered at bank level.
2. ***, ** and * represent 1 per cent, 5 per cent and 10 per cent levels of significance, respectively.

Source: Authors' calculations.

[6] Ideally, the share of PSL to ANBC/CEOBE should be considered for the estimation. However, due to lack of consistent availability of ANBC/CEOBE data, gross loans and advances are used instead. PSL here includes the loans directly disbursed by banks to the target sectors along with other measures of target achievement as enumerated in Section III.2.

[7] Annual PSL target achievement is measured as an average of the four quarters. Banks may achieve their PSL target on an annual basis even if they do not do so in every quarter.

[8] In order to determine the appropriate model specification between fixed effects and random effects, the Hausman test was conducted, and the results indicated that the fixed effects model was more appropriate.

[9] Priority sector loans include micro, small and medium enterprises, and the sub-target is prescribed only for loans to micro enterprises. For this analysis, however, only loans to micro and small enterprises have been included due to data limitations.

agriculture financing. Bank size has a significant and negative impact on the PSL share.

The share of PSL in the overall credit by banks has gone up since the introduction of PSLCs, which has helped certain banks to develop a niche in specific PSL segments. Data suggest that such banks lend over and above the regulatory minimum to their specialised segments and convert these excess achievements into PSLCs, which they trade for a premium. The statistically significant and positive coefficient of the PSLC dummy indicates that its introduction has helped banks improve their overall and MSE PSL share. Peaking of PSL share in the March quarter is also captured in the model.

IV.2 Asset Quality of PSL

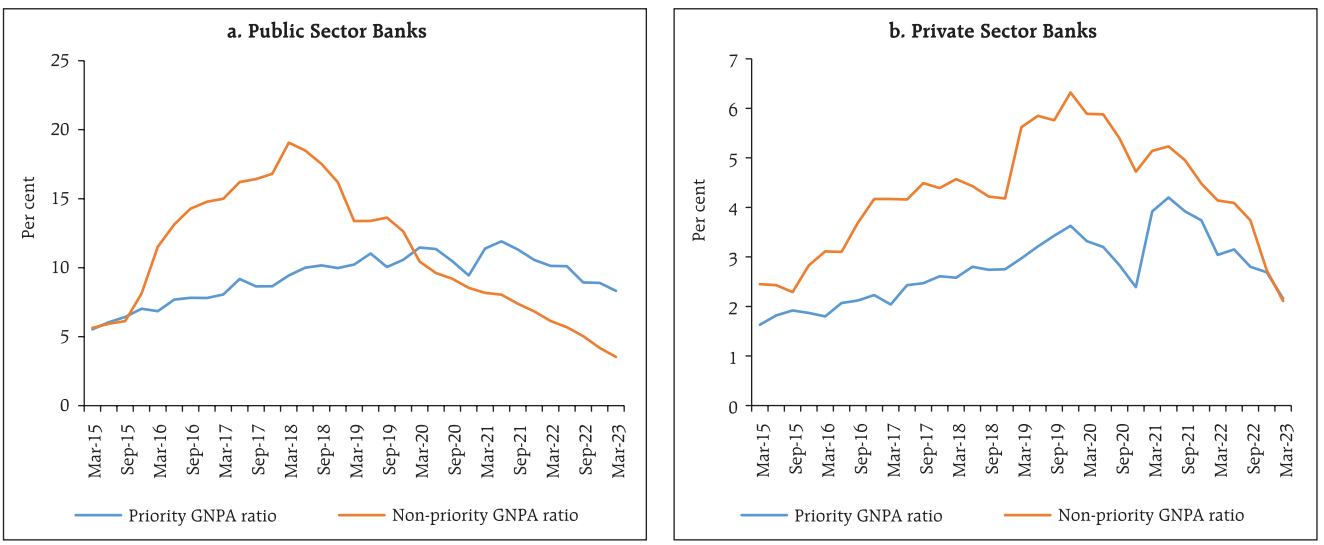
Historically, loans originating from priority sectors have had higher NPAs than their non-priority sector counterparts, of which the majority have been on PSBs' books. However, the trend reversed in 2015, in part due to better recognition of NPAs after the asset quality review (John *et al.*, 2016)[10] [Chart 3].

Empirical evidence suggests that GNPAs of banks depend on bank specific and macroeconomic variables (Chavan and Gambacorta, 2016). In addtion to this, the focus of our estimation is to test whether banks' PSL has an impact on their overall asset quality. For this, an exercise was undertaken using panel regression models on the same dataset used in the earlier subsection.

$$GNPA\ \ Ratio_{it} = \beta_1\ PriorityLoanGrowth_{it-1} + \beta_2 AQR_t + \beta_3 X_{it-1} + \alpha_y + \vartheta_i + \varepsilon_{it} \quad \text{(II)}$$

where the dependent variable is the GNPA ratio of bank i at time t. $PriorityLoanGrowth_{it-1}$ is the one period lagged year-on-year (y-o-y) growth in a bank's PSL. AQR_t is a dummy variable for asset quality review that takes value 1 for the quarters between September 2015 and March 2018, and 0 otherwise. X_{it-1} are bank-level controls, inclusive of a dummy for bank group, lagged return on assets, and lagged log of bank size (sum of loans and deposits). α_y are year fixed-effects, ϑ_i are bank fixed effects[11], and ε_{it} are standard errors clustered at bank level and adjusted for heteroscedasticity.

Chart 3: Asset Quality: Priority Sector Loans *versus* Non-priority Sector Loans



Source: Off-site returns (domestic operations), RBI.

[10] The asset quality review (AQR) in July 2015 was aimed at cleaning of banks' balance sheets and improving their transparency, while increasing their NPA provisions.

[11] In order to determine the appropriate model specification between fixed effects and random effects, the Hausman test was conducted, and the results indicated that the fixed effects model was more appropriate.

Table 2: Impact of PSL Growth on Bank's Asset Quality

Variables	Dependent Variable: GNPA Ratio			
	(1)	(2)	(3)	(4)
Priority advances growth (L1)	-0.0254***	-0.0483***	-0.0210***	-0.0226***
	(0.00457)	(0.00841)	(0.00382)	(0.00455)
AQR dummy	0.757***	0.539***	0.742***	9.751***
	(0.185)	(0.153)	(0.180)	(1.667)
Return on assets (L1)	-3.188***		-3.187***	-3.238***
	(0.327)		(0.308)	(0.319)
Log (size) (L1)	-1.860***		-3.338***	-3.401***
	(0.383)		(0.684)	(0.711)
Bank group dummy	5.200***			
	(1.264)			
Constant	24.82***	4.205***	42.68***	
	(3.864)	(0.597)	(7.253)	
Observations	2,030	2,030	2,030	
Bank fixed effects	No	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	No
Time fixed effects	No	No	No	Yes
Adjusted R-squared	0.534#	0.465	0.713	0.716
Number of banks	33	33	33	33

Notes: 1. Figures in parentheses indicate robust standard errors clustered at bank level.
2. ***, ** and * represent 1 per cent, 5 per cent and 10 per cent levels of significance, respectively.
3. #: Overall R-squared has been reported.

Source: Authors' calculations.

As expected, primary results from the regression indicate that the GNPA ratios significantly increased during the AQR period. Results also indicate that higher growth in priority sector advances dampen the GNPA ratios of banks.

In column (1) of Table 2, it is found that the coefficient of the *Bank group dummy*, which takes value 1 for PSBs and 0 for PVBs, is positive and significant as PSBs had higher GNPA ratios as compared to PVBs during the period under study. In column (2), bank fixed effects are added and the results remain robust to their inclusion. In column (3), other bank-level controls are added and it is found that asset quality improves with higher profitability and larger size of banks. Further, in column (4), even after adding time fixed effects to control for all exogenous time varying factors, the results remain robust.

V. Conclusion

Lending programmes like PSL have been put in place to enhance formal credit availability to the needy sectors. Cross-country literature on directed lending remains inconclusive on the impact it has on banks' health. In one view, such lending can be successful when supplemented by appropriate institutional mechanisms, strict performance standards and policy framework. According to the opposing view, these loans, being mandated by regulatory requirements, may not align with the banks' business interests and could potentially harm their overall asset quality, raising questions about their commercial viability. This article empirically evaluates these arguments.

Using bank-level PSL data from March 2006 to March 2023, the study finds that the share of priority sector loans in banks' total loan portfolio depends, *inter alia*, on the asset quality of such loans. Further, the introduction of PSLCs played a pivotal role in helping banks develop a niche in certain priority sectors, and consequently, increasing lending to these. The empirical analysis also suggests that high growth in PSL is not associated with a deterioration in banks' asset quality.

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Peeling the Layers: A Review of the NBFC Sector in Recent Times

by Abhyuday Harsh, Rajnish Kumar Chandra, Nandini Jayakumar and Brijesh P. ^

Globally, non-banking financial institutions (NBFIs) have grown in size and complexity over the years, intertwining them with other entities in the financial system. In India too, non-banking financial companies (NBFCs) have become an integral part of the financial system which is reflected in a gradual rise in NBFCs' credit to GDP ratio. Recognizing rapid developments in the sector along with rising interconnectedness and changing risk profile of NBFCs, the Reserve Bank introduced scale-based regulation (SBR) in October 2022. Amidst this transition, the NBFC sector remains resilient, with steady double-digit growth in credit, adequate capital, and lower delinquency ratio.

Introduction

Non-banking financial institutions[1] (NBFIs) are important intermediaries in the global financial system, currently accounting for almost half of global financial assets. The characteristics of the NBFI sector differ across jurisdictions. With increasingly diverse and complex activities, NBFIs are becoming deeply interconnected with other segments of the financial and real economy (FSB, 2023a). Hence, it becomes critical to ensure that various policies applicable to supervised entities fit together from a system-wide perspective.

One of the important features of any diverse financial system is the presence of different types of financial institutions with varying risk profiles, which necessitates differentiated regulatory treatment. To this end, scale-based regulation (SBR) for non-banking financial companies[2] (NBFCs), put in place by the Reserve Bank of India (RBI) in October 2022, prescribes differential regulatory requirements based on the size, activity and perceived riskiness of NBFCs. It combines the best features of activity-based and entity-based regulations, without sacrificing the overarching goal of systemic risk management. In India, NBFCs have become an integral part of the financial system which is reflected by a gradual rise in metrics like NBFCs' credit to GDP ratio and NBFCs' credit to scheduled commercial banks' (SCBs) credit (RBI, 2023).

This article analyses the performance of the NBFC sector in recent times. The rest of the article is divided into the following sections. Section II provides an overview of the international landscape of the NBFI sector, with a special focus on India. Section III presents details of the regulatory evolution of the NBFC sector in India, highlighting the extant regulatory differences between banks and NBFCs and among NBFCs. Section IV analyses balance sheet dynamics, along with sectoral distribution of credit, profitability and asset quality of NBFCs. The last section of the article concludes with a few observations on emerging challenges.

II. NBFIs in India: A Global Perspective

NBFIs play a crucial role in the global financial system by providing services that are not necessarily provided by banks. They play a key role in enhancing access to credit and supporting economic growth. Over time, NBFIs have grown in size and complexity, which has enmeshed them with other entities in the financial system. By implication, the stress in NBFI

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1 The Financial Stability Board (FSB) defines NBFI sector as a broad measure of all non-bank financial entities, comprising all financial institutions that are not central banks, banks, or public financial institutions.

2 NBFCs in India are a subset of the broader NBFI sector and in this article NBFCs refer to non-banks regulated by the RBI, as defined under Section 45-IA of the RBI Act, 1934.

sector may affect other parts of the financial system more rapidly and widely. To this extent the Financial Stability Board (FSB) created an annual system-wide monitoring framework for NBFIs to track innovations and identify systemic and emerging risks (FSB, 2023b).

Since the Global Financial Crisis (GFC), NBFIs have increased in size and now constitute the largest component of the global financial system (Chart 1a). This ecosystem of institutions is very diverse and differ based on business models and jurisdictions. After the GFC, for the first time, NBFI assets globally contracted by more than 5 per cent in 2022. This was mainly due to the impact of higher interest rates and tightening liquidity and financial conditions which most economies experienced in 2022 owing to the inflationary pressures (FSB, 2023b).

In India, the financial system remains bank-dominated. The NBFI sector trails the banking sector in terms of asset size, however, the gap between them is closing over time (Chart 1b & Table 1). Their systemic importance is increasing, as indicated in the size of NBFIs as a share of GDP. In 2022, NBFIs in India registered a growth of around 12 per cent

Table 1: Key Participants in the Indian Financial System
(At end-March 2023)

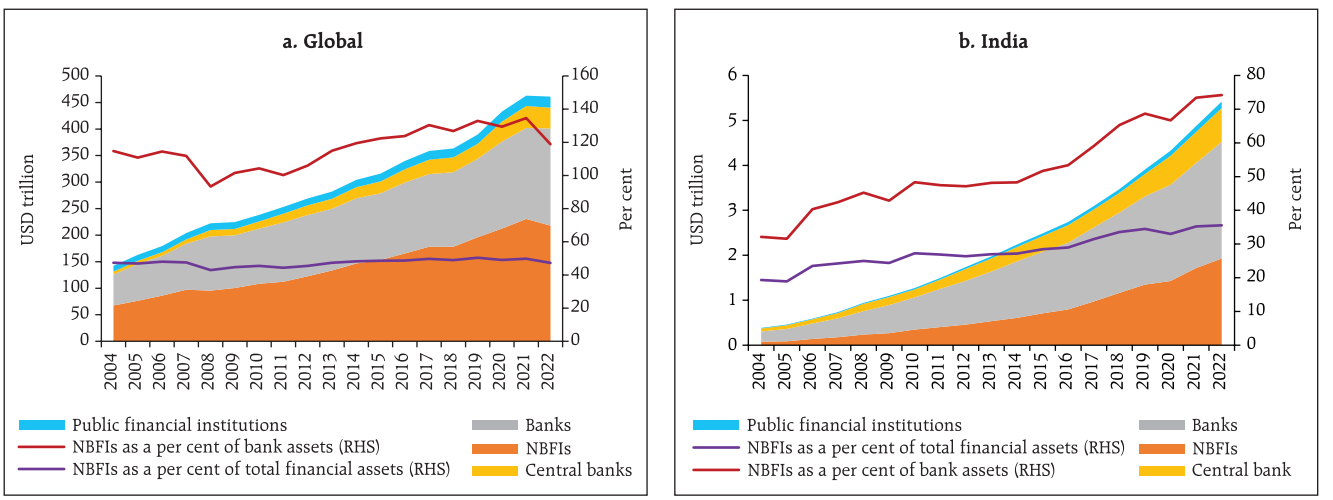
		As per cent of Total Assets
1.	Scheduled Commercial Banks*	53.7
2.	Co-operative Banks#	4.7
3.	NBFIs	41.6
	3.1. NBFCs ^	*15.2*
	3.2. AIFIs ^ ^	*3.2*
	3.3. Insurance Companies	*12.8*
	3.4. Pension Funds	*1.9*
	3.5. Mutual Funds	*8.4*
Total		**100.0**

Notes: * refers to all scheduled commercial banks including RRBs.
includes urban and rural credit co-operatives. Data for the latter pertain to end-March 2022.
^ includes all NBFCs and ARCs registered with RBI; and all HFCs registered with NHB.
^ ^ refers to five All India Financial Institutions namely, NABARD, EXIM Bank, SIDBI, NHB and NaBFID.
Sources: RBI, IRDAI and PFRDA.

(year-on-year), as opposed to contraction globally (Chart 2). The contraction in investment funds of the domestic NBFC sector was more than compensated by the expansion in size of lending companies which account for 79 per cent of total NBFI assets in the narrow measure (Table 2).

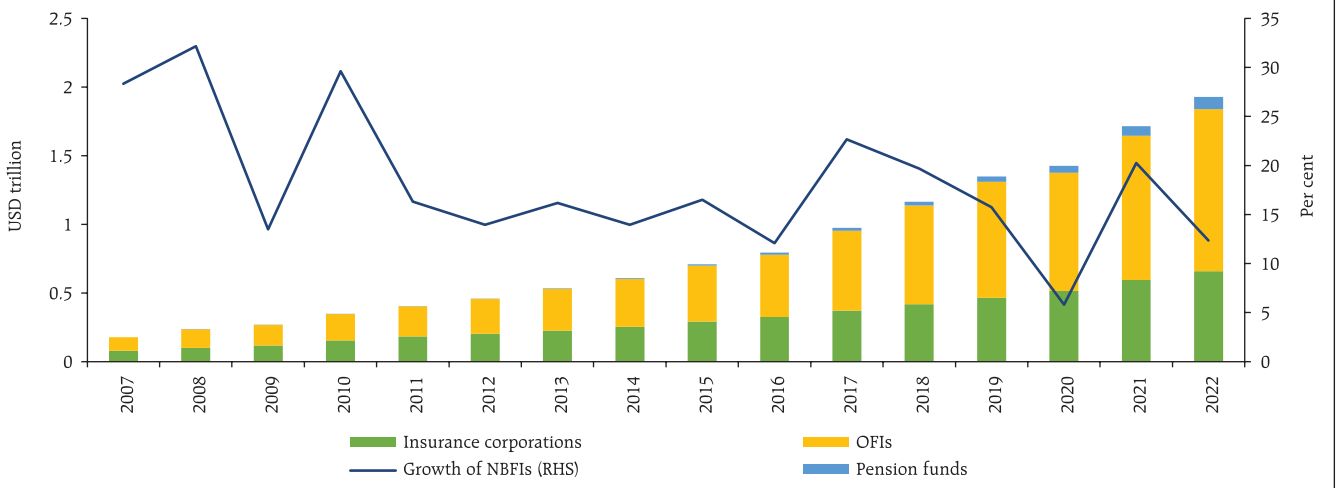
To assess the extent of bank-like financial stability risks posed by NBFIs due to their interconnections, the FSB devised a 'narrow measure', which focuses

Chart 1: Total Financial Assets
(At end-December)



Note: Global includes India as well.
Source: Global Monitoring Report on Non-Bank Financial Intermediation, 2023.

Chart 2: Components and Growth of NBFIs in India
(At end-December)



Note: Other financial intermediaries (OFIs) refer to a subset of the NBFI sector, composed of all financial institutions that are not central banks, banks, public financial institutions, insurance corporations, pension funds, or financial auxiliaries.
Source: Global Monitoring Report on Non-Bank Financial Intermediation, 2023.

on a subset of NBFI activities. The measure divides NBFIs into five economic functions (EFs) or activities (Table 2). At end-December 2022, the largest jurisdictions as per their share in the global narrow measure assets were the United States (30.4 per cent), eight participating Euro Area jurisdictions (21.5 per cent), China (16.3 per cent) and the Cayman Islands (12.8 per cent). The global narrow measure declined in 2022, almost entirely driven by decline in EF1 while the other four EFs continued to grow. In India, the narrow measure expanded by 7.5 per cent, almost entirely driven by EF2, while EF1 recorded a decline.

Table 2: Composition of Narrow Measure, by Entity-type and Activity
(at end-December 2022)

Economic Function/Activity	Entity type	Economic Function wise share in Narrow Measure (Per cent)			
		AEs	EMEs	Global	India
EF1	Money market funds, fixed income funds, mixed funds, credit hedge funds, real estate funds	72.6	81.0	74.3	20.1
EF2	Finance companies, leasing/factoring companies, consumer credit companies	7.7	9.0	7.9	79.0
EF3	Broker-dealers, custodial accounts, securities finance companies	7.3	6.5	7.1	0.4
EF4	Credit insurance companies, financial guarantors, monoline insurers	0.3	0.1	0.2	0.0
EF5	Securitisation vehicles, structured finance vehicles, asset-backed securities	9.1	3.1	7.8	0.4
Unallocated	Other financial auxiliaries assessed to be involved in bank-like financial stability risks from NBFI, but which could not be assigned to a specific economic function	3.2	0.3	2.6	-
Total		100.0	100.0	100.0	100.0
Narrow Measure as a share of total NBFI sector		26.1	49.2	28.9	42.2

Notes: 1. Based on data from 29 individual jurisdictions, which account for 85 per cent of global GDP and for which more granular data was available.
2. The entities listed are not exhaustive but indicate typical examples.
Source: Global Monitoring Report on Non-Bank Financial Intermediation, 2023.

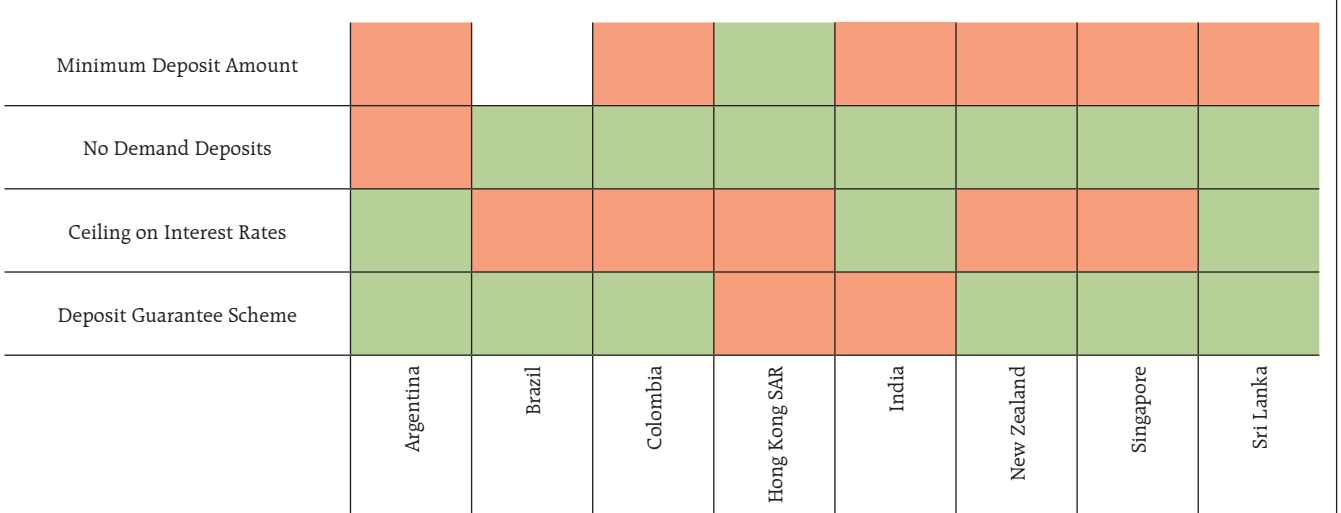
Globally, in most advanced economies (AEs) as well as emerging market economies (EMEs), EF1 is the largest component. In countries like India and Indonesia, on the other hand, EF2, which includes lending institutions dependent on short-term funding, is the largest component. EF2 is dominated by finance companies which specialise in areas such as consumer finance, auto finance, retail mortgage provision, commercial property finance, and equipment finance. India had the third largest EF2 assets globally, behind the United States and the United Kingdom.

The entities in EF2 merit special attention as they are involved in maturity transformation and may have higher interconnectedness with the banking sector. Akin to banks, along with credit intermediation, some of these entities might also be accepting public deposits and/or other forms of retail funding, which can exacerbate systemic risk during periods of stress. To address these concerns, regulators in jurisdictions where deposit-taking NBFIs operate typically differentiate these entities from banks by restricting NBFIs from offering current accounts/demand deposits. Further, these entities in general are subject to more stringent requirements as compared to other NBFI lenders (Ehrentraud, Mure, Noble, & Zamil, 2024). In India deposit-taking NBFIs do not have the deposit insurance coverage as only banks' deposits are covered under the deposit insurance. Almost all the jurisdictions do not allow these entities to accept demand deposits (Chart 3). Thus, unlike bank regulation, for which there are global prudential standards, no such framework exists for NBFI regulation.

III. Regulatory Evolution of the NBFC Sector in India

Since 1964, NBFCs are being regulated by the Reserve Bank under the provisions of Chapter IIIB of the RBI Act, 1934 (RBI, 2021b). In response to the evolution of the sector over the years, the Reserve Bank has periodically updated the regulations applicable to NBFCs, transitioning from a rule-based to a principle-based regulatory approach. In 1998, NBFCs were categorised based on acceptance of public deposits, followed by introduction of systemic importance for non-deposit taking NBFCs (NBFC-ND-

Chart 3: Features of Deposit-Taking NBFIs



Note: Green =Applicable; Red =Not Applicable; and Blank =Not Available.
Source: Ehrentraud, Mure, Noble, & Zamil, 2024; Central Bank of Sri Lanka.

SI) with asset size of ₹100 crore and above in 2006. In 2014, a review of the regulatory framework for NBFCs was undertaken and the sector transitioned to an activity based regulation. Taking cues from the recommendations of expert committees[3], new regulations were formulated, wherein, *inter alia*, threshold for systemic significance was raised from ₹100 to ₹500 crore, investment grade rating became mandatory for asset finance companies to renew existing or accept fresh public deposits and the limit for acceptance of public deposits across the sector was harmonized for rated NBFCs. Further, for NBFCs-ND-SI and NBFCs-D (deposit-taking), minimum Tier-1 capital requirement was raised to 10 per cent from 7.5 per cent along with bringing asset classification norms of NBFCs-D and NDSI in line with that of banks (RBI, 2014).

The most recent overhaul was in the form of Scale-Based Regulation (SBR), which took effect from October 1, 2022. This became imperative on account of rapid developments in the sector along with rising interconnectedness and the changing risk profile of NBFCs. Under this new regulatory framework, NBFCs are placed in any of the four layers (top, upper, middle, and base) based on size, activity, or perceived riskiness. At present, the top layer is kept vacant, and the Reserve Bank can shift NBFCs from the upper layer to the top layer, for higher scrutiny if required. SBR incorporates a hybrid approach to regulation, combining entity and activity-based regulation approaches under the pillars of prudential and conduct regulations. This approach is tailor-made for the ever-evolving NBFC sector without impeding their dynamism.

Given the diverse business models within the NBFC sector, SBR envisages a layer-wise progressive increase in regulatory intensity. The extent of harmonisation of regulations between banks and upper-layer NBFCs (NBFCs-UL) on the one hand, and among NBFCs in different layers, on the other, in key areas of capital, prudential and governance guidelines is presented in Table 3. SBR places enhanced regulatory scrutiny on NBFCs-UL *vis-à-vis* other layers, but not at par with banks. In this way, SBR preserves the accommodative approach to regulation where the differential business models and capacity of varied players in the Indian financial ecosystem is maintained, while ensuring that financial stability is not compromised.

A key area of difference between banks and NBFCs is the permissibility to accept public deposits, which exists only for a handful of NBFCs[4]. Since 1997, no certificate of registration has been granted to new NBFCs for acceptance of public deposits. In fact, the regulatory approach has been disincentivising deposit-taking activities of NBFCs. This allows the Reserve Bank to retain lower entry and exit barriers for starting or closing the business of NBFCs respectively and facilitate innovation and specialisation in their respective business domains (Rao, 2024).

NBFCs in the base layer are subject to less stringent regulation than those in middle and upper layers in view of their small size and limited interconnectedness. Consequently, the analysis in this article is restricted to only NBFCs-UL and ML. The former occupies a significant space in the NBFC sector[5], with nine NBFCs in the upper layer accounting for around one-fifth of the total assets at end-March 2023 (Chart 4).

[3] Working Group on Issues and Concerns in the NBFC Sector (Chairperson: Smt. Usha Thorat) and the Committee on Comprehensive Financial Services for Small Businesses and Low-Income Households (Chairman: Dr. Nachiket Mor).

[4] 26 NBFCs at end-September 2023.

[5] NBFC sector for the purposes of the analysis here includes only NBFCs-UL and NBFCs-ML, excluding Standalone Primary Dealers (SPDs), Core Investment Companies (CICs) and Housing Finance Companies (HFCs). In light of the merger of two NBFCs-ICC (including an NBFC-UL) into a CIC, the concerned companies are not included in the sample at end-December 2023.

Table 3: Important Regulatory Features of Banks and NBFCs

Extant Regulatory Requirements	NBFCs			Banks	Remarks
	Base Layer	Middle Layer	Upper layer		
Capital Guidelines					
Minimum Initial Capital	✓	✓	✓	✓*	For a universal bank, it is ₹1,000 crore *vis-à-vis* ₹10 crore ^ for an NBFC (to be achieved by March 31, 2027 in a phased manner).
Capital to Risk-weighted Assets Ratio	–	✓	✓*	✓**	Capital requirement of a universal bank is comprised of credit, market, and operational risk capital charges. For NBFCs, it is based only on credit risk capital charge#. NBFC-UL are required to maintain common equity tier 1 capital of minimum nine per cent of risk weighted assets, within the overall capital requirement of 15 per cent. Gold loan NBFCs in the base layer, shall maintain a minimum Tier 1 capital of 12 percent.
Standard Asset Provisioning	✓	✓*	✓**	✓**	Akin to banks, NBFC-UL must maintain differential provisioning for standard assets.
Internal Capital Adequacy Assessment Process (ICAAP)	–	✓	✓	✓*	ICAAP for NBFCs on similar lines as prescribed for banks under Pillar 2 of Basel III norms.
Prudential Guidelines					
Concentration of credit/ investment	–	✓	✓*	✓**	Akin to banks, large exposure framework is applicable to NBFC-UL@, however more detailed framework for banks.
Internal Exposure Limits	–	✓	✓	✓*	In addition to the internal limits on sensitive sector exposure, NBFC-UL must have internal exposure limits on other important (including NBFC) sector. More detailed regulation for banks.
Governance and Disclosure Guidelines					
Disclosure Regulations	✓	✓*	✓***	✓**	Banks and NBFC-UL must meet disclosure requirements same as a listed company. NBFCs-UL, however, shall meet these requirements even before the actual listing.
Listing	–	–	✓*	✓	A new universal bank must get listed within six years post commencement of operations while an NBFC has three years to get listed post identification as NBFC-UL.
Core Banking Solution (CBS)/ Core Financial Services Solution (CFSS)	–	✓	✓	✓	NBFCs with 10 and more branches must adopt CFSS.
Others					
Activities Permitted under relevant Acts	–	–	–	✓	Banks can only engage in activities that are specifically provided under the Banking Regulation Act, 1949. No such provision under RBI Act, 1934, governing NBFCs.
Commercial Expansion	–	–	–	✓	Almost no regulatory restrictions on operations of NBFCs (except gold loans NBFCs), while detailed policy in place for banks.
Priority Sector Lending (PSL)	–	–	–	✓	Minimum 40% of the adjusted net bank credit must be for PSL and for SFBs it is 75 per cent. NBFCs have no such requirements.
Ceiling on Initial Public Offer (IPO) Funding	✓	✓	✓	✓*	Ceiling on financing subscription to IPO for both banks and NBFCs.

Notes: 1. – Not Applicable; ✓ Applicable; ✓* Applicable and stringent; ✓** Applicable and more stringent

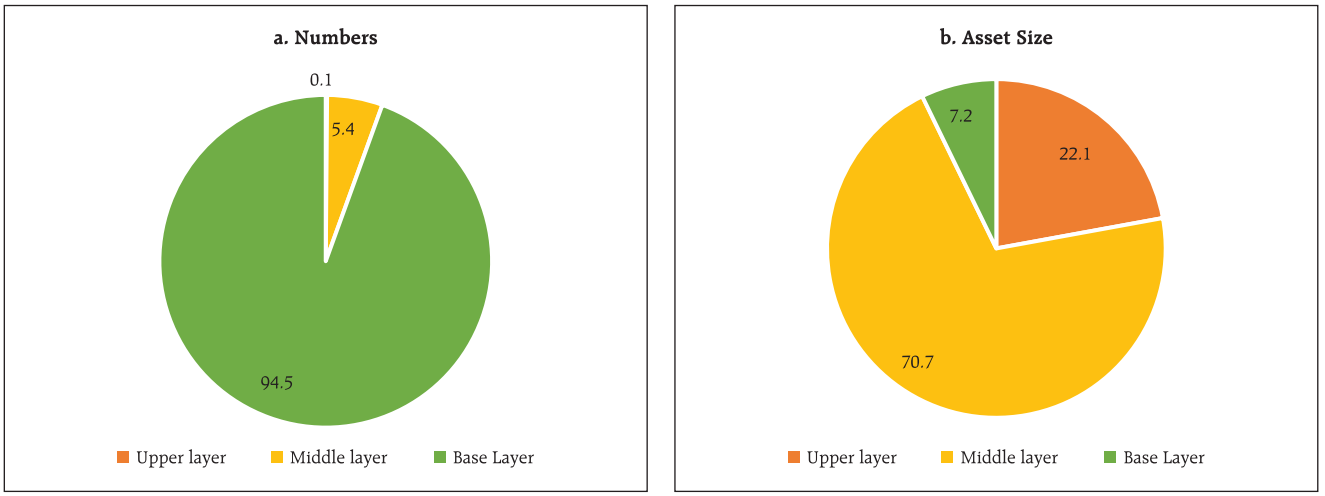
2. ^ For NBFC-P2P, NBFC-AA, and NBFC not availing public funds and not having any customer interface, the NOF is ₹2 crore. NBFC-IFC and IDF-NBFC, the NOF is ₹300 crore.

