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*Transforming Grievance Redress: The AI Advantage**

Shri Sanjay Malhotra

I am delighted to participate in this year's Annual Conference of the RBI Ombudsmen. The Reserve Bank has been organising this conference on or around the World Consumer Rights Day, that is, 15th March. World Consumer Rights Day is celebrated every year with the aim of raising global awareness about consumer rights and needs. We organise this conference to reflect on our achievements with regard to consumer services and to deliberate on how to improve services and reduce grievances. We need to improve consumer services, not only because it is our duty to do so, but because it is in our selfish interest to do so. In this age of competition, we would not survive long if we do not provide quality service to our consumers.

We have made tremendous strides in improving consumer services over the years. We have enabled internet banking and mobile banking. Most of the banking services, be it opening a deposit account, or taking a small loan have been digitised, adding to the convenience and speed. We are making record number of digital transactions through UPI and other means of digital payments. Many among the younger generation may have never visited a bank branch. We have even enabled opening of accounts using video KYC.

While we have enhanced customer experience over the years, the high number of customer grievances continues to be a matter of serious concern. I am told that last year (2023-24), the 95 Scheduled Commercial Banks alone received over 10 million complaints from their customers. If we take into account the complaints received at other RBI-regulated entities (REs), the number would be even higher. One may argue that this amounts to only four complaints per thousand accounts per year as there are about 2.5 billion bank accounts. But, for us, even one complaint is a cause of concern. We have 10 million complaints and with the rapidly growing customer base and expanding suite of products, this may grow, if we do not get our act together.

Customer satisfaction – a cornerstone for banking and other financial services

Excellent customer service, in fact excellent customer experience is a *sine qua non* in any service industry. Our effort should be to enhance the total customer experience. The experience should be such that there is no cause for a grievance that requires a redress. Let me state a fundamental truth: every complaint is a test of trust. When a consumer files a grievance – whether for a disputed transaction, a lapse in service, inappropriate pricing or charges or an unfair practice – it is a signal that our system has fallen short. Left unresolved, such issues can erode consumer confidence and tarnish the entire ecosystem.

I am reminded of a real story about customer service. Some of you, especially the management graduates, may have heard it but it is so appropriate for today's theme that it is worth being retold. In the winter of 1975, in a town in Alaska, a man walked into a store and complained to the salesman present that the snow tyres that he bought some time ago were not holding. The salesman was a little puzzled. He said that he could not replace them but will check what he could do and went to the back of the store. Those of you, who have visited departmental stores in the USA, would know that refunds are processed

* Inaugural Address by Shri Sanjay Malhotra, Governor, Reserve Bank of India At the Annual Conference of the RBI Ombudsmen, March 17, 2025, Mumbai.

at the back of the store. The salesman came back after some time and handed over some cash as refund and the customer left satisfied. Can anyone guess why this was unique, as no questions asked policy for refunds is fairly common in the USA? It is because the company in question is Nordstrom which does not even sell tyres. It sells apparel and shoes. But, for Nordstrom, customer comes first. Trusting him and winning his trust is more important than anything else.

Some say that this is not a true story. How is this possible? How could a company offer refund for a product which it never sold? Nordstrom, however, insists that this incident did take place. Nordstrom had acquired three stores from another company that sold miscellaneous articles including tyres. The customer did not realise that the store had changed and walked in with his complaint. The key message is that Nordstrom saw itself being in the business of customer service, and not just selling goods. We too need to realise that we are in the business of providing unalloyed customer service and not just selling banking and other financial services.

Top management to accord priority to customer service

I am sure you will all agree that we are indeed in the business of customer service. However, I suspect that we are not spending enough time on customer service and grievance redressal as a result of which not only are there a large number of complaints being received by banks and NBFCs but in the absence of satisfactory resolution, a large number of them are getting escalated to RBI Ombudsmen.

Let me give you some perspective. The number of complaints received under RBI's Integrated Ombudsman Scheme increased at a compounded average growth rate of almost 50 per cent per year over last two years to 9.34 lakh in 2023-24. The number of complaints processed at the Office of RBI Ombudsman increased by 25 per cent from about 2,35,000 in 2022-23 to almost 2,94,000 in 2023-24. Not only are large number of complaints getting escalated, a large proportion of them – nearly 57 per cent of the maintainable complaints last year – required mediation or formal intervention by the RBI Ombudsmen. You would all agree that this is a highly unsatisfactory situation and needs our urgent attention.

I would, therefore, strongly urge all the MD&CEOs, Zonal and Regional Managers and the Branch Managers to spend some time every week, if not every day on grievance redressal. This is a must. All great CEOs find time to do it. We too must keep some time in our diary for improving customer service and grievance redressal.

Improving customer service systems

Customer complaints aren't a nuisance – they are in fact opportunities to improve, innovate, and build trust. Handling them well can define your success. Each unresolved grievance is a missed opportunity for regulated entities to reaffirm customer trust and loyalty. It is also a warning signal as repeat complaints are often signs of systemic flaws. Today, complaints often surface on social media even before reaching official channels, highlighting the need for proactive measures.

The effort thus should be to not only resolve the complaints but also to ensure that the same type of complaint does not arise again. Many of the complaints like digital transaction disputes, unauthorized charges, or miscommunication frequently recur. These are clearcut symptoms of underlying issues in the overall customer service framework of the regulated entities. A thorough root cause analysis should be performed for each complaint so as to enable remedial action and avoid repetition of same type of complaint.

In fact, I would go a step further. Best service is not one in which there is no occasion for grievance redressal but one in which there is no occasion for the customer service department to step in. Systems should work seamlessly and conveniently so that customers do not have to call the branch or the customer service centre or talk to anyone in the Bank or NBFC. Systems have to be so user-friendly that customers can rely on self-service rather than being dependent on anyone else.

Improving internal grievance redressal systems

While improving systems to reduce grievances is important, setting up a robust grievance redressal system is equally important for all regulated entities. I would urge you all to review the same. While the regulations do not make any prescription for the organisational structure for grievance redressal, my experience suggests that there should be at least two levels for grievance redressal in large REs, with unresolved grievances getting escalated from the lower to the higher level. The highest level should be at a fairly high rank. This to ensure that requests do not get rejected without having been examined by a senior functionary who is empowered to take decisions in consumer interest. This will help reduce grievances getting escalated to the Ombudsman. It must also be ensured that there are sufficient number of grievance redress officers at all levels including in the Internal Ombudsman office.

I would also like to draw your attention to the misclassification of complaints as requests, queries, and disputes by the regulated entities. This results in the complainants' grievances remaining unaddressed. Moreover, this is also a gross regulatory violation.

Major areas of service improvement

Let me now briefly allude to some of the major areas where we need to improve. These relate to KYC, digital frauds, mis-selling, and aggressive recovery practices.

As for KYC, we need to ensure that once a customer has submitted documents to a financial institution, we do not insist on obtaining the same documents again. Once the customer has updated his details, for example, his residential address, with one regulated entity of any financial sector regulator, it gets updated in CKYCR and other REs are notified of the updation. PML Rules made by the Department of Revenue in the Ministry of Finance and RBI's Master Directions on KYC mandate regulated entities to check the CKYCR system before seeking KYC documents for opening an account. However, most banks and NBFCs have not enabled the same in their branches/ business outlets, causing avoidable inconvenience to customers. This may be facilitated early. This will be in the interest of all.

Another important issue connected to customer protection is rising digital frauds. It is a matter of great concern that innocent customers continue to fall prey to scamsters. While this could be attributed to rise in digital transactions and innovative methods adopted by fraudsters, lack of customer awareness is also a major reason for the same. To mitigate this menace, REs not only need to put in place robust internal controls but also enhance digital financial literacy.

The issues of mis-selling and aggressive recovery practices have been highlighted earlier too. In this context too, I would request you to keep consumer interest supreme.

Embracing technology – the AI way

Let me now come to the theme of this year's conference: AI's potential to revolutionize grievance redressal. We are entering an exciting era where technology, particularly artificial intelligence (AI), can drive remarkable improvements in speed, accuracy, and fairness of complaint resolution.

AI can help categorize incoming complaints by urgency, complexity, or subject area, ensuring minimal delay in reaching the right people or the right team. AI can also help in optimising complaint routing. Further, it can assist in decision-making and reducing processing time.

Secondly, AI can be used to pinpoint systemic gaps by analysing both structured and unstructured data such as emails, chat logs, and call transcripts. This will aid in identifying training needs and guiding necessary process reforms. Using data from millions of consumer branch visits, call centre logs, mobile apps, and social media, a unified, AI-driven view of all these interactions can help identify common pain points more efficiently. Leveraging data analytics, sentiment analysis, and predictive models, AI can be used to analyse large volumes of data to detect spikes in issues – such as ATM failures or erroneous charges – and alert REs pre-emptively.

Lastly, in a linguistically diverse country like India, AI-driven chatbots and voice recognition tools can eliminate language barriers by operating in local languages. Moreover, the implementation of conversational AI in chatbots, voicebots, and advanced IVR systems can handle routine queries round the clock, thereby freeing people to focus on cases that require empathy and complex problem-solving.

In short, integrating AI at every stage – from complaint lodging to closure – can result in a seamless, efficient, and data-driven grievance redressal system. Such a framework not only reduces processing times and addresses repetitive complaints but also fosters equitable outcomes by mitigating human biases. It is time that the banking industry explores and pioneers the integration of technology – including AI – to strengthen the grievance resolution mechanisms and make it best in class across the globe.

Challenges and guardrails in AI driven grievance redressal system

While AI presents unparalleled opportunities, we need to be cognizant of the challenges and risks that its adoption poses. There are concerns on data privacy, algorithmic bias and complexity in AI-driven models. As we embrace AI in grievance redressal or any other process, we must also remain mindful of ethical considerations. Human oversight, bias mitigation and data privacy must be integrated into the AI Systems to ensure transparent and consistent outcomes.

Investing in human resources

While technology in all its forms is a powerful enabler, I would like to emphasise that it is no substitute for integrity, empathy, and human judgment. In a world increasingly driven by data, algorithms, and automation, it is all too easy to lose sight of the human element. Every transaction represents not just a number in a ledger, but the hard-earned savings of a family, the dreams of a small entrepreneur, or the lifelong savings of a senior citizen. It is, therefore, critical that REs continue to invest in human resources dedicated for customer service and grievance redressal. It is essential to invest in training of staff, especially in behavioural aspects of customer service. Moreover, the staff needs to be empowered to take decisions based on their judgement to redress consumer grievances, enhance customer satisfaction and win consumer trust.

RBI as a facilitator

In the end, I would like to assure you that, while we exhort you to provide services efficiently to customers, we in the Reserve Bank shall also provide various services, approvals, clarifications, *etc.* to the regulated entities in a timely manner. We already have a citizen's charter. We are in the process of reviewing the charter. We will make the charter comprehensive to include all services that we offer either to the REs

or directly to citizens. Moreover, we are reviewing the timelines for each service. It will be our endeavour to provide all approvals, *etc.* within the timelines. We are also making mandatory the use of PRAVAAH, which is RBI's secure and centralised web-based portal for any individual or entity to seek authorisation, license or regulatory approval on any reference made to the Reserve Bank in a timely manner. This will help us in expediting the disposal of applications received by the Reserve Bank.

Conclusion

We stand at a pivotal juncture as India looks to realise its dream of a more resilient and inclusive *Viksit Bharat*. With the financial sector touching the lives of almost the entire population, we have a critical role. To succeed in this role, we must continue to enhance customer service and customer protection.

Thank you !

*Keynote Address at the Policy Seminar on Climate Change Risks and Finance**

Shri Sanjay Malhotra

I am delighted to be present here and be part of this important event on climate change which continues to draw attention in the national and international discourse. I would not dwell in detail about the perils of climate change since this audience is already well aware about its impact not only on the real economy, but also the financial system, as well as our day-to-day lives. Climate related changes are perceptible, clear, and visible. They are intensifying and threatening ecosystems, livelihoods, and economies. It is our individual and collective responsibility, to work together effectively and contribute to the global efforts to mitigate the risks associated with climate change and ensure that the Indian financial system remains resilient.

Dimensions of Climate Change Risks

There are two dimensions to climate change related risks that we as regulators, policymakers and practitioners have to be aware of – the first is facilitative involving capacity building, development of the ecosystem and financing of green and sustainable transition; and the second is the prudential aspect, which is related to risk management.

While the role of the Central Banks in managing risks posed by climate change to the financial system is increasingly being recognised, their role in facilitating the financing of green and sustainable transition has been a matter of debate and has varying dimensions to it. Central Banks in Advanced Economies have traditionally followed an asset neutral approach. Central Banks in Emerging Markets and Developing Economies (EMDEs), on the other hand, have adopted directed lending policies to channelise credit to certain sectors of their economies given their individual country circumstances and developmental objectives. In the Indian context, as you are all aware, the priority sector lending guidelines facilitate credit to be channelled to specific sectors including renewable energy.

On the prudential aspect, there are several channels through which climate change risks impact the financial system. All the major types of financial risks - be it credit, market, or operational risk - are influenced by climate change. These risks include losses from credit portfolio due to extreme climate events or natural disasters (physical risks) and loss in value of collaterals due to stranded assets (transition risks); losses from investments; and operational losses. Although climate change impacts almost all economic sectors, the extent and nature of these risks vary by sector, industry, geography, and institution. The mitigation of climate change risks, therefore, rests – firstly, on realistic and comprehensive assessment of the frequency and severity of climate risks and secondly, estimating their financial impact, which is no easy task.

As a Central Bank, the Reserve Bank is mindful of its role in addressing and mitigating risks to the financial system from climate change. In this context, our endeavour has been to play the role of a facilitator – including supporting capacity building and fostering a conducive regulatory framework for promoting green and sustainable finance. One important aspect of green financing/lending for sustainable finance is the higher credit risk due to borrowers' use of new and emerging green technologies, which have relatively limited track record in terms of reliability, efficiency, and effectiveness. Regulated Entities, therefore, need to develop suitable capacity and technical know-how to better appraise risks in financing projects which use such green technologies.

* Keynote Address by Shri Sanjay Malhotra, Governor, Reserve Bank of India at the Policy Seminar on Climate Change Risks and Finance organised by Reserve Bank of India, March 13, 2025, New Delhi.

Evolution of climate change risks and mitigation for the Indian Financial System

The Reserve Bank's approach with respect to climate related financial risks is oriented not just for the short-term but also the medium-term, taking into consideration the evolving national and global circumstances. Over the short-term, our goal is to be able to make a realistic estimation of the impact of climate related risks not just on individual institutions but also on the financial system as a whole. This would involve scenario analysis and stress testing exercises, using both bottom-up and top-down approaches.

The risk management framework in Regulated Entities for climate related financial risks is still evolving. There is a need for concerted efforts in developing the risk management framework; building technical expertise and competencies for comprehensive assessment and mitigation of climate related financial risks as also on the extent of losses due to such risks. I would now like to highlight some of the initiatives of the Reserve Bank has taken in this regard.