Except for SPDs where market risk capital applies.

@ A slightly higher limit is applicable to NBFC-IFC.

Sources: RBI, 2021a; RBI, 2021b and Rao, 2024.

Chart 4: Layer-wise Distribution of NBFCs
(Share in per cent, at-end March 2023)



Note: Top Layer is currently vacant.
Source: Supervisory returns, RBI.

IV. Performance of the NBFC Sector

a. Balance sheet

The NBFC sector continued to exhibit sustained growth during 2023, primarily driven by credit growth even as investments declined. On the liabilities side, borrowings by NBFCs grew at a lower rate than the previous year (Table 4).

Assets

To address some concerns regarding high growth in certain components of consumer credit, the Reserve Bank increased risk weights on select categories of retail loans by NBFCs in November 2023. The growth in unsecured loans has moderated subsequent to these measures (Chart 5).

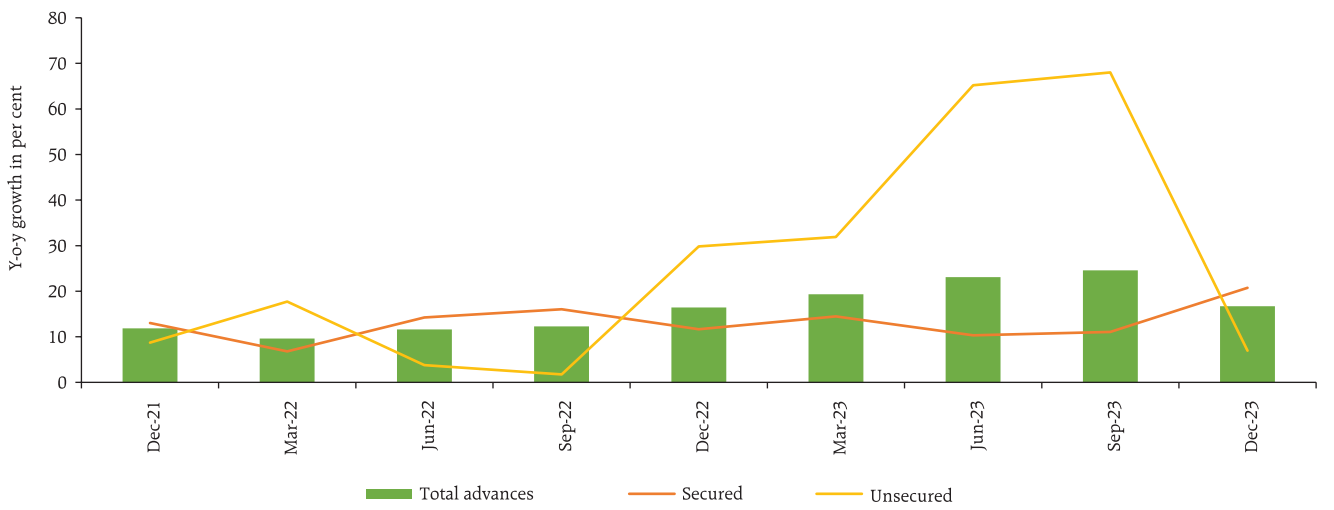
Table 4: Consolidated Balance Sheet of NBFCs

(₹ crore)

	The amount outstanding at the end of			Y-o-y growth (Per cent)	
	Dec-22	Mar-23	Dec-23	Dec 22 over Dec 21	Dec 23 over Dec 22
1. Share capital	1,14,533	1,19,432	1,29,479	11.6	13.0
2. Reserves and surplus	7,97,827	8,58,744	8,79,323	20.8	10.2
3. Public deposits	1,15,850	89,322	1,06,405	22.5	-8.2
4. Total borrowings	27,67,612	29,43,224	30,72,171	16.3	11.0
5. Other liabilities	2,91,141	3,29,415	3,25,561	7.1	11.8
Total liabilities / assets	**40,86,963**	**43,40,138**	**45,12,938**	**16.4**	**10.4**
1. Loans and advances	31,42,244	33,65,863	35,88,631	16.4	14.2
2. Investments	5,25,669	5,38,714	4,98,172	19.7	-5.2
3. Cash & bank balances	1,61,094	1,70,274	1,57,821	6.7	-2.0
4. Other assets	2,57,956	2,65,287	2,68,315	17.0	4.0

Notes: 1. Data are provisional and pertain to only NBFCs-UL and NBFCs-ML.
2. Numbers may not add up as all components are not reported here.
Source: Supervisory returns, RBI.

Chart 5: Loans and Advances by NBFCs

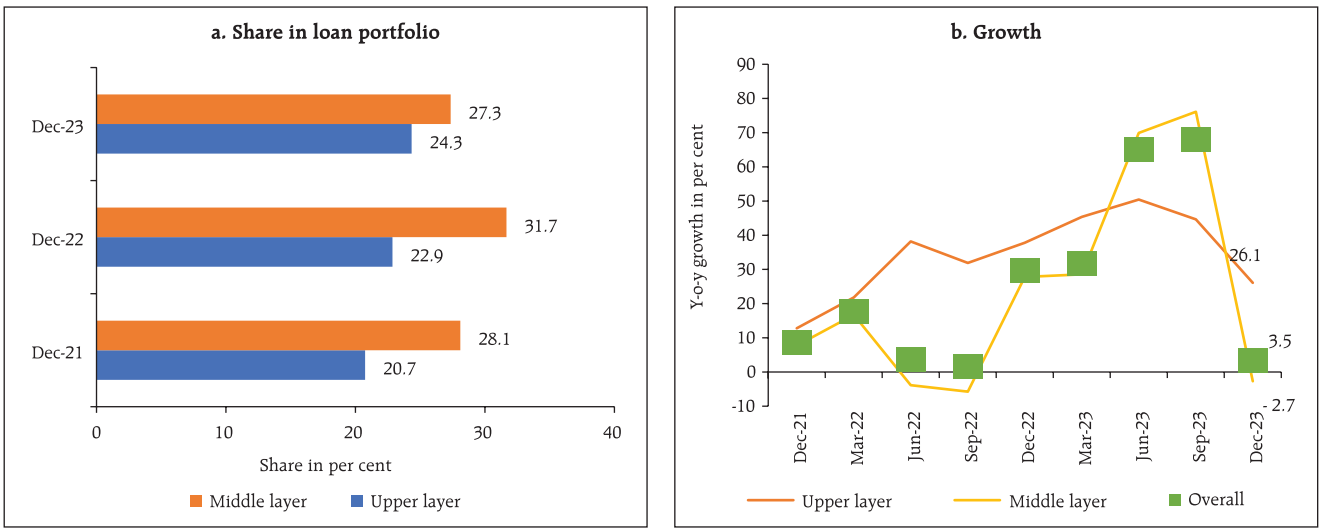


Note: Data are provisional and pertain to only NBFCs-UL and NBFCs-ML.
Source: Supervisory returns, RBI.

Unsecured loans comprise around 26 per cent of NBFCs' credit, with middle layer having a higher share within their loan portfolio (Chart 6a). Across NBFC layers, the initial steep growth in unsecured loans and the subsequent deceleration was driven by middle layer NBFCs. The pace of expansion in unsecured loans by upper layer NBFCs has also softened, although it remains in double digits (Chart 6b).

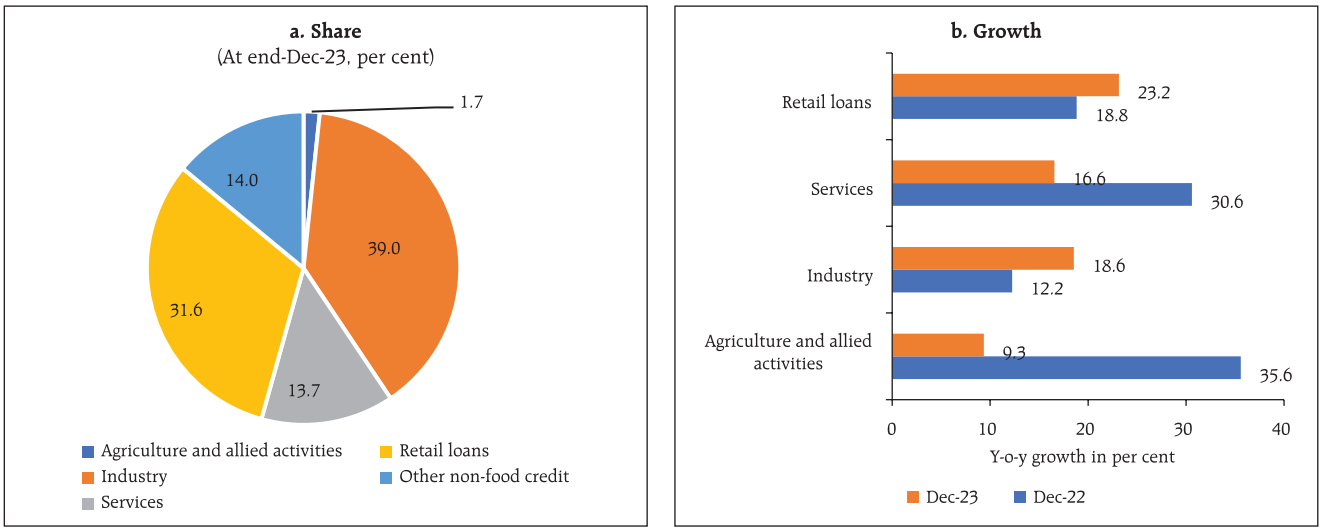
Over 70 per cent of NBFC credit is channeled toward industry and retail sectors, with the former accounting for around two-fifth share at end-December 2023, which makes it the largest recipient of NBFC credit (Chart 7a). In 2023, credit to industry, services and retail loans grew in double digits, while that of agriculture and allied activities moderated owing to base effect (Chart 7b). The credit to retail sector was driven on the back of strong growth in lending for vehicles, consumer durables, gold loans and credit card receivables segments.

Chart 6: Trends in Unsecured Loans by Layer



Note: Data are provisional and pertain to only NBFCs-UL and NBFCs-ML.
Source: Supervisory returns, RBI.

Chart 7: Sectoral Distribution of NBFC Credit



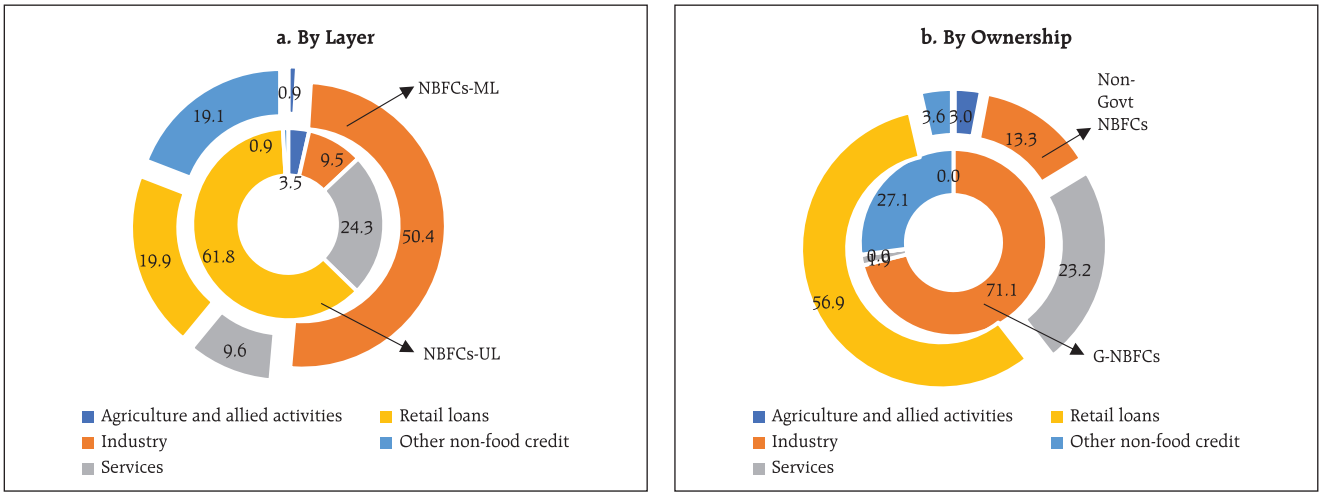
Note: Data are provisional and pertain to only NBFCs-UL and NBFCs-ML.
Source: Supervisory returns, RBI.

A layer-wise and ownership-wise analysis provides insights into the structure of the sector. Industry is the largest recipient of NBFC credit benefitting from the presence of large government-owned[6] NBFCs which lend to the infrastructure segment. All NBFCs in the upper layer are privately owned and mainly cater to the credit demands of the retail sector (Chart 8).

Liabilities

NBFCs rely heavily on borrowings, both from markets and banks for their funding needs (RBI, 2023). NBFCs-UL, by virtue of their strong balance sheets and market standing, rely more on secured borrowings. NBFCs-ML on the other hand, rely more on unsecured borrowings at presumably higher rates (Chart 9a). Banks remain the dominant source of

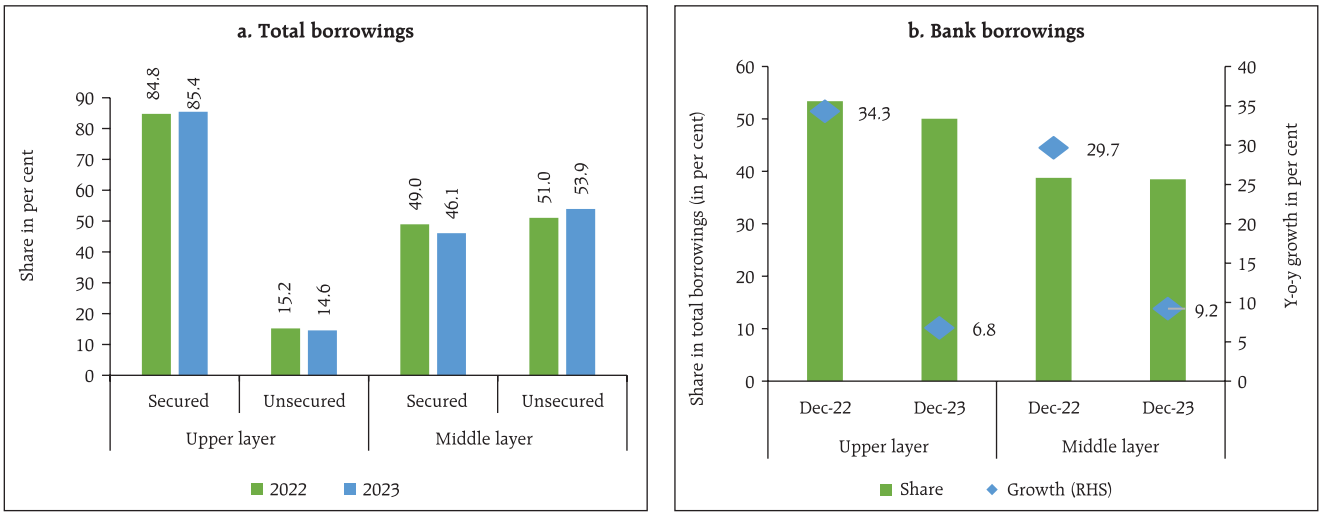
Chart 8: Sectoral Credit Portfolio of NBFC Sector
(At end-December 2023)



Note: Data are provisional and pertain to only NBFCs-UL and NBFCs-ML.
Source: Supervisory returns, RBI.

6 By design government NBFCs lie either in the middle layer or base layer. This article only considers government NBFCs lying in the middle layer.

Chart 9: Borrowing Profile of NBFCs



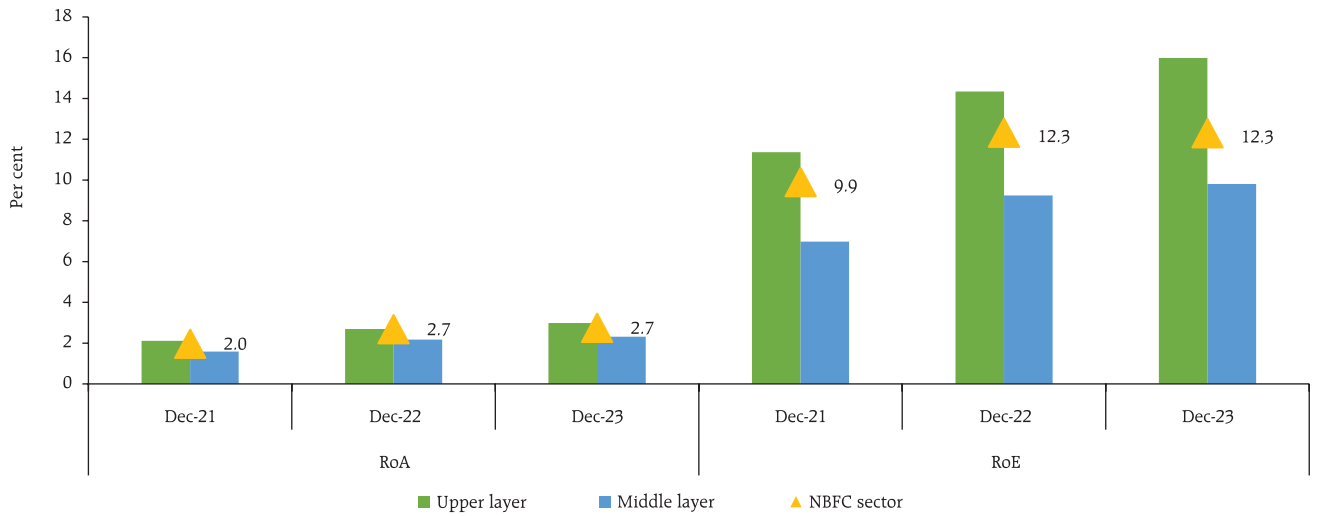
Note: 1. Data are provisional and pertain to only NBFCs-UL and NBFCs-ML.
2. Bank borrowing includes direct borrowing as well as borrowing via market instruments.
Source: Supervisory returns, RBI.

funds for NBFCs, not only *via* direct lending, but also indirectly *via* subscription of debentures and commercial paper issued by NBFCs. In an attempt to encourage NBFCs to broad base their fund raising and limit reliance on banks, the Reserve Bank had increased risk weights on bank lending to NBFCs in November 2023. Since then, there has been a sharp deceleration in NBFCs' borrowing from banks, particularly by NBFCs-UL (Chart 9b).

b. Financial Performance and Prudential Indicators of the NBFC Sector

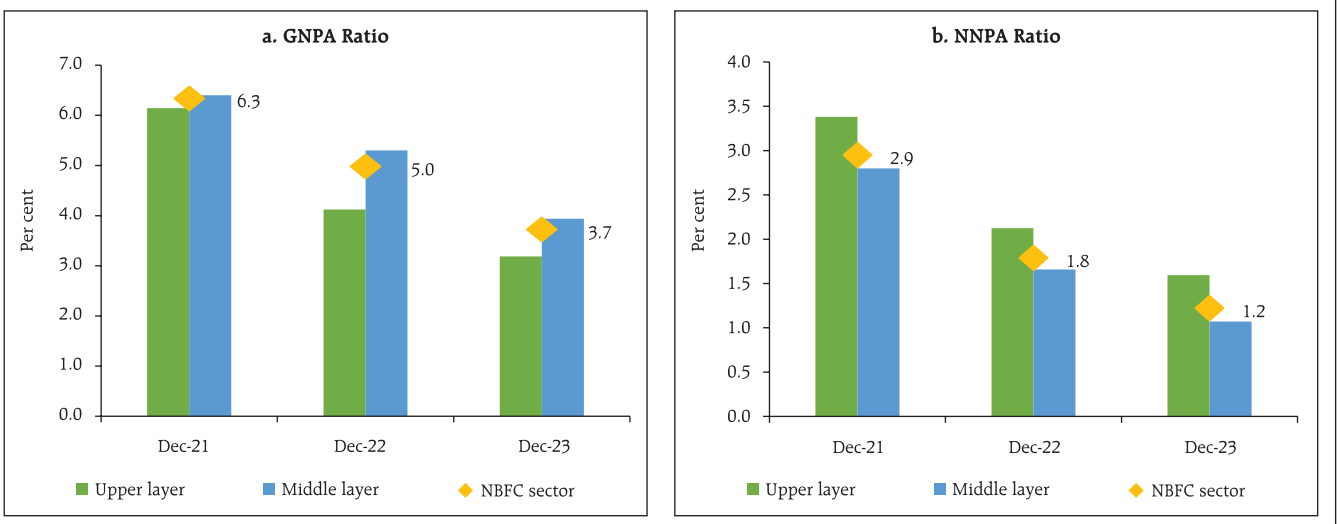
There has been a consistent improvement in the bottom line of the sector, as gauged by the profitability indicators, *i.e.*, return on assets (RoA) and return on equity (RoE) [Chart 10]. NBFCs-UL have outperformed NBFCs-ML with regard to profitability, mainly on account of lower provisions against non-performing assets (NPA) and lower interest expenses.

Chart 10: Profitability of the NBFC Sector



Note: Data are provisional and pertain to only NBFCs-UL and NBFCs-ML.
Source: Supervisory returns, RBI.

Chart 11: Asset Quality

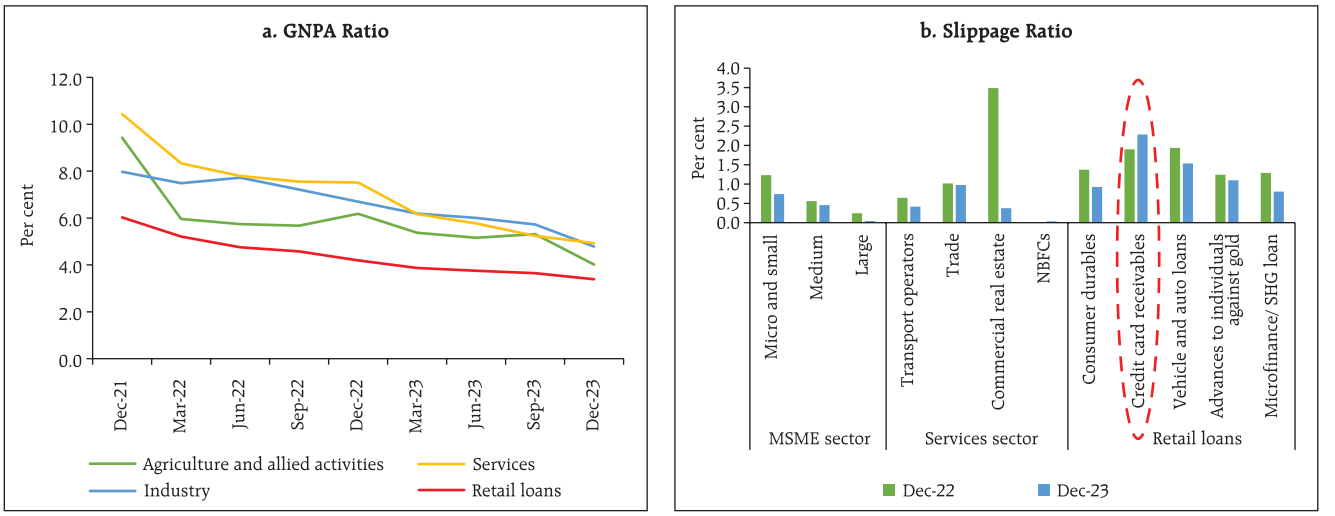


Note: Data are provisional and pertain to only NBFCs-UL and NBFCs-ML.
Source: Supervisory returns, RBI.

The asset quality of the sector has also improved. While the gross NPA (GNPA) ratio of upper layer NBFCs is lower than that of middle layer, the latter maintained adequate provisions to account for their riskier loan portfolio, thereby bringing their net NPA (NNPA) ratio below that of NBFCs-UL (Chart 11).

The decline in the GNPA ratio has been seen across sectors, with retail loan segment having the lowest GNPA ratio despite high unsecured retail lending (Chart 12a). The slippage ratios[7] in important categories of retail loans such as, *inter alia*, vehicle loans and gold loans, have been elevated *vis-à-vis* other sectors, although they have moderated at end-

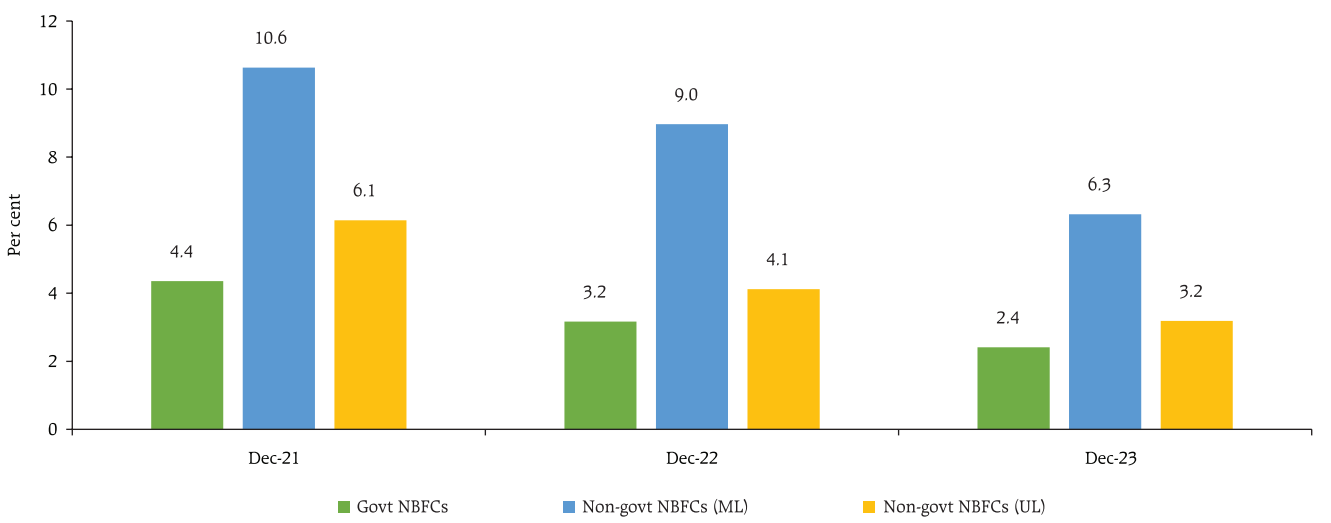
Chart 12: Asset Quality, Sector-wise



Note: Data are provisional and pertain to only NBFCs-UL and NBFCs-ML.
Source: Supervisory returns, RBI.

[7] Slippage ratio refers to the ratio of accretion to non-performing assets during the quarter to total outstanding advances.

Chart 13: Asset Quality (GNPA Ratio) by Ownership



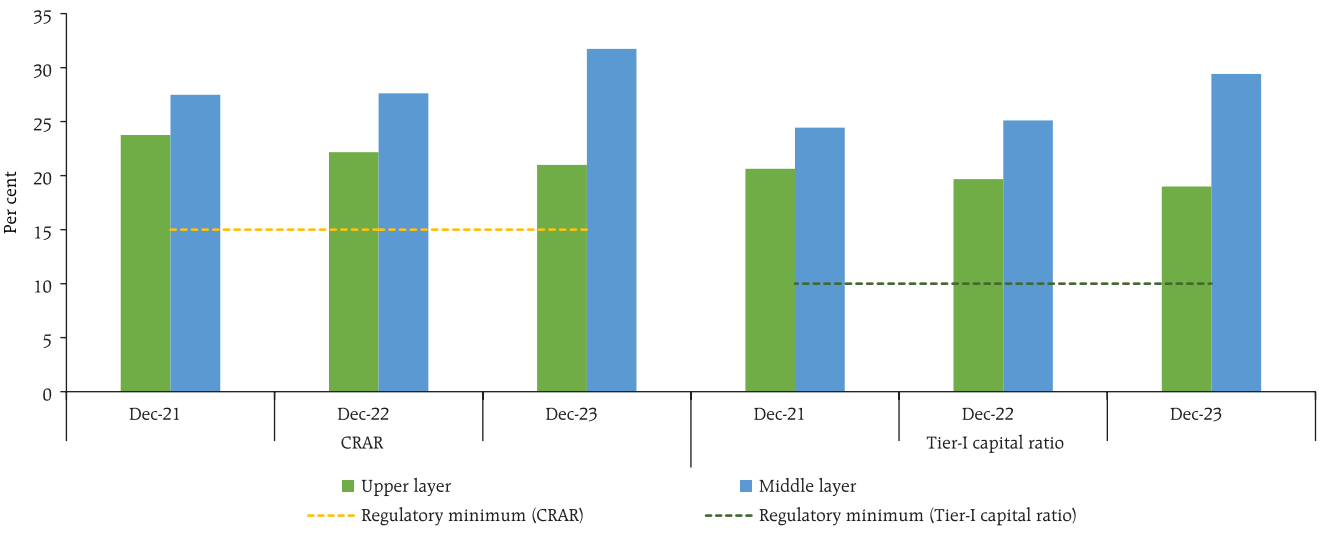
Note: Data are provisional and pertain to only NBFCs-UL and NBFCs-ML.
Source: Supervisory returns, RBI.

December 2023 except in credit card receivables segment (Chart 12b).

Another important feature of the sector is the relatively low NPA ratio of government-owned NBFCs (Chart 13). As alluded to earlier, non-government NBFCs, especially in the middle layer, focus on retail lending, where slippages have been elevated in recent times.

With the increase in risk weights on some categories of retail loans, NBFCs with a large portfolio of unsecured loans may require additional capital to adhere to regulatory capital requirements. However, the sector as a whole, both NBFCs-UL and NBFCs-ML, remains well-capitalised, indicating their financial readiness to meet higher requirements (Chart 14).

Chart 14: Capital Adequacy



Note: Data are provisional and pertain to only NBFCs-UL and NBFCs-ML.
Source: Supervisory returns, RBI.

Under the prompt corrective action (PCA) framework, capital and asset quality are the key areas for monitoring the health of NBFCs, and will become applicable for government-owned NBFCs from October 1, 2024. With adequate capital and low NNPA at end-December 2023, these NBFCs are comfortably placed. PCA framework is already effective for other NBFCs since October 1, 2022.

V. Conclusion

Globally, NBFIs play a key role in financing the real economy and supporting economic growth. Different countries implement regulations for NBFIs which suit their specific requirements. Compared to India, non-banks in advanced countries are much bigger in size and operate in a complex market environment.

The NBFC sector in India remains resilient under the SBR framework. At end-December 2023, the sector continued to exhibit double-digit growth in credit, adequate capital and low delinquency ratio. The recent regulatory measure of extension of PCA norms to government-owned NBFCs is expected to further strengthen the sector. In response to the recent increase in risk weights on bank lending to NBFCs, they have begun to diversify their funding sources and reduce excessive reliance on borrowings from banks. Secured retail credit like gold loans, vehicle and housing loan, along with industry and service sector loans continue to exhibit robust growth.

Going forward, NBFCs need to remain mindful of the rapidly evolving financial landscape and the emerging risks and challenges, especially in the domains of cyber-security and climate risk. The assurance functions namely, risk management, compliance and internal audit, play a crucial role in maintaining the robustness and resilience of both the financial entity and the overall financial system (J. Swaminathan, 2024). In light of their growing role in the Indian financial system, it is incumbent upon NBFCs to proactively identify and manage risks and bolster their assurance functions to ensure that the NBFC sector maintains a sustainable growth trajectory.

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CURRENT STATISTICS

Contents

Notes: .. = Not available.

– = Nil/Negligible.

P = Preliminary/Provisional. PR = Partially Revised.

No. 1: Select Economic Indicators

Item	2023-24	2022-23	2023-24		2024-25
		Q4	Q1	Q4	Q1
	1	2	3	4	5
1 Real Sector (% Change)					
1.1 GVA at Basic Prices	7.2	6.0	8.3	6.3	6.8
1.1.1 Agriculture	1.4	7.6	3.7	0.6	2.0
1.1.2 Industry	9.3	1.7	5.0	8.3	7.4
1.1.3 Services	7.9	7.3	10.4	7.0	7.7
1.1a Final Consumption Expenditure	3.8	3.5	4.6	3.4	6.3
1.1b Gross Fixed Capital Formation	9.0	3.8	8.5	6.5	7.5
	2023-24	2023		2024	
		Jun.	Jul.	Jun.	Jul.
	1	2	3	4	5
1.2 Index of Industrial Production	5.9	4.0	6.2	4.7	4.8
2 Money and Banking (% Change)					
2.1 Scheduled Commercial Banks					
2.1.1 Deposits	12.9	12.9	12.0	10.6	11.0
	(13.5)		(12.9)	(11.1)	(10.6)
2.1.2 Credit #	16.3	16.2	14.6	13.9	15.1
	(20.2)		(19.5)	(17.4)	(13.7)
2.1.2.1 Non-food Credit #	16.3	16.3	14.7	13.9	15.1
	(20.2)		(19.7)	(17.4)	(13.7)
2.1.3 Investment in Govt. Securities	11.1	14.3	14.2	7.4	9.1
	(12.8)		(16.5)	(8.6)	(8.1)
2.2 Money Stock Measures					
2.2.1 Reserve Money (M0)	5.6	6.5	5.4	7.4	7.2
2.2.2 Broad Money (M3)	11.1	13.4	10.6	9.7	10.0
			(11.3)	(10.1)	(9.7)
3 Ratios (%)					
3.1 Cash Reserve Ratio	4.50	4.50	4.50	4.50	4.50
3.2 Statutory Liquidity Ratio	18.00	18.00	18.00	18.00	18.00
3.3 Cash-Deposit Ratio	5.0	5.1	5.2	5.1	5.1
	(5.0)		(5.2)	(5.1)	(5.1)
3.4 Credit-Deposit Ratio	78.1	75.1	74.6	77.3	77.3
	(80.3)		(77.1)	(79.3)	(79.3)
3.5 Incremental Credit-Deposit Ratio #	95.8	63.7	51.6	58.4	56.3
	(113.4)		(99.0)	(56.0)	(53.1)
3.6 Investment-Deposit Ratio	29.5	29.6	30.1	28.8	29.6
	(29.8)		(30.5)	(28.9)	(29.8)
3.7 Incremental Investment-Deposit Ratio	25.8	23.0	32.1	9.4	31.4
	(28.4)		(37.8)	(6.4)	(28.8)
4 Interest Rates (%)					
4.1 Policy Repo Rate	6.50	6.50	6.50	6.50	6.50
4.2 Fixed Reverse Repo Rate	3.35	3.35	3.35	3.35	3.35
4.3 Standing Deposit Facility (SDF) Rate *	6.25	6.25	6.25	6.25	6.25
4.4 Marginal Standing Facility (MSF) Rate	6.75	6.75	6.75	6.75	6.75
4.5 Bank Rate	6.75	6.75	6.75	6.75	6.75
4.6 Base Rate	9.10/10.25	8.75/10.10	8.85/10.10	9.10/10.40	9.10/10.40
4.7 MCLR (Overnight)	8.00/8.60	7.95/8.35	7.95/8.35	8.10/8.60	8.10/8.60
4.8 Term Deposit Rate >1 Year	6.50/7.25	6.00/7.25	6.00/7.25	6.00/7.30	6.00/7.30
4.9 Savings Deposit Rate	2.70/3.00	2.70/3.00	2.70/3.00	2.70/3.00	2.70/3.00
4.10 Call Money Rate (Weighted Average)	6.85	6.79	6.50	6.67	6.59
4.11 91-Day Treasury Bill (Primary) Yield	-	6.76	6.72	6.80	6.67
4.12 182-Day Treasury Bill (Primary) Yield	7.28	6.87	6.86	6.92	6.79
4.13 364-Day Treasury Bill (Primary) Yield	7.31	6.87	6.89	6.96	6.80
4.14 10-Year G-Sec Par Yield (FBIL)	7.31	7.10	7.17	7.04	6.97
5 Reference Rate and Forward Premia					
5.1 INR-US$ Spot Rate (Rs. Per Foreign Currency)	83.37	82.04	82.25	83.45	83.73
5.2 INR-Euro Spot Rate (Rs. Per Foreign Currency)	90.22	89.13	90.32	89.25	90.86
5.3 Forward Premia of US$ 1-month (%)	1.00	1.39	1.17	1.10	1.11
3-month (%)	1.11	1.32	1.22	1.14	1.20
6-month (%)	1.31	1.38	1.33	1.26	1.43
6 Inflation (%)					
6.1 All India Consumer Price Index	5.4	4.9	7.4	5.1	3.6
6.2 Consumer Price Index for Industrial Workers	5.19	5.6	7.5	3.7	2.1
6.3 Wholesale Price Index	-0.7	-4.2	-1.2	3.4	2.0
6.3.1 Primary Articles	3.6	-3.0	8.2	9.2	3.1
6.3.2 Fuel and Power	-4.6	-12.5	-12.7	0.5	1.7
6.3.3 Manufactured Products	-1.7	-2.8	-2.6	1.5	1.6
7 Foreign Trade (% Change)					
7.1 Imports	-5.3	-16.8	-16.1	5.9	7.5
7.2 Exports	-3.1	-18.8	-10.0	2.5	-1.7

Note : Financial Benchmark India Pvt. Ltd. (FBIL) has commenced publication of the G-Sec benchmarks with effect from March 31, 2018 as per RBI circularFMRD.DIRD. 7/14.03.025/2017-18 dated March 31, 2018. FBIL has started dissemination of reference rates w.e.f. July 10, 2018.

#: Bank credit growth and related ratios for all fortnights from December 3, 2021 to November 18, 2022 are adjusted for past reporting errors by select scheduled commercial banks (SCBs). Figures in parentheses include the impact of merger of a non-bank with a bank.

*: As per Press Release No. 2022-2023/41 dated April 08, 2022.

Reserve Bank of India

No. 2: RBI - Liabilities and Assets *

(₹ Crore)

Item	As on the Last Friday/ Friday						
	2023-24	2023	2024				
		Aug.	Aug. 02	Aug. 09	Aug. 16	Aug. 23	Aug. 30
	1	2	3	4	5	6	7
1 Issue Department							
1.1 Liabilities							
1.1.1 Notes in Circulation	3482333	3278665	3489264	3491350	3482555	3478635	3458493
1.1.2 Notes held in Banking Department	11	11	13	12	14	15	14
1.1/1.2 Total Liabilities (Total Notes Issued) or Assets	**3482344**	**3278676**	**3489277**	**3491361**	**3482569**	**3478650**	**3458507**
1.2 Assets							
1.2.1 Gold	162996	138185	183666	180881	183520	186147	188699
1.2.2 Foreign Securities	3318885	3140180	3305234	3310172	3298588	3292110	3269461
1.2.3 Rupee Coin	463	311	377	308	461	393	347
1.2.4 Government of India Rupee Securities	-	-	-	-	-	-	-
2 Banking Department							
2.1 Liabilities							
2.1.1 Deposits	1782333	1613239	1724157	1689026	1702879	1713393	1702744
2.1.1.1 Central Government	101	101	101	101	100	101	100
2.1.1.2 Market Stabilisation Scheme	-		-	-	-	-	-
2.1.1.3 State Governments	42	42	42	42	42	42	42
2.1.1.4 Scheduled Commercial Banks	1008618	1010361	984745	971052	983701	960220	1019456
2.1.1.5 Scheduled State Co-operative Banks	10092	8808	8344	8160	8250	8279	8019
2.1.1.6 Non-Scheduled State Co-operative Banks	6412	4686	5730	5315	5241	5537	5186
2.1.1.7 Other Banks	48725	49758	49362	49287	49452	49559	49701
2.1.1.8 Others	545400	407378	544469	504228	502137	533728	479121
2.1.1.9 Financial Institution Outside India	162944	132104	131364	150839	153956	155927	141119
2.1.2 Other Liabilities	1804747	1514949	1795429	1821931	1855035	1899261	1917383
2.1/2.2 Total Liabilities or Assets	**3587080**	**3128188**	**3519586**	**3510957**	**3557914**	**3612654**	**3620127**
2.2 Assets							
2.2.1 Notes and Coins	11	11	13	12	14	15	14
2.2.2 Balances Held Abroad	1480408	1245172	1690591	1662873	1704888	1758981	1790736
2.2.3 Loans and Advances							
2.2.3.1 Central Government	-	-	-	-	-	-	-
2.2.3.2 State Governments	2300	16470	31072	32993	26767	26802	13381
2.2.3.3 Scheduled Commercial Banks	266021	93310	5921	7825	11850	6708	6968
2.2.3.4 Scheduled State Co-op.Banks	-	-	-	-	-	-	-
2.2.3.5 Industrial Dev. Bank of India	-	-	-	-	-	-	-
2.2.3.6 NABARD	-	-	-	-	-	-	-
2.2.3.7 EXIM Bank	-	-	-	-	-	-	-
2.2.3.8 Others	12398	3122	8593	8547	8541	8541	8547
2.2.3.9 Financial Institution Outside India	162650	131569	131306	151272	154678	156604	141402
2.2.4 Bills Purchased and Discounted							
2.2.4.1 Internal	-	-	-	-	-	-	-
2.2.4.2 Government Treasury Bills	-	-	-	-	-	-	-
2.2.5 Investments	1365425	1400911	1321941	1320389	1319318	1318323	1317280
2.2.6 Other Assets	297868	237622	330148	327046	331858	336680	341800
2.2.6.1 Gold	272028	228431	319664	316457	321074	325671	330135

* Data are provisional.

No. 3: Liquidity Operations by RBI

(₹ Crore)

Date	Liquidity Adjustment Facility						Standing Liquidity Facilities	OMO (Outright)		Net Injection (+)/ Absorption (-) (1+3+5+7+9-2-4-6 - 8)
	Repo	Reverse Repo	Variable Rate Repo	Variable Rate Reverse Repo	MSF	SDF		Sale	Purchase	
	1	2	3	4	5	6	7	8	9	10
Jul. 1, 2024	-	-	-	4200	4418	73290	-	-	-	-73072
Jul. 2, 2024	-	-	-	38227	4150	66906	-994	-	-	-101977
Jul. 3, 2024	-	-	-	25145	4265	76547	851	-	-	-96576
Jul. 4, 2024	-	-	-	33020	1937	48665	-709	-	-	-80457
Jul. 5, 2024	-	-	-	61731	8267	90005	759	-	-	-142710
Jul. 6, 2024	-	-	-	-	2566	61220	-	-	-	-58654
Jul. 7, 2024	-	-	-	-	63	51508	-	-	-	-51445
Jul. 8, 2024	-	-	-	22890	6474	75706	-	0	-	-92122
Jul. 9, 2024	-	-	-	21310	1765	71134	92	485	-	-91072
Jul. 10, 2024	-	-	-	10770	1735	69256	-	490	-	-78781
Jul. 11, 2024	-	-	-	25006	2326	67682	-	860	-	-91222
Jul. 12, 2024	-	-	-	9581	3064	143541	-	1570	-	-151628
Jul. 13, 2024	-	-	-	-	204	56909	-	-	-	-56705
Jul. 14, 2024	-	-	-	-	320	55552	-	-	-	-55232
Jul. 15, 2024	-	-	-	37220	1854	52129	-	640	-	-88135
Jul. 16, 2024	-	-	-	25009	6251	60632	-	820	-	-80210
Jul. 17, 2024	-	-	-	-	4688	46819	-	-	-	-42131
Jul. 18, 2024	-	-	-	45360	7927	43465	-974	335	-	-82207
Jul. 19, 2024	-	-	-	33705	1276	72071	975	940	20	-104445
Jul. 20, 2024	-	-	-	-	504	41100	-	-	-	-40596
Jul. 21, 2024	-	-	-	-	83	32270	-	-	-	-32187
Jul. 22, 2024	-	-	-	-	4545	47923	-	345	-	-43723
Jul. 23, 2024	-	-	-	-	4635	51630	-	370	-	-47365
Jul. 24, 2024	-	-	-	3860	3401	62865	-	-	-	-63324
Jul. 25, 2024	-	-	-	-	2807	89489	-	1710	-	-88392
Jul. 26, 2024	-	-	-	23420	2021	138026	-	1560	-	-160985
Jul. 27, 2024	-	-	-	-	71	78287	-	-	-	-78216
Jul. 28, 2024	-	-	-	-	92	77632	-	-	-	-77540
Jul. 29, 2024	-	-	-	41785	716	63919	-	105	-	-105093
Jul. 30, 2024	-	-	-	23855	468	50963	-	200	-	-74550
Jul. 31, 2024	-	-	-	7000	2891	76182	-469	125	-	-80885

No. 4: Sale/ Purchase of U.S. Dollar by the RBI

i) Operations in onshore / offshore OTC segment

Item	2023-24	2023	2024	
		Jul.	Jun.	Jul.
	1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US $ Million) (1.1-1.2)	41271	3472	-2107	6934
1.1 Purchase (+)	194296	5315	15936	23569
1.2 Sale (–)	153025	1843	18043	16635
2 ₹ equivalent at contract rate (₹ Crores)	339528	28535	-17688	57887
3 Cumulative (over end-March) (US $ Million)	41271	23051	-1532	5402
(₹ Crore)	339528	189273	-13016	44872
4 Outstanding Net Forward Sales (-)/ Purchase (+) at the end of month (US $ Million)	-541	19468	-15835	-9100

ii) Operations in currency futures segment

Item	2023-24	2023	2024	
		Jul.	Jun.	Jul.
	1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US $ Million) (1.1-1.2)	0	0	0	0
1.1 Purchase (+)	7930	0	2338	2144
1.2 Sale (–)	7930	0	2338	2144
2 Outstanding Net Currency Futures Sales (-)/ Purchase (+) at the end of month (US $ Million)	-1080	0	-1974	-340

No. 4 A : Maturity Breakdown (by Residual Maturity) of Outstanding Forwards of RBI (US $ Million)

Item	As on July 31 , 2024		
	Long (+)	Short (-)	Net (1-2)
	1	2	3
1. Upto 1 month	0	8700	-8700
2. More than 1 month and upto 3 months	0	400	-400
3. More than 3 months and upto 1 year	0	0	0
4. More than 1 year	0	0	0
Total (1+2+3+4)	**0**	**9100**	**-9100**

No. 5: RBI's Standing Facilities

(₹ Crore)

Item	As on the Last Reporting Friday							
	2023-24	2023	2024					
		Aug. 25	Mar. 22	Apr. 19	May. 31	Jun. 28	Jul. 26	Aug. 23
	1	2	3	4	5	6	7	8
1 MSF	49906	73658	49906	3238	14601	46848	2021	1818
2 Export Credit Refinance for Scheduled Banks								
2.1 Limit	-	-	-	-	-	-	-	-
2.2 Outstanding	-	-	-	-	-	-	-	-
3 Liquidity Facility for PDs								
3.1 Limit	9900	4900	9900	9900	9900	9900	9900	9900
3.2 Outstanding	9810	3122	9810	8770	9311	9061	9062	8541
4 Others								
4.1 Limit	76000	76000	76000	76000	76000	76000	76000	76000
4.2 Outstanding	-	-	-	-	-	-	-	-
5 Total Outstanding (1+2.2+3.2+4.2)	59716	76780	59716	12008	23912	55909	11083	10359

Money and Banking

No. 6: Money Stock Measures

(₹ Crore)

Item	Outstanding as on March 31/last reporting Fridays of the month/ reporting Fridays				
	2023-24	2023	2024		
		Jul. 28	Jun. 28	Jul. 12	Jul. 26
	1	2	3	4	5
1 Currency with the Public (1.1 + 1.2 + 1.3 – 1.4)	3410276	3215903	3446055	3468893	3426089
1.1 Notes in Circulation	3477795	3293330	3528333	3539912	3502389
1.2 Circulation of Rupee Coin	32689	30405	33322	33322	33563
1.3 Circulation of Small Coins	743	743	743	743	743
1.4 Cash on Hand with Banks	101185	108660	116948	105513	111091
2 Deposit Money of the Public	2681424	2469202	2842003	2625539	2678638
2.1 Demand Deposits with Banks	2586888	2398078	2746237	2533569	2587413
2.2 'Other' Deposits with Reserve Bank	94536	71123	95766	91971	91225
3 M1 (1 + 2)	**6091700**	**5685104**	**6288057**	**6094432**	**6104726**
4 Post Office Saving Bank Deposits	225927	208417	225927	225927	225927
5 M2 (3 + 4)	**6317627**	**5893521**	**6513984**	**6320359**	**6330653**
6 Time Deposits with Banks	18739918	17574391	19413975	19520094	19485726
	(18848160)	(17724850)	(19503372)	(19606801)	(19568928)
7 M3 (3 + 6)	24831618	23259495	25702033	25614526	25590453
	(24939860)	(23409955)	(25791429)	(25701233)	(25673654)
8 Total Post Office Deposits	1298623	1202947	1298623	1298623	1298623
9 M4 (7 + 8)	26130241	24462442	27000656	26913149	26889076
	(26238483)	(24612902)	(27090052)	(26999856)	(26972277)

Figures in parentheses include the impact of merger of a non-bank with a bank.

No. 7 : Sources of Money Stock (M_3)

(₹ Crore)

Sources	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2023-24	2023	2024		
		Jul. 28	Jun. 28	Jul. 12	Jul. 26
	1	2	3	4	5
1 Net Bank Credit to Government	**7512016**	**7224878**	**7424141**	**7629016**	**7612861**
1 Net Bank Credit to Government (Including Merger)	(7603571)	(7337446)	(7489485)	(7694364)	(7678213)
1.1 RBI's net credit to Government (1.1.1–1.1.2)	1193213	1197085	1026142	1081536	1060910
1.1.1 Claims on Government	1370428	1415005	1355438	1362848	1341836
1.1.1.1 Central Government	1363828	1401096	1348151	1346488	1320596
1.1.1.2 State Governments	6600	13909	7286	16359	21239
1.1.2 Government deposits with RBI	177215	217920	329296	281311	280926
1.1.2.1 Central Government	177172	217877	329254	281269	280883
1.1.2.2 State Governments	42	42	42	42	42
1.2 Other Banks' Credit to Government	6318803	6027793	6397999	6547480	6551951
1.2 Other Banks Credit to Government (Including Merger)	(6410358)	(6140360)	(6463344)	(6612828)	(6617302)
2 Bank Credit to Commercial Sector	**16672145**	**14915606**	**17144910**	**17081633**	**17084181**
2 Bank Credit to Commercial Sector (Including Merger)	(17202832)	(15525886)	(17645141)	(17576178)	(17577818)
2.1 RBI's credit to commercial sector	14406	5144	10922	11107	10935
2.2 Other banks' credit to commercial sector	16657739	14910462	17133988	17070526	17073246
2.2 Other banks credit to commercial sector (Including Merger)	(17188426)	(15520742)	(17634219)	(17565071)	(17566883)
2.2.1 Bank credit by commercial banks	15901477	14176844	16381945	16317573	16320298
2.2.1 Bank credit by commercial banks (Including Merger)	(16432164)	(14787123)	(16882176)	(16812117)	(16813935)
2.2.2 Bank credit by co-operative banks	738194	716715	733421	734189	733892
2.2.3 Investments by commercial and co-operative banks in other securities	18068	16904	18621	18765	19056
2.2.3 Investments by commercial and co-operative banks in other securities (Including Merger)	(18068)	(16904)	(18621)	(18765)	(19056)
3 Net Foreign Exchange Assets of Banking Sector (3.1 + 3.2)	**5543700**	**5042528**	**5589632**	**5721304**	**5736662**
3.1 RBIs net foreign exchange assets (3.1.1 - 3.1.2)	5240824	4799704	5286756	5418428	5433786
3.1.1 Gross foreign assets	5241083	4799965	5287015	5418686	5434044
3.1.2 Foreign liabilities	259	262	259	259	259
3.2 Other banks' net foreign exchange assets	302876	242825	302876	302876	302876
4 Government's Currency Liabilities to the Public	**33432**	**31148**	**34065**	**34065**	**34306**
5 Banking Sector's Net Non-monetary Liabilities	**4929674**	**3954665**	**4490716**	**4851492**	**4877557**
5 Banking Sectors Net Non-monetary Liabilities (Including Merger)	(5443674)	(4527053)	(4966894)	(5324678)	(5353343)
5.1 Net non-monetary liabilities of RBI	1789875	1543892	1631572	1718864	1718379
5.2 Net non-monetary liabilities of other banks (residual)	3139799	2410773	2859144	3132628	3159178
5.2 Net non-monetary liabilities of other banks (residual) (Including Merger)	(3653798)	(2983160)	(3335322)	(3605814)	(3634964)
M_3(1+2+3+4–5)	**24831618**	**23259495**	**25702033**	**25614526**	**25590453**
M3 (1+2+3+4-5) (Including Merger)	(24939860)	(23409955)	(25791429)	(25701233)	(25673654)

Figures in parentheses include the impact of merger of a non-bank with bank.

No. 8: Monetary Survey

(₹ Crore)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2023-24	2023	2024		
		Jul. 28	Jun. 28	Jul. 12	Jul. 26
	1	2	3	4	5
Monetary Aggregates					
NM_1 (1.1+1.2.1+1.3)	6091700	5685104	6288057	6094432	6104726
NM_2 (NM_1 + 1.2.2.1)	14424855	13513039	14915799	14768110	14761845
NM2 (NM1 + 1.2.2.1) (Including Merger)	(14473564)	(13580746)	(14956028)	(14807128)	(14799285)
NM_3 (NM_2 +1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	25387764	23864857	26225278	26254050	26277956
NM3 (NM2 + 1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 - 2.4 - 2.5) (Including Merger)	(25496006)	(24015316)	(26314675)	(26340757)	(26361158)
1 Components					
1.1 Currency with the Public	3410276	3215903	3446055	3468893	3426089
1.2 Aggregate Deposits of Residents	21105009	19793489	21918997	21808409	21825453
1.2 Aggregate Deposits of Residents (Including Merger)	(21213252)	(19943948)	(22008393)	(21895116)	(21908655)
1.2.1 Demand Deposits	2586888	2398078	2746237	2533569	2587413
1.2.2 Time Deposits of Residents	18518121	17395411	19172760	19274840	19238040
1.2.2 Time Deposits of Residents (Including Merger)	(18626364)	(17545870)	(19262157)	(19361548)	(19321242)
1.2.2.1 Short-term Time Deposits	8333155	7827935	8627742	8673678	8657118
1.2.2.1 Short-term Time Deposits (Including Merger)	(8381864)	(7895642)	(8667971)	(8712696)	(8694559)
1.2.2.1.1 Certificates of Deposits (CDs)	369399	303075	407354	418531	420069
1.2.2.2 Long-term Time Deposits	10184967	9567476	10545018	10601162	10580922
1.2.2.2 Long-term Time Deposits (Including Merger)	(10244500)	(9650229)	(10594186)	(10648851)	(10626683)
1.3 'Other' Deposits with RBI	94536	71123	95766	91971	91225
1.4 Call/Term Funding from Financial Institutions	777942	784342	764461	884777	935190
2 Sources					
2.1 Domestic Credit	25295986	23278576	26017302	25825273	25825974
2.1 Domestic Credit (Including Merger)	(25918227)	(24001423)	(26582877)	(26385167)	(26384962)
2.1.1 Net Bank Credit to the Government	7512016	7224878	7424141	7629016	7612861
2.1.1 Net Bank Credit to the Government (Including Merger)	(7603571)	(7337446)	(7489485)	(7694364)	(7678213)
2.1.1.1 Net RBI credit to the Government	1193213	1197085	1026142	1081536	1060910
2.1.1.2 Credit to the Government by the Banking System	6318803	6027793	6397999	6547480	6551951
2.1.1.2 Credit to the Government by the Banking System (Including Merger)	(6410358)	(6140360)	(6463344)	(6612828)	(6617302)
2.1.2 Bank Credit to the Commercial Sector	17783970	16053697	18593161	18196257	18213113
2.1.2 Bank Credit to the Commercial Sector (Including Merger)	(18314656)	(16663977)	(19093392)	(18690802)	(18706750)
2.1.2.1 RBI Credit to the Commercial Sector	14406	5144	10922	11107	10935
2.1.2.2 Credit to the Commercial Sector by the Banking System	17769564	16048553	18582239	18185151	18202178
2.1.2.2 Credit to the Commercial Sector by the Banking System (Including Merger)	(18300250)	(16658833)	(19082470)	(18679695)	(18695815)
2.1.2.2.1 Other Investments (Non-SLR Securities)	1089184	1119528	1432378	1096760	1112229
2.2 Government's Currency Liabilities to the Public	33432	31148	34065	34065	34306
2.3 Net Foreign Exchange Assets of the Banking Sector	5110820	4837647	5180164	5282474	5304164
2.3.1 Net Foreign Exchange Assets of the RBI	5240824	4799704	5286756	5418428	5433786
2.3.2 Net Foreign Currency Assets of the Banking System	-130004	37943	-106593	-135954	-129622
2.4 Capital Account	3912897	3932845	4258925	4310491	4317778
2.5 Other items (net)	1653576	922057	1223505	1050458	1044496

Figures in parentheses include the impact of merger of a non-bank with a bank.

No. 9: Liquidity Aggregates

(₹ Crore)

Aggregates	2023-24	2023	2024		
		Jul.	May	Jun.	Jul.
	1	2	3	4	5
1 NM_3	**25387764**	**23864857**	**26023034**	**26225278**	**26277956**
	(25496006)	(24015316)	(26118212)	(26314675)	(26361158)
2 Postal Deposits	729246	684023	729246	729246	729246
3 L_1 (1 + 2)	**26117010**	**24548880**	**26752280**	**26954524**	**27007202**
	(26225252)	(24699339)	(26847458)	(27043921)	(27090404)
4 Liabilities of Financial Institutions	85150	73298	72510	68179	68324
4.1 Term Money Borrowings	2375	1107	1324	748	748
4.2 Certificates of Deposit	70245	62185	58570	54670	54670
4.3 Term Deposits	12531	10006	12616	12761	12905
5 L_2 (3 + 4)	**26202160**	**24622178**	**26824789**	**27022704**	**27075526**
	(26310403)	(24772637)	(26919968)	(27112100)	(27158728)
6 Public Deposits with Non-Banking Financial Companies	102994	..	..	102994	..
7 L_3 (5 + 6)	**26305155**	**..**	**..**	**27125698**	**..**

Note : 1. Figures in the columns might not add up to the total due to rounding off of numbers.
2. Figures in parentheses include the impact of merger of a non-bank with a bank.

No. 10: Reserve Bank of India Survey

(₹ Crore)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2023-24	2023	2024		
		Jul. 28	Jun. 28	Jul. 12	Jul. 26
	1	2	3	4	5
1 Components					
1.1 Currency in Circulation	3511461	3324563	3563002	3574406	3537180
1.2 Bankers' Deposits with the RBI	1025449	959639	1036368	1014996	1039059
1.2.1 Scheduled Commercial Banks	956011	899279	973455	952094	976073
1.3 'Other' Deposits with the RBI	94536	71123	95766	91971	91225
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	4631446	4355324	4695137	4681373	4667464
2 Sources					
2.1 RBI's Domestic Credit	1147066	1068365	1005887	947743	917751
2.1.1 Net RBI credit to the Government	1193213	1197085	1026142	1081536	1060910
2.1.1.1 Net RBI credit to the Central Government (2.1.1.1.1 + 2.1.1.1.2 + 2.1.1.1.3 + 2.1.1.1.4 – 2.1.1.1.5)	1186655	1183219	1018898	1065219	1039713
2.1.1.1.1 Loans and Advances to the Central Government	-	-	-	-	-
2.1.1.1.2 Investments in Treasury Bills	-	-	-	-	-
2.1.1.1.3 Investments in dated Government Securities	1363369	1400820	1347914	1346159	1320373
2.1.1.1.3.1 Central Government Securities	1363369	1400820	1347914	1346159	1320373
2.1.1.1.4 Rupee Coins	459	276	237	330	223
2.1.1.1.5 Deposits of the Central Government	177172	217877	329254	281269	280883
2.1.1.2 Net RBI credit to State Governments	6557	13866	7244	16317	21197
2.1.2 RBI's Claims on Banks	-60553	-133864	-31176	-144900	-154094
2.1.2.1 Loans and Advances to Scheduled Commercial Banks	-60553	-133864	-31176	-144900	-154094
2.1.3 RBI's Credit to Commercial Sector	14406	5144	10922	11107	10935
2.1.3.1 Loans and Advances to Primary Dealers	9358	3082	9061	9061	9062
2.1.3.2 Loans and Advances to NABARD	-	-	-	-	-
2.2 Government's Currency Liabilities to the Public	33432	31148	34065	34065	34306
2.3 Net Foreign Exchange Assets of the RBI	5240824	4799704	5286756	5418428	5433786
2.3.1 Gold	439319	369359	471350	490045	483062
2.3.2 Foreign Currency Assets	4801522	4430362	4815423	4928400	4950741
2.4 Capital Account	1589134	1685487	1728614	1789370	1774642
2.5 Other Items (net)	200741	-141594	-97042	-70506	-56263

No. 11: Reserve Money - Components and Sources

(₹ Crore)

Item	2023-24	Outstanding as on March 31/last Fridays of the month/Fridays					
		2023	2024				
		Jul. 28	Jun. 28	Jul. 5	Jul. 12	Jul. 19	Jul. 26
	1	2	3	4	5	6	7
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 + 2.4 + 2.5 – 2.6)	4631446	4355324	4695137	4717510	4681373	4714625	4667464
1 Components							
1.1 Currency in Circulation	3511461	3324563	3563002	3571740	3574406	3554532	3537180
1.2 Bankers' Deposits with RBI	1025449	959639	1036368	1053615	1014996	1069565	1039059
1.3 'Other' Deposits with RBI	94536	71123	95766	92154	91971	90528	91225
2 Sources							
2.1 Net Reserve Bank Credit to Government	1193213	1197085	1026142	1141339	1081536	1062945	1060910
2.2 Reserve Bank Credit to Banks	-60553	-133864	-31176	-137576	-144900	-108935	-154094
2.3 Reserve Bank Credit to Commercial Sector	14406	5144	10922	11030	11107	11120	10935
2.4 Net Foreign Exchange Assets of RBI	5240824	4799704	5286756	5334956	5418428	5459293	5433786
2.5 Government's Currency Liabilities to the Public	33432	31148	34065	34065	34065	34065	34306
2.6 Net Non- Monetary Liabilities of RBI	1789875	1543892	1631572	1666304	1718864	1743863	1718379

No. 12: Commercial Bank Survey

(₹ Crore)

Item	Outstanding as on last reporting Fridays of the month/ reporting Fridays of the month				
	2023-24	2023	2024		
		Jul. 28	Jun. 28	Jul. 12	Jul. 26
	1	2	3	4	5
1 Components					
1.1 Aggregate Deposits of Residents	20145188	18837513	20955209	20845356	20862822
	(20253430)	(18987973)	(21044606)	(20932064)	(20946024)
1.1.1 Demand Deposits	2443853	2257972	2601677	2390322	2444220
1.1.2 Time Deposits of Residents	17701334	16579541	18353531	18455034	18418602
	(17809577)	(16730001)	(18442928)	(18541742)	(18501804)
1.1.2.1 Short-term Time Deposits	7965600	7460794	8259089	8304765	8288371
1.1.2.1.1 Certificates of Deposits (CDs)	369399	303075	407354	418531	420069
1.1.2.2 Long-term Time Deposits	9735734	9118748	10094442	10150269	10130231
1.2 Call/Term Funding from Financial Institutions	777942	784342	764461	884777	935190
2 Sources					
2.1 Domestic Credit	23019606	21033028	23914360	23665796	23688947
	(23641847)	(21755875)	(24479935)	(24225689)	(24247935)
2.1.1 Credit to the Government	6014054	5726039	6091725	6241235	6247305
	(6105610)	(5838607)	(6157070)	(6306583)	(6312657)
2.1.2 Credit to the Commercial Sector	17005551	15306989	17822634	17424561	17441642
	(17536238)	(15917269)	(18322865)	(17919106)	(17935278)
2.1.2.1 Bank Credit	15901477	14176844	16381945	16317573	16320298
	(16432164)	(14787123)	(16882176)	(16812117)	(16813935)
2.1.2.1.1 Non-food Credit	15878397	14156007	16348042	16287310	16292108
	(16409083)	(14766287)	(16848272)	(16781855)	(16785745)
2.1.2.2 Net Credit to Primary Dealers	22904	18826	16136	18128	16966
2.1.2.3 Investments in Other Approved Securities	949	753	1137	1063	1111
2.1.2.4 Other Investments (in non-SLR Securities)	1080222	1110566	1423416	1087798	1103267
2.2 Net Foreign Currency Assets of Commercial Banks (2.2.1-2.2.2-2.2.3)	-130004	37943	-106593	-135954	-129622
2.2.1 Foreign Currency Assets	241661	328316	304848	274230	284197
2.2.2 Non-resident Foreign Currency Repatriable Fixed Deposits	221796	178980	241215	245254	247686
2.2.3 Overseas Foreign Currency Borrowings	149868	111393	170226	164931	166133
2.3 Net Bank Reserves (2.3.1+2.3.2-2.3.3)	893350	1130067	1109609	1190784	1229518
2.3.1 Balances with the RBI	931483	899279	973455	952094	976073
2.3.2 Cash in Hand	89433	96924	104977	93790	99350
2.3.3 Loans and Advances from the RBI	127566	-133864	-31176	-144900	-154094
2.4 Capital Account	2299592	2223187	2506141	2496950	2518965
2.5 Other items (net) (2.1+2.2+2.3-2.4-1.1-1.2)	560230	355996	691565	493542	471866
2.5.1 Other Demand and Time Liabilities (net of 2.2.3)	787560	709381	759345	721487	732752
2.5.2 Net Inter-Bank Liabilities (other than to PDs)	197781	175419	148239	159658	149681

Figures in parentheses include the impact of merger of a non-bank with a bank.