Climate related financial risk modelling is very important and data intensive. There is limited data available for measuring financial impact of climate change. Moreover, there is lack of benchmark sectoral transition pathways and country-specific carbon emission database. These constraints limit our ability to make a comprehensive assessment of climate change risks. These limitations also constrain comparison of financial impact, as each Regulated Entity may use its own assumptions and models to process climate related data. To address such constraints, we had in October last year announced the creation of a repository called the Reserve Bank – Climate Risk Information System (RB-CRIS). The repository is intended to bridge data gaps by providing standardised datasets. These datasets include hazard data, vulnerability data and exposure data related to physical risk assessment, sectoral transition pathways and carbon emission intensity database related to transition risk assessment. Work on this repository is underway and we expect to launch it later this year.

Several jurisdictions have started work on the assessment and disclosure of climate related risks. International organisations such as International Sustainability Standards Board (ISSB) of the International Financial Reporting Standards (IFRS)[1] Foundation has released standards on climate related disclosures. The Basel Committee on Banking Supervision (BCBS) has also released a consultative document on disclosure of climate-related financial risks[2] with a view to integrate climate risk related disclosures under the Pillar III disclosure requirements of the Basel framework. The Reserve Bank, as you are aware, had already issued draft guidelines on Disclosure Framework on Climate related Financial risks in February 2024, for public comments. We have received valuable feedback and are in the process of finalising the guidelines. A guidance note on Climate Scenario Analysis and Stress Testing is also being developed for the Regulated Entities.

As we all are aware, technology and finance have a critical role in the transition towards a low-carbon economy. There is a need to build innovative solutions and capabilities in these areas. The Reserve Bank has been encouraging and facilitating innovations through its Regulatory Sandbox and Hackathon initiatives in the Fintech space. We propose to set up a dedicated "on Tap" cohort on climate change risks and sustainable finance under RBI's Regulatory Sandbox initiative. We are also planning to conduct a special "Greenathon" on climate change and related aspects.

We had in April 2023, issued the Framework on acceptance of Green Deposits[3] with the objective of enabling banks to augment the flow of credit to

[1] https://www.ifrs.org/issued-standards/ifrs-sustainability-standards-navigator/

[2] https://www.bis.org/bcbs/publ/d560.pdf

[3] https://www.rbi.org.in/Scripts/NotificationUser.aspx?Id=12487&Mode=0

green activities and projects. This again shows our willingness to facilitate financing green/sustainable projects. The idea behind the Green Deposits is similar to that of sovereign green bonds. We all need to raise awareness about such products.

I would like to highlight an important initiative to promote green finance. We have included finance to small renewable energy projects – solar, biomass based, windmills, micro-hydel plants and non-conventional energy based public utilities *viz.* street lighting systems, and remote village electrification projects as part of priority sector lending.

One of the oft-cited constraints to adequate flow of climate related finance has been the lack of bankable projects. Capacity and expertise constraints limit the ability to appraise and thus finance climate change mitigation. It also enhances the risk of funding such projects. Thus, creation of a common pool of such bankable projects will have multi-fold benefits for the entire ecosystem. Regulated Entities with experience of such projects can contribute to the pool for the benefit of others, while also benefiting from such information shared by other Regulated Entities. This will help share knowledge for benefit of all. There is a need for collaboration in this emerging and evolving area. I urge the Regulated Entities to seriously consider setting up such a pool through an appropriate institutional arrangement.

Before I conclude, let me say what is perhaps obvious. The impact of climate change risks is not limited to the financial system alone but extends to the real economy. Be it the corporates or the MSMEs or the agricultural sector, climate change risks are ubiquitous. This calls for a cohesive co-ordination and harmonisation in approach, among not only the financial sector regulators and the Regulated Entities but also various government agencies. There is a need to adopt a holistic approach towards mitigation of climate change risks considering the country specific requirements and circumstances. We will collaborate and coordinate with the government and other regulators to ensure that there is harmonisation and consistency in rules, regulations and our approach towards mitigating the impacts of climate change.

I am happy to note that while we are deliberating on this important topic, the Annual Steering Committee meeting of the Network for Greening the Financial System (NGFS) is also taking place today at this venue. NGFS is doing some pioneering work in the area of managing climate related financial risks. Be it the NGFS scenarios, the recent work on adaptation, or the work on data directory, they have been a source of technical guidance and capacity building across the globe. We look forward to continued engagement and coordination with the NGFS.

Conclusion

To conclude, let me reiterate that climate change risks are real and all stakeholders need to be prepared to address the risks and challenges from climate change. Even though we have made a decent start, there are still issues that need to be addressed. The Reserve Bank remains committed to continue adopting a constructive and consultative approach towards supporting the various initiatives being undertaken towards management and mitigation of financial risks related to climate change. We will continue to work steadfastly to realise our vision to build a financial system that can not only withstand future climate shocks, but also actively contribute to India's journey towards a sustainable and resilient future. I urge you all to contribute towards this cause. As Albert Einstein had said *"The world will not be destroyed by those who do evil, but by those who watch them without doing anything."*

Let me also take this opportunity to extend my best wishes to you and your families on the occasion of Holi - the festival of colours.

Thank you.

*Address at the Inauguration of Digital Payments Awareness Week 2025**

Shri Sanjay Malhotra

Digital Payments – Background and benefits

Payments are the lifeblood of commerce, enabling the flow of goods and services in an economy. They connect people, empower individuals and businesses, and drive economic growth. Quick, secure and reliable payments at affordable prices are the bedrock for a vibrant economy. Payments through digital modes support economic growth. They also deepen financial inclusion by overcoming barriers like high transaction costs and geographical limitations[1]. In effect, digital payments are not just convenient but are also a powerful tool for economic empowerment and growth.

Digital Payments – Convenience : Bouquet of products

Over the years, the Reserve Bank has supported various digital payment products. This has enhanced choice and convenience to the customers. We started with ECS (electronic clearing service). We then introduced NEFT, RTGS, IMPS, NACH (this is for e-mandates, it has replaced ECS), AePS, UPI, NETC, *etc.* We have introduced many new features on UPI and expanded its scope to cater to different needs of customers. These include UPI123Pay, UPI Lite, linking RuPay credit cards to UPI, processing payment mandates with single-block-and-multiple-debits, enabling Credit Lines for UPI, linking PPIs with UPI, *etc.* UPI with its multiple features, allows us to transfer money, pay bills, and make purchases with a simple click, tap or scan. We will continue to proactively support the development of the payment ecosystem.

Digital Payments – Safety and Security

While promoting digital payment systems and innovations around them, we have been mindful of the needs of safety and security in payments. We have thus put in place various measures for this purpose:

- Multi-factor authentication; security controls for internet and mobile payments apps and card payments; card tokenisation (to prevent storage of card details in merchants systems), *etc.* are intended to make our payments ecosystem robust.
- We have enabled customers to have control over creating and terminating e-mandates for recurring transactions.

Enhancing safety and security of payments ecosystem is a work in progress. The recently released drafts on "Framework on Alternative Authentication Mechanisms for Digital Payment Transactions", and on "Additional Factor of Authentication (AFA) for cross-border Card Not Present (CNP) transactions" are steps in this direction.

Payment Systems – Way Forward

Apart from the RBI, the government and other important stakeholders such as the Banks and Payment System Operators have also taken a number of initiatives to encourage the adoption of digital payments. While these efforts have produced results, as visible in the huge growth of digital payments, there is still a lot more to be done. Going forward, we will work on three broad areas.

Payment Systems – Soft Touch Regulations to continue promoting innovation

First, we will continue to encourage innovation in payments, as also generally, while being mindful

* Address by Shri Sanjay Malhotra, Governor, Reserve Bank of India at the Inauguration of Digital Payments Awareness Week 2025, March 10, 2025, RBI, Mumbai.

1 World Bank, Digital Financial Services, April 2020.

of risks and taking appropriate measures to mitigate them. We will promote innovation to facilitate payment systems that are fast, safe, secure, accessible and resilient. We have adopted a soft-touch approach to regulating the payments ecosystem and FinTechs. Through these regulations, the Reserve Bank attempts to balance these divergent set of expectations. Our approach has been to put in place regulatory guardrails within which all stakeholders are free to operate. We will continue to encourage innovation while promoting safety and security through soft-touch regulations.

Promote awareness generation

Second, though much progress has been made in the development, spread and adoption of digital payments, there is a lot of scope to further deepen and expand digital payments in the country. In January 2025, more than 20 billion payments worth almost 250 trillion rupees were made in India through digital modes. Digital payments have become the preferred mode of payment for many of us. However, surveys have shown that nearly 40% of our adult population still do not use digital payments. One of the main reasons for this is the lack of awareness or familiarity with using digital payments.

To create awareness of Digital Payments, the Digital Payments Awareness Week is being observed in March every year. As part of this endeavour, the "Har Payment Digital" mission was launched in 2023. The mission seeks to promote digital payments by enhancing awareness of digital payments among all citizens and making available the necessary infrastructure and solutions for people to make payments digitally. The objectives of Mission Har Payment Digital can be achieved only with the active participation of all stakeholders. Geographies and population segments, lagging behind in usage and awareness of digital payments need to be identified and suitable steps taken to expand awareness and improve usage.

We are now in the 3rd year of this mission. The theme for this year is "India Pays Digitally". This year too, we will continue our awareness activities. By showcasing how digital payments have become a ubiquitous part of our lives, we will encourage those who haven't adopted digital payments yet, to do so.

The Reserve Bank, as in the previous years, will be running multimedia campaigns around this year's theme. To encourage active involvement of citizens, we will be conducting various competitions over social media with attractive prizes.

The Regional Offices of RBI too conduct Awareness Programs, called eBAAT, across the country covering various strata of society. We have been conducting these programs since 2012. In the last 8 years, more than 1800 such programs have been conducted. During this year, the content and method of delivery of eBAAT will be reviewed, and a pilot will be conducted (in a large State) with the objective to reach a very large number of people in the most efficient way.

I urge the Banks, Payment System Operators and other stake holders to contribute in their own innovative ways to take forward the mission of Har Payment Digital.

More efficient Cross border payments

Third, while in domestic payments, the success of UPI has propelled India to a leadership position with a share of 48.5 per cent in global real-time payments by volume[2], we will endeavour to make cross-border payments more efficient. This assumes priority as India is the largest receiver of personal remittances globally. As per a World Bank[3] report, it has been estimated that in 2024, India received remittances

[2] ACI Worldwide, 2024.

[3] https://blogs.worldbank.org/en/peoplemove/in-2024--remittance-flows-to-low--and-middle-income-countries-ar

totalling approximately 130 billion USD. We need to address the challenges of high cost, slow speed, and insufficient access and transparency in cross border payments.. We will continue to expand the reach of UPI bilaterally by linking UPI with Fast Payment Systems of other countries. We will also explore the possibility of linking payment systems other than UPI for facilitating efficient cross-border payments. We will continue our engagement in a multilateral project called Project Nexus, to enable instant cross-border retail payments[4].

As we observe the 5th Digital Payments Awareness Week, I am happy to note that this year marks the 20th year of the establishment of the Department of Payment and Settlement Systems (DPSS). I congratulate the department on this key milestone. The work carried out by this department in association with all stakeholders has established India as a pioneer in digital payments. The revolution in India's payment systems is, however, far from over. We are just beginning to unlock the true potential of digital payments. I am confident that we will continue to work with renewed vigour to ensure that India remains at the forefront of digital payments globally.

Thank you.

[4] Nexus, conceptualised by the Innovation Hub of the Bank for International Settlements (BIS), aims to connect the Fast Payment Systems of four ASEAN countries (Malaysia, Philippines, Singapore, and Thailand); and India, who would be the founding members and first mover countries of this platform.

*Inaugural address at the Indian Institute of Management Kozhikode (IIMK)- National Stock Exchange (NSE) joint Second Annual Conference on Macroeconomics, Banking and Finance**

M. Rajeshwar Rao

Introduction

Good Morning All!

I thank IIM, Kozhikode and the National Stock Exchange for inviting me to deliver the inaugural address at this Conference. The theme for the conference— *"Finance for Growth Amid Creative Disruptions"*—captures the essence of the transformation we are witnessing in the financial sector – not just in India but globally. Disruptions in finance are not new, but what sets this era apart is the unprecedented pace and scale of change, fuelled by digitalization, artificial intelligence, and the resulting confluence of these changes leading to emergence of new business models. These changes make it essential for us to understand how to harness them for sustainable economic growth.

For India, this transformation is particularly significant as we strive towards *Viksit Bharat 2047* — a vision of a developed and self-reliant economy. Our goal of becoming an advanced economy by 2047 will require us to effectively integrate technology with finance to deepen markets, expand financial inclusion, and drive economic productivity.

* Inaugural address delivered by Shri M. Rajeshwar Rao, Deputy Governor at IIMK-NSE 2nd Annual Conference on Macroeconomics, Banking & Finance on February 21, 2025 at Mumbai. Inputs provided by Pramanshu Rajput are gratefully acknowledged.

Creative Disruption *vis-à-vis* Creative Destruction

Innovation in finance has always been a double-edged sword—on one side, it drives efficiency and inclusion, but on the other, it can destabilize traditional structures if not managed well. This is where the distinction between creative disruption and creative destruction becomes crucial. While both terms may seem similar, they carry very different implications. ***Creative destruction***, as popularized by economist Joseph Schumpeter, refers to the complete dismantling of old systems to make room for new ones. In contrast, ***creative disruption*** is a more nuanced process—it's about evolving existing systems, refining them, and making them better through technological innovations. We are not simply looking to replace what exists but to transform it for the better.

This sets the context for my talk today. I will share my views on how digital transformation is reshaping finance, the role of AI, the way forward for more meaningful financialization and financial inclusion and how the regulatory landscape must evolve to foster responsible growth.

Digital Transformation in Finance

The financial sector has undergone a profound transformation in the digital era, reshaping how individuals and businesses access and utilize financial services. The shift from cash-driven, paper-based transactions to a seamless, technology-driven ecosystem has been one of the most defining changes in modern finance. India has exemplified creative disruption in finance through innovations like Unified Payment Interface (UPI), Account Aggregator (AA) framework, and the recently launched Unified Lending Interface (ULI). This has complemented the other components of what is collectively known as the *"India Stack"*. In the context of the creative disruption referred to earlier, these initiatives have not just supplemented the traditional banking system but have strengthened it by making transactions more

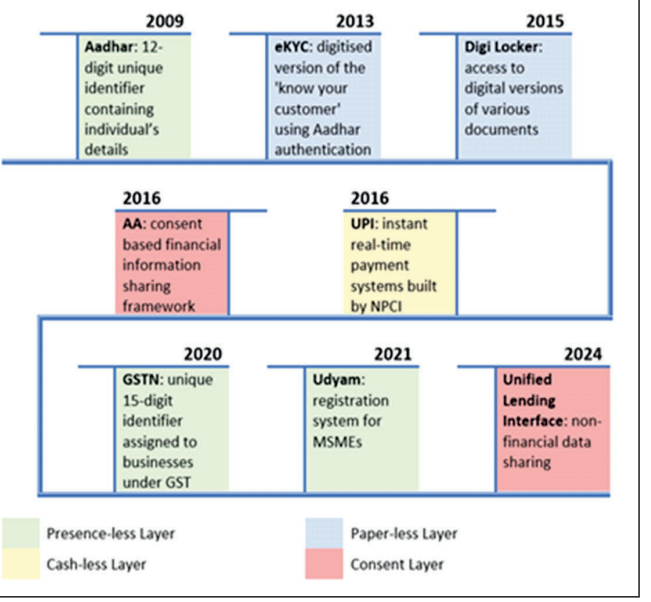
seamless, expanding financial reach, and improving efficiency. Similarly, the rise of digital lending has not rendered conventional credit channels obsolete but has complemented them, bringing underserved segments into the formal financial fold.