No. 13: Scheduled Commercial Banks' Investments

(₹ Crore)

Item	As on March 22, 2024	2023	2024		
		Jul. 28	Jun. 28	Jul. 12	Jul. 26
	1	2	3	4	5
1 SLR Securities	6106558	5839360	6158207	6307646	6313767
	(6015003)	(5726793)	(6092862)	(6242298)	(6248416)
2 Other Government Securities (Non-SLR)	177136	180324	157944	157987	157537
3 Commercial Paper	61175	54410	51636	48177	52091
4 Shares issued by					
4.1 PSUs	8475	9178	13259	12415	12950
4.2 Private Corporate Sector	77722	84154	92861	93269	93730
4.3 Others	5624	5454	7014	7180	7367
5 Bonds/Debentures issued by					
5.1 PSUs	103070	89456	119057	114158	121092
5.2 Private Corporate Sector	287596	291299	248618	245204	242161
5.3 Others	124690	108987	134187	138703	138806
6 Instruments issued by					
6.1 Mutual funds	62499	92914	66115	93133	96391
6.2 Financial institutions	172340	194388	178493	177572	181142

Note: Data against column Nos.(1), (2) & (3) are Final and for column Nos. (4) & (5) data are Provisional.
Data since July 14, 2023 include the impact of the merger of a non-bank with a bank.
Figures in parentheses exclude the impact of the merger.

No. 14: Business in India - All Scheduled Banks and All Scheduled Commercial Banks

(₹ Crore)

Item	As on the Last Reporting Friday (in case of March)/ Last Friday							
	All Scheduled Banks				All Scheduled Commercial Banks			
	2023-24	2023	2024		2023-24	2023	2024	
		Jul.	Jun.	Jul.		Jul.	Jun.	Jul.
	1	2	3	4	5	6	7	8
Number of Reporting Banks	210	212	208	208	137	137	135	135
1 Liabilities to the Banking System	**554117**	**509583**	**512993**	**499880**	**549351**	**506511**	**508633**	**495504**
1.1 Demand and Time Deposits from Banks	298452	249424	285944	285333	294471	247165	281871	281245
1.2 Borrowings from Banks	182566	193383	150174	138779	182429	193269	150168	138752
1.3 Other Demand and Time Liabilities	73100	66776	76875	75768	72452	66077	76594	75507
2 Liabilities to Others	**22664868**	**21232155**	**23454519**	**23497836**	**22190597**	**20772069**	**22979527**	**23027785**
2.1 Aggregate Deposits	20932067	19609571	21743132	21647188	20475226	19166953	21285496	21193710
	(20823825)	(19459112)	(21653735)	(21563986)	(20366984)	(19016494)	(21196099)	(21110508)
2.1.1 Demand	2492916	2303947	2651692	2493057	2443853	2257972	2601677	2444220
2.1.2 Time	18439151	17305624	19091439	19154131	18031373	16908981	18683818	18749490
2.2 Borrowings	782260	789050	768687	939516	777942	784342	764461	935190
2.3 Other Demand and Time Liabilities	950541	833534	942700	911133	937428	820774	929570	898885
3 Borrowings from Reserve Bank	**222716**	**45028**	**102741**	**7161**	**222716**	**45028**	**102741**	**7161**
3.1 Against Usance Bills /Promissory Notes	-	-	-	-	-	-	-	-
3.2 Others	222716	45028	102741	7161	222716	45028	102741	7161
4 Cash in Hand and Balances with Reserve Bank	1043272	1018457	1100832	1097622	1020916	996203	1078433	1075424
4.1 Cash in Hand	91886	99358	107446	101784	89433	96924	104977	99350
4.2 Balances with Reserve Bank	951386	919099	993386	995838	931483	899279	973455	976073
5 Assets with the Banking System	**455057**	**413394**	**446434**	**430424**	**374474**	**349919**	**376205**	**362788**
5.1 Balances with Other Banks	246384	234362	250069	241621	198327	191554	200204	192802
5.1.1 In Current Account	12010	13536	15362	11939	8971	10234	12536	9487
5.1.2 In Other Accounts	234373	220826	234707	229681	189357	181319	187668	183315
5.2 Money at Call and Short Notice	39614	38996	27374	28548	12355	22908	11606	13930
5.3 Advances to Banks	51325	44273	51727	42711	48368	42737	50288	41613
5.4 Other Assets	117734	95763	117264	117544	115424	92720	114106	114443
6 Investment	**6256962**	**5985714**	**6310568**	**6464961**	**6106558**	**5839360**	**6158207**	**6313767**
	(6165407)	(5873147)	(6245223)	(6399609)	(6015003)	(5726793)	(6092862)	(6248416)
6.1 Government Securities	6249319	5979513	6302648	6456607	6105610	5838607	6157070	6312657
6.2 Other Approved Securities	7643	6201	7919	8354	949	753	1137	1111
7 Bank Credit	**16866336**	**15188521**	**17319966**	**17247802**	**16432164**	**14787123**	**16886029**	**16813935**
	(16335650)	(14578241)	(16819735)	(16754166)	(15901477)	(14176844)	(16385798)	(16320298)
7a Food Credit	75472	72807	84526	78811	23081	20836	33904	28190
7.1 Loans, Cash-credits and Overdrafts	16565348	14926259	16995175	16931204	16134303	14527984	16564523	16500433
7.2 Inland Bills-Purchased	60471	43575	69416	68987	60467	43561	68064	67638
7.3 Inland Bills-Discounted	199761	174526	214495	208216	197358	172106	213232	207073
7.4 Foreign Bills-Purchased	16662	18756	17139	16061	16412	18528	16909	15852
7.5 Foreign Bills-Discounted	24094	25405	23741	23334	23624	24944	23301	22940

Note: Data in column Nos. (4) & (8) are Provisional
1. Data since July 2023 include the impact of the merger of a non-bank with a bank.
2. Figures in parentheses exclude the impact of the merger.

No. 15: Deployment of Gross Bank Credit by Major Sectors

(₹ Crore)

Sector	Outstanding as on				Growth(%)	
	Mar. 22, 2024	2023	2024		Financial year so far	Y-o-Y
		Jul. 28	Jun. 28	Jul. 26	2024-25	2024
	1	2	3	4	%	%
I. Bank Credit (II + III)	**16432164**	**14787123**	**16880782**	**16814792**	**2.3**	**13.7**
	(15901477)	(14176844)	(16380551)	(16321156)	(2.6)	(15.1)
II. Food Credit	**23081**	**20836**	**33904**	**28190**	**22.1**	**35.3**
III. Non-food Credit	**16409083**	**14766287**	**16846879**	**16786602**	**2.3**	**13.7**
	(15878397)	(14156007)	(16346648)	(16292966)	(2.6)	(15.1)
1. Agriculture & Allied Activities	**2071251**	**1826031**	**2159559**	**2155991**	**4.1**	**18.1**
2. Industry (Micro and Small, Medium and Large)	**3652804**	**3380957**	**3728156**	**3722147**	**1.9**	**10.1**
	(3635810)	(3363118)	(3712270)	(3705319)	(1.9)	(10.2)
2.1 Micro and Small	726315	644363	731625	729948	0.5	13.3
2.2 Medium	303998	270729	316322	317323	4.4	17.2
2.3 Large	2622490	2465866	2680209	2674877	2.0	8.5
3. Services	**4592227**	**4039465**	**4707069**	**4604567**	**0.3**	**14.0**
	(4490467)	(3917134)	(4616040)	(4518736)	(0.6)	(15.4)
3.1 Transport Operators	230175	204076	242193	237195	3.0	16.2
3.2 Computer Software	25917	22790	26677	27353	5.5	20.0
3.3 Tourism, Hotels & Restaurants	77513	72955	78351	78992	1.9	8.3
3.4 Shipping	7067	6977	7019	7075	0.1	1.4
3.5 Aviation	43248	39667	45360	44637	3.2	12.5
3.6 Professional Services	167234	146789	172138	163442	-2.3	11.3
3.7 Trade	1025752	903950	1059459	1041017	1.5	15.2
3.7.1. Wholesale Trade[1]	538744	473895	557604	545116	1.2	15.0
3.7.2 Retail Trade	487008	430055	501856	495900	1.8	15.3
3.8 Commercial Real Estate	469013	438109	483297	484531	3.3	10.6
	(400470)	(343708)	(421756)	(426515)	(6.5)	(24.1)
3.9 Non-Banking Financial Companies (NBFCs)[2] of which,	1548027	1356108	1555496	1528856	-1.2	12.7
3.9.1 Housing Finance Companies (HFCs)	325626	320132	328232	322052	-1.1	0.6
3.9.2 Public Financial Institutions (PFIs)	226963	182924	197127	202991	-10.6	11.0
3.10 Other Services[3]	998281	848044	1037078	991468	-0.7	16.9
	(978198)	(834300)	(1018174)	(972972)	(-0.5)	(16.6)
4. Personal Loans	**5331290**	**4833574**	**5486107**	**5529815**	**3.7**	**14.4**
	(4919468)	(4364342)	(5091342)	(5139980)	(4.5)	(17.8)
4.1 Consumer Durables	23713	22113	24123	24607	3.8	11.3
4.2 Housing	2718715	2491005	2798568	2810109	3.4	12.8
	(2331935)	(2052114)	(2427447)	(2443530)	(4.8)	(19.1)
4.3 Advances against Fixed Deposits	125239	110529	126533	120373	-3.9	8.9
4.4 Advances to Individuals against share & bonds	8492	7566	9357	9422	10.9	24.5
4.5 Credit Card Outstanding	257016	225950	273044	275601	7.2	22.0
4.6 Education	119380	103401	121990	123066	3.1	19.0
4.7 Vehicle Loans	589251	531547	603829	618600	5.0	16.4
4.8 Loan against gold jewellery	102562	95344	123776	132536	29.2	39.0
4.9 Other Personal Loans	1386921	1246120	1404889	1415500	2.1	13.6
	(1362113)	(1216369)	(1381337)	(1392327)	(2.2)	(14.5)
5. Priority Sector (Memo)						
(i) Agriculture & Allied Activities[4]	2081856	1835737	2186829	2196939	5.5	19.7
(ii) Micro & Small Enterprises[5]	1974191	1748225	2020474	1998597	1.2	14.3
(iii) Medium Enterprises[6]	490703	434298	511467	511874	4.3	17.9
(iv) Housing	755222	765099	752911	748840	-0.8	-2.1
	(660572)	(663149)	(661668)	(633763)	(-4.1)	(-4.4)
(v) Education Loans	62235	59932	61269	61523	-1.1	2.7
(vi) Renewable Energy	5991	4605	6279	7075	18.1	53.6
(vii) Social Infrastructure	2613	2571	2949	2937	12.4	14.2
(viii) Export Credit	11774	12212	11721	12163	3.3	-0.4
(ix) Others	61336	52978	60871	58548	-4.5	10.5
(x) Weaker Sections including net PSLC- SF/MF	1647778	1455992	1716930	1743686	5.8	19.8

Notes:

(1) Data are provisional. Bank credit, Food credit and Non-food credit data are based on Section-42 return, which covers all scheduled commercial banks (SCBs), while sectoral non-food credit data are based on sector-wise and industry-wise bank credit (SIBC) return, which covers select banks accounting for about 95 per cent of total non-food credit extended by all SCBs, pertaining to the last reporting Friday of the month.

(2) Data since July 28, 2023 include the impact of the merger of a non-bank with a bank. Figures in parentheses exclude the impact of the merger.

1 Wholesale trade includes food procurement credit outside the food credit consortium.

2 NBFCs include HFCs, PFIs, Microfinance Institutions (MFIs), NBFCs engaged in gold loan and others.

3 "Other Services" include Mutual Fund (MFs), Banking and Finance other than NBFCs and MFs and other services which are not indicated elsewhere under services.

4 "Agriculture and Allied Activities" under the priority sector also include priority sector lending certificates (PSLCs).

5 "Micro and Small Enterprises" under the priority sector include credit to micro and small enterprises in industry and services sectors and also include PSLCs.

6 "Medium Enterprises" under the priority sector include credit to medium enterprises in industry and services sectors.

No. 16: Industry-wise Deployment of Gross Bank Credit

(₹ Crore)

Industry	Outstanding as on				Growth(%)	
	Mar. 22, 2024	2023	2024		Financial year so far	Y-o-Y
		Jul. 28	Jun. 28	Jul. 26	2024-25	2024
	1	2	3	4	%	%
2 Industries (2.1 to 2.19)	3652804	3380957	3728156	3722147	1.9	10.1
	(3635810)	(3363118)	(3712270)	(3705319)	(1.9)	(10.2)
2.1 Mining & Quarrying (incl. Coal)	54166	51796	55600	54637	0.9	5.5
2.2 Food Processing	208864	175680	206410	204970	-1.9	16.7
2.2.1 Sugar	26383	19344	24945	22622	-14.3	16.9
2.2.2 Edible Oils & Vanaspati	19700	17955	18123	18167	-7.8	1.2
2.2.3 Tea	5692	5513	5853	6049	6.3	9.7
2.2.4 Others	157089	132867	157490	158133	0.7	19.0
2.3 Beverage & Tobacco	31136	22886	30518	30398	-2.4	32.8
2.4 Textiles	256048	234904	255274	255052	-0.4	8.6
2.4.1 Cotton Textiles	99199	90173	96345	94890	-4.3	5.2
2.4.2 Jute Textiles	4280	3581	4245	4125	-3.6	15.2
2.4.3 Man-Made Textiles	45111	39612	45229	45737	1.4	15.5
2.4.4 Other Textiles	107458	101538	109456	110300	2.6	8.6
2.5 Leather & Leather Products	12588	11762	12621	12547	-0.3	6.7
2.6 Wood & Wood Products	23839	21685	24222	24440	2.5	12.7
2.7 Paper & Paper Products	46426	43725	47584	47826	3.0	9.4
2.8 Petroleum, Coal Products & Nuclear Fuels	132356	111125	150054	136958	3.5	23.2
2.9 Chemicals & Chemical Products	249347	218487	254950	254822	2.2	16.6
2.9.1 Fertiliser	37569	32626	36925	34891	-7.1	6.9
2.9.2 Drugs & Pharmaceuticals	81036	70962	81818	82303	1.6	16.0
2.9.3 Petro Chemicals	23157	21050	25356	27879	20.4	32.4
2.9.4 Others	107584	93849	110852	109749	2.0	16.9
2.10 Rubber, Plastic & their Products	90420	82968	88917	89571	-0.9	8.0
2.11 Glass & Glassware	12090	9580	12340	12423	2.7	29.7
2.12 Cement & Cement Products	59757	57119	60571	60689	1.6	6.2
2.13 Basic Metal & Metal Product	384447	355567	398182	402690	4.7	13.3
2.13.1 Iron & Steel	273803	239594	281763	285042	4.1	19.0
2.13.2 Other Metal & Metal Product	110645	115973	116419	117648	6.3	1.4
2.14 All Engineering	196643	184743	203490	204641	4.1	10.8
2.14.1 Electronics	43175	42954	45351	45156	4.6	5.1
2.14.2 Others	153468	141789	158139	159485	3.9	12.5
2.15 Vehicles, Vehicle Parts & Transport Equipment	113185	106565	113222	109182	-3.5	2.5
2.16 Gems & Jewellery	84860	85993	84039	82939	-2.3	-3.6
2.17 Construction	133520	125938	137097	140382	5.1	11.5
2.18 Infrastructure	1304096	1253131	1323860	1301069	-0.2	3.8
2.18.1 Power	644042	616494	646566	636923	-1.1	3.3
2.18.2 Telecommunications	138192	130920	132542	129613	-6.2	-1.0
2.18.3 Roads	318072	309873	335841	327542	3.0	5.7
2.18.4 Airports	7280	7782	7779	8004	9.9	2.8
2.18.5 Ports	6681	7882	6483	6331	-5.2	-19.7
2.18.6 Railways	13062	11447	13275	11834	-9.4	3.4
2.18.7 Other Infrastructure	176767	168732	181374	180822	2.3	7.2
2.19 Other Industries	259016	227304	269206	296912	14.6	30.6

Note: (1) Data since July 28, 2023 include the impact of the merger of a non-bank with a bank. Figures in parentheses exclude the impact of the merger.

No. 17: State Co-operative Banks Maintaining Accounts with the Reserve Bank of India

(₹ Crore)

Item	Last Reporting Friday (in case of March)/Last Friday/ Reporting Friday								
	2023-24	2023	2024						
		Jun. 30	Apr. 19	Apr. 26	May 03	May 17	May 31	Jun. 14	Jun. 28
	1	2	3	4	5	6	7	8	9
Number of Reporting Banks	33	33	33	33	33	33	33	33	33
1 Aggregate Deposits (2.1.1.2+2.2.1.2)	**138788.9**	**138579.7**	**137357.2**	**135856.4**	**137855.6**	**135672.9**	**135938.7**	**134828.9**	**133938.0**
2 Demand and Time Liabilities									
2.1 Demand Liabilities	**30226.7**	**28185.3**	**28302.3**	**28654.1**	**29748.9**	**27309.7**	**28297.6**	**28943.0**	**27801.7**
2.1.1 Deposits									
2.1.1.1 Inter-Bank	9101.3	6015.4	8096.3	7965.2	7934.7	7634.3	7482.3	7685.6	7904.7
2.1.1.2 Others	15000.4	15613.8	14869.0	14417.9	16196.2	14617.1	15241.7	15296.8	14567.8
2.1.2 Borrowings from Banks	130.0	439.8		679.5	499.7		154.9	179.9	
2.1.3 Other Demand Liabilities	5995.0	6116.4	5337.0	5591.5	5118.3	5058.3	5418.7	5780.7	5329.2
2.2 Time Liabilities	**198141.8**	**182740.2**	**192115.1**	**189681.3**	**190499.2**	**189412.7**	**187897.4**	**185975.8**	**185708.9**
2.2.1 Deposits									
2.2.1.1 Inter-Bank	72308.4	57869.2	67955.0	66557.0	66911.4	66378.9	65382.8	64573.2	64501.4
2.2.1.2 Others	123788.5	122965.9	122488.2	121438.5	121659.4	121055.8	120697.0	119532.1	119370.2
2.2.2 Borrowings from Banks	673.6	839.7	652.8	652.8	879.3	920.1	663.8	653.2	653.2
2.2.3 Other Time Liabilities	1371.3	1065.4	1019.1	1033.0	1049.1	1057.9	1153.8	1217.2	1184.1
3 Borrowing from Reserve Bank	0.0				150.0			0.0	0.0
4 Borrowings from a notified bank / Government	95914.5	73630.1	87425.2	86593.2	85136.5	84716.3	84175.6	84574.6	85281.4
4.1 Demand	27317.7	15253.8	24184.6	23967.7	23767.7	23507.7	23112.7	23242.7	23887.4
4.2 Time	68596.8	58376.2	63240.6	62625.5	61368.8	61208.6	61062.9	61331.9	61394.0
5 Cash in Hand and Balances with Reserve Bank	**16263.7**	**11981.9**	**13393.3**	**12135.1**	**13141.4**	**10494.5**	**12165.3**	**11435.2**	**13323.7**
5.1 Cash in Hand	960.0	845.0	874.7	777.3	819.5	853.6	714.6	770.9	759.4
5.2 Balance with Reserve Bank	15303.7	11136.9	12518.6	11357.8	12321.9	9640.9	11450.7	10664.3	12564.3
6 Balances with Other Banks in Current Account	**2088.1**	**2666.2**	**1725.5**	**1625.6**	**1573.3**	**1480.0**	**1528.5**	**1694.6**	**1631.9**
7 Investments in Government Securities	**77700.5**	**72286.7**	**75605.0**	**75501.1**	**75604.0**	**76369.8**	**76376.5**	**76482.9**	**75500.4**
8 Money at Call and Short Notice	**34355.3**	**19661.2**	**26097.0**	**23246.7**	**22827.2**	**22441.5**	**21180.5**	**19092.4**	**20740.5**
9 Bank Credit (10.1+11)	**135141.9**	**128006.9**	**134755.3**	**137382.4**	**137182.4**	**135776.2**	**135733.7**	**137026.6**	**134324.1**
10 Advances									
10.1 Loans, Cash-Credits and Overdrafts	**134936.8**	**127932.8**	**134570.3**	**137200.4**	**136992.2**	**135600.7**	**135524.3**	**136811.1**	**134111.9**
10.2 Due from Banks	142185.2	120521.3	136863.1	136586.9	135859.4	135411.7	136109.4	136794.5	135046.8
11 Bills Purchased and Discounted	205.1	74.2	185.0	182.0	190.2	175.5	209.4	215.5	212.2

Prices and Production

No. 18: Consumer Price Index (Base: 2012=100)

Group/Sub group	2023-24			Rural			Urban			Combined		
	Rural	Urban	Combined	Aug.23	Jul.24	Aug.24 (P)	Aug.23	Jul.24	Aug.24 (P)	Aug.23	Jul.24	Aug.24 (P)
	1	2	3	4	5	6	7	8	9	10	11	12
1 Food and beverages	**185.9**	**192.7**	**188.4**	**189.5**	**200.4**	**200.2**	**197.6**	**208.3**	**207.0**	**192.5**	**203.3**	**202.7**
1.1 Cereals and products	181.4	181.7	181.5	179.0	191.4	192.6	179.8	191.2	191.9	179.3	191.3	192.4
1.2 Meat and fish	213.0	221.3	215.9	211.1	227.1	220.1	219.7	237.4	229.1	214.1	230.7	223.3
1.3 Egg	185.4	189.5	187.0	174.2	192.5	188.1	180.1	197.2	190.7	176.5	194.3	189.1
1.4 Milk and products	181.4	181.5	181.4	181.2	185.6	186.3	181.1	186.6	187.1	181.2	186.0	186.6
1.5 Oils and fats	165.3	158.7	162.9	165.2	163.4	164.0	159.0	157.1	157.1	162.9	161.1	161.5
1.6 Fruits	172.1	179.9	175.7	174.2	181.4	186.1	186.2	192.4	197.4	179.8	186.5	191.4
1.7 Vegetables	183.9	229.9	199.5	216.4	248.8	245.0	272.3	303.4	291.0	235.4	267.3	260.6
1.8 Pulses and products	192.2	196.5	193.7	187.8	211.5	212.5	191.5	218.0	219.0	189.0	213.7	214.7
1.9 Sugar and confectionery	126.2	128.1	126.9	124.8	130.4	130.7	127.0	132.3	132.7	125.5	131.0	131.4
1.10 Spices	238.0	228.4	234.8	242.1	229.4	229.5	231.4	225.0	224.9	238.5	227.9	228.0
1.11 Non-alcoholic beverages	180.7	168.2	175.5	180.3	183.0	183.8	167.7	172.1	172.8	175.0	178.4	179.2
1.12 Prepared meals, snacks, sweets	193.3	200.9	196.8	192.9	197.6	198.5	200.0	207.2	208.3	196.2	202.1	203.0
2 Pan, tobacco and intoxicants	**202.0**	**207.1**	**203.3**	**201.7**	**206.5**	**206.8**	**206.7**	**212.9**	**213.1**	**203.0**	**208.2**	**208.5**
3 Clothing and footwear	**192.9**	**181.5**	**188.4**	**192.3**	**196.7**	**197.2**	**180.8**	**185.5**	**186.0**	**187.7**	**192.3**	**192.8**
3.1 Clothing	193.5	183.5	189.6	192.9	197.5	198.0	182.8	187.6	188.1	188.9	193.6	194.1
3.2 Footwear	189.4	170.2	181.4	189.1	191.8	192.3	169.7	173.8	174.1	181.0	184.3	184.7
4 Housing	--	**176.7**	**176.7**	--	--	--	**176.4**	**180.0**	**181.1**	**176.4**	**180.0**	**181.1**
5 Fuel and light	**183.0**	**178.9**	**181.4**	**185.9**	**180.0**	**180.8**	**187.4**	**169.5**	**169.8**	**186.5**	**176.0**	**176.6**
6 Miscellaneous	**181.7**	**173.7**	**177.8**	**181.2**	**187.9**	**188.3**	**173.4**	**179.3**	**180.0**	**177.4**	**183.7**	**184.3**
6.1 Household goods and services	181.5	171.8	176.9	181.3	184.3	184.9	171.3	175.6	176.4	176.6	180.2	180.9
6.2 Health	190.8	185.2	188.7	189.8	196.5	197.3	184.3	191.4	192.2	187.7	194.6	195.4
6.3 Transport and communication	171.1	161.4	166.0	171.1	175.5	176.0	161.2	164.8	165.3	165.9	169.9	170.4
6.4 Recreation and amusement	175.8	171.1	173.2	175.6	179.0	179.6	170.8	174.2	174.8	172.9	176.3	176.9
6.5 Education	184.0	179.1	181.1	184.5	190.6	191.7	179.8	185.0	186.2	181.7	187.3	188.5
6.6 Personal care and effects	186.3	187.4	186.8	184.7	199.8	199.0	185.7	201.3	200.9	185.1	200.4	199.8
General Index (All Groups)	**185.6**	**182.4**	**184.1**	**187.6**	**195.3**	**195.4**	**184.5**	**190.3**	**190.3**	**186.2**	**193.0**	**193.0**

Source: National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India.
P: Provisional

No. 19: Other Consumer Price Indices

Item	Base Year	Linking Factor	2023-24	2023	2024	
				Jul.	Jun.	Jul.
	1	2	3	4	5	6
1 Consumer Price Index for Industrial Workers	2016	2.88	137.9	139.7	141.4	142.7
2 Consumer Price Index for Agricultural Labourers	1986-87	5.89	1229	1215	1280	1290
3 Consumer Price Index for Rural Labourers	1986-87	-	1240	1226	1292	1302

Source: Labour Bureau, Ministry of Labour and Employment, Government of India.

No. 20: Monthly Average Price of Gold and Silver in Mumbai

Item	2023-24	2023	2024	
		Jul.	Jun.	Jul.
	1	2	3	4
1 Standard Gold (₹ per 10 grams)	60624	58922	72014	71189
2 Silver (₹ per kilogram)	72243	72945	88666	88058

Source: India Bullion & Jewellers Association Ltd., Mumbai for Gold and Silver prices in Mumbai.