In my opinion, what truly sets India apart from global peers is the open approach. Unlike many other countries, where these advancements have come as *"walled gardens"*, India's financial infrastructure is built on the principles of openness and accessibility. Our platforms are designed as plug-and-play systems, enabling any entity to build on top of them, fostering competition, innovation, and inclusion. Whether it is the UPI, the Account Aggregator framework, or the ULI, our guiding philosophy remains the same— creating an open ecosystem. UPI stands as a prime example of open digital infrastructure that fosters both innovation and inclusivity. It provides an interoperable framework for instant payments, enabling several private players to build seamless financial solutions on top of it. As on date[1], there are 39 Third Party Application Providers (TPAP) in the UPI ecosystem enabling UPI payments besides apps of banks. With over 16 billion transactions processed monthly[2], UPI demonstrates how public digital infrastructure can empower private sector innovation for promoting financial inclusion, without the risks of exclusivity. A research article[3] by World Economic Forum (WEF) had estimated that UPI has saved the Indian economy approximately $67 billion since its inception in April 2016.

AI/ ML in Finance

While the *India Stack* has successfully built the digital pipelines that power a seamless and inclusive financial system, as we move forward, I believe

Figure 1: Evolution of India Stack



Artificial Intelligence (AI) and Machine Learning (ML) will become the engines that drive the next phase of financial transformation. These stand among the most transformative advancements of our times. This growing significance is reflected in how both financial institutions and regulators are increasingly engaging with AI-related topics. An analysis (Chart 1) of the annual reports of Scheduled Commercial Banks has revealed a sharp rise in references to AI and its applications in recent years[4].

Further, this trend is not limited to regulated entities—central banks are also devoting more attention to AI in their public interactions. A review (Chart 2) of speeches[5] by central bank officials globally shows a similar pattern, where discussions on AI related topics have increased significantly especially post-2022 generative AI wave. This underscores the increasing awareness and strategic focus on AI within the financial ecosystem.

1 As on February 20, 2025.

2 RBI Payment Systems Report, 2024.

3 India's digital leap: the Unified Payment Interface's unprecedented impact on the financial landscape dated June 26, 2023 available at https://www.weforum.org/stories/2023/06/india-unified-payment-interface-impact/

4 How Indian Banks are Adopting Artificial Intelligence? RBI Bulletin October 2024.

5 Based on text mining analysis of central bank officials speeches available at Bank for International Settlements (2024). Central bank speeches, 2015-2024, https://www.bis.org/cbspeeches/download.htm

Chart 1: AI Word Count for Public and Private Sector Banks

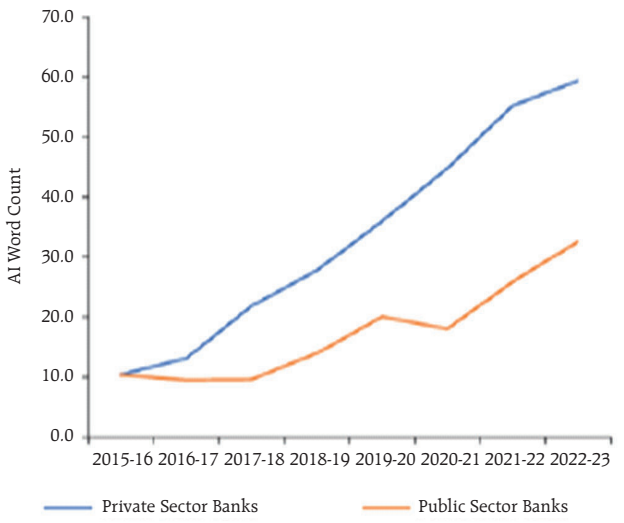
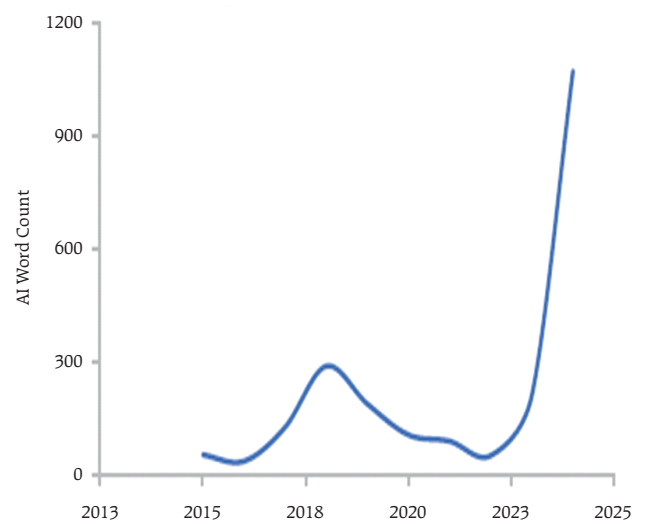


Chart 2: AI Word Count for Central Banker Speeches



While AI adoption in financial services is increasing, it can make a significant impact in three areas *viz.* risk assessment and credit scoring, enhancing customer experience, and fraud detection.

Traditional credit evaluation relies heavily on structured financial data, such as credit history and income statements. However, AI-driven models enable analysis of vast amounts of alternative data—including transaction patterns, utility bill payments, e-commerce behaviour *etc.* to assess a borrower's creditworthiness more holistically. This is not only useful in initial underwriting, but in pro-active monitoring of existing borrowers to detect stress at early stage and take remedial measures. It also enables offerings of hyper-personalized financial products leading to enhanced customer experience. Another use-case gaining prominence is fraud detection. Unlike traditional rule-based fraud detection systems, which rely on predefined parameters, AI based techniques continuously learn and evolve, adapting to new fraud techniques and identifying subtle anomalies in transaction and payment behaviour. This is especially critical in the era of real-time payments and digital transactions, where cyber threats, frauds and use of mule accounts are becoming more sophisticated.

Challenges and Ethical Considerations

On an earlier occasion[6], I spoke about the risks associated with AI/ML models and the guiding principles for their responsible use in finance. Today, however, I want to highlight a fundamental point: while AI raises critical issues such as algorithmic bias, fairness, data privacy, and security, the root of these challenges and many other lies in **lack of explainability**.

Critical Need for Explainability and Human Oversight

Many advanced AI models, particularly deep learning-based systems, function as "black boxes," producing outputs that even their developers struggle to interpret. In a sector where trust, accountability, and regulatory compliance are paramount, a lack of explainability undermines confidence in AI-driven decisions. In the absence of explainability, human intervention can end up becoming mere rubber-stamping, rather than responsible oversight, increasing the likelihood of systemic errors.

[6] Innovations in Banking - The emerging role for Technology and AI, December 22, 2023 - at the 106th Annual Conference of Indian Economic Association in Delhi available at https://www.rbi.org.in/Scripts/BS_SpeechesView.aspx?Id=1400

Second-Order Effects: Hidden Risks of Unexplainable AI

AI models continuously learn and evolve based on new data. While '*dynamic adaptation*' can be beneficial, it also makes models susceptible to data drift[7] and concept drift[8]. These changes can cause models to misalign with real-world trends, risking incorrect financial decisions and instability. Regular human oversight and explainability are critical to prevent such risks.

Danger of Over-Reliance on AI

A less appreciated risk of AI-based decision models is "automation complacency," where people rely too much on technology, even when situations need careful judgment. As the aphorism goes, "*All models are wrong, but some are useful*[9]". While algorithms can provide valuable insights and efficiency, they should be viewed as tools to support, not replace, human judgment.

Skill Gap: A Compounding Factor in the Explainability Challenge

A significant yet often overlooked barrier to responsible AI adoption in finance is the shortage of professionals who can interpret and oversee AI models. If financial institutions lack personnel with the necessary skills in AI, data science, and regulatory oversight, the explainability problem is further exacerbated and decisions made by AI models may remain opaque.

Bridging the Gaps: Road Ahead for Financial Inclusion

Before I delve into the way forward on financial inclusion, another critical distinction is in order. Financialization and financial inclusion are often used interchangeably, but they represent distinct aspects of economic development. Financialization refers to the increasing role of financial markets, institutions, and instruments in an economy. On the other hand, financial inclusion focuses on ensuring that every individual, especially those from underserved and marginalized communities, has access to basic financial services like savings accounts, credit, insurance, and digital payments. The two are inherently complementary—without inclusion, financialization risks being concentrated among a privileged few, limiting broader economic participation. Conversely, without financialization, inclusion remains superficial, as access to banking alone does not empower individuals unless they can also save, invest, and grow their wealth.

Present Status of Financial Inclusion

Reserve Bank of India's Financial Inclusion Index (FI-Index), a multidimensional composite index that captures the extent of financial inclusion across the country, stood at 64.2 in March 2024, up from 60.1 in March 2023 and 43.4 in 2017. The index is based on three sub-indices – Access, Quality and Usage. India has made remarkable strides in expanding financial access, with the success of schemes like PM Jan Dhan Yojana, *etc.* ensuring that 80% of adults now have a bank account[10]. Till date, 54.84 crore bank accounts have been opened under PM Jan Dhan Yojana with a total balance of ₹2.45 lakh crore in the accounts[11]. However, true financial inclusion goes beyond merely opening accounts—it requires meaningful engagement with financial services. As the FI-Index

[7] Data drift, or covariate shift, refers to the phenomenon where the distribution of data inputs that an ML model was trained on differs from the distribution of the data inputs that the model is applied to. This can result in the model becoming less accurate or less effective at making predictions or decisions (changes in the data due to seasonality, changes in consumer preferences, the addition of new products).

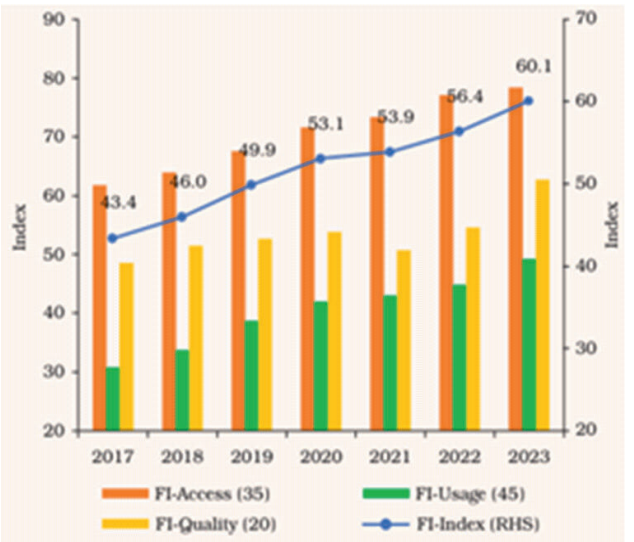
[8] Concept drift or drift is an evolution of data that invalidates the data model. It happens when the statistical properties of the target variable, which the model is trying to predict, change over time in unforeseen ways. This causes problems because the predictions become less accurate as time passes.

[9] Generally attributed to British statistician George Box.

[10] World Bank, Global Findex Report, 2021.

[11] As on February 20, 2025, retrieved from https://pmjdy.gov.in/

Chart 3: FI-Index and Sub-Indices (end-March)



Note: Figures in parentheses indicate weights in per cent in FI-Index.

(Chart 3) shows, Usage is the one which is lagging the other two[12].

A bank account should serve as the entry point for individuals to access a broader suite of financial products, including credit, insurance, pensions, and investment opportunities. Without this deeper engagement, financial inclusion remains superficial, and the true benefits of a formal financial system do not reach every individual or business. It was encouraging to note that the improvement in the FI-Index in 2023-24 was largely contributed by the usage dimension, reflecting deepening of financial inclusion[13]. While this shows that we are moving in the right direction, there is still a long way to go wherein the most vulnerable populations and low-income groups have access to secure and affordable finance.

One of the significant gaps lies in access to credit, particularly for the informal sector of the economy, which is a major contributor to Indian economy, employing millions. Traditional credit models, which rely heavily on collateral-based lending, fail to accommodate first-time borrowers and small businesses with limited credit histories. As a result, such entities and individuals either remain underfunded or turn to informal sources of credit, often at exorbitant interest rates. Another critical gap is in insurance penetration, which stands at just 3.7% in FY24, significantly lower than the global average of 7%. Similarly, pension assets in India account for only 21.5% of GDP (17% under EPFO and 4.5% under NPS), which pales in comparison to the 80% of GDP in OECD countries[14].

Leveraging Digital Transformation for Greater Financial Inclusion

To bridge these gaps, we must harness the power of digital transformation to make financial services more accessible, efficient, and inclusive. Technology-driven solutions can democratize finance by breaking traditional barriers and bringing a wider range of financial products to underserved segments of the population.

As I highlighted earlier, having a bank account is not very useful if it does not lead to further financialization *i.e.* ensuring Quality and Usage. In case of payments, UPI meets all three dimensions of Access, Quality and Usage. Given the omnipresence nature of UPI for retail payments and its ease of usage, it has become essential for many informal sector businesses. This has created financial footprints for a large informal economy which was earlier mostly dealing in cash. Access to these financial footprints has been enabled for the financial service providers through the AA framework and it can be employed by lenders to underwrite them using new-age models and combining with other alternative data to offer hyper-personalized products. This approach is particularly useful in extending credit to new-to-credit individuals,

[12] RBI Annual Report 2023-24, page 99.

[13] RBI Report on Trend and Progress in Banking, 2023-24.

[14] Economic Survey 2024-25.

gig workers, and small businesses who may lack formal credit histories but demonstrate strong financial discipline through alternative indicators. Thus, the AA framework acts as a bridge, allowing banks, NBFCs, and other financial service providers to access a more holistic and accurate picture of a customer's financial profile.

Further, increasing formalization of MSMEs through GST, e-commerce sales data, *etc.* can help lenders assess creditworthiness more accurately. To augment further data-driven financial inclusion, RBI has also facilitated the setting up of ULI as a digital public infrastructure in the lending space, which will unlock critical financial, non-financial and alternate data for lenders to enable informed credit decisions. As on December 6, 2024, over 6 lakh loans amounting to ₹27,000 crore, including 1.6 lakh loans amounting to ₹14,500 crore to MSMEs have been disbursed using the ULI platform. 36 lenders, including various banks and NBFCs have been onboarded. These lenders are using more than 50 data services including, inter alia, authentication and verification services, land records data from six states, satellite service data, transliteration, property search services, dairy/milk pouring data and identity/ document verification.