No. 21: Wholesale Price Index

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2023	2024		
			Aug.	Jun.	Jul.(P)	Aug.(P)
	1	2	3	4	5	6
1 ALL COMMODITIES	**100.000**	**151.4**	**152.5**	**154.0**	**155.2**	**154.5**
1.1 PRIMARY ARTICLES	**22.618**	**183.0**	**190.3**	**192.3**	**197.6**	**194.9**
1.1.1 FOOD ARTICLES	**15.256**	**191.3**	**202.8**	**205.5**	**213.0**	**209.1**
1.1.1.1 Food Grains (Cereals+Pulses)	3.462	193.8	190.1	206.6	208.1	209.7
1.1.1.2 Fruits & Vegetables	3.475	210.2	263.6	245.4	276.9	259.1
1.1.1.3 Milk	4.440	180.3	179.6	185.5	186.0	185.9
1.1.1.4 Eggs, Meat & Fish	2.402	172.1	174.4	174.5	173.7	173.2
1.1.1.5 Condiments & Spices	0.529	235.4	251.7	237.2	237.2	237.0
1.1.1.6 Other Food Articles	0.948	189.5	179.8	209.8	209.1	207.3
1.1.2 NON-FOOD ARTICLES	**4.119**	**162.4**	**163.2**	**157.3**	**157.2**	**159.8**
1.1.2.1 Fibres	0.839	168.0	170.6	160.2	164.2	160.6
1.1.2.2 Oil Seeds	1.115	185.0	187.8	180.0	179.8	177.7
1.1.2.3 Other non-food Articles	1.960	134.9	135.4	135.8	133.4	140.0
1.1.2.4 Floriculture	0.204	279.7	265.3	228.8	232.6	248.6
1.1.3 MINERALS	**0.833**	**217.7**	**205.5**	**229.6**	**229.6**	**223.5**
1.1.3.1 Metallic Minerals	0.648	204.2	189.0	225.4	225.4	212.4
1.1.3.2 Other Minerals	0.185	265.0	263.4	244.4	244.3	262.4
1.1.4 CRUDE PETROLEUM & NATURAL GAS	**2.410**	**153.6**	**152.3**	**156.0**	**157.9**	**155.0**
1.2 FUEL & POWER	**13.152**	**152.0**	**149.1**	**146.9**	**147.9**	**148.1**
1.2.1 COAL	**2.138**	**136.4**	**137.6**	**135.8**	**135.6**	**135.6**
1.2.1.1 Coking Coal	0.647	143.4	143.4	143.4	143.4	143.4
1.2.1.2 Non-Coking Coal	1.401	124.8	125.8	125.8	125.8	125.8
1.2.1.3 Lignite	0.090	267.6	279.8	236.0	232.0	232.0
1.2.2 MINERAL OILS	**7.950**	**159.0**	**157.6**	**155.7**	**157.4**	**156.9**
1.2.3 ELECTRICITY	**3.064**	**145.0**	**135.1**	**132.0**	**131.9**	**134.0**
1.3 MANUFACTURED PRODUCTS	**64.231**	**140.2**	**139.9**	**142.0**	**141.7**	**141.6**
1.3.1 MANUFACTURE OF FOOD PRODUCTS	**9.122**	**160.5**	**160.8**	**165.9**	**165.9**	**166.6**
1.3.1.1 Processing and Preserving of meat	0.134	145.3	143.0	157.2	156.6	153.7
1.3.1.2 Processing and Preserving of fish, Crustaceans, Molluscs and products thereof	0.204	142.9	144.0	143.8	141.9	147.1
1.3.1.3 Processing and Preserving of fruit and Vegetables	0.138	130.4	132.3	132.1	131.9	131.8
1.3.1.4 Vegetable and Animal oils and Fats	2.643	145.0	147.5	148.4	149.2	150.2
1.3.1.5 Dairy products	1.165	179.1	178.8	180.1	179.2	178.5
1.3.1.6 Grain mill products	2.010	175.6	174.1	185.1	184.5	185.4
1.3.1.7 Starches and Starch products	0.110	157.1	150.3	165.6	168.9	173.2
1.3.1.8 Bakery products	0.215	165.4	164.3	166.0	166.1	167.3
1.3.1.9 Sugar, Molasses & honey	1.163	134.6	132.6	139.2	138.5	139.6
1.3.1.10 Cocoa, Chocolate and Sugar confectionery	0.175	139.8	137.9	153.3	155.8	157.1
1.3.1.11 Macaroni, Noodles, Couscous and Similar farinaceous products	0.026	149.9	148.4	151.5	150.9	150.8
1.3.1.12 Tea & Coffee products	0.371	176.2	182.6	203.2	202.4	199.4
1.3.1.13 Processed condiments & salt	0.163	192.1	189.6	193.6	191.1	192.9
1.3.1.14 Processed ready to eat food	0.024	146.3	146.2	152.9	152.1	151.1
1.3.1.15 Health supplements	0.225	179.1	179.2	176.3	184.6	186.2
1.3.1.16 Prepared animal feeds	0.356	208.3	211.7	206.7	206.8	208.4
1.3.2 MANUFACTURE OF BEVERAGES	**0.909**	**131.5**	**131.4**	**133.4**	**133.6**	**133.9**
1.3.2.1 Wines & spirits	0.408	133.3	133.2	134.3	134.7	135.7
1.3.2.2 Malt liquors and Malt	0.225	135.6	135.6	139.0	138.9	138.7
1.3.2.3 Soft drinks; Production of mineral waters and Other bottled waters	0.275	125.5	125.1	127.4	127.5	127.3
1.3.3 MANUFACTURE OF TOBACCO PRODUCTS	**0.514**	**173.5**	**172.6**	**176.2**	**177.2**	**178.9**
1.3.3.1 Tobacco products	0.514	173.5	172.6	176.2	177.2	178.9

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2023	2024		
			Aug.	Jun.	Jul.(P)	Aug.(P)
	1	2	3	4	5	6
1.3.4 MANUFACTURE OF TEXTILES	**4.881**	**134.6**	**134.1**	**136.4**	**136.7**	**136.5**
1.3.4.1 Preparation and Spinning of textile fibres	2.582	120.1	119.8	122.1	122.5	122.5
1.3.4.2 Weaving & Finishing of textiles	1.509	157.5	156.9	158.1	158.1	157.6
1.3.4.3 Knitted and Crocheted fabrics	0.193	120.0	119.9	124.1	125.2	123.6
1.3.4.4 Made-up textile articles, Except apparel	0.299	156.6	156.6	159.3	158.8	160.2
1.3.4.5 Cordage, Rope, Twine and Netting	0.098	139.2	141.8	138.8	141.1	141.1
1.3.4.6 Other textiles	0.201	129.6	124.5	135.1	133.1	133.7
1.3.5 MANUFACTURE OF WEARING APPAREL	**0.814**	**150.8**	**150.6**	**152.3**	**152.1**	**152.8**
1.3.5.1 Manufacture of Wearing Apparel (woven), Except fur Apparel	0.593	148.7	149.0	150.3	150.1	150.2
1.3.5.2 Knitted and Crocheted apparel	0.221	156.6	154.8	157.6	157.4	159.7
1.3.6 MANUFACTURE OF LEATHER AND RELATED PRODUCTS	**0.535**	**124.1**	**125.5**	**124.6**	**124.5**	**124.7**
1.3.6.1 Tanning and Dressing of leather; Dressing and Dyeing of fur	0.142	107.3	110.8	105.1	104.5	103.6
1.3.6.2 Luggage, HandbAgs, Saddlery and Harness	0.075	140.9	140.9	141.8	141.6	142.9
1.3.6.3 Footwear	0.318	127.7	128.4	129.2	129.4	129.9
1.3.7 MANUFACTURE OF WOOD AND PRODUCTS OF WOOD AND CORK	**0.772**	**146.6**	**144.9**	**149.5**	**149.5**	**149.5**
1.3.7.1 Saw milling and Planing of wood	0.124	137.8	137.6	139.6	139.8	140.8
1.3.7.2 Veneer sheets; Manufacture of plywood, Laminboard, Particle board and Other panels and Boards	0.493	146.1	143.8	149.3	149.2	149.0
1.3.7.3 Builder's carpentry and Joinery	0.036	206.4	201.8	215.4	215.6	215.9
1.3.7.4 Wooden containers	0.119	139.8	139.8	141.4	141.2	141.1
1.3.8 MANUFACTURE OF PAPER AND PAPER PRODUCTS	**1.113**	**140.3**	**139.0**	**138.4**	**138.7**	**139.7**
1.3.8.1 Pulp, Paper and Paperboard	0.493	147.6	146.8	144.3	144.6	145.3
1.3.8.2 Corrugated paper and Paperboard and Containers of paper and Paperboard	0.314	140.9	140.3	144.6	145.6	146.1
1.3.8.3 Other articles of paper and Paperboard	0.306	128.0	125.1	122.6	121.9	124.1
1.3.9 PRINTING AND REPRODUCTION OF RECORDED MEDIA	**0.676**	**182.3**	**183.1**	**185.2**	**186.3**	**186.0**
1.3.9.1 Printing	0.676	182.3	183.1	185.2	186.3	186.0
1.3.10 MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS	**6.465**	**136.9**	**136.3**	**136.4**	**136.8**	**136.6**
1.3.10.1 Basic chemicals	1.433	139.9	138.3	137.8	137.9	137.7
1.3.10.2 Fertilizers and Nitrogen compounds	1.485	142.8	141.4	143.3	143.3	143.2
1.3.10.3 Plastic and Synthetic rubber in primary form	1.001	132.3	132.8	134.1	135.3	134.2
1.3.10.4 Pesticides and Other agrochemical products	0.454	132.8	132.9	128.0	128.6	128.8
1.3.10.5 Paints, Varnishes and Similar coatings, Printing ink and Mastics	0.491	143.7	143.6	139.0	140.2	140.3
1.3.10.6 Soap and Detergents, Cleaning and Polishing preparations, Perfumes and Toilet preparations	0.612	139.7	140.1	139.0	138.9	138.9
1.3.10.7 Other chemical products	0.692	134.4	134.3	135.8	136.4	136.4
1.3.10.8 Man-made fibres	0.296	103.6	103.5	107.2	107.3	106.9
1.3.11 MANUFACTURE OF PHARMACEUTICALS, MEDICINAL CHEMICAL AND BOTANICAL PRODUCTS	**1.993**	**142.9**	**141.8**	**144.0**	**144.7**	**144.6**
1.3.11.1 Pharmaceuticals, Medicinal chemical and Botanical products	1.993	142.9	141.8	144.0	144.7	144.6
1.3.12 MANUFACTURE OF RUBBER AND PLASTICS PRODUCTS	**2.299**	**127.5**	**127.1**	**128.8**	**129.0**	**129.0**
1.3.12.1 Rubber Tyres and Tubes; Retreading and Rebuilding of Rubber Tyres	0.609	113.7	113.6	113.6	114.9	114.6
1.3.12.2 Other Rubber Products	0.272	107.3	106.7	110.4	112.1	112.7
1.3.12.3 Plastics products	1.418	137.3	136.8	138.9	138.3	138.3
1.3.13 MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS	**3.202**	**134.7**	**135.0**	**130.7**	**130.5**	**129.8**
1.3.13.1 Glass and Glass products	0.295	163.8	163.0	162.7	163.5	163.2
1.3.13.2 Refractory products	0.223	119.7	123.1	118.5	118.1	118.8
1.3.13.3 Clay Building Materials	0.121	123.9	123.5	112.7	117.1	121.6
1.3.13.4 Other Porcelain and Ceramic Products	0.222	122.3	121.8	124.4	124.6	124.6
1.3.13.5 Cement, Lime and Plaster	1.645	137.3	137.5	130.3	129.9	127.9

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2023	2024		
			Aug.	Jun.	Jul.(P)	Aug.(P)
	1	2	3	4	5	6
1.3.13.6 Articles of Concrete, Cement and Plaster	0.292	137.7	138.4	139.7	138.4	138.2
1.3.13.7 Cutting, Shaping and Finishing of Stone	0.234	130.3	130.7	132.3	132.8	133.7
1.3.13.8 Other Non-Metallic Mineral Products	0.169	102.4	103.0	97.4	95.7	96.8
1.3.14 MANUFACTURE OF BASIC METALS	**9.646**	**141.0**	**140.6**	**143.3**	**141.1**	**139.5**
1.3.14.1 Inputs into steel making	1.411	140.3	136.1	140.3	135.0	133.1
1.3.14.2 Metallic Iron	0.653	153.6	154.9	150.9	148.4	146.5
1.3.14.3 Mild Steel - Semi Finished Steel	1.274	119.9	120.7	121.7	119.2	117.8
1.3.14.4 Mild Steel -Long Products	1.081	141.3	140.8	143.6	140.2	138.9
1.3.14.5 Mild Steel - Flat products	1.144	143.4	141.8	140.6	139.6	137.0
1.3.14.6 Alloy steel other than Stainless Steel- Shapes	0.067	137.6	136.6	141.3	136.5	134.6
1.3.14.7 Stainless Steel - Semi Finished	0.924	136.4	139.7	132.9	131.3	128.9
1.3.14.8 Pipes & tubes	0.205	169.7	167.8	166.1	167.1	166.3
1.3.14.9 Non-ferrous metals incl. precious metals	1.693	144.8	143.7	158.2	156.6	154.7
1.3.14.10 Castings	0.925	141.0	143.0	144.5	145.0	145.4
1.3.14.11 Forgings of steel	0.271	173.3	174.5	174.4	171.4	170.7
1.3.15 MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENT	**3.155**	**138.6**	**138.9**	**136.1**	**136.2**	**136.8**
1.3.15.1 Structural Metal Products	1.031	132.3	133.3	130.4	130.9	131.2
1.3.15.2 Tanks, Reservoirs and Containers of Metal	0.660	157.6	158.3	151.6	151.4	152.0
1.3.15.3 Steam generators, Except Central Heating Hot Water Boilers	0.145	106.3	105.6	109.6	111.2	111.5
1.3.15.4 Forging, Pressing, Stamping and Roll-Forming of Metal; Powder Metallurgy	0.383	141.4	142.5	135.3	135.5	138.4
1.3.15.5 Cutlery, Hand Tools and General Hardware	0.208	108.4	108.5	101.5	101.7	101.9
1.3.15.6 Other Fabricated Metal Products	0.728	143.8	142.5	145.8	145.2	145.1
1.3.16 MANUFACTURE OF COMPUTER, ELECTRONIC AND OPTICAL PRODUCTS	**2.009**	**119.3**	**119.4**	**121.9**	**121.1**	**121.3**
1.3.16.1 Electronic Components	0.402	115.0	115.6	117.7	117.6	117.4
1.3.16.2 Computers and Peripheral Equipment	0.336	135.3	135.1	135.3	136.0	136.2
1.3.16.3 Communication Equipment	0.310	136.1	136.9	145.9	145.9	145.4
1.3.16.4 Consumer Electronics	0.641	103.6	103.4	103.3	100.5	100.5
1.3.16.5 Measuring, Testing, Navigating and Control equipment	0.181	113.8	114.2	117.8	118.1	118.1
1.3.16.6 Watches and Clocks	0.076	157.2	156.6	163.0	163.1	166.3
1.3.16.7 Irradiation, Electromedical and Electrotherapeutic equipment	0.055	108.3	108.9	109.9	109.9	115.0
1.3.16.8 Optical instruments and Photographic equipment	0.008	103.8	103.6	109.8	107.2	106.7
1.3.17 MANUFACTURE OF ELECTRICAL EQUIPMENT	**2.930**	**131.4**	**132.1**	**133.6**	**133.4**	**133.4**
1.3.17.1 Electric motors, Generators, Transformers and Electricity distribution and Control apparatus	1.298	130.1	131.6	131.3	131.1	131.4
1.3.17.2 Batteries and Accumulators	0.236	137.8	136.5	141.7	141.7	141.8
1.3.17.3 Fibre optic cables for data transmission or live transmission of images	0.133	123.4	123.6	121.0	120.7	120.7
1.3.17.4 Other electronic and Electric wires and Cables	0.428	146.1	146.3	155.8	154.4	153.4
1.3.17.5 Wiring devices, Electric lighting & display equipment	0.263	116.8	116.1	119.5	119.0	119.1
1.3.17.6 Domestic appliances	0.366	133.8	135.2	132.0	131.9	132.4
1.3.17.7 Other electrical equipment	0.206	120.9	121.1	122.2	123.2	122.6
1.3.18 MANUFACTURE OF MACHINERY AND EQUIPMENT	**4.789**	**129.0**	**128.5**	**130.8**	**130.4**	**130.7**
1.3.18.1 Engines and Turbines, Except aircraft, Vehicle and Two wheeler engines	0.638	128.9	127.9	132.4	133.0	132.4
1.3.18.2 Fluid power equipment	0.162	131.9	130.5	133.9	133.9	133.9
1.3.18.3 Other pumps, Compressors, Taps and Valves	0.552	117.4	116.7	118.2	118.2	118.2
1.3.18.4 Bearings, Gears, Gearing and Driving elements	0.340	127.7	126.7	129.0	128.4	127.9
1.3.18.5 Ovens, Furnaces and Furnace burners	0.008	83.7	84.0	86.6	83.7	83.8
1.3.18.6 Lifting and Handling equipment	0.285	128.6	128.7	130.3	130.3	129.6

No. 21: Wholesale Price Index (Concld.)

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2023	2024		
			Aug.	Jun.	Jul.(P)	Aug.(P)
	1	2	3	4	5	6
1.3.18.7 Office machinery and Equipment	0.006	130.2	130.2	130.2	130.2	130.2
1.3.18.8 Other general-purpose machinery	0.437	145.2	145.4	148.4	146.6	149.2
1.3.18.9 Agricultural and Forestry machinery	0.833	142.5	141.2	145.0	143.5	144.3
1.3.18.10 Metal-forming machinery and Machine tools	0.224	122.5	122.3	122.4	122.4	122.8
1.3.18.11 Machinery for mining, Quarrying and Construction	0.371	88.6	88.4	89.4	89.0	88.9
1.3.18.12 Machinery for food, Beverage and Tobacco processing	0.228	124.4	124.4	125.8	125.9	126.2
1.3.18.13 Machinery for textile, Apparel and Leather production	0.192	137.2	138.6	136.3	137.6	141.9
1.3.18.14 Other special-purpose machinery	0.468	144.7	144.1	145.7	145.2	145.1
1.3.18.15 Renewable electricity generating equipment	0.046	70.8	71.0	69.6	69.7	69.1
1.3.19 MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS	**4.969**	**128.4**	**128.3**	**130.0**	**129.7**	**130.0**
1.3.19.1 Motor vehicles	2.600	128.5	128.9	130.8	130.2	130.5
1.3.19.2 Parts and Accessories for motor vehicles	2.368	128.2	127.7	129.2	129.1	129.4
1.3.20 MANUFACTURE OF OTHER TRANSPORT EQUIPMENT	**1.648**	**143.1**	**142.8**	**143.8**	**144.4**	**144.6**
1.3.20.1 Building of ships and Floating structures	0.117	163.7	163.7	177.9	177.9	177.9
1.3.20.2 Railway locomotives and Rolling stock	0.110	107.4	106.4	108.3	109.8	110.0
1.3.20.3 Motor cycles	1.302	144.7	144.4	144.4	145.0	145.4
1.3.20.4 Bicycles and Invalid carriages	0.117	137.9	138.5	135.7	136.0	135.2
1.3.20.5 Other transport equipment	0.002	159.2	157.5	161.5	160.2	158.9
1.3.21 MANUFACTURE OF FURNITURE	**0.727**	**159.6**	**160.1**	**157.5**	**157.4**	**159.1**
1.3.21.1 Furniture	0.727	159.6	160.1	157.5	157.4	159.1
1.3.22 OTHER MANUFACTURING	**1.064**	**158.2**	**154.7**	**177.9**	**178.8**	**174.1**
1.3.22.1 Jewellery and Related articles	0.996	157.9	154.1	179.1	180.0	175.0
1.3.22.2 Musical instruments	0.001	187.0	179.0	201.9	200.0	201.4
1.3.22.3 Sports goods	0.012	155.2	155.4	161.7	163.0	163.6
1.3.22.4 Games and Toys	0.005	159.6	160.4	161.7	161.5	164.1
1.3.22.5 Medical and Dental instruments and Supplies	0.049	163.1	164.5	158.6	158.6	159.7
2 FOOD INDEX	**24.378**	**179.8**	**187.1**	**190.7**	**195.4**	**193.2**

Source: Office of the Economic Adviser, Ministry of Commerce and Industry, Government of India.

No. 22: Index of Industrial Production (Base:2011-12=100)

Industry	Weight	2022-23	2023-24	Apr-Jul		Jul	
				2023-24	2024-25	2023	2024
	1	2	3	4	5	6	7
General Index	100.00	138.5	146.7	143.2	150.7	142.7	149.6
1 Sectoral Classification							
1.1 Mining	14.37	119.9	128.9	121.2	129.6	111.9	116.0
1.2 Manufacturing	77.63	137.1	144.7	141.4	147.4	142.1	148.6
1.3 Electricity	7.99	185.2	198.3	200.8	221.1	204.0	220.2
2 Use-Based Classification							
2.1 Primary Goods	34.05	139.2	147.7	145.2	154.8	141.8	150.1
2.2 Capital Goods	8.22	100.3	106.6	101.1	106.6	102.1	114.4
2.3 Intermediate Goods	17.22	149.4	157.3	154.2	161.0	153.8	164.3
2.4 Infrastructure/ Construction Goods	12.34	160.7	176.3	171.1	182.5	170.3	178.7
2.5 Consumer Durables	12.84	114.5	118.6	114.4	125.8	117.0	126.6
2.6 Consumer Non-Durables	15.33	147.7	153.7	151.2	149.0	153.5	146.8

Source : Central Statistics Office, Ministry of Statistics and Programme Implementation, Government of India.

Government Accounts and Treasury Bills

No. 23: Union Government Accounts at a Glance

(₹ Crore)

Item	Financial Year	April – July			
	2024-25 (Budget Estimates)	2024-25 (Actuals)	2023-24 (Actuals)	Percentage to Budget Estimates	
				2024-25	2023-24
	1	2	3	4	5
1 Revenue Receipts	**3129200**	**1017020**	**761389**	**32.5**	**28.9**
1.1 Tax Revenue (Net)	2583499	715224	582585	27.7	25.0
1.2 Non-Tax Revenue	545701	301796	178804	55.3	59.3
2 Non Debt Capital Receipt	**78000**	**6386**	**13718**	**8.2**	**16.3**
2.1 Recovery of Loans	28000	6381	8253	22.8	35.9
2.2 Other Receipts	50000	5	5465	0.0	9.0
3 Total Receipts (excluding borrowings) (1+2)	**3207200**	**1023406**	**775107**	**31.9**	**28.5**
4 Revenue Expenditure of which :	3709401	1039091	1063621	28.0	30.4
4.1 Interest Payments	1162940	327887	299889	28.2	27.8
5 Capital Expenditure	1111111	261260	317079	23.5	31.7
6 Total Expenditure (4+5)	**4820512**	**1300351**	**1380700**	**27.0**	**30.7**
7 Revenue Deficit (4-1)	**580201**	**22071**	**302232**	**3.8**	**34.7**
8 Fiscal Deficit (6-3)	**1613312**	**276945**	**605593**	**17.2**	**33.9**
9 Gross Primary Deficit (8-4.1)	**450372**	**-50942**	**305704**	**-11.3**	**43.2**

Source: Controller General of Accounts (CGA), Ministry of Finance, Government of India and Interim Union Budget 2024-25.

No. 24: Treasury Bills – Ownership Pattern

(₹ Crore)

Item	2023-24	2023	2024					
		Jul. 28	Jun. 21	Jun. 28	Jul. 5	Jul. 12	Jul. 19	Jul. 26
	1	2	3	4	5	6	7	8
1 91-day								
1.1 Banks	18054	20183	6606	10411	5790	3856	2323	2466
1.2 Primary Dealers	22676	19282	27126	24135	18519	17056	16734	9749
1.3 State Governments	5701	35727	44835	46310	38710	30300	41340	46140
1.4 Others	88670	122735	95368	88554	94791	95188	93042	95885
2 182-day								
2.1 Banks	84913	63735	61859	54590	49091	48413	51095	51248
2.2 Primary Dealers	87779	119595	58731	66312	61856	63109	59966	57730
2.3 State Governments	4070	20791	14592	14592	15592	15292	15292	14922
2.4 Others	102311	138170	127409	123098	129053	124478	120939	119522
3 364-day								
3.1 Banks	91819	81443	92156	92592	90418	88810	89690	90700
3.2 Primary Dealers	159085	182603	145237	143140	140991	142478	140420	137182
3.3 State Governments	41487	49427	37753	38191	38184	38589	38603	38525
3.4 Others	165095	136953	158607	156268	160591	160712	161890	164118
4 14-day Intermediate								
4.1 Banks								
4.2 Primary Dealers								
4.3 State Governments	318736	172959	245624	204835	143591	197638	177044	175531
4.4 Others	442	730	379	592	1345	720	646	1008
Total Treasury Bills (Excluding 14 day Intermediate T Bills) #	871662	990645	870281	858193	843586	828282	831336	828188

14D intermediate T-Bills are non-marketable unlike 91D, 182D and 364D T-Bills. These bills are 'intermediate' by nature as these are liquidated to replenish shortfall in the daily minimum cash balances of State Governments.
Note: Primary Dealers (PDs) include banks undertaking PD business.

No. 25: Auctions of Treasury Bills

(Amount in ₹ Crore)

Date of Auction	Notified Amount	Bids Received			Bids Accepted			Total Issue (6+7)	Cutoff Price (₹)	Implicit Yield at Cut-off Price (per cent)
		Number	Total Face Value		Number	Total Face Value				
			Competitive	Non-Competitive		Competitive	Non-Competitive			
	1	2	3	4	5	6	7	8	9	10
91-day Treasury Bills										
2024-25										
Jul. 3	8000	93	29591	1965	21	7935	1965	9900	98.34	6.7810
Jul. 10	8000	99	30464	13565	25	7935	13565	21500	98.34	6.7578
Jul. 18	8000	92	31361	13581	44	7959	13581	21540	98.35	6.7399
Jul. 24	8000	102	30786	6054	35	7946	6054	14000	98.35	6.7130
Jul. 31	8000	95	19776	748	47	7952	748	8700	98.36	6.6736
182-day Treasury Bills										
2024-25										
Jul. 3	6000	153	27489	1035	32	5965	1035	7000	96.67	6.9000
Jul. 10	6000	99	20507	81	23	5919	81	6000	96.69	6.8699
Jul. 18	6000	95	18666	1576	45	5924	1576	7500	96.70	6.8451
Jul. 24	6000	119	19854	712	46	5943	712	6655	96.71	6.8249
Jul. 31	6000	99	17547	1661	53	5964	1661	7625	96.73	6.7885
364-day Treasury Bills										
2024-25										
Jul. 3	6000	139	23190	137	53	5962	137	6099	93.52	6.9498
Jul. 10	6000	148	28619	437	32	5975	437	6412	93.55	6.9194
Jul. 18	6000	129	29830	35	14	5979	35	6014	93.58	6.8740
Jul. 24	6000	128	27277	89	30	5982	89	6071	93.62	6.8365
Jul. 31	6000	124	25880	361	49	5984	361	6345	93.65	6.7985

Financial Markets

No. 26: Daily Call Money Rates

(Per cent per annum)

As on	Range of Rates	Weighted Average Rates
	Borrowings/ Lendings	Borrowings/ Lendings
	1	2
July 01 ,2024	5.10-6.65	6.54
July 02 ,2024	5.00-6.60	6.49
July 03 ,2024	5.10-6.55	6.49
July 04 ,2024	5.10-6.55	6.50
July 05 ,2024	4.50-6.65	6.52
July 06 ,2024	5.50-6.24	6.13
July 08 ,2024	5.10-6.65	6.54
July 09 ,2024	5.10-6.55	6.47
July 10 ,2024	5.10-6.60	6.47
July 11 ,2024	5.10-6.60	6.47
July 12 ,2024	5.10-6.55	6.46
July 15 ,2024	5.10-6.55	6.47
July 16 ,2024	5.10-6.55	6.48
July 18 ,2024	5.10-6.60	6.47
July 19 ,2024	5.10-6.60	6.49
July 20 ,2024	5.50-6.24	6.11
July 22 ,2024	5.10-6.75	6.60
July 23 ,2024	5.10-6.80	6.67
July 24 ,2024	5.10-6.80	6.67
July 25 ,2024	5.10-6.70	6.56
July 26 ,2024	5.10-6.55	6.48
July 29 ,2024	5.10-6.55	6.48
July 30 ,2024	5.10-6.55	6.47
July 31 ,2024	5.10-6.60	6.49
August 01 ,2024	5.10-6.55	6.47
August 02 ,2024	5.10-6.55	6.45
August 03 ,2024	5.50-6.50	6.08
August 05 ,2024	5.10-6.55	6.45
August 06 ,2024	5.10-6.50	6.41
August 07 ,2024	5.10-6.75	6.47
August 08 ,2024	5.10-6.80	6.65
August 09 ,2024	5.10-6.65	6.53
August 12 ,2024	5.10-6.55	6.47
August 13 ,2024	5.10-6.55	6.48
August 14 ,2024	5.10-6.60	6.48

Note: Includes Notice Money.

No. 27: Certificates of Deposit

Item	2023	2024			
	Jul. 28	Jun. 14	Jun. 28	Jul. 12	Jul. 26
	1	2	3	4	5
1 Amount Outstanding (₹ Crore)	307002.89	352302.19	409554.44	424835.55	424747.21
1.1 Issued during the fortnight (₹ Crore)	25601.63	55859.00	84271.02	34710.85	23643.34
2 Rate of Interest (per cent)	6.76-7.89	6.95-7.75	6.97-7.71	6.95-7.24	7.02-7.26

No. 28: Commercial Paper

Item	2023	2024			
	Jul. 31	Jun. 15	Jun. 30	Jul. 15	Jul. 31
	1	2	3	4	5
1 Amount Outstanding (₹ Crore)	444567.60	431100.55	422447.45	440818.85	458911.05
1.1 Reported during the fortnight (₹ Crore)	65987.70	106920.70	56023.85	37452.10	67966.95
2 Rate of Interest (per cent)	6.75-12.23	6.95-12.08	6.99-15.06	6.93-11.69	6.89-12.07

No. 29: Average Daily Turnover in Select Financial Markets

(₹ Crore)

Item	2023-24	2023	2024					
		Jul. 28	Jun. 21	Jun. 28	Jul. 5	Jul. 12	Jul. 19	Jul. 26
	1	2	3	4	5	6	7	8
1 Call Money	17761	21447	19913	23962	16171	17506	15785	17812
2 Notice Money	2550	185	613	3722	3481	308	4624	228
3 Term Money	871	491	673	613	1149	1050	733	618
4 Triparty Repo	601363	615266	617320	799629	668230	607911	739055	693314
5 Market Repo	574534	651665	539543	663566	545361	528564	632592	566606
6 Repo in Corporate Bond	1817	1178	2865	3558	3321	4071	3352	3283
7 Forex (US $ million)	95115	96828	110450	135891	93725	101334	105661	103577
8 Govt. of India Dated Securities	90992	90813	108012	107938	77825	80996	119858	139737
9 State Govt. Securities	6102	4199	11282	9999	7107	7881	5759	6747
10 Treasury Bills								
10.1 91-Day	5378	3955	2336	8036	10592	5453	3400	3301
10.2 182-Day	6079	4788	3692	5128	9259	3380	6441	4933
10.3 364-Day	4307	2426	2813	4984	5608	3406	4208	4467
10.4 Cash Management Bills			0	0	0	0	0	0
11 Total Govt. Securities (8+9+10)	112858	106181	128135	136084	110391	101115	139667	159184
11.1 RBI	492	24	1026	948	87	1093	1196	2077

No. 30: New Capital Issues by Non-Government Public Limited Companies

(Amount in ₹ Crore)

Security & Type of Issue	2023-24		2023-24 (Apr.-Jul.)		2024-25 (Apr.-Jul.) *		Jul. 2023		Jul. 2024 *	
	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount
	1	2	3	4	5	6	7	8	9	10
1 Equity Shares	**339**	**80942**	**81**	**15126**	**154**	**50281**	**28**	**4387**	**42**	**9001**
1A Premium	328	76319	75	13997	144	32249	27	3749	40	8481
1.1 Public	272	65832	57	10491	106	42592	21	3610	31	6210
1.1.1 Premium	272	62791	57	10040	106	25527	21	3301	31	6026
1.2 Rights	67	15110	24	4636	48	7690	7	777	11	2791
1.2.1 Premium	56	13527	18	3956	38	6722	6	448	9	2455
2 Preference Shares	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
2.1 Public	-	-	-	-	-	-	-	-	-	-
2.2 Rights	-	-	-	-	-	-	-	-	-	-
3 Bonds & Debentures	**44**	**16342**	**12**	**3416**	**12**	**2716**	**3**	**841**	**2**	**262**
3.1 Convertible	-	-	-	-	-	-	-	-	-	-
3.1.1 Public	-	-	-	-	-	-	-	-	-	-
3.1.2 Rights	-	-	-	-	-	-	-	-	-	-
3.2 Non-Convertible	44	16342	12	3416	12	2716	3	841	2	262
3.2.1 Public	44	16342	12	3416	12	2716	3	841	2	262
3.2.2 Rights	-	-	-	-	-	-	-	-	-	-
4 Total (1+2+3)	**383**	**97284**	**93**	**18542**	**166**	**52997**	**31**	**5228**	**44**	**9263**
4.1 Public	316	82174	69	13907	118	45307	24	4451	33	6472
4.2 Rights	67	15110	24	4636	48	7690	7	777	11	2791

Note : 1. Since April 2020, monthly data on equity issues is compiled on the basis of their listing date.
2. Figures in the columns might not add up to the total due to rounding off numbers.

Source : Securities and Exchange Board of India.