Financial Inclusion not Financial Excesses

While technology and digital innovations are driving financial inclusion and access, they also bring with them the risk of excessive exposure and over-leveraging, which can create significant vulnerabilities for both individuals and the broader financial system. However, as it is said that presence of too much light can also lead to blindness, we must be aware of the risk of reckless financialization. Of late we have seen some concerns of excessive borrowing in unsecured segment and from derivative euphoria in the capital markets. The temptation of short-term gains can easily overshadow the long-term financial security of individuals. Financial entities have a duty to ensure that customers fully understand the risks associated with leveraged products and speculative investing.

While RBI along with other financial sector regulators is taking progressive steps to educate the customers, financial sector entities also need to shoulder part of the responsibility. Absence of financial literacy leads people to fall prey to unscrupulous players which erodes the trust of the people in the system. Increased financial literacy will help increase trust in the sector and its participants, whose benefits will accrue to the entities themselves.

Financial Regulation in the era of fast-paced innovation

While educating consumers helps protect them from fraudulent practices, regulation plays a critical role in maintaining stability and preventing systemic failure. Financial services are regulated because their stability is crucial for the broader economy—failures in the financial sector have severe real-world consequences, often requiring costly taxpayer-funded bailouts. The 2008 global financial crisis is a reminder of how lax regulation and excessive risk-taking can lead to widespread economic distress, job losses, and prolonged recessions. The cost of restoring financial stability in such scenarios is often much higher than the cost of preventive regulation. While strong regulation is essential to prevent such crises, determining the optimal level of regulations remains a delicate balance—too little regulation may increase systemic risk, while excessive regulation can stifle innovation, limit credit availability, and raise costs. Thus, regulating finance in an era of fast-paced technological innovation is a delicate balancing act.

At the same time, regulated entities must develop the necessary capabilities to implement and comply with evolving regulations. As financial institutions integrate AI, cloud computing, and API-driven finance into their operations, they must invest in robust governance frameworks and risk management

protocols to ensure compliance and customer appropriateness. Financial firms cannot afford to view regulation as a barrier to innovation—rather, compliance itself must become a core component of their digital strategy. A strong internal culture of risk awareness, ethical AI usage, and customer-centric innovation will be critical in navigating the evolving financial landscape effectively.

Conclusion

"*Change is the only constant*," wrote an ancient Greek philosopher[15] and yet change can appear daunting, destabilizing, even threatening. So, will the technological changes lead to "creative destruction" and really replace the traditional financial institutions like banks? The specter of banks being 'dead' has been raised in the past also. A quarter century back, the issue was examined in the light of disruptive financial innovation of those times such as securitisation which was touted as evidence enough for erasing the need of banks as financial intermediaries[16]. As the passage of time has shown, these predictions proved false, and the banking sector emerged even more resilient from these disruptions. Although, history does not repeat itself, and the potential of the current wave of disruption is arguably bigger, it may be prudent to be cautious while making predictions about future of banking.

For banks and NBFCs, however the message is clear: adapt or risk being made obsolete. To remain competitive, financial institutions must invest in digital infrastructure, and pivot to a customer-centric, data-driven approach in this new landscape. At the same time, institutions must navigate the risks of excessive reliance on third-party technology providers, ensuring that regulatory compliance and cybersecurity while ensuring customer protection remain their top priorities. The challenge is ensuring a balanced and resilient financial ecosystem for the future. The key is to harness the benefits while managing the risks.

Thank You!

[15] Heraclitus of Ephesus.

[16] Boyd and Gertler's Are banks dead? Or are the reports greatly exaggerated? Federal Reserve Bank of Minneapolis Quarterly Review Vol 18 No. 3.

ARTICLES

State of the Economy

Spatial Distribution of Monsoon and Agricultural Production

Changing Dynamics of India's Remittances – Insights from the Sixth Round of India's Remittances Survey

Decoupling Economic Growth from Emissions: A LMDI Decomposition Analysis

Market Access and IMF Arrangements: Evidence from Across the Globe

*State of the Economy**

The resilience of the global economy is being tested by escalating trade tensions and a heightened wave of uncertainty around the scope, timing, and intensity of tariffs. While engendering heightened volatility in global financial markets, these have also caused apprehensions about the slowdown in global growth. Amidst these challenges, the Indian economy continues to demonstrate resilience as evident in the robust performance of the agriculture sector and improving consumption. The reverberations of a tumultuous external environment, however, are being reflected in sustained foreign portfolio outflows. India's macroeconomic strength to face these challenges is bolstered by a decline in headline CPI inflation to a seven-month low of 3.6 per cent in February 2025 on account of a further correction in food prices.

Introduction

The global economy, which entered 2025 on a strong note of resilience, is caught in a storm of escalating trade tensions and a heightened wave of uncertainty around the scope, timing, and intensity of tariffs. What is more certain, however, is that trade wars and escalating tariffs could have a deleterious impact on growth and fuel inflation, not just in the countries directly involved but for the global economy as a whole. Estimates suggest that a full-blown tariff war could raise the price level by 1.0-1.2 per cent in the US, reduce real GDP growth by 0.6 percentage points in 2025, and leave the U.S. economy persistently 0.3-0.4 per cent smaller in the long run.[1] The projections by the Conference Board indicate that the world economy is likely to witness a significant deceleration over the next decade.[2] These assessments have been vindicated by the incoming data pointing to a weakening US growth momentum.[3]

Financial markets are increasingly pricing in the anticipated slowdown in global growth, with benchmark indices in the US and most non-European geographies witnessing a decline. As of March 17, 2025, the US dollar has given up all of its gains since mid-November 2024, weighed by US trade policy and growth uncertainties. Geopolitical tensions and changing global power relations are adding another layer of complexity. In Europe, shifting security priorities are triggering a surge in military spending, particularly in Germany and its neighbouring nations, driving bond yields to rise the most in a week in nearly three decades. Expectations that the fiscal stimulus would lead to a turnaround in growth in the Euro area led to gains in European equities, making them significantly outperform their US counterparts in 2025. With financial markets on the edge and global tensions rising, the months ahead are shrouded in uncertainty.

Amidst these challenges, the outlook for global commodities remains a silver lining. Supply prospects for food and energy have been improving. Global cereals production during 2025 is projected to surpass that of 2024.[4] Oil prices (UK Brent) declined by about 15 per cent since mid-January 2025 (up to

* This article has been prepared by Rekha Misra, G. V. Nadhanael, Shahbaaz Khan, Biswajeet Mohanty, Shreya Kansal, Bajrangi Lal Gupta, Ramesh Kumar Gupta, Rajni Dahiya, Harendra Behera, Gautam, Amit Kumar, Amrita Basu, Aayushi Khandelwal, Rishabh Kumar, Radhika Singh, Rashika Arora, Aman Tiwari, Divya Kadian, Snigdha Yogindran, Shelja Bhatia, Shivam, Khushi Sinha, Monica, Yuvraj Kashyap, Nikhil Prakash Kose, Ashish Khobragade, Satyam Kumar and Shreya Gupta. Views expressed in this article are those of the authors and do not represent the views of the Reserve Bank of India.

1 Yale University Budget Lab, available at https://budgetlab.yale.edu/research/fiscal-economic-and-distributional-effects-20-tariffs-china-and-25-tariffs-canada-and-mexico.

2 World GDP growth is projected to fall from 3.0 per cent in 2025-26 to an average of 2.5 per cent during 2027-31 and 2.4 per cent during 2032-37. The Conference Board, Global Forecast Update, February 2025.

3 The widely tracked Atlanta Fed GDPNow model projects US real GDP growth (seasonally adjusted annual rate) in Q1:2025 to be -2.1 per cent (March 17, 2025 update).

4 FAO Cereal Supply and Demand Brief, March 07, 2025.

March 11) to below US$ 70 over concerns that a trade war could dampen economic growth and weaken energy demand. Prices are expected to moderate through 2025-26 as inventories increase due to production expansion in an environment of modest demand growth.[5] Metal prices, however, witnessed increases in February, tracking news of the US imposition of import tariffs on steel and aluminum. Tariff concerns and safe-haven demand drove gold prices to a historical high of US$ 3000 per ounce on March 14, 2025.

Policymakers are now walking a tightrope, having to balance the upward strain of rising prices on account of tariffs and currency depreciation, as well as the downward pressure on inflation from economic slowdown. The stubbornness of headline inflation in AEs, along with a sticky core and services inflation, could act as a constraint on monetary policy being used as a tool to counteract the potential slowdown engendered by the tariff war. Emerging economies remain vulnerable to the contagion effects of these developments through the trade, capital flows and currency depreciation channels. Divergence in domestic macroeconomic conditions is also reflected in dissension in policy actions among central banks.

The Indian economy continues to demonstrate resilience in this turbulent global environment, as the growth momentum is supported by robust sectoral performance and improving consumption trends. The Second Advance Estimates (SAE) released by the National Statistics Office (NSO) project a steady 6.5 per cent growth for 2024-25. The latest quarterly data further underscores this strength, with real GDP expanding by 6.2 per cent in Q3:2024-25, shaking off the sluggishness of the previous quarter. Private consumption expenditure is on an upward trajectory, signalling strong consumer confidence and sustained demand. Government spending has picked up significantly in recent months, providing a further fillip to growth. Key sectors, including construction, financial services, and trade, continue to thrive as pillars of economic resilience. Various high-frequency indicators of economic activity point towards a sustained momentum in growth during Q4 as well. The first revised estimates (FRE) of GDP for 2023-24 placed the real GDP growth at 9.2 per cent — the highest in over a decade if we exclude the post-COVID rebound — demonstrating that in an uncertain world, India's growth story remains a beacon of stability and progress.

Recent developments across different sectors reaffirm the assessment of a sequential pick-up in growth momentum. The *kharif* season 2024-25 has seen an upward revision in production estimates for foodgrains and oilseeds and *rabi* foodgrains registered a growth of 2.8 per cent mainly on account of above normal rainfall supported by comfortable reservoir levels.[6] Despite a mild loss in momentum, the Indian manufacturing sector saw a rise in purchasing activity and employment in February 2025.[7] The services sector recorded a strong expansion in new businesses and employment.[8]

Notwithstanding the innate strength built on strong macroeconomic fundamentals and prudent policy, the reverberations of a tumultuous external environment are also reflected in various segments of the economy. Sustained foreign portfolio outflows exerted significant pressures on domestic equity markets in February and engendered currency depreciation. As discussed in more detail in Section IV, domestic investors have, however, increased their

[5] Short-Term Economic Outlook, US Energy Information Administration, March 7, 2025.

[6] Agricultural Crop Production (*kharif* and *rabi*): Second Advance Estimates of 2024-25.

[7] HSBC India Manufacturing PMI, February 2025.

[8] HSBC India Services PMI, February 2025.

holdings, acting as a counterbalancing force, leading to a shift in ownership patterns.

India's financial landscape is also navigating these external risks manifested through various channels while addressing domestic funding needs. The Reserve Bank has remained agile, swiftly tackling liquidity shortages triggered by government tax flow dynamics, currency leakages and foreign portfolio investor (FPI) outflows. The Reserve Bank has deployed a strategic mix of interventions, including open market operations (OMO), daily variable rate repo (VRR) auctions, and dollar/rupee buy-sell swap auctions. These proactive measures have helped stabilise market liquidity conditions, ensuring financial resilience in an unpredictable global environment.

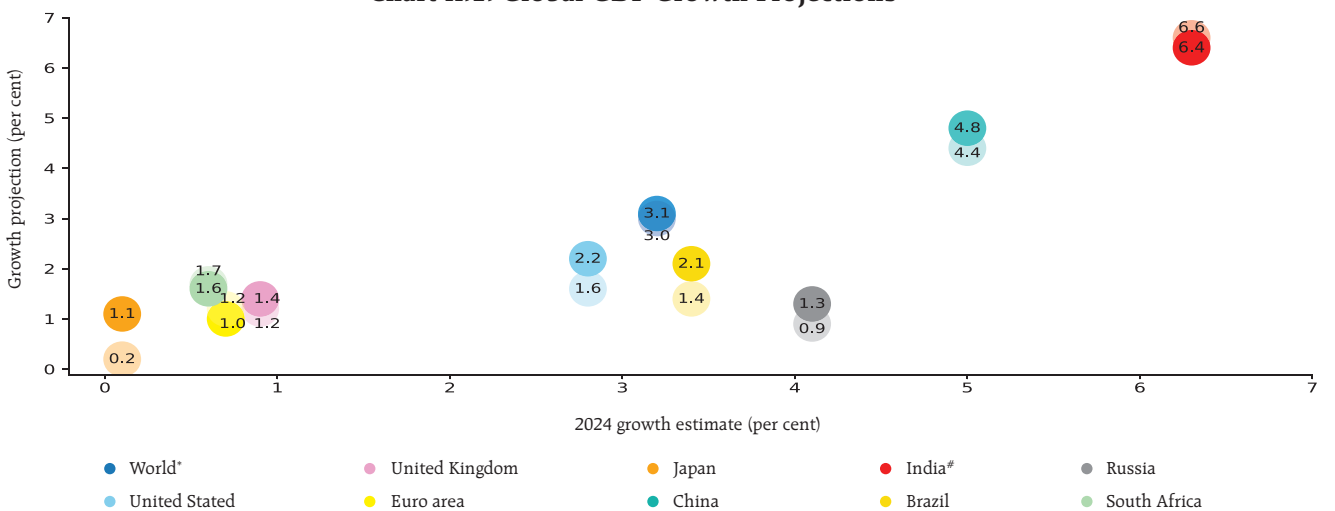
Headline CPI inflation moderated to a seven-month low of 3.6 per cent in February 2025 as food prices, especially vegetables, recorded a sharp decline driven by the arrival of winter crops in the market. Core (CPI excluding food and fuel) inflation, however, increased to 4.1 per cent. The decline in overall inflation is expected to further support recovery in consumption and bolster macroeconomic strength, which would act as a bulwark to ward off the myriad of external challenges.

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 the conclusions.

II. Global Setting

Persistent trade and geopolitical uncertainties continue to test the global economy's resilience. In its Global Economic Outlook interim report of March 2025, the Organization for Economic Co-operation and Development (OECD) revised its global GDP growth forecast downward by 20 basis points (bps) to 3.1 per cent for 2025 and by 30 bps to 3.0 per cent for 2026 (from their December 2024 projections). Among the advanced economies (AEs), the US is projected to outperform other AEs in the near term and emerging market economies (EMEs) are expected to remain key drivers of global growth (Chart II.1). It has been found that policy uncertainty has emerged as a major risk for global economic prospects (Box II.1)

Chart II.1: Global GDP Growth Projections



Notes: 1. *: PPP weighted #: India's data is on a fiscal year basis.
2. Darker (lighter) shaded circles pertain to 2025 (2026) forecasts.
Source: The OECD Global Economic Outlook, March 2025.