* : Data is Provisional

External Sector

No. 31: Foreign Trade

Item	Unit	2023-24	2023	2024				
			Jul.	Mar.	Apr.	May	Jun.	Jul.
		1	2	3	4	5	6	7
1 Exports	₹ Crore	3618952	283341	346040	294476	330245	293540	283332
	US $ Million	437072	34490	41693	35306	39601	35167	33894
1.1 Oil	₹ Crore	696850	55171	44950	58783	67624	45865	43703
	US $ Million	84157	6716	5416	7048	8109	5495	5228
1.2 Non-oil	₹ Crore	2922102	228170	301089	235693	262621	247675	239629
	US $ Million	352915	27774	36277	28258	31492	29672	28666
2 Imports	₹ Crore	5616042	439397	473312	456100	518032	473168	480469
	US $ Million	678215	53486	57027	54684	62119	56687	57476
2.1 Oil	₹ Crore	1480232	97042	135638	137648	166315	125611	115968
	US $ Million	178733	11813	16342	16503	19944	15048	13873
2.2 Non-oil	₹ Crore	4135810	342355	337674	318452	351716	347557	364501
	US $ Million	499482	41673	40685	38181	42176	41638	43603
3 Trade Balance	₹ Crore	-1997090	-156056	-127272	-161624	-187786	-179628	-197137
	US $ Million	-241143	-18996	-15334	-19378	-22518	-21520	-23582
3.1 Oil	₹ Crore	-783382	-41871	-90687	-78865	-98691	-79746	-72265
	US $ Million	-94576	-5097	-10927	-9456	-11835	-9554	-8645
3.2 Non-oil	₹ Crore	-1213708	-114185	-36584	-82759	-89095	-99882	-124871
	US $ Million	-146567	-13899	-4408	-9922	-10684	-11966	-14938

Note: Data in the table are provisional.
Source: Directorate General of Commercial Intelligence and Statistics.

No. 32: Foreign Exchange Reserves

Item	Unit	2023	2024					
		Sep. 01	Jul. 26	Aug. 02	Aug. 09	Aug. 16	Aug. 23	Aug. 30
		1	2	3	4	5	6	7
1 Total Reserves	**₹ Crore**	**4953552**	**5587802**	**5652457**	**5625930**	**5664078**	**5719971**	**5736861**
	US $ Million	**598897**	**667386**	**674919**	**670119**	**674664**	**681688**	**683987**
1.1 Foreign Currency Assets	₹ Crore	4389432	4913727	4958347	4936193	4966459	5014012	5024359
	US $ Million	530691	586877	592039	587960	591569	597552	599037
1.2 Gold	₹ Crore	371694	483062	503330	497338	504594	511818	518835
	US $ Million	44939	57695	60099	59239	60104	60997	61859
	Volume (Metric Tonnes)	799.59	843.38	846.18	848.98	848.98	848.98	848.98
1.3 SDRs	SDRs Million	13681	13699	13699	13699	13702	13702	13702
	₹ Crore	150491	152398	152096	153484	153983	154888	154901
	US $ Million	18195	18202	18161	18282	18341	18459	18468
1.4 Reserve Tranche Position in IMF	₹ Crore	41935	38614	38685	38915	39042	39253	38766
	US $ Million	5073	4612	4620	4638	4650	4680	4622

* Difference, if any, is due to rounding off.
Note: Exclude investment in foreign currency denominated bonds issued by IIFC (UK), SDRs transferred by Government of India to RBI and foreign currency received under SAARC and ACU currency swap arrangements. Foreign currency assets in US dollar take into account appreciation/depreciation of non-US currencies (such as Euro, Sterling, Yen and Australian Dollar) held in reserves. Foreign exchange holdings are converted into rupees at rupee-US dollar RBI holding rates.

No. 33: Non-Resident Deposits

(US $ Million)

Scheme	Outstanding				Flows	
	2023-24	2023	2024		2023-24	2024-25
		Jul.	Jun.	Jul. (P)	Apr.-Jul.	Apr.-Jul.(P)
	1	2	3	4	5	6
1 NRI Deposits	**151879**	**141850**	**155782**	**157157**	**3013**	**5820**
1.1 FCNR(B)	25733	20808	27414	28572	1445	2839
1.2 NR(E)RA	98624	96351	100111	99981	568	1780
1.3 NRO	27522	24690	28257	28603	1000	1201

P: Provisional.

No. 34: Foreign Investment Inflows

(US $ Million)

Item	2023-24	2023-24	2024-25 (P)	2023	2024 (P)	
		Apr.-Jul.	Apr.-Jul.	Jul.	Jun.	Jul.
	1	2	3	4	5	6
1.1 Net Foreign Direct Investment (1.1.1-1.1.2)	**9790**	**3800**	**5518**	**-927**	**-212**	**-1412**
1.1.1 Direct Investment to India (1.1.1.1-1.1.1.2)	**26469**	**7737**	**11790**	**376**	**652**	**1285**
1.1.1.1 Gross Inflows/Gross Investments	**70941**	**22393**	**27708**	**4604**	**7332**	**5217**
1.1.1.1.1 Equity	45817	13923	19823	2658	5521	3325
1.1.1.1.1.1 Government (SIA/FIPB)	585	98	321	53	118	112
1.1.1.1.1.2 RBI	31826	10985	13864	1721	3244	2099
1.1.1.1.1.3 Acquisition of shares	12013	2409	5207	772	2052	1002
1.1.1.1.1.4 Equity capital of unincorporated bodies	1394	432	432	111	107	111
1.1.1.1.2 Reinvested earnings	19768	6121	6121	1580	1514	1580
1.1.1.1.3 Other capital	5355	2350	1764	367	297	312
1.1.1.2 Repatriation/Disinvestment	**44472**	**14656**	**15918**	**4229**	**6679**	**3932**
1.1.1.2.1 Equity	41334	13443	15043	4093	6620	3555
1.1.1.2.2 Other capital	3137	1213	875	136	59	377
1.1.2 Foreign Direct Investment by India (1.1.2.1+1.1.2.2+1.1.2.3-1.1.2.4)	**16678**	**3937**	**6272**	**1302**	**864**	**2697**
1.1.2.1 Equity capital	9111	2324	4369	460	538	2194
1.1.2.2 Reinvested Earnings	5786	1929	1929	482	482	482
1.1.2.3 Other Capital	5406	1461	1388	648	286	286
1.1.2.4 Repatriation/Disinvestment	3624	1777	1413	288	442	266
1.2 Net Portfolio Investment (1.2.1+1.2.2+1.2.3-1.2.4)	**44081**	**20023**	**6238**	**4292**	**5249**	**5108**
1.2.1 GDRs/ADRs	-	-	-	-	-	-
1.2.2 FIIs	44626	20495	6275	4406	5281	5192
1.2.3 Offshore funds and others	-	-	-	-	-	-
1.2.4 Portfolio investment by India	544	472	37	113	32	84
1 Foreign Investment Inflows	**53872**	**23824**	**11756**	**3366**	**5037**	**3696**

P: Provisional

No. 35: Outward Remittances under the Liberalised Remittance Scheme (LRS) for Resident Individuals

(US $ Million)

Item	2023-24	2023	2024		
		Jul.	May.	Jun.	Jul.
	1	2	3	4	5
1 Outward Remittances under the LRS	**31735.74**	**2359.51**	**2420.58**	**2181.85**	**2754.05**
1.1 Deposit	916.45	50.12	52.98	39.02	41.68
1.2 Purchase of immovable property	242.51	14.89	21.69	18.77	24.54
1.3 Investment in equity/debt	1510.89	58.06	98.86	120.22	120.86
1.4 Gift	3580.27	233.96	271.93	228.81	275.26
1.5 Donations	11.31	0.65	0.58	2.01	0.68
1.6 Travel	17006.27	1419.42	1401.16	1275.63	1662.13
1.7 Maintenance of close relatives	4611.53	282.30	320.80	270.72	337.40
1.8 Medical Treatment	79.62	4.22	7.66	6.42	8.62
1.9 Studies Abroad	3478.65	267.28	210.99	177.07	272.16
1.10 Others	298.24	28.62	33.94	43.19	10.72

No. 36: Indices of Nominal Effective Exchange Rate (NEER) and Real Effective Exchange Rate (REER) of the Indian Rupee

Item	2022-23	2023-24	2023	2024	
			Aug	Jul	Aug
	1	2	3	4	5
40-Currency Basket (Base: 2015-16=100)					
1 Trade-Weighted					
1.1 NEER	91.20	90.74	90.86	92.02	90.84
1.2 REER	102.78	103.70	105.41	107.45	105.45
2 Export-Weighted					
2.1 NEER	93.01	93.12	93.08	94.48	93.46
2.2 REER	101.10	101.21	102.74	104.46	102.75
6-Currency Basket (Trade-weighted)					
1 Base : 2015-16 =100					
1.1 NEER	85.93	83.62	83.73	83.40	82.04
1.2 REER	101.80	101.66	103.03	104.45	102.59
2 Base : 2022-23 =100					
2.1 NEER	100.00	97.31	97.44	97.06	95.47
2.2 REER	100.00	99.86	101.20	102.60	100.77

No. 37: External Commercial Borrowings (ECBs) – Registrations

(Amount in US $ Million)

Item	2023-24	2023	2024	
		Jul.	Jun.	Jul.
	1	2	3	4
1 Automatic Route				
1.1 Number	1188	93	121	119
1.2 Amount	29461	485	1811	3581
2 Approval Route				
2.1 Number	33	2	4	0
2.2 Amount	19748	2074	1005	0
3 Total (1+2)				
3.1 Number	1221	95	125	119
3.2 Amount	49209	2559	2816	3581
4 Weighted Average Maturity (in years)	5.60	5.00	5.80	5.20
5 Interest Rate (per cent)				
5.1 Weighted Average Margin over alternative reference rate (ARR) for Floating Rate Loans@	1.66	0.83	1.36	1.45
5.2 Interest rate range for Fixed Rate Loans	0.00-27.00	0.00-11.25	0.00-11.00	0.00-10.00
Borrower Category				
I. Corporate Manufacturing	15836	223	603	626
II. Corporate-Infrastructure	15916	1635	808	1393
a.) Transport	1505	43	0	0
b.) Energy	3513	2	745	559
c.) Water and Sanitation	33	0	27	0
d.) Communication	6309	1590	0	0
e.) Social and Commercial Infrastructure	115	0	17	0
f.) Exploration,Mining and Refinery	2480	0	19	800
g.) Other Sub-Sectors	1961	0	0	34
III. Corporate Service-Sector	1526	101	37	349
IV. Other Entities	1728	0	19	4
a.) units in SEZ	1	0	19	4
b.) SIDBI	0	0	0	0
c.) Exim Bank	1727	0	0	0
V. Banks	0	0	0	0
VI. Financial Institution (Other than NBFC)	20	0	0	0
VII. NBFCs	13361	562	1311	1195
a). NBFC- IFC/AFC	7734	505	1062	0
b). NBFC-MFI	531	2	38	16
c). NBFC-Others	5096	55	211	1179
VIII. Non-Government Organization (NGO)	0	0	0	0
IX. Micro Finance Institution (MFI)	0	0	0	0
X. Others	822	38	38	14

Note: Based on applications for ECB/Foreign Currency Convertible Bonds (FCCBs) which have been allotted loan registration number during the period.
@ With effect from July 01, 2023, the benchmark rate is changed to Alternative Reference Rate (ARR)

No. 38: India's Overall Balance of Payments

(US$ Million)

Item	Jan-Mar 2023			Jan-Mar 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance Of Payments (1+2+3)	**391827**	**386248**	**5579**	**502210**	**471456**	**30754**
1 Current Account (1.1+ 1.2)	**238010**	**239366**	**-1356**	**253561**	**247879**	**5682**
1.1 Merchandise	**115821**	**168408**	**-52587**	**121652**	**172546**	**-50894**
1.2 Invisibles (1.2.1+1.2.2+1.2.3)	**122189**	**70959**	**51231**	**131909**	**75333**	**56576**
1.2.1 Services	85833	46758	39075	89357	46672	42685
1.2.1.1 Travel	8445	7698	747	9961	8063	1898
1.2.1.2 Transportation	7956	8091	-135	7772	7829	-57
1.2.1.3 Insurance	824	455	369	927	650	277
1.2.1.4 G.n.i.e.	144	307	-163	129	315	-186
1.2.1.5 Miscellaneous	68464	30207	38256	70568	29814	40753
1.2.1.5.1 Software Services	38473	4103	34370	41551	4908	36643
1.2.1.5.2 Business Services	22260	16314	5945	22620	16388	6232
1.2.1.5.3 Financial Services	2093	1303	790	1599	1269	330
1.2.1.5.4 Communication Services	2558	2217	341	498	506	-7
1.2.2 Transfers	28650	3888	24762	32097	3378	28719
1.2.2.1 Official	24	342	-318	51	282	-231
1.2.2.2 Private	28627	3547	25080	32046	3096	28950
1.2.3 Income	7706	20312	-12606	10455	25283	-14828
1.2.3.1 Investment Income	6010	19395	-13385	8523	24244	-15721
1.2.3.2 Compensation of Employees	1695	917	778	1932	1039	893
2 Capital Account (2.1+2.2+2.3+2.4+2.5)	**153422**	**146882**	**6540**	**248111**	**223578**	**24534**
2.1 Foreign Investment (2.1.1+2.1.2)	**83781**	**79091**	**4691**	**158711**	**145366**	**13345**
2.1.1 Foreign Direct Investment	17084	10730	6355	19834	17881	1954
2.1.1.1 In India	15858	6538	9319	19128	11411	7718
2.1.1.1.1 Equity	9708	6254	3454	12762	10934	1829
2.1.1.1.2 Reinvested Earnings	4976	0	4976	5332		5332
2.1.1.1.3 Other Capital	1173	284	889	1034	477	557
2.1.1.2 Abroad	1227	4191	-2964	706	6470	-5764
2.1.1.2.1 Equity	1227	2123	-896	706	3208	-2503
2.1.1.2.2 Reinvested Earnings	0	1103	-1103	0	1446	-1446
2.1.1.2.3 Other Capital	0	965	-965	0	1815	-1815
2.1.2 Portfolio Investment	66697	68361	-1664	138877	127485	11392
2.1.2.1 In India	66117	67704	-1588	138217	126638	11579
2.1.2.1.1 FIIs	66117	67704	-1588	138217	126638	11579
2.1.2.1.1.1 Equity	57476	59959	-2483	120154	112150	8004
2.1.2.1.1.2 Debt	8640	7745	895	18063	14487	3575
2.1.2.1.2 ADR/GDRs	0	0	0	0		0
2.1.2.2 Abroad	580	657	-77	660	847	-187
2.2 Loans (2.2.1+2.2.2+2.2.3)	**26512**	**23457**	**3055**	**30700**	**28949**	**1751**
2.2.1 External Assistance	3240	1522	1718	3587	1562	2025
2.2.1.1 By India	8	22	-14	8	31	-23
2.2.1.2 To India	3232	1500	1732	3579	1531	2048
2.2.2 Commercial Borrowings	7323	5698	1624	15113	13418	1695
2.2.2.1 By India	272	382	-110	3401	4308	-907
2.2.2.2 To India	7051	5316	1735	11711	9110	2601
2.2.3 Short Term to India	15950	16237	-287	12000	13969	-1969
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	15950	13646	2305	12000	12865	-865
2.2.3.2 Suppliers' Credit up to 180 days	0	2592	-2592	0	1104	-1104
2.3 Banking Capital (2.3.1+2.3.2)	**27997**	**32047**	**-4050**	**40722**	**33811**	**6911**
2.3.1 Commercial Banks	27922	32047	-4125	39768	33811	5957
2.3.1.1 Assets	4274	13260	-8986	9220	12330	-3110
2.3.1.2 Liabilities	23648	18787	4861	30548	21481	9067
2.3.1.2.1 Non-Resident Deposits	21066	17485	3581	26041	20678	5363
2.3.2 Others	75	0	75	955	0	955
2.4 Rupee Debt Service	**0**	**7**	**-7**		**7**	**-7**
2.5 Other Capital	**15131**	**12280**	**2852**	**17978**	**15445**	**2533**
3 Errors & Omissions	**395**	**0**	**395**	**538**	**0**	**538**
4 Monetary Movements (4.1+ 4.2)	**0**	**5579**	**-5579**	**0**	**30754**	**-30754**
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	5579	-5579		30754	-30754

Note: P: Preliminary.

No. 39: India's Overall Balance of Payments

(₹ Crore)

Item	Jan-Mar 2023			Jan-Mar 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance Of Payments (1+2+3)	**3223390**	**3177490**	**45899**	**4169720**	**3914381**	**255339**
1 Current Account (1.1+ 1.2)	**1958005**	**1969160**	**-11155**	**2105253**	**2058074**	**47179**
1.1 Merchandise	**952809**	**1385415**	**-432606**	**1010049**	**1432606**	**-422556**
1.2 Invisibles (1.2.1+1.2.2+1.2.3)	**1005196**	**583745**	**421451**	**1095204**	**625468**	**469735**
1.2.1 Services	706112	384660	321451	741908	387502	354406
1.2.1.1 Travel	69476	63331	6145	82705	66948	15758
1.2.1.2 Transportation	65454	66565	-1111	64527	65002	-475
1.2.1.3 Insurance	6777	3740	3037	7699	5395	2304
1.2.1.4 G.n.i.e.	1185	2525	-1339	1073	2616	-1543
1.2.1.5 Miscellaneous	563219	248500	314719	585904	247541	338363
1.2.1.5.1 Software Services	316497	33753	282744	344986	40752	304234
1.2.1.5.2 Business Services	183122	134212	48910	187807	136067	51740
1.2.1.5.3 Financial Services	17215	10718	6497	13280	10537	2743
1.2.1.5.4 Communication Services	21041	18237	2804	4136	4197	-61
1.2.2 Transfers	235693	31986	203706	266491	28049	238442
1.2.2.1 Official	194	2810	-2616	423	2344	-1921
1.2.2.2 Private	235499	29176	206322	266068	25705	240363
1.2.3 Income	63392	167098	-103707	86804	209917	-123113
1.2.3.1 Investment Income	49444	159555	-110111	70763	201290	-130527
1.2.3.2 Compensation of Employees	13948	7544	6404	16041	8627	7414
2 Capital Account (2.1+2.2+2.3+2.4+2.5)	**1262134**	**1208330**	**53804**	**2060004**	**1856307**	**203698**
2.1 Foreign Investment (2.1.1+2.1.2)	**689231**	**650644**	**38587**	**1317736**	**1206932**	**110803**
2.1.1 Foreign Direct Investment	140546	88268	52278	164679	148458	16220
2.1.1.1 In India	130453	53788	76665	158819	94741	64078
2.1.1.1.1 Equity	79863	51450	28413	105963	90780	15183
2.1.1.1.2 Reinvested Earnings	40937	0	40937	44274	0	44274
2.1.1.1.3 Other Capital	9652	2338	7315	8582	3960	4621
2.1.1.2 Abroad	10093	34480	-24387	5860	53718	-47858
2.1.1.2.1 Equity	10093	17465	-7372	5860	26638	-20778
2.1.1.2.2 Reinvested Earnings	0	9073	-9073	0	12009	-12009
2.1.1.2.3 Other Capital	0	7941	-7941	0	15071	-15071
2.1.2 Portfolio Investment	548685	562376	-13691	1153057	1058474	94583
2.1.2.1 In India	543912	556972	-13060	1147577	1051439	96139
2.1.2.1.1 FIIs	543912	556972	-13060	1147577	1051439	96139
2.1.2.1.1.1 Equity	472831	493254	-20423	997608	931154	66454
2.1.2.1.1.2 Debt	71080	63718	7363	149969	120285	29685
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	4774	5404	-631	5480	7035	-1555
2.2 Loans (2.2.1+2.2.2+2.2.3)	**218106**	**192973**	**25133**	**254894**	**240356**	**14538**
2.2.1 External Assistance	26652	12519	14133	29784	12969	16816
2.2.1.1 By India	63	180	-117	66	255	-188
2.2.1.2 To India	26589	12339	14250	29718	12714	17004
2.2.2 Commercial Borrowings	60240	46876	13363	125478	111407	14071
2.2.2.1 By India	2237	3144	-907	28241	35769	-7528
2.2.2.2 To India	58003	43732	14271	97237	75638	21599
2.2.3 Short Term to India	131214	133577	-2364	99631	115980	-16349
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	131214	112256	18958	99631	106817	-7185
2.2.3.2 Suppliers' Credit up to 180 days	0	21322	-21322	0	9163	-9163
2.3 Banking Capital (2.3.1+2.3.2)	**230320**	**263635**	**-33315**	**338106**	**280721**	**57384**
2.3.1 Commercial Banks	229701	263635	-33934	330180	280721	49459
2.3.1.1 Assets	35162	109084	-73921	76548	102370	-25822
2.3.1.2 Liabilities	194539	154551	39988	253632	178351	75281
2.3.1.2.1 Non-Resident Deposits	173302	143842	29461	216214	171683	44531
2.3.2 Others	619	0	619	7926	0	7926
2.4 Rupee Debt Service	**0**	**60**	**-60**	**0**	**60**	**-60**
2.5 Other Capital	**124477**	**101018**	**23459**	**149269**	**128237**	**21033**
3 Errors & Omissions	**3250**	**0**	**3250**	**4463**	**0**	**4463**
4 Monetary Movements (4.1+ 4.2)	**0**	**45899**	**-45899**	**0**	**255339**	**-255339**
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	45899	-45899	0	255339	-255339

Note: P: Preliminary.

No. 40: Standard Presentation of BoP in India as per BPM6

(US$ Million)

Item	Jan-Mar 2023			Jan-Mar 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	**238010**	**239346**	**-1336**	**253558**	**247857**	**5701**
1.A Goods and Services (1.A.a+1.A.b)	**201654**	**215166**	**-13512**	**211010**	**219218**	**-8208**
1.A.a Goods (1.A.a.1 to 1.A.a.3)	**115821**	**168408**	**-52587**	**121652**	**172546**	**-50894**
1.A.a.1 General merchandise on a BOP basis	115268	161779	-46511	121353	162955	-41602
1.A.a.2 Net exports of goods under merchanting	553	0	553	300	0	300
1.A.a.3 Nonmonetary gold	0	6629	-6629		9591	-9591
1.A.b Services (1.A.b.1 to 1.A.b.13)	**85833**	**46758**	**39075**	**89357**	**46672**	**42685**
1.A.b.1 Manufacturing services on physical inputs owned by others	327	52	275	352	18	335
1.A.b.2 Maintenance and repair services n.i.e.	56	644	-587	55	456	-401
1.A.b.3 Transport	7956	8091	-135	7772	7829	-57
1.A.b.4 Travel	8445	7698	747	9961	8063	1898
1.A.b.5 Construction	1099	705	394	1658	791	867
1.A.b.6 Insurance and pension services	824	455	369	927	650	277
1.A.b.7 Financial services	2093	1303	790	1599	1269	330
1.A.b.8 Charges for the use of intellectual property n.i.e.	290	2729	-2438	319	3365	-3046
1.A.b.9 Telecommunications, computer, and information services	41116	6606	34509	42137	5707	36430
1.A.b.10 Other business services	22260	16314	5945	22620	16388	6232
1.A.b.11 Personal, cultural, and recreational services	1045	1390	-346	1253	1496	-243
1.A.b.12 Government goods and services n.i.e.	144	307	-163	129	315	-186
1.A.b.13 Others n.i.e.	178	464	-286	575	324	251
1.B Primary Income (1.B.1 to 1.B.3)	**7706**	**20312**	**-12606**	**10455**	**25283**	**-14828**
1.B.1 Compensation of employees	1695	917	778	1932	1039	893
1.B.2 Investment income	4839	18772	-13934	6758	23566	-16808
1.B.2.1 Direct investment	2156	10609	-8453	2518	13929	-11411
1.B.2.2 Portfolio investment	78	2755	-2676	94	2383	-2289
1.B.2.3 Other investment	210	5246	-5035	874	7026	-6152
1.B.2.4 Reserve assets	2393	163	2231	3272	229	3043
1.B.3 Other primary income	1172	623	549	1765	678	1087
1.C Secondary Income (1.C.1+1.C.2)	**28650**	**3868**	**24782**	**32093**	**3356**	**28737**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	28627	3547	25080	32046	3096	28950
1.C.1.1 Personal transfers (Current transfers between resident and/non-resident households)	27984	2631	25352	31301	2324	28977
1.C.1.2 Other current transfers	643	915	-272	745	772	-27
1.C.2 General government	23	321	-298	48	260	-212
2 Capital Account (2.1+2.2)	**272**	**260**	**12**	**182**	**138**	**44**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	120	35	85	21	50	-30
2.2 Capital transfers	152	225	-73	161	87	74
3 Financial Account (3.1 to 3.5)	**153151**	**152222**	**929**	**247933**	**254216**	**-6283**
3.1 Direct Investment (3.1A+3.1B)	**17084**	**10730**	**6355**	**19834**	**17881**	**1954**
3.1.A Direct Investment in India	15858	6538	9319	19128	11411	7718
3.1.A.1 Equity and investment fund shares	14684	6254	8430	18095	10934	7161
3.1.A.1.1 Equity other than reinvestment of earnings	9708	6254	3454	12762	10934	1829
3.1.A.1.2 Reinvestment of earnings	4976	0	4976	5332		5332
3.1.A.2 Debt instruments	1173	284	889	1034	477	557
3.1.A.2.1 Direct investor in direct investment enterprises	1173	284	889	1034	477	557
3.1.B Direct Investment by India	1227	4191	-2964	706	6470	-5764
3.1.B.1 Equity and investment fund shares	1227	3226	-1999	706	4655	-3949
3.1.B.1.1 Equity other than reinvestment of earnings	1227	2123	-896	706	3208	-2503
3.1.B.1.2 Reinvestment of earnings	0	1103	-1103		1446	-1446
3.1.B.2 Debt instruments	0	965	-965	0	1815	-1815
3.1.B.2.1 Direct investor in direct investment enterprises	0	965	-965		1815	-1815
3.2 Portfolio Investment	**66697**	**68361**	**-1664**	**138877**	**127485**	**11392**
3.2.A Portfolio Investment in India	66117	67704	-1588	138217	126638	11579
3.2.1 Equity and investment fund shares	57476	59959	-2483	120154	112150	8004
3.2.2 Debt securities	8640	7745	895	18063	14487	3575
3.2.B Portfolio Investment by India	580	657	-77	660	847	-187
3.3 Financial derivatives (other than reserves) and employee stock options	**3661**	**6332**	**-2671**	**6126**	**9280**	**-3154**
3.4 Other investment	**65708**	**61219**	**4489**	**83096**	**68816**	**14280**
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	21141	17485	3656	26996	20678	6318
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	75	0	75	955	0	955
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	21066	17485	3581	26041	20678	5363
3.4.2.3 General government	0	0	0			0
3.4.2.4 Other sectors	0	0	0			0
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	17418	21782	-4364	32426	28113	4313
3.4.3.A Loans to India	17139	21378	-4239	29017	23774	5243
3.4.3.B Loans by India	280	404	-125	3409	4339	-929
3.4.4 Insurance, pension, and standardized guarantee schemes	41	30	11	54	85	-31
3.4.5 Trade credit and advances	15950	16237	-287	12000	13969	-1969
3.4.6 Other accounts receivable/payable - other	11157	5685	5472	11620	5972	5648
3.4.7 Special drawing rights	0	0	0			0
3.5 Reserve assets	**0**	**5579**	**-5579**	**0**	**30754**	**-30754**
3.5.1 Monetary gold	0	0	0			0
3.5.2 Special drawing rights n.a.	0	0	0			0
3.5.3 Reserve position in the IMF n.a.	0	0	0			0
3.5.4 Other reserve assets (Foreign Currency Assets)	0	5579	-5579	0	30754	-30754
4 Total assets/liabilities	**153151**	**152222**	**929**	**247933**	**254216**	**-6283**
4.1 Equity and investment fund shares	77670	76458	1212	145795	137951	7844
4.2 Debt instruments	64323	64499	-176	90518	79539	10979
4.3 Other financial assets and liabilities	11157	11265	-107	11620	36725	-25105
5 Net errors and omissions	**395**	**0**	**395**	**538**		**538**

Note: P: Preliminary.

No. 41: Standard Presentation of BoP in India as per BPM6

(₹ Crore)

Item	Jan-Mar 2023			Jan-Mar 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	**1958000**	**1968993**	**-10992**	**2105225**	**2057890**	**47336**
1.A Goods and Services (1.A.a+1.A.b)	**1658921**	**1770076**	**-111155**	**1751957**	**1820108**	**-68150**
1.A.a Goods (1.A.a.1 to 1.A.a.3)	**952809**	**1385415**	**-432606**	**1010049**	**1432606**	**-422556**
1.A.a.1 General merchandise on a BOP basis	948262	1330884	-382622	1007561	1352971	-345410
1.A.a.2 Net exports of goods under merchanting	4548	0	4548	2488	0	2488
1.A.a.3 Nonmonetary gold	0	54532	-54532	0	79635	-79635
1.A.b Services (1.A.b.1 to 1.A.b.13)	**706112**	**384660**	**321451**	**741908**	**387502**	**354406**
1.A.b.1 Manufacturing services on physical inputs owned by others	2689	425	2264	2923	146	2778
1.A.b.2 Maintenance and repair services n.i.e.	464	5295	-4831	455	3786	-3331
1.A.b.3 Transport	65454	66565	-1111	64527	65002	-475
1.A.b.4 Travel	69476	63331	6145	82705	66948	15758
1.A.b.5 Construction	9040	5797	3244	13763	6567	7196
1.A.b.6 Insurance and pension services	6777	3740	3037	7699	5395	2304
1.A.b.7 Financial services	17215	10718	6497	13280	10537	2743
1.A.b.8 Charges for the use of intellectual property n.i.e.	2389	22449	-20059	2648	27942	-25294
1.A.b.9 Telecommunications, computer, and information services	338240	54349	283891	349851	47384	302467
1.A.b.10 Other business services	183122	134212	48910	187807	136067	51740
1.A.b.11 Personal, cultural, and recreational services	8596	11438	-2842	10404	12421	-2016
1.A.b.12 Government goods and services n.i.e.	1185	2525	-1339	1073	2616	-1543
1.A.b.13 Others n.i.e.	1463	3817	-2354	4771	2691	2081
1.B Primary Income (1.B.1 to 1.B.3)	**63392**	**167098**	**-103707**	**86804**	**209917**	**-123113**
1.B.1 Compensation of employees	13948	7544	6404	16041	8627	7414
1.B.2 Investment income	39805	154433	-114627	56107	195663	-139556
1.B.2.1 Direct investment	17740	87278	-69538	20904	115646	-94742
1.B.2.2 Portfolio investment	644	22661	-22016	782	19786	-19004
1.B.2.3 Other investment	1731	43156	-41425	7255	58332	-51077
1.B.2.4 Reserve assets	19690	1338	18352	27166	1900	25266
1.B.3 Other primary income	9638	5122	4516	14656	5627	9029
1.C Secondary Income (1.C.1+1.C.2)	**235688**	**31819**	**203869**	**266464**	**27865**	**238599**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	235499	29176	206322	266068	25705	240363
1.C.1.1 Personal transfers (Current transfers between resident and/non-resident households)	230210	21647	208563	259885	19295	240591
1.C.1.2 Other current transfers	5288	7529	-2241	6183	6410	-227
1.C.2 General government	189	2642	-2453	396	2160	-1764
2 Capital Account (2.1+2.2)	**2237**	**2137**	**100**	**1509**	**1144**	**364**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	986	288	698	171	419	-248
2.2 Capital transfers	1250	1849	-599	1338	725	613
3 Financial Account (3.1 to 3.5)	**1259902**	**1252260**	**7643**	**2058523**	**2110686**	**-52163**
3.1 Direct Investment (3.1A+3.1B)	**140546**	**88268**	**52278**	**164679**	**148458**	**16220**
3.1.A Direct Investment in India	130453	53788	76665	158819	94741	64078
3.1.A.1 Equity and investment fund shares	120800	51450	69350	150237	90780	59457
3.1.A.1.1 Equity other than reinvestment of earnings	79863	51450	28413	105963	90780	15183
3.1.A.1.2 Reinvestment of earnings	40937	0	40937	44274	0	44274
3.1.A.2 Debt instruments	9652	2338	7315	8582	3960	4621
3.1.A.2.1 Direct investor in direct investment enterprises	9652	2338	7315	8582	3960	4621
3.1.B Direct Investment by India	10093	34480	-24387	5860	53718	-47858
3.1.B.1 Equity and investment fund shares	10093	26539	-16446	5860	38647	-32787
3.1.B.1.1 Equity other than reinvestment of earnings	10093	17465	-7372	5860	26638	-20778
3.1.B.1.2 Reinvestment of earnings	0	9073	-9073	0	12009	-12009
3.1.B.2 Debt instruments	0	7941	-7941	0	15071	-15071
3.1.B.2.1 Direct investor in direct investment enterprises	0	7941	-7941	0	15071	-15071
3.2 Portfolio Investment	**548685**	**562376**	**-13691**	**1153057**	**1058474**	**94583**
3.2.A Portfolio Investment in India	543912	556972	-13060	1147577	1051439	96139
3.2.1 Equity and investment fund shares	472831	493254	-20423	997608	931154	66454
3.2.2 Debt securities	71080	63718	7363	149969	120285	29685
3.2.B Portfolio Investment by India	4774	5404	-631	5480	7035	-1555
3.3 Financial derivatives (other than reserves) and employee stock options	**30121**	**52094**	**-21973**	**50865**	**77053**	**-26187**
3.4 Other investment	**540550**	**503623**	**36927**	**689922**	**571362**	**118560**
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	173921	143842	30080	224139	171683	52457
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	619	0	619	7926	0	7926
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	173302	143842	29461	216214	171683	44531
3.4.2.3 General government	0	0	0	0	0	0
3.4.2.4 Other sectors	0	0	0	0	0	0
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	143291	179189	-35898	269228	233414	35814
3.4.3.A Loans to India	140991	175865	-34873	240921	197391	43530
3.4.3.B Loans by India	2300	3324	-1024	28307	36024	-7717
3.4.4 Insurance, pension, and standardized guarantee schemes	337	245	92	448	704	-257
3.4.5 Trade credit and advances	131214	133577	-2364	99631	115980	-16349
3.4.6 Other accounts receivable/payable - other	91787	46770	45017	96475	49580	46895
3.4.7 Special drawing rights	0	0	0	0	0	0
3.5 Reserve assets	**0**	**45899**	**-45899**	**0**	**255339**	**-255339**
3.5.1 Monetary gold	0	0	0	0	0	0
3.5.2 Special drawing rights n.a.	0	0	0	0	0	0
3.5.3 Reserve position in the IMF n.a.	0	0	0	0	0	0
3.5.4 Other reserve assets (Foreign Currency Assets)	0	45899	-45899	0	255339	-255339
4 Total assets/liabilities	**1259902**	**1252260**	**7643**	**2058523**	**2110686**	**-52163**
4.1 Equity and investment fund shares	638957	628987	9970	1210498	1145373	65124
4.2 Debt instruments	529159	530604	-1445	751550	660393	91157
4.3 Other financial assets and liabilities	91787	92669	-883	96475	304919	-208444
5 Net errors and omissions	**3250**	**0**	**3250**	**4463**	**0**	**4463**

Note: P: Preliminary.