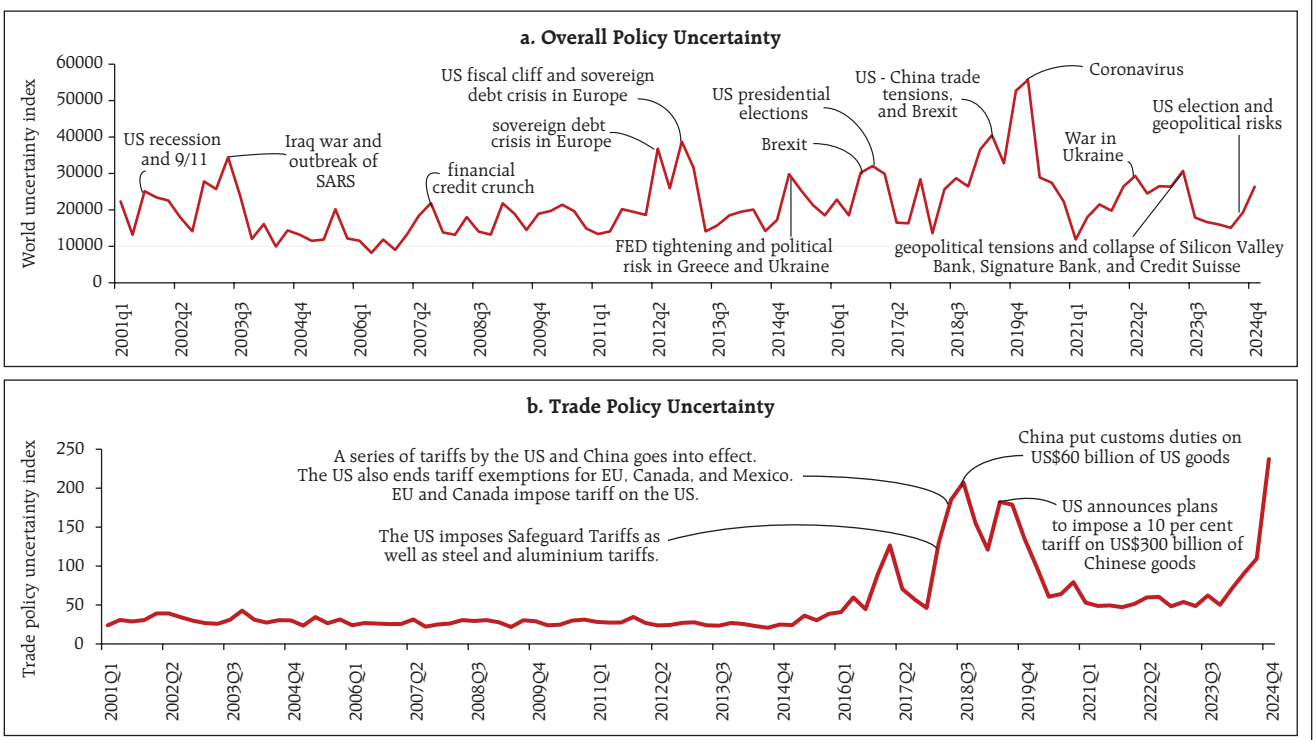
Box II.1: Impact of Trade Policy Uncertainty on Global Economic Activity

There has been a resurgence of policy uncertainty recently, particularly relating to geopolitics and trade (Chart II.B1a). The World Trade Policy Uncertainty Index (TPU)[9], which was relatively low and stable until 2016, experienced a significant spike in 2018, driven by tariff wars between the US and China, as well as the US ending tariff exemptions for key trading partners, which prompted retaliatory measures. This heightened uncertainty subsided post-2020 but re-emerged in late 2024, driven by concerns about new trade restrictions, tariff increases, and tighter immigration policies following the US presidential elections (Chart II.B1b).

The impact of heightened trade policy uncertainty reverberates across key economic variables, as evidenced by their impulse responses to an increase in TPU in a Vector Autoregression (VAR) framework. World exports experience a significant decline in response to increased TPU, highlighting the adverse effects on global trade flows (Chart II.B2a). For EMEs, an increase in TPU leads to a notable decline in industrial production (Chart II.B2b). This is particularly concerning for EMEs that rely heavily on exports as an engine of economic growth.

In the commodity markets, the Energy Price Index shows a temporary increase in response to surging TPU,

Chart II.B1: Global Policy Uncertainty

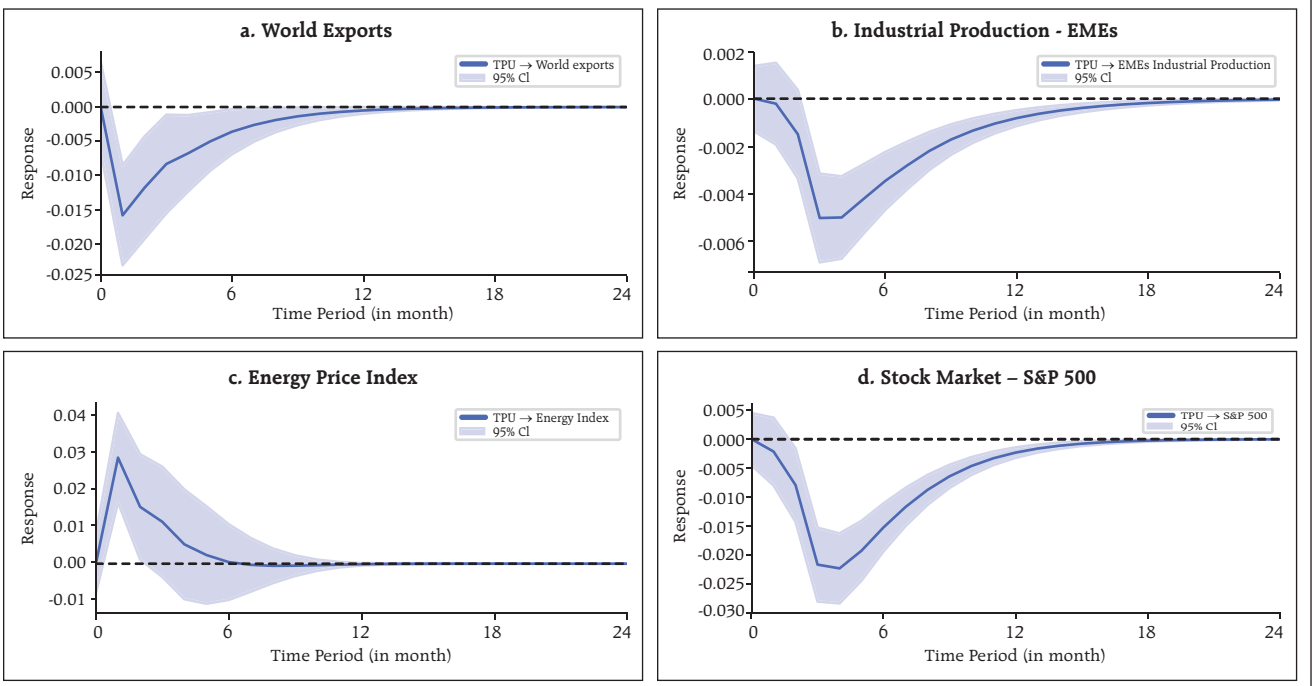


Note: In Chart II.B1a, the World Uncertainty Index (WUI) measures overall uncertainty across the globe, using frequency counts of "uncertainty" (and its variants) in the quarterly Economist Intelligence Unit (EIU) country reports. The index is an unbalanced GDP-weighted average for 142 countries.
Sources: Ahir *et al.* (2022); Caldara *et al.* (2019); and RBI authors' illustration.

(Contd.)

[9] The trade policy uncertainty index (TPU) is constructed by staff in the International Finance Division of the Federal Reserve Board and measures media attention to news related to trade policy uncertainty. The index reflects automated text-search results of the electronic archives of 7 leading newspapers discussing trade policy uncertainty: Boston Globe, Chicago Tribune, Guardian, Los Angeles Times, New York Times, Wall Street Journal, and Washington Post (accessed through ProQuest Historical Newspapers and ProQuest Newsstream). The index is scaled so that 100 indicates that 1 per cent of news articles contain references to TPU.

Chart II.B2: VAR Impulse Responses to One Standard Deviation Shock in TPU



Notes: 1. Monthly data from January 2000 to December 2024 were used for the analysis.
2. The data were log transformed and detrended using the HP filter. A generalised VAR model, with a one standard deviation increase in TPU, was used with optimal lags determined by the Akaike Information Criterion (AIC).
3. The shaded areas represent 95 per cent confidence intervals (CI).

Sources: Caldara *et al.* (2019); World Bank; CEIC; S&P Global; World Bank Pink Sheet; and RBI staff estimates.

reflecting heightened risk perceptions and potential supply disruptions (Chart II.B2c). Similarly, the equity market, as measured by the S&P 500 index for the US, reacts negatively to rising TPU, indicating a decline in investor confidence (Chart II.B2d). These responses underscore the broad and interconnected impact of TPU on various facets of the global economy.

References:

Ahir, H., Bloom, N., and Furceri, D. (2022). World Uncertainty Index. *NBER Working Paper.*

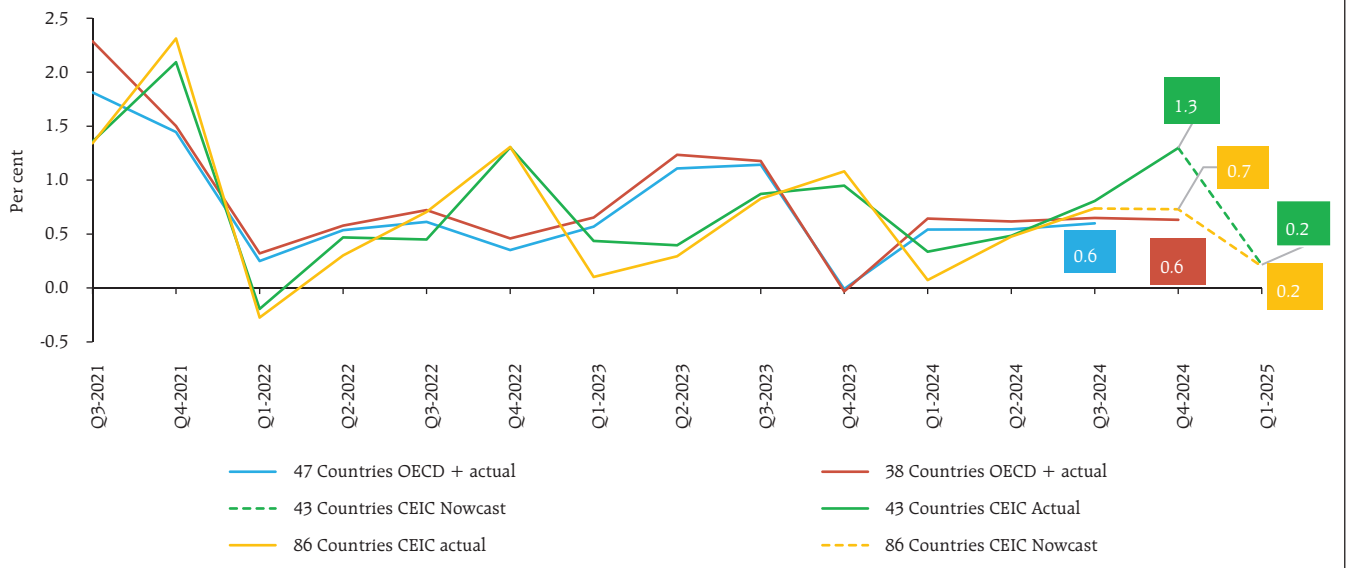
Caldara, D., Iacoviello, M., Molligo, P., Prestipino, A., and Raffo, A. (2019). Does Trade Policy Uncertainty affect Global Economic Activity? *FEDS Notes.* Washington, DC: Board of Governors of the Federal Reserve System. https://doi.org/10.17016/2380-7172.2445.

Our model-based nowcast of global GDP indicates a significant deceleration in global growth momentum in Q1:2025 (Chart II.2).

Global supply chain pressures recorded an uptick in February, inching towards historical average levels (Chart II.3a). The geopolitical risk indicator rose in February 2025 due to rising trade protectionism and simmering political tensions despite the fragile ceasefire in the Middle East (Chart II.3b). Indicators of global shipping costs showed mixed signals as the Baltic Dry Index reached a three-month high in February, reversing the decline seen during the Lunar New Year period in Asia (Chart II.3c). Meanwhile, the Drewry World Container Index continued to decline due to increased shipping capacity (Chart II.3d).

In February 2025, consumer sentiments worsened in the US, Japan, and Brazil while improving marginally in the Euro area and the UK (Chart II.4a and II.4b). Financial conditions eased in major AEs,

Chart II.2: Global GDP Growth Nowcast (Q-o-Q)

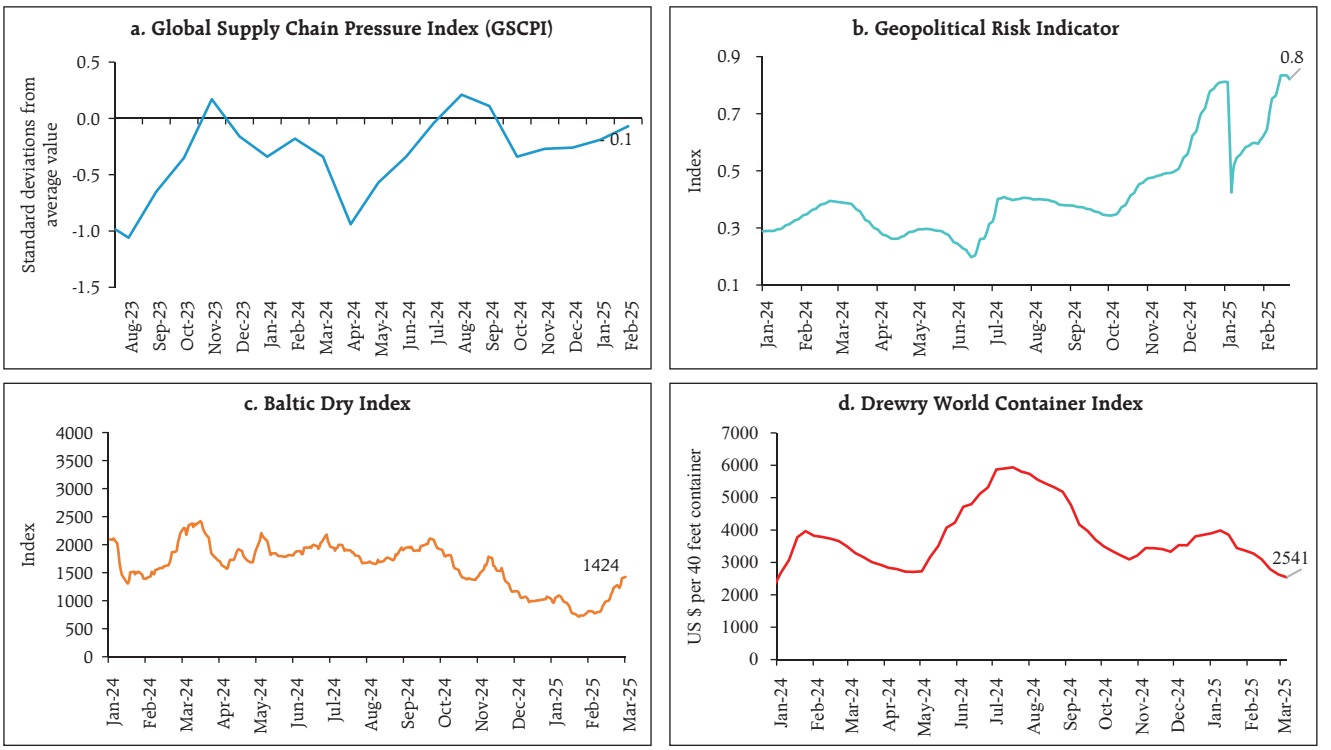


Sources: CEIC; OECD; and RBI staff estimates.

but among EMEs, they tightened in China and Brazil (Chart II.4c and 4d).