No. 42: India's International Investment Position

(US$ Million)

Item	As on Financial Year/Quarter End							
	2023-24		2023				2024	
			Mar.		Dec.		Mar.	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	1	2	3	4	5	6	7	8
1. Direct investment Abroad/in India	242271	542516	225592	523322	236506	536795	242271	542516
1.1 Equity Capital*	153343	511142	142071	493896	149394	505572	153343	511142
1.2 Other Capital	88927	31374	83521	29426	87112	31223	88927	31374
2. Portfolio investment	10286	283804	13106	243561	10661	269154	10286	283804
2.1 Equity	8518	168679	7449	138958	8438	161206	8518	168679
2.2 Debt	1768	115126	5657	104603	2223	107948	1768	115126
3. Other investment	129328	563664	101420	518847	120558	552330	129328	563664
3.1 Trade credit	33450	118598	27507	124304	31689	120355	33450	118598
3.2 Loan	13578	221964	9256	202334	14845	215009	13578	221964
3.3 Currency and Deposits	52803	154787	33046	141133	44452	149326	52803	154787
3.4 Other Assets/Liabilities	29497	46404	31612	28815	29572	45438	29497	46404
4. Reserves	646419		578449		622452		646419	
5. Total Assets/ Liabilities	1028304	1389984	918567	1285729	990178	1358280	1028304	1389984
6. Net IIP (Assets - Liabilities)	-361680		-367162		-368102		-361680	

Note: * Equity capital includes share of investment funds and reinvested earnings.

Payment and Settlement Systems

No.43: Payment System Indicators

PART I - Payment System Indicators - Payment & Settlement System Statistics

System	Volume (Lakh)				Value (₹ Crore)			
	FY 2023-24	2023	2024		FY 2023-24	2023	2024	
		Jul.	Jun.	Jul.		Jul.	Jun.	Jul.
	1	2	3	4	5	6	7	8
A. Settlement Systems								
Financial Market Infrastructures (FMIs)								
1 CCIL Operated Systems (1.1 to 1.3)	43.04	3.83	4.36	4.54	259206893	21113033	22580094	25280807
1.1 Govt. Securities Clearing (1.1.1 to 1.1.3)	16.80	1.53	1.60	1.71	170464587	14338395	15107943	17139102
1.1.1 Outright	9.51	0.87	0.97	1.03	13463848	1200245	1372786	1524120
1.1.2 Repo	4.94	0.46	0.42	0.44	76718788	6722022	6414226	7150905
1.1.3 Tri-party Repo	2.35	0.20	0.21	0.23	80281951	6416128	7320931	8464077
1.2 Forex Clearing	24.92	2.17	2.67	2.71	80984671	5937050	6953169	7417106
1.3 Rupee Derivatives @	1.31	0.13	0.09	0.12	7757636	837588	518982	724598
B. Payment Systems								
I Financial Market Infrastructures (FMIs)	-	-	-	-	-	-	-	-
1 Credit Transfers - RTGS (1.1 to 1.2)	2700.16	211.89	231.84	246.68	170886670	13124561	16037694	15970680
1.1 Customer Transactions	2686.04	210.72	230.72	245.48	152406168	11615417	14570686	14531533
1.2 Interbank Transactions	14.12	1.17	1.12	1.19	18480503	1509144	1467008	1439147
II Retail								
2 Credit Transfers - Retail (2.1 to 2.6)	1486106.89	114189.63	155567.02	161225.51	67542859	5250943	6073917	6480748
2.1 AePS (Fund Transfers) @	3.92	0.32	0.30	0.31	261	22	16	13
2.2 APBS $	25888.17	2850.05	2929.34	2481.39	390743	45524	43676	28605
2.3 IMPS	60053.35	4897.10	5167.51	4902.84	6495652	512312	577794	593177
2.4 NACH Cr $	16227.27	1322.80	1311.11	1479.29	1525104	110184	113888	132397
2.5 NEFT	72639.50	5476.79	7307.34	8006.14	39136014	3049364	3331461	3662264
2.6 UPI @	1311294.68	99642.56	138851.42	144355.54	19995086	1533536	2007081	2064292
2.6.1 of which USSD @	26.19	2.77	1.41	1.40	352	43	15	15
3 Debit Transfers and Direct Debits (3.1 to 3.3)	18249.53	1473.10	1697.73	1734.76	1687658	130931	171469	175789
3.1 BHIM Aadhaar Pay @	193.59	14.42	21.07	19.25	6112	457	581	575
3.2 NACH Dr $	16426.49	1327.06	1544.59	1588.11	1678769	130240	170756	175014
3.3 NETC (linked to bank account) @	1629.45	131.62	132.07	127.40	2777	233	132	200
4 Card Payments (4.1 to 4.2)	58469.79	4882.21	5003.43	5294.35	2423563	198421	200081	217435
4.1 Credit Cards (4.1.1 to 4.1.2)	35610.15	2780.90	3579.49	3837.80	1831134	145108	158822	172670
4.1.1 PoS based $	18614.08	1434.21	1895.40	1970.94	651911	49789	59417	62284
4.1.2 Others $	16996.08	1346.69	1684.10	1866.86	1179223	95319	99405	110386
4.2 Debit Cards (4.2.1 to 4.2.1)	22859.64	2101.31	1423.94	1456.56	592429	53313	41259	44765
4.2.1 PoS based $	16477.95	1485.21	1063.60	1068.60	393589	33513	27630	28600
4.2.2 Others $	6381.69	616.10	360.33	387.96	198840	19801	13629	16165
5 Prepaid Payment Instruments (5.1 to 5.2)	78775.40	6393.08	5236.08	5356.71	283048	23238	15897	16327
5.1 Wallets	63256.69	5068.53	4038.05	4009.69	234353	19736	11298	11386
5.2 Cards (5.2.1 to 5.2.2)	15518.71	1324.55	1198.03	1347.01	48695	3502	4599	4941
5.2.1 PoS based $	8429.87	714.15	650.89	713.97	11247	775	946	940
5.2.2 Others $	7088.84	610.40	547.14	633.05	37447	2727	3653	4001
6 Paper-based Instruments (6.1 to 6.2)	6632.10	555.48	484.42	531.00	7212333	587310	553834	610685
6.1 CTS (NPCI Managed)	6632.10	555.48	484.42	531.00	7212333	587310	553834	610685
6.2 Others	0.00	–	–	–	–	–	–	–
Total - Retail Payments (2+3+4+5+6)	1648233.71	127493.51	167988.69	174142.33	79149461	6190842	7015198	7500984
Total Payments (1+2+3+4+5+6)	1650933.88	127705.40	168220.52	174389.01	250036131	19315404	23052892	23471665
Total Digital Payments (1+2+3+4+5)	1644301.78	127149.92	167736.10	173858.01	242823799	18728094	22499058	22860979

PART II - Payment Modes and Channels

System	Volume (Lakh)				Value (₹ Crore)			
	FY 2023-24	2023	2024		FY 2023-24	2023	2024	
		Jul.	Jun.	Jul.		Jul.	Jun.	Jul.
	1	2	3	4	5	6	7	8
A. Other Payment Channels								
1 Mobile Payments (mobile app based) (1.1 to 1.2)	1252599.21	93340.31	134138.30	139896.47	30687088	2316954	3062709	3175645
1.1 Intra-bank $	83000.56	6400.03	9156.28	9299.86	5676805	428279	571044	599267
1.2 Inter-bank $	1169598.65	86940.28	124982.02	130596.61	25010283	1888674	2491666	2576378
2 Internet Payments (Netbanking / Internet Browser Based) @ (2.1 to 2.2)	45034.98	3938.95	3717.20	4236.74	102117736	8157864	9505759	9894263
2.1 Intra-bank @	12033.28	1107.74	1026.53	1225.09	53247042	4353820	4873274	5064291
2.2 Inter-bank @	33001.71	2831.21	2690.67	3011.65	48870694	3804045	4632484	4829973
B. ATMs								
3 Cash Withdrawal at ATMs $ (3.1 to 3.3)	66440.72	5590.96	5076.57	5069.38	3259388	269298	255229	250318
3.1 Using Credit Cards $	95.80	7.58	8.29	8.54	4648	357	426	433
3.2 Using Debit Cards $	66001.01	5553.98	5045.81	5040.14	3241538	267870	253844	248968
3.3 Using Pre-paid Cards $	343.90	29.39	22.47	20.70	13202	1071	959	917
4 Cash Withdrawal at PoS $ (4.1 to 4.2)	15.18	2.23	0.28	0.29	148	22	3	3
4.1 Using Debit Cards $	15.06	2.23	0.27	0.27	147	22	3	3
4.2 Using Pre-paid Cards $	0.12	0.01	0.02	0.02	1	0	0	0
5 Cash Withrawal at Micro ATMs @	11754.95	1078.92	973.79	944.29	314003	28950	24426	23498
5.1 AePS @	11754.95	1078.92	973.79	944.29	314003	28950	24426	23498

PART III - Payment Infrastructures (Lakh)

System	As on March 2024	2023	2024	
		Jul.	Jun.	Jul.
	1	2	3	4
Payment System Infrastructures				
1 Number of Cards (1.1 to 1.2)	10667.22	10606.14	10835.23	10850.30
1.1 Credit Cards	1018.03	898.73	1038.13	1045.68
1.2 Debit Cards	9649.19	9707.41	9797.10	9804.62
2 Number of PPIs @ (2.1 to 2.2)	16743.63	16646.89	15051.30	15211.55
2.1 Wallets @	13381.80	13678.38	11375.61	11419.62
2.2 Cards @	3361.82	2968.51	3675.69	3791.93
3 Number of ATMs (3.1 to 3.2)	2.58	2.57	2.56	2.55
3.1 Bank owned ATMs $	2.23	2.21	2.21	2.21
3.2 White Label ATMs $	0.35	0.36	0.35	0.34
4 Number of Micro ATMs @	17.55	15.37	15.18	14.71
5 Number of PoS Terminals	89.03	81.23	89.67	89.72
6 Bharat QR @	62.50	58.06	61.64	61.87
7 UPI QR *	3434.93	2807.25	3230.03	3286.40

@: New inclusion w.e.f. November 2019
#: Data reported by Co-operative Banks, LABs and RRBs included with effect from December 2021.
$: Inclusion separately initiated from November 2019 - would have been part of other items hitherto.
*: New inclusion w.e.f. September 2020; Includes only static UPI QR Code
Note : 1. Data is provisional.
1. ECS (Debit and Credit) has been merged with NACH with effect from January 31, 2020.
2. The data from November 2019 onwards for card payments (Debit/Credit cards) and Prepaid Payment Instruments (PPIs) may not be comparable with earlier months/ periods, as more granular data is being published along with revision in data definitions.
3. Only domestic financial transactions are considered. The new format captures e-commerce transactions; transactions using FASTags, digital bill payments and card-to-card transfer through ATMs, etc.. Also, failed transactions, chargebacks, reversals, expired cards/ wallets, are excluded.
   Part I-A. Settlement systems
   1.1.3: Tri- party Repo under the securities segment has been operationalised from November 05, 2018.
   Part I-B. Payments systems
   4.1.2: 'Others' includes e-commerce transactions and digital bill payments through ATMs, etc.
   4.2.2: 'Others' includes e-commerce transactions, card to card transfers and digital bill payments through ATMs, etc.
   5: Available from December 2010.
   5.1: includes purchase of goods and services and fund transfer through wallets.
   5.2.2: includes usage of PPI Cards for online transactions and other transactions.
   6.1: Pertain to three grids – Mumbai, New Delhi and Chennai.
   6.2: 'Others' comprises of Non-MICR transactions which pertains to clearing houses managed by 21 banks.
   Part II-A. Other payment channels
   1: Mobile Payments –
   • Include transactions done through mobile apps of banks and UPI apps.
   • The data from July 2017 includes only individual payments and corporate payments initiated, processed, and authorised using mobile device. Other corporate payments which are not initiated, processed, and authorised using mobile device are excluded.
   2: Internet Payments – includes only e-commerce transactions through 'netbanking' and any financial transaction using internet banking website of the bank.
   Part II-B. ATMs
   3.3 and 4.2: only relates to transactions using bank issued PPIs.
   Part III. Payment systems infrastructure
   3: Includes ATMs deployed by Scheduled Commercial Banks (SCBs) and White Label ATM Operators (WLAOs). WLAs are included from April 2014 onwards.

Occasional Series

No. 44: Small Savings

(₹ Crore)

Scheme		2022-23	2023		2024	
			Feb.	Dec.	Jan.	Feb.
		1	2	3	4	5
1 Small Savings	**Receipts**	**173993**	**11210**	**16670**	**16076**	**14570**
	Outstanding	**1636935**	**1599193**	**1789946**	**1805716**	**1819758**
1.1 Total Deposits	**Receipts**	**125209**	**8093**	**12386**	**11340**	**10025**
	Outstanding	**1137451**	**1113230**	**1247555**	**1258895**	**1268920**
1.1.1 Post Office Saving Bank Deposits	Receipts	20680	1170	2279	3014	1520
	Outstanding	209112	200257	213964	216978	218498
1.1.2 Sukanya Samriddhi Yojna	Receipts	29003	1965	2171	2130	2233
	Outstanding	87787	77472	104859	106989	109222
1.1.3 National Saving Scheme, 1987	Receipts	-244	0	0	0	0
	Outstanding	0	0	0	0	0
1.1.4 National Saving Scheme, 1992	Receipts	-20	0	0	0	0
	Outstanding	0	0	0	0	0
1.1.5 Monthly Income Scheme	Receipts	6492	484	1713	1895	1927
	Outstanding	242313	242198	263383	265278	267205
1.1.6 Senior Citizen Scheme 2004	Receipts	17971	1475	2197	2290	2153
	Outstanding	137304	135986	169033	171323	173476
1.1.7 Post Office Time Deposits	Receipts	29155	1814	2429	2379	2632
	Outstanding	280436	278939	297989	300368	303000
1.1.7.1 1 year Time Deposits	Outstanding	125951	125377	135196	136762	138552
1.1.7.2 2 year Time Deposits	Outstanding	9497	9282	11265	11483	11730
1.1.7.3 3 year Time Deposits	Outstanding	7543	7380	8472	8628	8782
1.1.7.4 5 year Time Deposits	Outstanding	137445	136900	143056	143495	143936
1.1.8 Post Office Recurring Deposits	Receipts	21552	1203	1616	-344	-420
	Outstanding	178422	176836	196491	196147	195727
1.1.9 Post Office Cumulative Time Deposits	Receipts	0	0	0	0	0
	Outstanding	0	0	0	0	0
1.1.10 Other Deposits	Receipts	288	-18	-19	-24	-20
	Outstanding	1745	1439	1488	1464	1444
1.1.11 PM Care for children	Receipts	332	0	0	0	0
	Outstanding	332	103	348	348	348
1.2 Saving Certificates	**Receipts**	**33965**	**2504**	**3957**	**4247**	**3940**
	Outstanding	**366317**	**363564**	**407244**	**411185**	**414597**
1.2.1 National Savings Certificate VIII issue	Receipts	10793	658	1213	1581	1446
	Outstanding	165836	164750	177154	178735	180181
1.2.2 Indira Vikas Patras	Receipts	0	0	0	0	0
	Outstanding	0	0	0	0	0
1.2.3 Kisan Vikas Patras	Receipts	-1892	0	0	0	0
	Outstanding	0	0	0	0	0
1.2.4 Kisan Vikas Patras - 2014	Receipts	25064	1846	1568	1561	1428
	Outstanding	199624	197646	216509	218070	219498
1.2.5 National Saving Certificate VI issue	Receipts	0	0	0	0	0
	Outstanding	0	0	0	0	0
1.2.6 National Saving Certificate VII issue	Receipts	0	0	0	0	0
	Outstanding	0	0	0	0	0
1.2.7 M.S. Certificates	Receipts		0	1176	1105	1066
	Outstanding		0	15064	16169	17235
1.2.8 Other Certificates	Outstanding	857	1168	-1483	-1789	-2317
1.3 Public Provident Fund	**Receipts**	**14819**	**613**	**327**	**489**	**605**
	Outstanding	**133167**	**122399**	**135147**	**135636**	**136241**

Note : Data on receipts from April 2017 are net receipts, i.e., gross receipt minus gross payment.
Source: Accountant General, Post and Telegraphs.

No. 45 : Ownership Pattern of Central and State Governments Securities

(Per cent)

Central Government Dated Securities					
Category	2023			2024	
	Jun.	Sep.	Dec.	Mar.	Jun.
	1	2	3	4	5
(A) Total (in ₹. Crore)	**9898751**	**10383607**	**10538792**	**10740389**	**10946860**
1 Commercial Banks	36.58	37.96	37.55	37.66	37.52
2 Co-operative Banks	1.56	1.52	1.49	1.47	1.42
3 Non-Bank PDs	0.73	0.66	0.67	0.66	0.70
4 Insurance Companies	26.21	26.05	26.16	25.98	26.11
5 Mutual Funds	2.69	3.02	3.03	2.90	2.87
6 Provident Funds	4.59	4.42	4.57	4.47	4.41
7 Pension Funds	4.18	4.32	4.44	4.52	4.74
8 Financial Institutions	1.20	0.54	0.55	0.55	0.57
9 Corporates	1.22	1.21	1.33	1.35	1.44
10 Foreign Portfolio Investors	1.59	1.61	1.92	2.34	2.34
11 RBI	13.78	13.06	12.54	12.31	11.92
12 Others	5.67	5.64	5.74	5.79	5.97
12.1 State Governments	2.03	2.04	2.07	2.04	2.13

State Governments Securities					
Category	2023			2024	
	Jun.	Sep.	Dec.	Mar.	Jun.
	1	2	3	4	5
(B) Total (in ₹. Crore)	**5050874**	**5161642**	**5338587**	**5646219**	**5727482**
1 Commercial Banks	34.13	33.87	33.90	34.14	33.85
2 Co-operative Banks	3.68	3.60	3.53	3.39	3.38
3 Non-Bank PDs	0.50	0.61	0.63	0.60	0.59
4 Insurance Companies	26.73	26.97	26.64	26.14	25.85
5 Mutual Funds	2.08	1.86	2.00	2.09	2.08
6 Provident Funds	21.19	21.70	22.00	22.35	22.94
7 Pension Funds	4.84	4.82	4.56	4.76	4.87
8 Financial Institutions	1.82	1.65	1.63	1.59	1.58
9 Corporates	1.92	1.87	2.03	2.02	2.03
10 Foreign Portfolio Investors	0.02	0.02	0.03	0.07	0.05
11 RBI	0.70	0.69	0.66	0.63	0.62
12 Others	2.39	2.34	2.37	2.20	2.17
12.1 State Governments	0.27	0.27	0.27	0.25	0.26

Treasury Bills					
Category	2023			2024	
	Jun.	Sep.	Dec.	Mar.	Jun.
	1	2	3	4	5
(C) Total (in ₹. Crore)	**1012301**	**925317**	**849151**	**871662**	**858193**
1 Commercial Banks	47.64	56.35	57.18	58.53	47.79
2 Co-operative Banks	1.20	1.20	1.28	1.67	1.49
3 Non-Bank PDs	1.99	0.54	1.70	1.66	2.69
4 Insurance Companies	4.93	5.26	5.50	5.06	5.78
5 Mutual Funds	17.04	12.74	11.21	11.89	14.50
6 Provident Funds	1.46	1.52	0.08	0.15	0.60
7 Pension Funds	0.01	0.01	0.00	0.01	0.00
8 Financial Institutions	7.96	4.10	5.34	7.16	6.56
9 Corporates	4.42	4.00	4.58	4.50	4.79
10 Foreign Portfolio Investors	0.12	0.10	0.07	0.01	0.20
11 RBI	0.00	0.00	0.00	0.00	0.00
12 Others	13.23	14.17	13.06	9.36	15.59
12.1 State Governments	10.33	11.36	9.26	5.88	11.55

Note: (-) represents nil or negligible
The Table format is revised since Monthly Bulletin for the month of June 2023.
State Government Securities include special bonds issued under Ujwal DISCOM Assurance Yojana (UDAY).
Bank PDs are clubbed under Commercial Banks. However, they form a small fraction of total outstanding securities.
The category 'Others' comprises State Governments, DICGC, PSUs, Trusts, Foreign Central Banks, HUF/Individuals etc.
Data since September 2023 includes the impact of the merger of a non-bank with a bank.

No. 46: Combined Receipts and Disbursements of the Central and State Governments

(₹ Crore)

Item	2018-19	2019-20	2020-21	2021-22	2022-23 RE	2023-24 BE
	1	2	3	4	5	6
1 Total Disbursements	**5040747**	**5410887**	**6353359**	**7098451**	**8376972**	**9045119**
1.1 Developmental	2882758	3074492	3823423	4189146	5073367	5426440
1.1.1 Revenue	2224367	2446605	3150221	3255207	3838714	3836447
1.1.2 Capital	596774	588233	550358	861777	1146013	1471534
1.1.3 Loans	61617	39654	122844	72163	88639	118460
1.2 Non-Developmental	2078276	2253027	2442941	2810388	3188699	3490946
1.2.1 Revenue	1965907	2109629	2271637	2602750	2988556	3277722
1.2.1.1 Interest Payments	894520	955801	1060602	1226672	1403183	1589435
1.2.2 Capital	111029	141457	169155	175519	196688	208268
1.2.3 Loans	1340	1941	2148	32119	3455	4957
1.3 Others	79713	83368	86995	98916	114906	127733
2 Total Receipts	**5023352**	**5734166**	**6397162**	**7156342**	**8258187**	**9149787**
2.1 Revenue Receipts	3797731	3851563	3688030	4823821	5706246	6337126
2.1.1 Tax Receipts	3278947	3231582	3193390	4160414	4837048	5477428
2.1.1.1 Taxes on commodities and services	2030050	2012578	2076013	2626553	2967610	3372525
2.1.1.2 Taxes on Income and Property	1246083	1216203	1114805	1530636	1865298	2100430
2.1.1.3 Taxes of Union Territories (Without Legislature)	2814	2800	2572	3225	4140	4473
2.1.2 Non-Tax Receipts	518783	619981	494640	663407	869198	859698
2.1.2.1 Interest Receipts	36273	31137	33448	35250	37974	45199
2.2 Non-debt Capital Receipts	140287	110094	64994	44077	88273	119373
2.2.1 Recovery of Loans & Advances	44667	59515	16951	27665	25661	34501
2.2.2 Disinvestment proceeds	95621	50578	48044	16412	62611	84872
3 Gross Fiscal Deficit [1 - (2.1 + 2.2)]	**1102729**	**1449230**	**2600335**	**2230553**	**2582453**	**2588620**
3A Sources of Financing: Institution-wise						
3A.1 Domestic Financing	1097210	1440548	2530155	2194406	2558579	2566503
3A.1.1 Net Bank Credit to Government	387091	571872	890012	627255	687904	...
3A.1.1.1 Net RBI Credit to Government	325987	190241	107493	350911	529	...
3A.1.2 Non-Bank Credit to Government	710119	868676	1640143	1567151	1870675	...
3A.2 External Financing	5519	8682	70180	36147	23874	22118
3B Sources of Financing: Instrument-wise						
3B.1 Domestic Financing	1097210	1440548	2530155	2194406	2558579	2566503
3B.1.1 Market Borrowings (net)	795845	971378	1696012	1213169	1776747	1902862
3B.1.2 Small Savings (net)	88961	209232	458801	526693	403838	441189
3B.1.3 State Provident Funds (net)	51004	38280	41273	28100	36454	37114
3B.1.4 Reserve Funds	-18298	10411	4545	42153	3524	24429
3B.1.5 Deposits and Advances	66289	-14227	25682	42203	82485	58404
3B.1.6 Cash Balances	17395	-323279	-43802	-57891	118784	-104667
3B.1.7 Others	96014	548753	347643	399980	136748	207172
3B.2 External Financing	5519	8682	70180	36147	23874	22118
4 Total Disbursements as per cent of GDP	*26.7*	*26.9*	*32.0*	*30.1*	*31.1*	*30.0*
5 Total Receipts as per cent of GDP	*26.6*	*28.5*	*32.2*	*30.3*	*30.6*	*30.3*
6 Revenue Receipts as per cent of GDP	*20.1*	*19.2*	*18.6*	*20.4*	*21.2*	*21.0*
7 Tax Receipts as per cent of GDP	*17.3*	*16.1*	*16.1*	*17.6*	*17.9*	*18.2*
8 Gross Fiscal Deficit as per cent of GDP	*5.8*	*7.2*	*13.1*	*9.5*	*9.6*	*8.6*

… : Not available; RE: Revised Estimates; BE: Budget Estimates
Source : Budget Documents of Central and State Governments.
Note: GDP data is based on 2011-12 base. GDP for 2023-24 is from Union Budget 2023-24.
Data pertains to all States and Union Territories.
1 & 2: Data are net of repayments of the Central Government (including repayments to the NSSF) and State Governments.
1.3: Represents compensation and assignments by States to local bodies and Panchayati Raj institutions.
2: Data are net of variation in cash balances of the Central and State Governments and includes borrowing receipts of the Central and State Governments.
3A.1.1: Data as per RBI records.
3B.1.1: Borrowings through dated securities.
3B.1.2: Represent net investment in Central and State Governments' special securities by the National Small Savings Fund (NSSF).
This data may vary from previous publications due to adjustments across components with availability of new data.
3B.1.6: Include Ways and Means Advances by the Centre to the State Governments.
3B.1.7: Include Treasury Bills, loans from financial institutions, insurance and pension funds, remittances, cash balance investment account.

No. 47: Financial Accommodation Availed by State Governments under various Facilities

(₹ Crore)

Sr. No	State/Union Territory	During July-2024					
		Special Drawing Facility (SDF)		Ways and Means Advances (WMA)		Overdraft (OD)	
		Average amount availed	Number of days availed	Average amount availed	Number of days availed	Average amount availed	Number of days availed
	1	2	3	4	5	6	7
1	Andhra Pradesh	5262.65	31	2128.16	9	-	-
2	Arunachal Pradesh	-	-	-	-	-	-
3	Assam	262.43	8	-	-	-	-
4	Bihar	-	-	-	-	-	-
5	Chhattisgarh	-	-	-	-	-	-
6	Goa	71.19	1	-	-	-	-
7	Gujarat	-	-	-	-	-	-
8	Haryana	580.75	16	-	-	-	-
9	Himachal Pradesh	-	-	375.33	8	-	-
10	Jammu & Kashmir UT	-	-	934.81	22	363.92	4
11	Jharkhand	-	-	-	-	-	-
12	Karnataka	-	-	-	-	-	-
13	Kerala	1404.10	31	1415.14	23	568.18	8
14	Madhya Pradesh	-	-	-	-	-	-
15	Maharashtra	-	-	-	-	-	-
16	Manipur	102.42	30	182.53	29	62.50	6
17	Meghalaya	311.10	23	18.58	1	-	-
18	Mizoram	51.64	6	-	-	-	-
19	Nagaland	-	-	-	-	-	-
20	Odisha	-	-	-	-	-	-
21	Puducherry	-	-	-	-	-	-
22	Punjab	3620.09	31	-	-	-	-
23	Rajasthan	2883.39	25	1546.00	9	-	-
24	Tamil Nadu	-	-	-	-	-	-
25	Telangana	4198.91	31	481.72	15	-	-
26	Tripura	-	-	-	-	-	-
27	Uttar Pradesh	-	-	-	-	-	-
28	Uttarakhand	901.61	9	-	-	-	-
29	West Bengal	-	-	-	-	-	-

Notes: 1. SDF is availed by State Governments against the collateral of Consolidated Sinking Fund (CSF), Guarantee Redemption Fund (GRF) & Auction Treasury Bills (ATBs) balances and other investments in government securities.
2. WMA is advance by Reserve Bank of India to State Governments for meeting temporary cash mismatches.
3. OD is advanced to State Governments beyond their WMA limits.
4. Average Availed is the total accommodation (SDF/WMA/OD) availed divided by number of days for which accommodation was extended during the month.
5.- : Nil.

Source: Reserve Bank of India.

No. 48: Investments by State Governments

(₹ Crore)

Sr. No	State/Union Territory	As on end of July 2024			
		Consolidated Sinking Fund (CSF)	Guarantee Redemption Fund (GRF)	Government Securities	Auction Treasury Bills (ATBs)
	1	2	3	4	5
1	Andhra Pradesh	11131	1098	0	0
2	Arunachal Pradesh	2552	6	0	2150
3	Assam	7174	87	0	0
4	Bihar	10526	-	0	11700
5	Chhattisgarh	7514	62	0	6165
6	Goa	1013	441	0	0
7	Gujarat	13867	642	0	9000
8	Haryana	2252	1634	0	0
9	Himachal Pradesh	-	-	0	0
10	Jammu & Kashmir UT	19	18	0	0
11	Jharkhand	2321	-	0	750
12	Karnataka	19569	724	0	49493
13	Kerala	3001	-	0	0
14	Madhya Pradesh	-	1229	0	0
15	Maharashtra	67400	1680	0	0
16	Manipur	67	135	0	0
17	Meghalaya	1230	105	0	0
18	Mizoram	442	61	0	0
19	Nagaland	1819	45	0	0
20	Odisha	17527	1973	113	7154
21	Puducherry	557	-	0	1300
22	Punjab	8835	0	0	0
23	Rajasthan	466	-	129	8100
24	Tamil Nadu	3314	-	0	3476
25	Telangana	7606	1663	0	0
26	Tripura	1178	26	0	300
27	Uttarakhand	4835	203	0	0
28	Uttar Pradesh	10243	-	89	0
29	West Bengal	12520	942	239	0
	Total	**218977**	**12773**	**570**	**99588**

Notes: 1. CSF and GRF are reserve funds maintained by some State Governments with the Reserve Bank of India.
2. ATBs include Treasury bills of 91 days, 182 days and 364 days invested by State Governments in the primary market.
3. - : Not Applicable (not a member of the scheme).