The global composite purchasing managers' index (PMI) moderated to a 14-month low in February 2025,

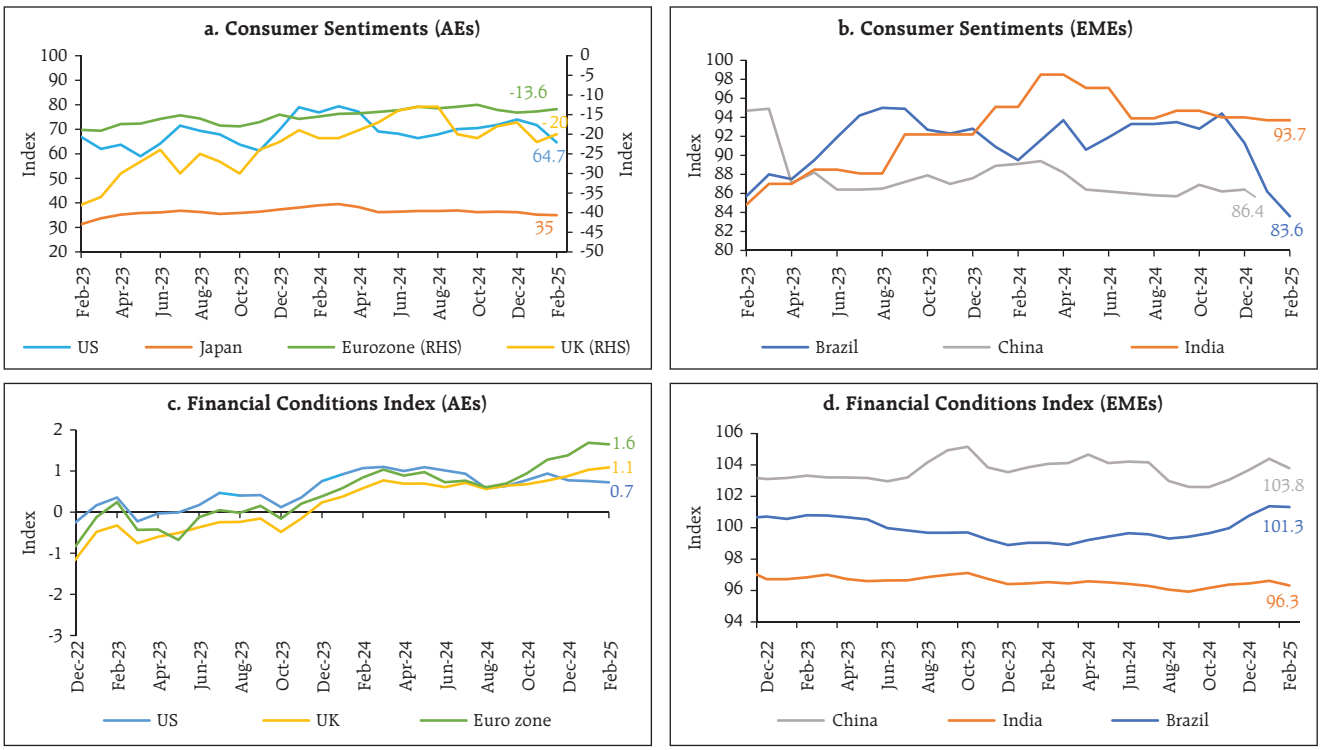
Chart II.3: Trends in Global Supply Chain Pressures and Geopolitical Risks



Notes: 1. GSCPI reflects data on transportation costs and manufacturing indicators.
2. The Baltic Dry Index provides a benchmark for the price of moving the major raw materials by sea and consists of three sub-indices that measure different sizes of dry bulk carriers.
3. Drewry's weekly WCI assessment reports actual spot container freight rates for major east-west trade routes. The composite index represents a weighted average of the eight shipping routes by volume and is reported in USD per 40-foot container.

Sources: Federal Reserve Bank of New York; BlackRock Investment Institute, February 2025; and Bloomberg.

Chart II.4: Consumer Sentiment and Financial Conditions

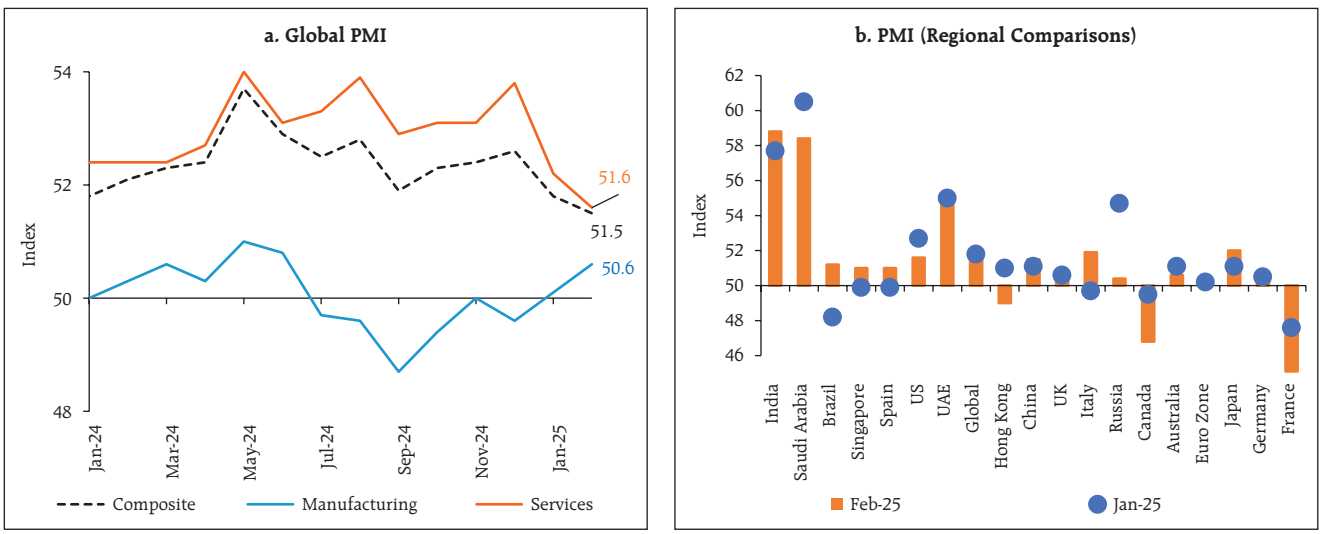


Notes: 1. Japan: A score above 50 indicates consumer optimism, below 50 shows a lack of consumer confidence, and 50 indicates neutrality.
2. Eurozone and UK: -100 indicates extreme lack of confidence, 0 denotes neutrality, and 100 indicates extreme confidence.
3. India and the US: The higher the index value, the higher the consumer confidence.
4. For the financial condition index (pertaining to EMEs constructed by Goldman Sachs), a reading below 100 is accommodative and *vice versa*. As for the AEs, the index constructed by Bloomberg is a *z*-score where a positive value indicates accommodative/easy financial conditions and *vice versa*.

Source: Bloomberg.

as the upturn in the manufacturing sector was offset by a deceleration in the service sector business activity (Chart II.5a). Global manufacturing PMI picked up pace as growth of output and new orders strengthened,

Chart II.5: 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.

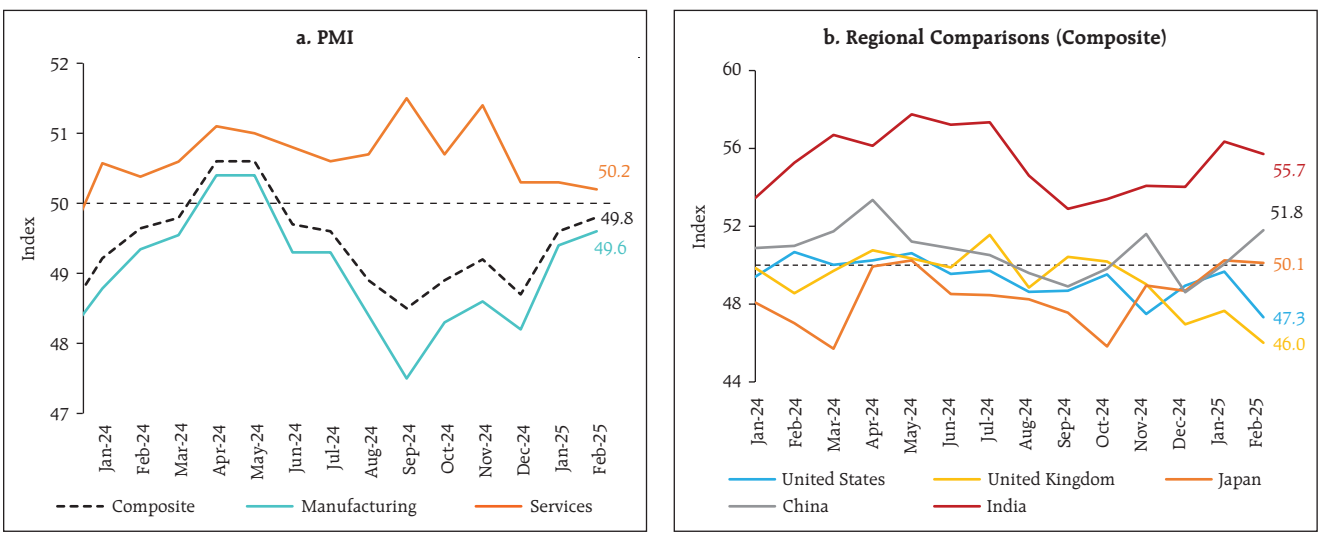
while slower new orders growth and flagging business optimism led to a deceleration in the global services PMI. Across regions, India outperformed other major emerging markets, while growth remained weak in Europe, and Canada's downturn intensified (Chart II.5b).

The composite PMI for new export orders recorded a sequential pick-up, *albeit* remaining in the negative territory, as the rate of contraction in manufacturing export orders narrowed. Services export orders continued to expand despite a sequential deceleration. Across major economies, Japan, India, and China recorded an expansion in export orders, while the US and the UK witnessed a contraction (Chart II.6a and II.6b). The World Trade Organization's (WTO) Goods Trade Barometer index at 102.8 for January indicates above trend merchandise trade growth, driven by accelerated imports in anticipation of potential trade policy changes.

Global commodity prices remained volatile in February, as indicated by the Bloomberg Commodity Index, registering a modest increase of 0.4 per cent on a month-on-month (m-o-m) basis (Chart II.7a). Food prices measured by the FAO's food price index increased by 1.6 per cent in February 2025, primarily driven by increase in the prices of sugar, dairy and vegetable oil partially offset by decrease in prices of meat (Chart II.7b). Crude oil prices declined by 4.6 per cent (m-o-m) driven by a significant build-up in US crude stockpiles and tariff uncertainty raising global growth concerns (Chart II.7c). Crude oil prices continued to decline in March following OPEC *plus* decision to proceed with its output increase in April. Base metal prices increased in February and early March, supported by expectations of additional stimulus in China and weakening of the US dollar. Gold prices also surged in February (Chart II.7d), bolstered by safe-haven demand and purchases by central banks.

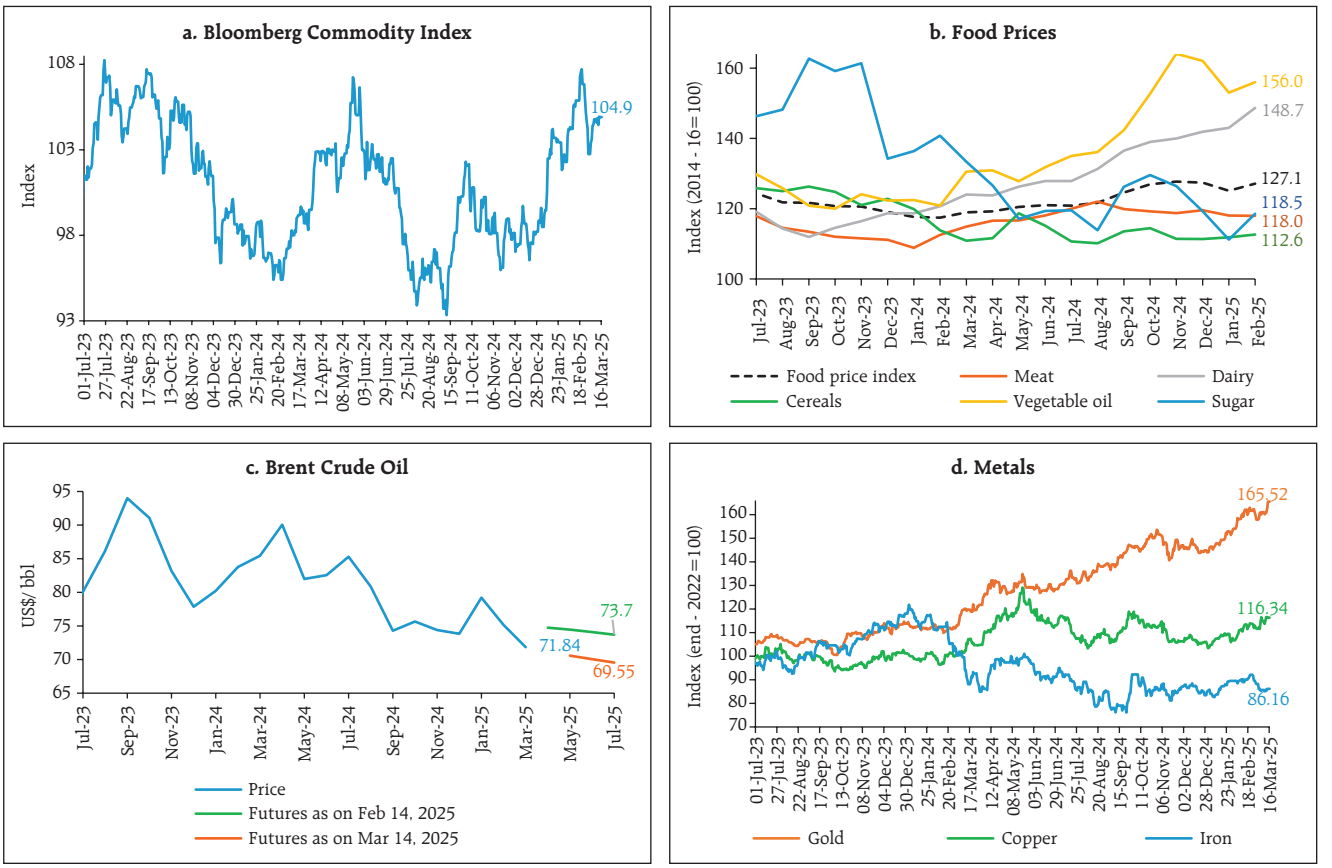
Headline inflation continues to exhibit stickiness in major economies' last mile of disinflation. In the US, CPI inflation moderated to 2.8 per cent (y-o-y) in February from 3.0 per cent in January. Headline inflation in the Euro area moderated to 2.4 per cent in February from 2.5 per cent in January. Inflation

Chart II.6: Global PMI: New 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.

Chart II.7: Commodity and Food Prices



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

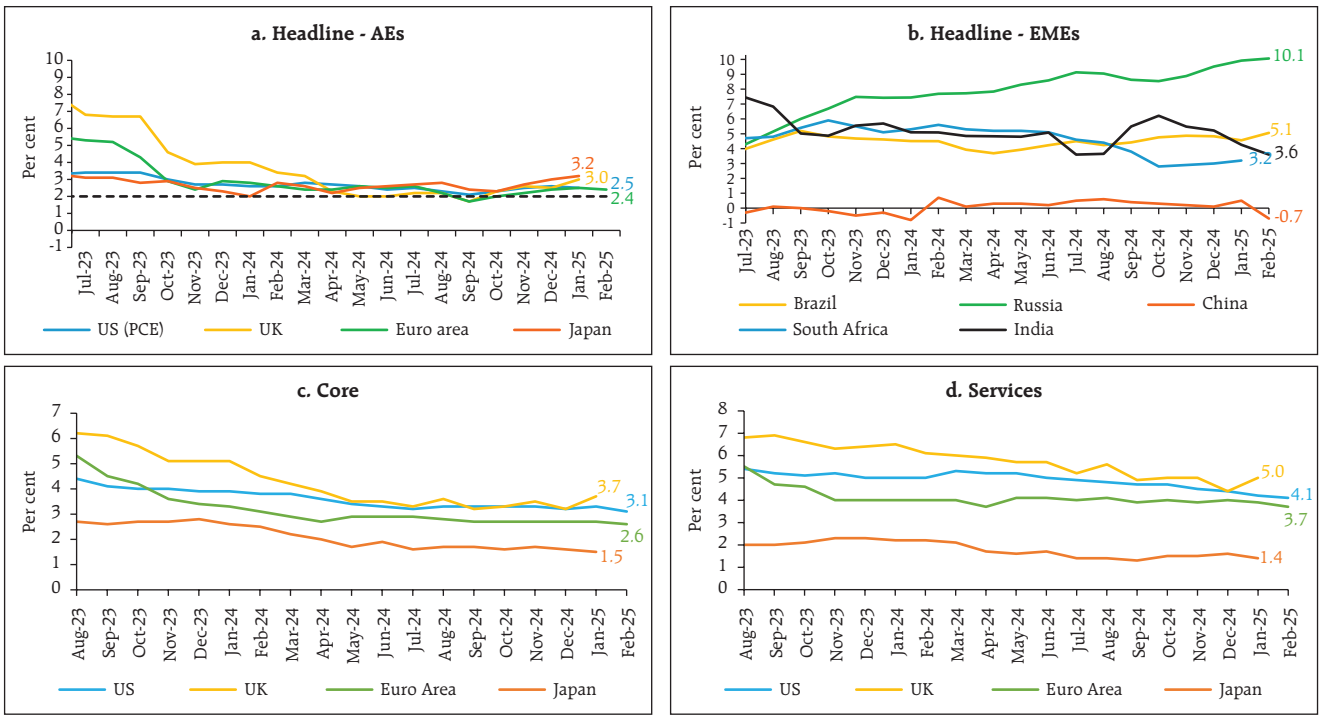
in Japan (CPI excluding fresh food) increased to 3.2 per cent in January, while in the UK, it accelerated by 50 bps (Chart II.8a). Among EMEs, CPI inflation in China returned to deflationary zone at (-)0.7 per cent in February, marking its lowest level in over a year driven by weak domestic demand (Chart II.8b). CPI inflation recorded an increase in Russia and Brazil in February, and in South Africa in January. Core and services inflation remains above headline in most AEs (Chart II.8c and II.8d).

The Morgan Stanley Capital International (MSCI) world equity index declined by 0.7 per cent (m-o-m) in February as losses in AEs outweighed gains in EMEs. The index rose in the first half of February, supported by strong quarterly corporate earnings in the US, but declined subsequently extending their decline to March so far (up to 14th) as the release of weaker than expected economic data[10] and heightened uncertainty regarding trade policies dented optimism (Chart II.9a). Yields on the US government securities remained volatile with a softening bias tracking these developments (Chart II.9b). Potential negative impact of trade restrictions on US growth weighed on the US dollar and the US dollar index (DXY) weakened by 0.7 per cent in February and continued to weaken in March. Concomitantly, the MSCI currency index for EMEs increased marginally despite modest capital outflows (Chart II.9c and II.9d).

Central banks have either lowered their policy rates or maintained a *status quo* in their latest policy meetings. Among AE central banks, the European Central Bank (ECB) and Canada cut

[10] These include disappointing flash PMI and a sluggish consumer sentiment index.

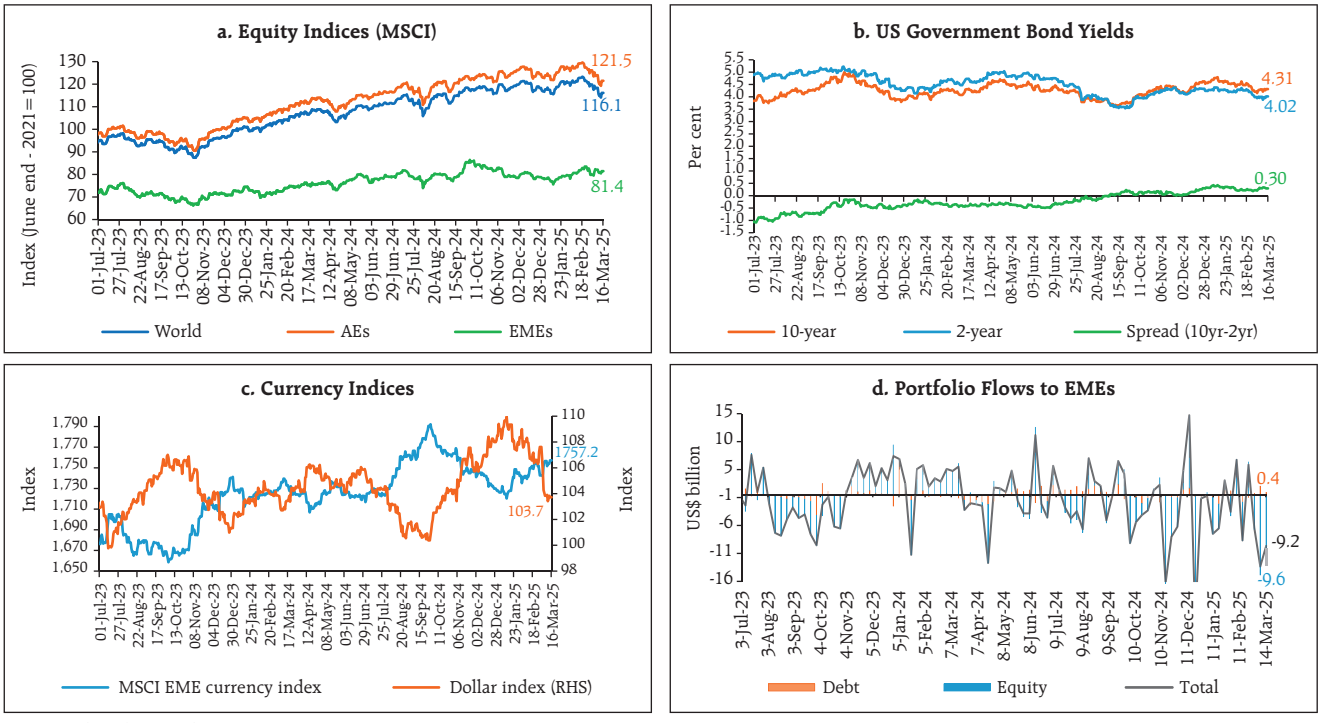
Chart II.8: Inflation - AEs and EMEs



Sources: Bloomberg; and OECD.

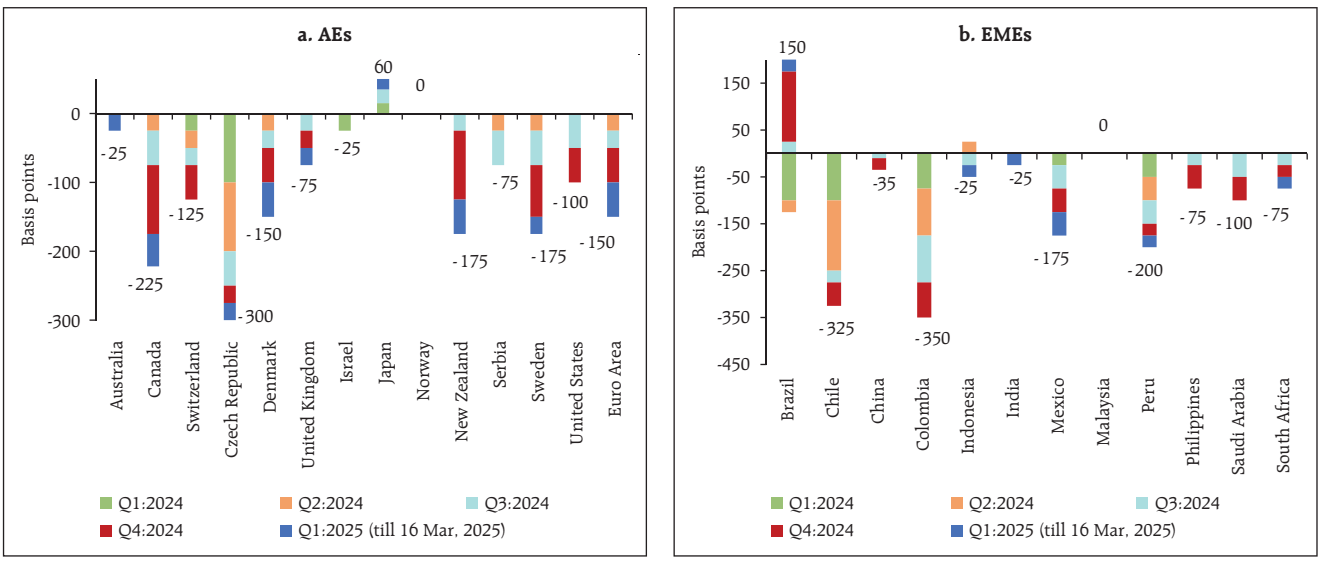
their policy rates by 25 bps in March and the UK, Czech Republic, Australia and South Korea lowered their key rates by 25 bps in February. Iceland and New Zealand accelerated their rate cuts to 50 bps

Chart II.9: Global Financial Markets



Sources: Bloomberg; and IIF.

Chart II.10: Changes in Policy Rates



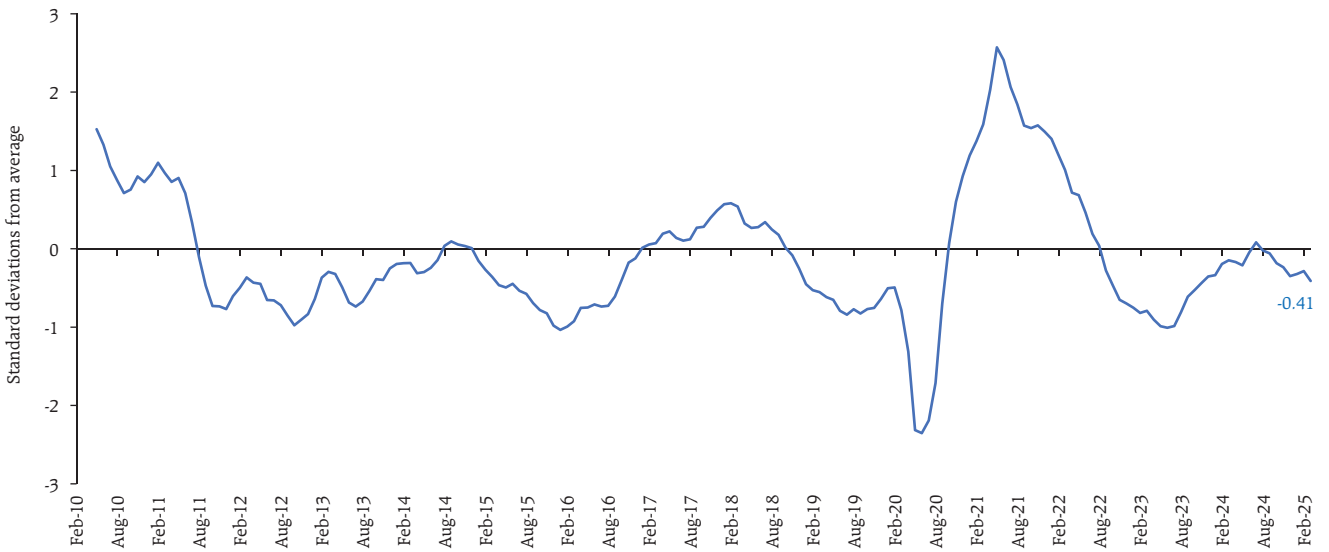
Source: Bloomberg.

in February (Chart II.10a). Israel, however, kept its policy rate unchanged. Among EME central banks, China, Russia, Hungary, the Philippines, Indonesia and Romania kept their policy rates unchanged in February. Malaysia, Peru and Poland kept their policy rates unchanged in March while Thailand lowered its policy rate by 25 bps, and Mexico cut its benchmark rate by 50 bps (Chart II.10b).

III. Domestic Developments

The Indian economy recorded a sequential pick-up in growth during Q3:2024-25 driven by private consumption and government spending. Supply chain pressures remained below historical average levels, despite a marginal uptick in February (Chart III.1).

Chart III.1: Index of Supply Chain Pressures (ISPI)



Source: RBI staff estimates.