No. 49: Market Borrowings of State Governments

(₹ Crore)

Sr. No.	State	2022-23		2023-24		2024-25						Total amount raised, so far in 2024-25	
						May		June		July			
		Gross Amount Raised	Net Amount Raised	Gross Amount Raised	Net Amount Raised	Gross Amount Raised	Net Amount Raised	Gross Amount Raised	Net Amount Raised	Gross Amount Raised	Net Amount Raised	Gross	Net
	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Andhra Pradesh	57478	45814	68400	55330	14000	11084	6000	4000	10000	10000	37000	29918
2	Arunachal Pradesh	559	389	902	672	-	-50	-	-	-	-	-	-146
3	Assam	17100	16105	18500	16000	2000	2000	-	-450	1000	1000	4000	3550
4	Bihar	36800	27467	47612	29910	-	-	-	-	-	-	-	-
5	Chhattisgarh	2000	-2287	32000	26213	-	-500	-	-250	-	-	-	-750
6	Goa	1350	500	2550	1560	-	-	-	-200	200	100	200	-200
7	Gujarat	43000	28300	30500	11947	-	-	2000	-1000	-	-	2000	-1000
8	Haryana	45158	28638	47500	28364	2000	1000	5500	3925	3500	3345	12000	9270
9	Himachal Pradesh	14000	11941	8072	5856	700	500	1200	1000	500	350	3400	2300
10	Jammu & Kashmir UT	8473	5969	16337	13904	2500	2350	2300	2150	3000	2700	7800	6900
11	Jharkhand	4000	-155	1000	-2505	-	-	-	-	-	-	-	-
12	Karnataka	36000	26000	81000	63003	-	-1500	-	-1000	-	-2000	-	-4500
13	Kerala	30839	15620	42438	26638	5500	3800	3500	2500	4500	3000	14500	8300
14	Madhya Pradesh	40158	26849	38500	26264	-	-1000	-	-350	-	-2200	-	-3550
15	Maharashtra	72000	42815	110000	79738	-	-2200	-	-2200	6000	3800	16000	8300
16	Manipur	1422	1147	1426	1076	200	200	-	-60	200	200	400	340
17	Meghalaya	1753	1356	1364	912	200	200	200	120	400	400	900	820
18	Mizoram	1315	1129	901	641	200	180	71	51	90	90	361	301
19	Nagaland	1854	1199	2551	2016	-	-65	300	300	-	-	300	100
20	Odisha	0	-7500	0	-4658	-	-	-	-	-	-500	-	-1000
21	Puducherry	1200	698	1100	475	-	-	250	150	-	-	250	150
22	Punjab	45500	33660	42386	29517	5700	4900	5500	3658	4993	4993	21693	17351
23	Rajasthan	46057	30110	73624	49718	10500	9000	8000	3688	7000	5500	25500	17188
24	Sikkim	1414	1320	1916	1701	-	-	-	-	-	-	-	-
25	Tamil Nadu	87000	65722	113001	75970	8000	5500	8000	4750	12000	9500	33000	20750
26	Telangana	40150	30922	49618	39385	4000	916	5000	5000	8000	8000	21000	17082
27	Tripura	0	-645	0	-550	-	-	-	-	-	-	-	-
28	Uttar Pradesh	55612	41797	97650	85335	-	-1000	-	-1233	-	-	-	-4233
29	Uttarakhand	3200	1450	6300	3800	-	-	500	500	-	-	1400	1400
30	West Bengal	63000	42500	69910	48910	2000	200	3500	2500	7000	5500	12500	6400
	Grand Total	758392	518829	1007058	717140	57500	35515	51821	27549	68383	53778	214204	135041

- : Nil.

Note: The State of J&K has ceased to exist constitutionally from October 31, 2019 and the liabilities of the State continue to remain as liabilities of the new UT of Jammu and Kashmir.

Source: Reserve Bank of India.

No. 50 (a): Flow of Financial Assets and Liabilities of Households - Instrument-wise

(Amount in ₹ Crore)

Item	2020-21				
	Q1	Q2	Q3	Q4	Annual
Net Financial Assets (I-II)	**583412.7**	**554437.6**	**463583.5**	**679174.4**	**2280608.2**
Per cent of GDP	*15.0*	*11.7*	*8.5*	*11.8*	*11.5*
I. Financial Assets	**788786.3**	**592945.3**	**633317.9**	**1047276.1**	**3062325.6**
Per cent of GDP	*20.3*	*12.5*	*11.6*	*18.2*	*15.4*
of which:					
1.Total Deposits (a+b)	**297412.4**	**278631.7**	**158172.2**	**506213.3**	**1240429.7**
(a) Bank Deposits	**281191.3**	**264565.3**	**147096.0**	**507719.3**	**1200571.8**
i. Commercial Banks	279010.5	262033.7	143558.6	462689.8	1147292.5
ii. Co-operative Banks	2180.8	2531.6	3537.3	45029.5	53279.3
(b) Non-Bank Deposits	**16221.1**	**14066.4**	**11076.3**	**-1506.0**	**39857.9**
of which:					
Other Financial Institutions (i+ii)	**11040.9**	**8886.2**	**5896.0**	**-6686.2**	**19137.0**
i. Non-Banking Financial Companies	1441.0	3763.0	3514.8	3521.2	12240.0
ii. Housing Finance Companies	9599.9	5123.2	2381.3	-10207.3	6897.0
2. Life Insurance Funds	**124387.9**	**143462.2**	**157535.1**	**142216.5**	**567601.8**
3. Provident and Pension Funds (including PPF)	**114496.3**	**107087.9**	**105344.6**	**175769.3**	**502698.2**
4. Currency	**202432.7**	**21286.9**	**91456.0**	**66800.5**	**381976.1**
5. Investments	**6249.8**	**-12956.4**	**67659.3**	**63624.0**	**124576.7**
of which:					
(a) Mutual Funds	-16021.0	-28837.7	57675.4	51267.0	64083.8
(b) Equity	18599.4	8291.5	5307.1	6333.3	38531.2
6. Small Savings (excluding PPF)	**42751.6**	**54377.4**	**52095.1**	**91597.0**	**240821.1**
II. Financial Liabilities	**205373.6**	**38507.7**	**169734.4**	**368101.7**	**781717.4**
Per cent of GDP	*5.3*	*0.8*	*3.1*	*6.4*	*3.9*
Loans/Borrowings					
1. Financial Corporations (a+b)	**205490.3**	**38624.3**	**169851.0**	**368219.1**	**782184.7**
(a) Banking Sector	**211058.8**	**13213.0**	**139622.0**	**276579.8**	**640473.6**
of which:					
i. Commercial Banks	211259.3	13213.8	140514.3	240050.4	605037.9
(b) Other Financial Institutions	**-5568.6**	**25411.3**	**30229.0**	**91639.4**	**141711.1**
i. Non-Banking Financial Companies	-15450.4	21627.1	15921.2	64881.1	86979.0
ii. Housing Finance Companies	10516.6	2875.1	13048.5	25336.1	51776.2
iii. Insurance Corporations	-634.8	909.2	1259.3	1422.2	2955.9
2. Non-Financial Corporations (Private Corporate Business)	**33.8**	**33.8**	**33.8**	**33.0**	**134.4**
3. General Government	**-150.4**	**-150.4**	**-150.4**	**-150.4**	**-601.7**

No. 50 (a): Flow of Financial Assets and Liabilities of Households - Instrument-wise (Contd.)

(Amount in ₹ Crore)

Item	2021-22				
	Q1	Q2	Q3	Q4	Annual
Net Financial Assets (I-II)	**370115.8**	**334234.9**	**489774.4**	**503089.0**	**1696155.6**
Per cent of GDP	*7.2*	*6.0*	*7.9*	*7.7*	*7.2*
I. Financial Assets	**364661.7**	**527896.1**	**818355.4**	**887657.3**	**2597511.9**
Per cent of GDP	*7.1*	*9.4*	*13.1*	*13.6*	*11.1*
of which:					
1.Total Deposits (a+b)	**-82726.1**	**204033.6**	**426977.3**	**277625.7**	**824852.1**
(a) Bank Deposits	**-106428.9**	**197105.1**	**422392.9**	**264882.9**	**777952.1**
i. Commercial Banks	-107940.7	195441.8	418267.0	262326.1	768094.3
ii. Co-operative Banks	1511.8	1663.4	4125.9	2556.8	9857.8
(b) Non-Bank Deposits	**23702.8**	**6928.5**	**4584.5**	**12742.8**	**46900.0**
of which:					
Other Financial Institutions (i+ii)	**16950.0**	**170.7**	**-2178.3**	**5960.0**	**20902.3**
i. Non-Banking Financial Companies	4972.6	-765.5	73.3	4211.8	8492.2
ii. Housing Finance Companies	11977.3	936.2	-2251.6	1748.2	12410.1
2. Life Insurance Funds	**114711.5**	**127449.8**	**103248.6**	**121541.6**	**466951.5**
3. Provident and Pension Funds (including PPF)	**127624.0**	**115463.1**	**98146.0**	**221372.4**	**562605.5**
4. Currency	**128660.2**	**-68631.2**	**62793.3**	**146845.0**	**269667.4**
5. Investments	**24929.6**	**82305.4**	**69760.9**	**50972.1**	**227967.9**
of which:					
(a) Mutual Funds	14573.0	63151.3	37912.2	44963.7	160600.1
(b) Equity	4502.5	13218.5	27808.2	3084.1	48613.3
6. Small Savings (excluding PPF)	**50405.2**	**66218.1**	**56372.0**	**68243.2**	**241238.4**
II. Financial Liabilities	**-5454.1**	**193661.2**	**328581.0**	**384568.3**	**901356.3**
Per cent of GDP	*-0.1*	*3.5*	*5.3*	*5.9*	*3.8*
Loans/Borrowings					
1. Financial Corporations (a+b)	**-5562.3**	**193553.0**	**328472.8**	**384460.1**	**900923.7**
(a) Banking Sector	**21436.5**	**138722.6**	**267950.7**	**348360.4**	**776470.2**
of which:					
i. Commercial Banks	26978.6	140268.7	265271.5	337009.8	769528.5
(b) Other Financial Institutions	**-26998.8**	**54830.4**	**60522.2**	**36099.7**	**124453.5**
i. Non-Banking Financial Companies	-34757.9	28876.8	29476.5	-2163.2	21432.2
ii. Housing Finance Companies	7132.0	24403.8	29494.8	37436.2	98466.8
iii. Insurance Corporations	627.1	1549.8	1550.9	826.7	4554.5
2. Non-Financial Corporations (Private Corporate Business)	**33.8**	**33.8**	**33.8**	**33.8**	**135.1**
3. General Government	**74.4**	**74.4**	**74.4**	**74.4**	**297.4**

No. 50 (a): Flow of Financial Assets and Liabilities of Households - Instrument-wise (Concld.)

(Amount in ₹ Crore)

Item	2022-23				
	Q1	Q2	Q3	Q4	Annual
Net Financial Assets (I-II)	**297770.4**	**293705.1**	**279460.1**	**505937.8**	**1376873.5**
Per cent of GDP	*4.6*	*4.5*	*4.0*	*7.0*	*5.1*
I. Financial Assets	**586920.5**	**646714.8**	**750856.7**	**974558.5**	**2959050.5**
Per cent of GDP	*9.0*	*9.8*	*10.8*	*13.6*	*10.9*
of which:					
1.Total Deposits (a+b)	**183072.0**	**315216.2**	**276593.9**	**324746.6**	**1099628.6**
(a) Bank Deposits	**163162.9**	**299545.0**	**256363.7**	**307491.6**	**1026563.1**
i. Commercial Banks	158613.3	300565.0	248459.8	284968.0	992606.2
ii. Co-operative Banks	4549.6	-1020.1	7903.8	22523.6	33956.9
(b) Non-Bank Deposits	**19909.1**	**15671.3**	**20230.2**	**17255.0**	**73065.5**
of which:					
Other Financial Institutions (i+ii)	**6314.4**	**2076.7**	**6635.6**	**3660.4**	**18687.1**
i. Non-Banking Financial Companies	4040.2	3267.2	1800.9	5372.2	14480.5
ii. Housing Finance Companies	2274.2	-1190.5	4834.7	-1711.8	4206.6
2. Life Insurance Funds	**73669.9**	**152049.5**	**167894.1**	**141206.6**	**534820.1**
3. Provident and Pension Funds (including PPF)	**155604.2**	**132126.0**	**140204.4**	**235093.2**	**663027.7**
4. Currency	**66438.9**	**-54579.3**	**76760.1**	**148990.2**	**237609.8**
5. Investments	**51603.2**	**48630.6**	**49879.2**	**64168.5**	**214281.5**
of which:					
(a) Mutual Funds	35443.5	44484.0	40205.9	58954.5	179087.8
(b) Equity	13560.9	1378.2	6434.1	1664.9	23038.1
6. Small Savings (excluding PPF)	**54375.1**	**51114.5**	**37367.7**	**58196.2**	**201053.5**
II. Financial Liabilities	**289150.0**	**353009.7**	**471396.5**	**468620.7**	**1582177.0**
Per cent of GDP	*4.4*	*5.4*	*6.8*	*6.5*	*5.8*
Loans/Borrowings					
1. Financial Corporations (a+b)	**289141.6**	**353001.2**	**471388.1**	**468612.3**	**1582143.3**
(a) Banking Sector	**234845.3**	**263782.5**	**368167.4**	**349555.0**	**1216350.1**
of which:					
i. Commercial Banks	230283.8	261265.3	365304.6	331292.5	1188146.3
(b) Other Financial Institutions	**54296.3**	**89218.8**	**103220.8**	**119057.3**	**365793.1**
i. Non-Banking Financial Companies	29281.6	54439.6	75878.8	80295.9	239895.9
ii. Housing Finance Companies	22336.7	33031.2	24903.3	36745.8	117017.0
iii. Insurance Corporations	2678.0	1747.9	2438.7	2015.6	8880.3
2. Non-Financial Corporations (Private Corporate Business)	**33.7**	**33.7**	**33.7**	**33.7**	**135.0**
3. General Government	**-25.3**	**-25.3**	**-25.3**	**-25.3**	**-101.3**

Notes :1. Net Financial Savings of households refer to the net financial assets, which are measured as difference of financial asset and liabilities flows.
2. Preliminary estimates for 2022-23 and revised estimates for 2020-21 and 2021-22.
3. The preliminary estimates for 2022-23 will undergo revision with the release of first revised estimates of national income, consumption expenditure, savings, and capital formation, 2022-23 by the NSO.
4. Non-bank deposits apart from other financial institutions, comprises state power utilities, co-operative non credit societies etc.
5. Figures in the columns may not add up to the total due to rounding off.

No. 50 (b): Stocks of Financial Assets and Liabilities of Households- Select Indicators

(Amount in ₹ Crore)

Item	Jun-2020	Sep-2020	Dec-2020	Mar-2021
Financial Assets (a+b+c+d+e+f+g+h)	**20405824.2**	**21066027.8**	**21906338.5**	**22874301.5**
Per cent of GDP	*107.2*	*111.5*	*114.0*	*115.4*
(a) Bank Deposits (i+ii)	**9977865.6**	**10242430.9**	**10389526.9**	**10897246.1**
i. Commercial Banks	9192702.5	9454736.2	9598294.8	10060984.6
ii. Co-operative Banks	785163.1	787694.7	791232.1	836261.6
(b) Non-Bank Deposits				
of which:				
Other Financial Institutions	**180857.4**	**189743.6**	**195639.6**	**188953.5**
i. Non-Banking Financial Companies	51463.0	55226.1	58740.8	62262.0
ii. Housing Finance Companies	129394.4	134517.6	136898.8	126691.5
(c) Life Insurance Funds	**4102000.7**	**4274424.9**	**4551882.0**	**4752932.3**
(d) Currency	**2434693.7**	**2455980.6**	**2547436.6**	**2614237.0**
(e) Mutual funds	**1343752.0**	**1443784.4**	**1648999.0**	**1730461.0**
(f) Public Provident Fund (PPF)	**663478.0**	**671884.3**	**678997.2**	**742189.5**
(g) Pension Funds	**464705.0**	**494930.0**	**548913.0**	**578025.0**
(h) Small Savings (excluding PPF)	**1238471.7**	**1292849.1**	**1344944.2**	**1370257.1**
Financial Liabilities (a+b)	**7190710.8**	**7229335.1**	**7399186.1**	**7767405.3**
Per cent of GDP	*37.8*	*38.3*	*38.5*	*39.2*
Loans/Borrowings				
(a) Banking Sector	**5728735.3**	**5741948.3**	**5881570.2**	**6158150.0**
of which:				
i. Commercial Banks	5226482.2	5239696.0	5380210.4	5620260.7
ii. Co-operative Banks	500870.2	500865.3	499968.8	536494.1
(b) Other Financial Institutions	**1461975.5**	**1487386.9**	**1517615.9**	**1609255.3**
of which:				
i. Non-Banking Financial Companies	687643.6	709270.7	725191.9	790073.0
ii. Housing Finance Companies	673118.3	675993.4	689041.8	714377.9
iii. Insurance Corporations	101213.7	102122.8	103382.2	104804.4

No. 50 (b): Stocks of Financial Assets and Liabilities of Households- Select Indicators (Contd.)

(Amount in ₹ Crore)

Item	Jun-2021	Sep-2021	Dec-2021	Mar-2022
Financial Assets (a+b+c+d+e+f+g+h)	**23318920.4**	**23991428.3**	**24700622.2**	**25435684.2**
Per cent of GDP	*110.7*	*109.3*	*108.7*	*108.4*
(a) Bank Deposits (i+ii)	**10790817.3**	**10987922.4**	**11410315.3**	**11675198.2**
i. Commercial Banks	9953043.9	10148485.7	10566752.7	10829078.8
ii. Co-operative Banks	837773.4	839436.7	843562.6	846119.4
(b) Non-Bank Deposits				
of which:				
Other Financial Institutions	**205903.4**	**206074.1**	**203895.8**	**209855.7**
i. Non-Banking Financial Companies	67234.6	66469.1	66542.3	70754.2
ii. Housing Finance Companies	138668.8	139605.0	137353.4	139101.6
(c) Life Insurance Funds	**4929725.2**	**5142278.8**	**5213527.2**	**5357350.2**
(d) Currency	**2742897.3**	**2674266.1**	**2737059.4**	**2883904.4**
(e) Mutual funds	**1855000.1**	**2064363.5**	**2126112.0**	**2152140.5**
(f) Public Provident Fund (PPF)	**757397.8**	**762264.0**	**767287.3**	**834147.6**
(g) Pension Funds	**616517.0**	**667379.0**	**699173.0**	**736592.0**
(h) Small Savings (excluding PPF)	**1420662.3**	**1486880.4**	**1543252.3**	**1586495.5**
Financial Liabilities (a+b)	**7755119.8**	**7868215.0**	**8256715.7**	**8668329.0**
Per cent of GDP	*36.8*	*35.9*	*36.3*	*36.9*
Loans/Borrowings				
(a) Banking Sector	**6172863.3**	**6231128.1**	**6559106.7**	**6934620.2**
of which:				
i. Commercial Banks	5640516.1	5700327.0	6025626.4	6389789.3
ii. Co-operative Banks	530937.1	529376.2	532040.6	543376.3
(b) Other Financial Institutions	**1582256.5**	**1637086.9**	**1697609.1**	**1733708.8**
of which:				
i. Non-Banking Financial Companies	755315.1	784191.9	813668.4	811505.2
ii. Housing Finance Companies	721510.0	745913.7	775408.5	812844.7
iii. Insurance Corporations	105431.4	106981.2	108532.1	109358.8

No. 50 (b): Stocks of Financial Assets and Liabilities of Households- Select Indicators (Concld.)

(Amount in ₹ Crore)

Item	Jun-2022	Sep-2022	Dec-2022	Mar-2023
Financial Assets (a+b+c+d+e+f+g+h)	**25689017.4**	**26240728.5**	**27208717.9**	**28083947.0**
Per cent of GDP	*103.2*	*101.5*	*102.4*	*103.1*
(a) Bank Deposits (i+ii)	**11911196.2**	**11956360.9**	**12421907.5**	**12701761.3**
i. Commercial Banks	11060527.2	11106712.0	11564354.7	11821685.0
ii. Co-operative Banks	850669.0	849648.9	857552.8	880076.4
(b) Non-Bank Deposits				
of which:				
Other Financial Institutions	**216170.2**	**218246.9**	**224882.5**	**228542.9**
i. Non-Banking Financial Companies	74794.4	78061.6	79862.5	85234.7
ii. Housing Finance Companies	141375.8	140185.3	145020.0	143308.2
(c) Life Insurance Funds	**5325967.3**	**5559681.9**	**5786592.6**	**6038630.4**
(d) Currency	**2950343.2**	**2895763.9**	**2972524.0**	**3121514.2**
(e) Mutual funds	**2048097.3**	**2260209.7**	**2355315.8**	**2367792.5**
(f) Public Provident Fund (PPF)	**851913.4**	**858591.1**	**864730.6**	**939814.6**
(g) Pension Funds	**744459.2**	**799889.0**	**853412.0**	**898342.0**
(h) Small Savings (excluding PPF)	**1640870.6**	**1691985.1**	**1729352.9**	**1787549.1**
Financial Liabilities (a+b)	**8957470.6**	**9310471.8**	**9781859.9**	**10253472.2**
Per cent of GDP	*36.0*	*36.0*	*36.8*	*37.6*
Loans/Borrowings				
(a) Banking Sector	**7169465.5**	**7433248.0**	**7801415.3**	**8153970.3**
of which:				
i. Commercial Banks	6620073.1	6881338.5	7246643.0	7580935.6
ii. Co-operative Banks	547894.8	550354.8	553201.4	571339.8
(b) Other Financial Institutions	**1788005.1**	**1877223.8**	**1980444.6**	**2099501.9**
of which:				
i. Non-Banking Financial Companies	840786.9	895226.5	971105.3	1051401.1
ii. Housing Finance Companies	835181.3	868212.5	893115.8	929861.7
iii. Insurance Corporations	112036.9	113784.8	116223.5	118239.1

Note : 1. Data as ratios to GDP have been calculated based on the Provisional Estimates of National Income 2022-23, released by NSO on May 31, 2023.
2. Pension funds comprises funds with the National Pension Scheme.
3. Outstanding deposits with Small Savings are sourced from the Controller General of Accounts, Government of India.
4. Non-bank deposits apart from other financial institutions, comprises state power utilities, co-operative non credit societies etc. Data for outstanding deposits are available only for other financial institutions.
5. Figures in the columns may not add up to the total due to rounding off.

Explanatory Notes to the Current Statistics

Table No. 1

1.2& 6: Annual data are average of months.
3.5 & 3.7: Relate to ratios of increments over financial year so far.
4.1 to 4.4, 4.8,4.9 &5: Relate to the last friday of the month/financial year.
4.5, 4.6 & 4.7: Relate to five major banks on the last Friday of the month/financial year.
4.10 to 4.12: Relate to the last auction day of the month/financial year.
4.13: Relate to last day of the month/ financial year
7.1&7.2: Relate to Foreign trade in US Dollar.

Table No. 2

2.1.2: Include paid-up capital, reserve fund and Long-Term Operations Funds.
2.2.2: Include cash, fixed deposits and short-term securities/bonds, e.g., issued by IIFC (UK).

Table No. 4

Maturity-wise position of outstanding forward contracts is available at http://nsdp.rbi.org.in under ''Reserves Template''.

Table No. 5

Special refinance facility to Others, *i.e.* to the EXIM Bank, is closed since March 31, 2013.

Table No. 6

For scheduled banks, March-end data pertain to the last reporting Friday.
2.2: Exclude balances held in IMF Account No.1, RBI employees' provident fund, pension fund, gratuity and superannuation fund.

Table Nos. 7 & 11

3.1 in Table 7 and 2.4 in Table 11: Include foreign currency denominated bonds issued by IIFC (UK).

Table No. 8

NM_2 and NM_3 do not include FCNR (B) deposits.
2.4: Consist of paid-up capital and reserves.
2.5: includes other demand and time liabilities of the banking system.

Table No. 9

Financial institutions comprise EXIM Bank, SIDBI, NABARD and NHB.
L_1 and L_2 are compiled monthly and L_3 quarterly.
Wherever data are not available, the last available data have been repeated.

Table No. 13

Data against column Nos. (1), (2) & (3) are Final and for column Nos. (4) & (5) data are Provisional.

Table No. 14

Data in column Nos. (4) & (8) are Provisional.

Table No. 17

2.1.1: Exclude reserve fund maintained by co-operative societies with State Co-operative Banks

2.1.2: Exclude borrowings from RBI, SBI, IDBI, NABARD, notified banks and State Governments.

4: Include borrowings from IDBI and NABARD.

Table No. 24

Primary Dealers (PDs) include banks undertaking PD business.

Table No. 30

Exclude private placement and offer for sale.

1: Exclude bonus shares.

2: Include cumulative convertible preference shares and equi-preference shares.

Table No. 32

Exclude investment in foreign currency denominated bonds issued by IIFC (UK), SDRs transferred by Government of India to RBI and foreign currency received under SAARC and ACU currency swap arrangements. Foreign currency assets in US dollar take into account appreciation/depreciation of non-US currencies (such as Euro, Sterling, Yen and Australian Dollar) held in reserves. Foreign exchange holdings are converted into rupees at rupee-US dollar RBI holding rates.

Table No. 34

1.1.1.1.2 & 1.1.1.1.1.4: Estimates.

1.1.1.2: Estimates for latest months.

'Other capital' pertains to debt transactions between parent and subsidiaries/branches of FDI enterprises.

Data may not tally with the BoP data due to lag in reporting.

Table No. 35

1.10: Include items such as subscription to journals, maintenance of investment abroad, student loan repayments and credit card payments.

Table No. 36

Increase in indices indicates appreciation of rupee and *vice versa*. For 6-Currency index, base year 2021-22 is a moving one, which gets updated every year. REER figures are based on Consumer Price Index (combined). The details on methodology used for compilation of NEER/REER indices are available in December 2005, April 2014 and January 2021 issues of the RBI Bulletin.

Table No. 37

Based on applications for ECB/Foreign Currency Convertible Bonds (FCCBs) which have been allotted loan registration number during the period.

Table Nos. 38, 39, 40 & 41

Explanatory notes on these tables are available in December issue of RBI Bulletin, 2012.

Table No. 43

Part I-A. Settlement systems

1.1.3: Tri- party Repo under the securities segment has been operationalised from November 05, 2018.

Part I-B. Payments systems

4.1.2: 'Others' includes e-commerce transactions and digital bill payments through ATMs, *etc.*

4.2.2: 'Others' includes e-commerce transactions, card to card transfers and digital bill payments through ATMs, *etc.*

5: Available from December 2010.

5.1: includes purchase of goods and services and fund transfer through wallets.

5.2.2: includes usage of PPI Cards for online transactions and other transactions.

6.1: Pertain to three grids – Mumbai, New Delhi and Chennai.

6.2: 'Others' comprises of Non-MICR transactions which pertains to clearing houses managed by 21 banks.

Part II-A. Other payment channels

1: Mobile Payments –
- Include transactions done through mobile apps of banks and UPI apps.
- The data from July 2017 includes only individual payments and corporate payments initiated, processed, and authorised using mobile device. Other corporate payments which are not initiated, processed, and authorised using mobile device are excluded.

2: Internet Payments – includes only e-commerce transactions through 'netbanking' and any financial transaction using internet banking website of the bank.

Part II-B. ATMs

3.3 and 4.2: only relates to transactions using bank issued PPIs.

Part III. Payment systems infrastructure

3: Includes ATMs deployed by Scheduled Commercial Banks (SCBs) and White Label ATM Operators (WLAOs). WLAs are included from April 2014 onwards.

Table No. 45

(-) represents nil or negligible

The table format is revised since June 2023 issue of the bulletin.

State Government Securities include special bonds issued under Ujjwal DISCOM Assurance Yojana (UDAY).

Bank PDs are clubbed under Commercial Banks. However, they form very small fraction of total outstanding securities.

The category 'Others' comprises State Governments, DICGC, PSUs, Trusts, Foreign Central Banks, HUF/ Individuals *etc.*

Data since September 2023 includes the impact of the merger of a non-bank with a bank.

Table No. 46

GDP data is based on 2011-12 base. GDP for 2023-24 is from Union Budget 2023-24.

Data pertains to all States and Union Territories.

1 & 2: Data are net of repayments of the Central Government (including repayments to the NSSF) and State Governments.

1.3: Represents compensation and assignments by States to local bodies and Panchayati Raj institutions.

2: Data are net of variation in cash balances of the Central and State Governments and includes borrowing receipts of the Central and State Governments.

3A.1.1: Data as per RBI records.

3B.1.1: Borrowings through dated securities.

3B.1.2: Represent net investment in Central and State Governments' special securities by the National Small Savings Fund (NSSF).

This data may vary from previous publications due to adjustments across components with availability of new data.

3B.1.6: Include Ways and Means Advances by the Centre to the State Governments.

3B.1.7: Include Treasury Bills, loans from financial institutions, insurance and pension funds, remittances, cash balance investment account.

Table No. 47

SDF is availed by State Governments against the collateral of Consolidated Sinking Fund (CSF), Guarantee Redemption Fund (GRF) & Auction Treasury Bills (ATBs) balances and other investments in government securities.

WMA is advance by Reserve Bank of India to State Governments for meeting temporary cash mismatches.

OD is advanced to State Governments beyond their WMA limits.

Average amount Availed is the total accommodation (SDF/WMA/OD) availed divided by number of days for which accommodation was extended during the month.

- : Nil.

Table No. 48

CSF and GRF are reserve funds maintained by some State Governments with the Reserve Bank of India.

ATBs include Treasury bills of 91 days, 182 days and 364 days invested by State Governments in the primary market.

--: Not Applicable (not a member of the scheme).

The concepts and methodologies for Current Statistics are available in Comprehensive Guide for Current Statistics of the RBI Monthly Bulletin **(https://rbi.org.in/Scripts/PublicationsView.aspx?id=17618)**

Time series data of 'Current Statistics' is available at https://data.rbi.org.in.

Detailed explanatory notes are available in the relevant press releases issued by RBI and other publications/releases of the Bank such as **Handbook of Statistics on the Indian Economy**.

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8. Report on Trend and Progress of Banking in India 2022-23	Issued as Supplement to RBI Bulletin January, 2024	
9. Annual Report 2023-24	Issued as Supplement to RBI Bulletin June, 2024	
10. Financial Stability Report, June 2024	Issued as Supplement to RBI Bulletin July, 2024	
11. Monetary Policy Report - April 2024	Included in RBI Bulletin April 2024	
12. Banking Glossary (English-Hindi)	₹100 per copy (over the counter) ₹150 per copy (inclusive of postal charges)	

Notes

1. Many of the above publications are available at the RBI website (www.rbi.org.in).
2. Time Series data are available at the Database on Indian Economy (https://data.rbi.org.in).
3. The Reserve Bank of India History 1935-2008 (5 Volumes) are available at leading book stores in India.

* Concession is available for students, teachers/lecturers, academic/education institutions, public libraries and Booksellers in India provided the proof of eligibility is submitted.

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