Aggregate Demand

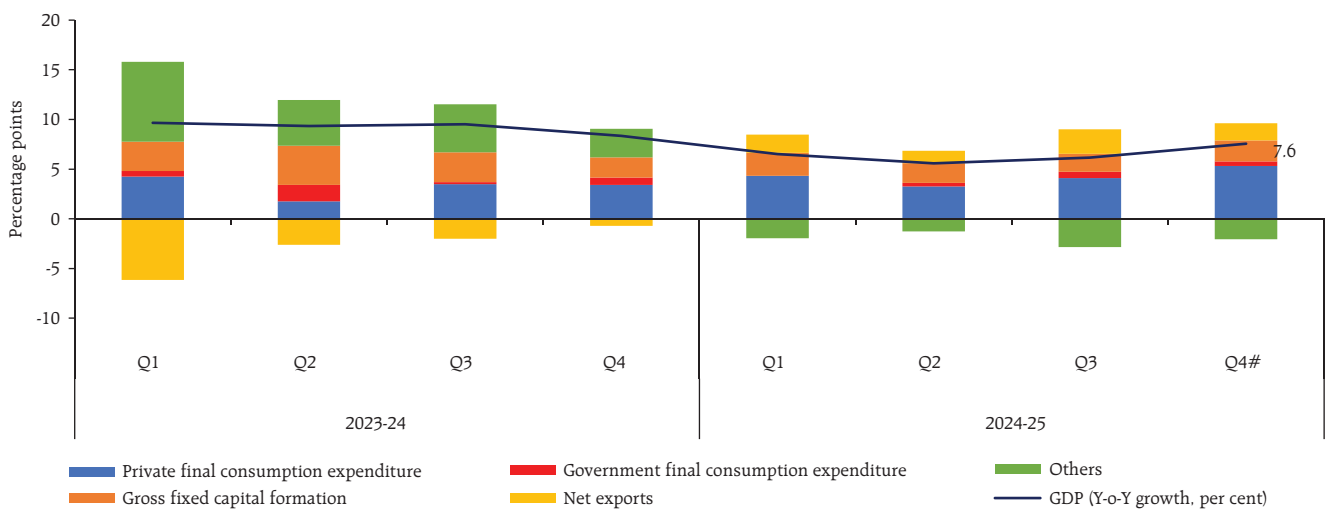
The second advance estimates (SAE) of national income released by the National Statistical Office (NSO) on February 28, 2025 placed India's real gross domestic product (GDP) growth at 6.5 per cent in 2024-25 – an upward revision of 10 bps from the first advance estimates (FAE) despite a higher base. This reflects an upward revision of 120 bps in net exports to 7.1 per cent and 30 bps in private final consumption expenditure (PFCE) to 7.6 per cent. Growth for 2023-24 was also revised upwards by 100 bps to 9.2 per cent from the provisional estimates (PE).

In terms of quarterly trajectory, growth accelerated to 6.2 per cent in Q3:2024-25 from 5.6 per cent in Q2. PFCE growth accelerated to 6.9 per cent during Q3, owing to a sustained momentum in rural consumption and a revival in urban consumption. Government final consumption expenditure (GFCE) growth improved to 8.3 per cent during Q3 as expenditure by both the Union and the State governments picked up. Growth in fixed investment, however, moderated to 5.7 per cent, as mirrored in its proximate indicators – steel consumption and import of capital goods. Despite headwinds to global trade and world demand, exports recorded a growth of 10.4 per cent, primarily supported by services. With growth in exports surpassing that of imports, the net exports contributed positively to GDP growth by 2.5 percentage points in Q3:2024-25 (Chart III.2).

High frequency indicators suggest that aggregate demand continued to remain resilient in Q4:2024-25. Activity indicators such as E-way bills and toll collections recorded double digit (y-o-y) growth in February 2025 (Chart III.3a and Chart III.3b).

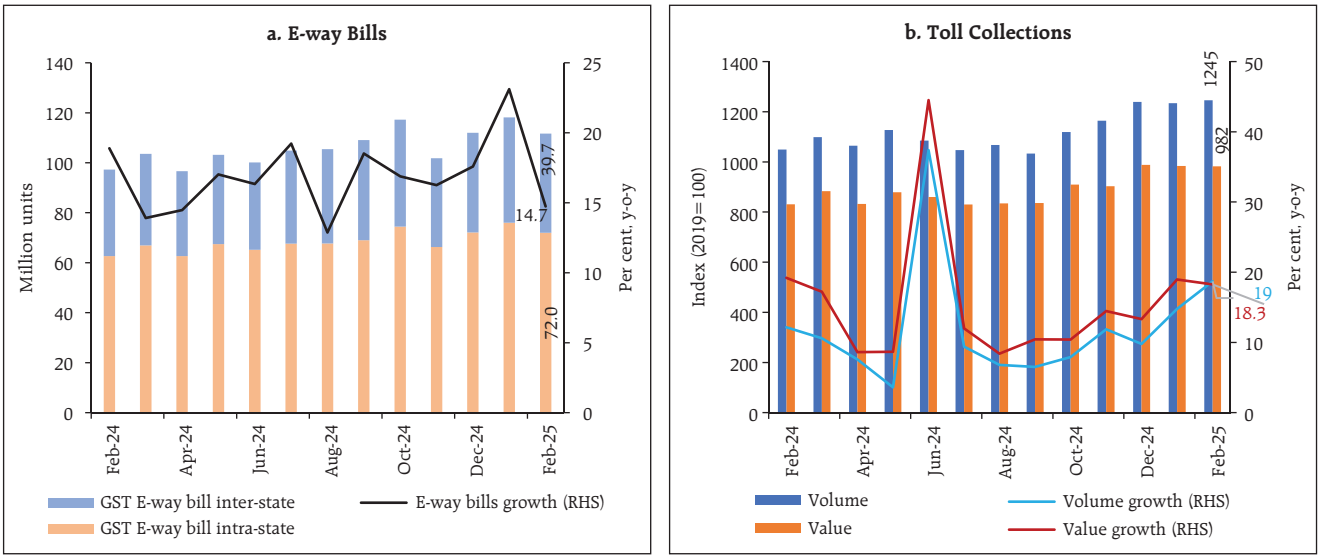
Wholesale automobile sales contracted by 6.4 per cent (y-o-y) in February (Chart III.4a). The two-wheeler segment declined by 9.0 per cent (y-o-y), mainly due to a fall in motorcycle sales (Chart III.4b). Tractor sales registered double-digit growth for the third consecutive month. Vehicle registrations recorded a contraction in February, driven by a

Chart III.2: Weighted Contribution to GDP Growth



Notes: 1. #: Implicit growth.
2. Others include change in stock, valuables and statistical discrepancies.
Source: NSO.

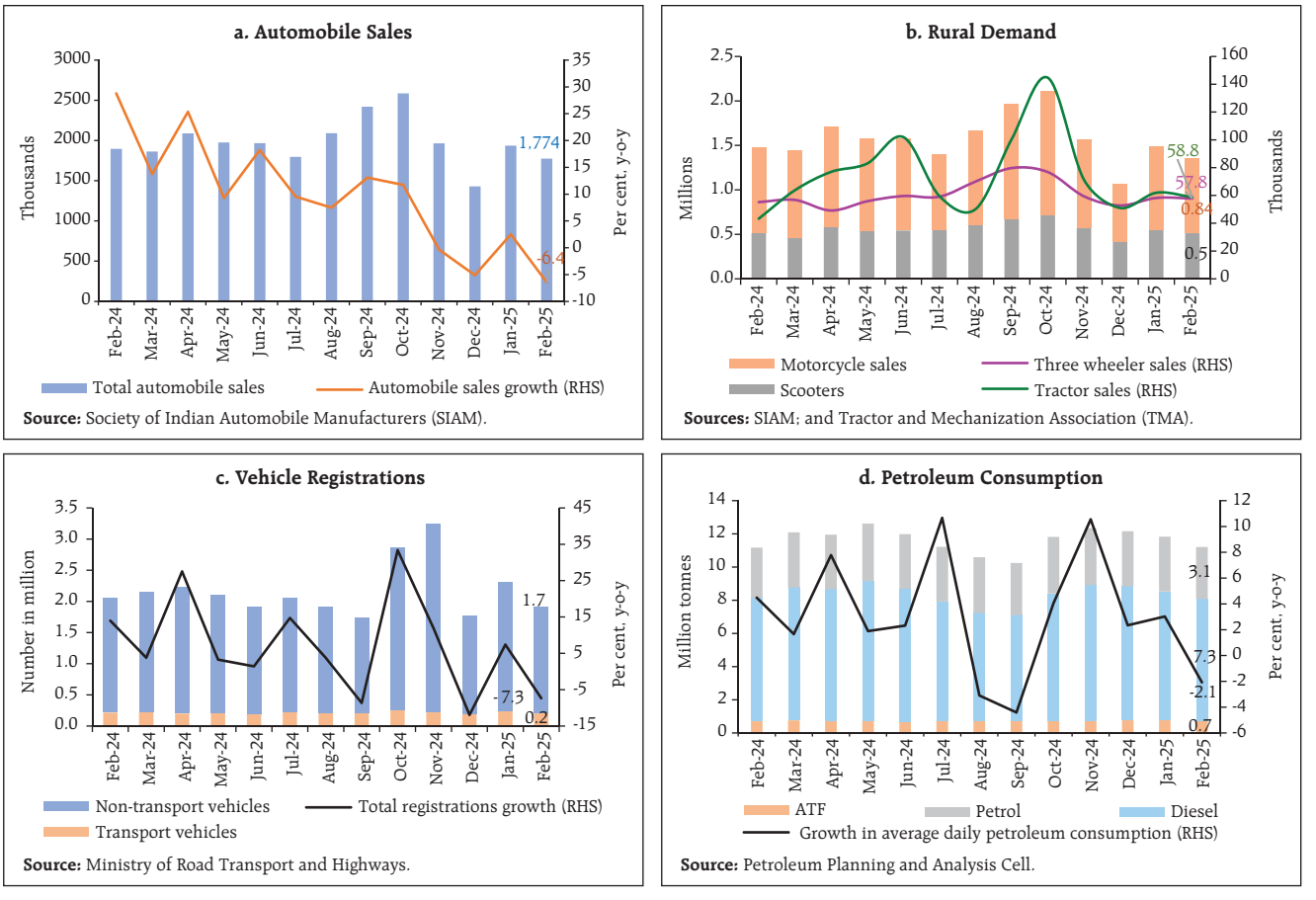
Chart III.3: E-way Bills and Toll Collections



Sources: GSTN; and RBI.

decline in both non-transport and transport vehicles segments (Chart III.4c). Petroleum consumption decreased by 2.1 per cent (y-o-y) in February (Chart III.4d).

Chart III.4: Automobile Sector Indicators



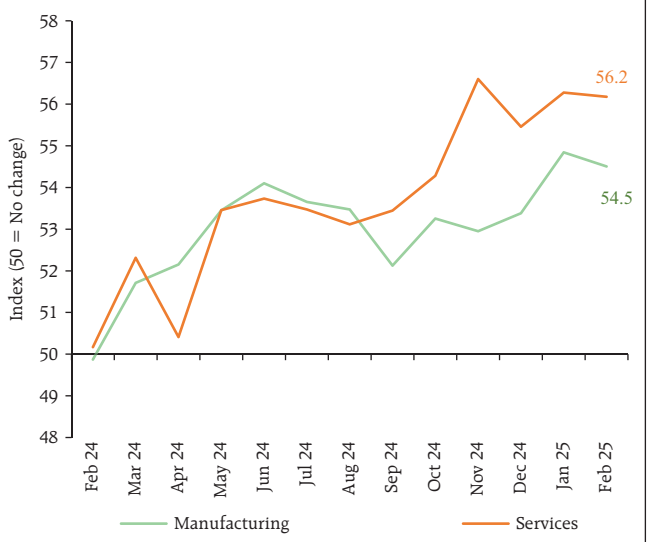
Source: Society of Indian Automobile Manufacturers (SIAM).

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

Source: Ministry of Road Transport and Highways.

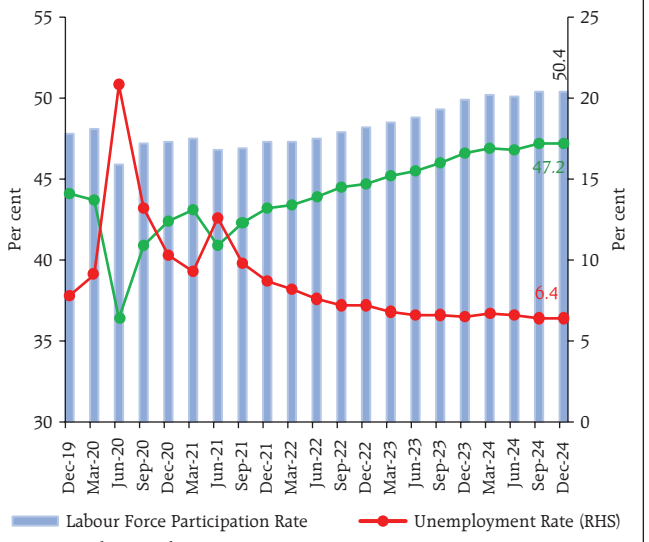
Source: Petroleum Planning and Analysis Cell.

Chart III.5: PMI Employment Indices



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

Chart III.6: PLFS Quarterly (age 15 and above)



Source: MOSPI.

In February 2025, job creation in the organised manufacturing sector recorded the second fastest rate of expansion since the inception of the PMI survey. Employment in the services sector also continued to expand at a robust pace (Chart III.5)

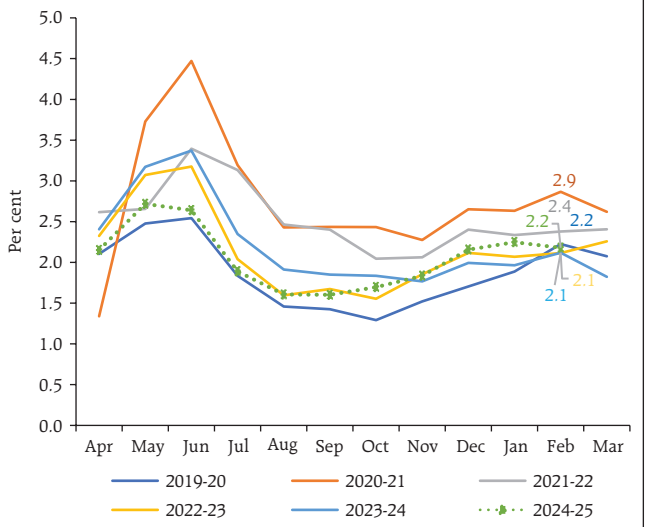
As per the latest quarterly Periodic Labour Force Survey (PLFS), urban unemployment rate during October-December 2024 was at 6.4 per cent, unchanged from the previous quarter and lowest in the PLFS series. The Labour Force Participation Rate (LFPR) and the Worker Population Ratio (WPR) remained steady (Chart III.6).

After recording sequential increase for four consecutive months, the demand for work under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) declined by 3.1 per cent (m-o-m) in February 2025, coinciding with the onset of *Rabi* harvesting (Chart III.7).

India's merchandise exports at US$ 36.9 billion contracted by 10.9 per cent (y-o-y) in February 2025, driven by an unfavourable base effect which more than offset the positive momentum (Chart III.8).

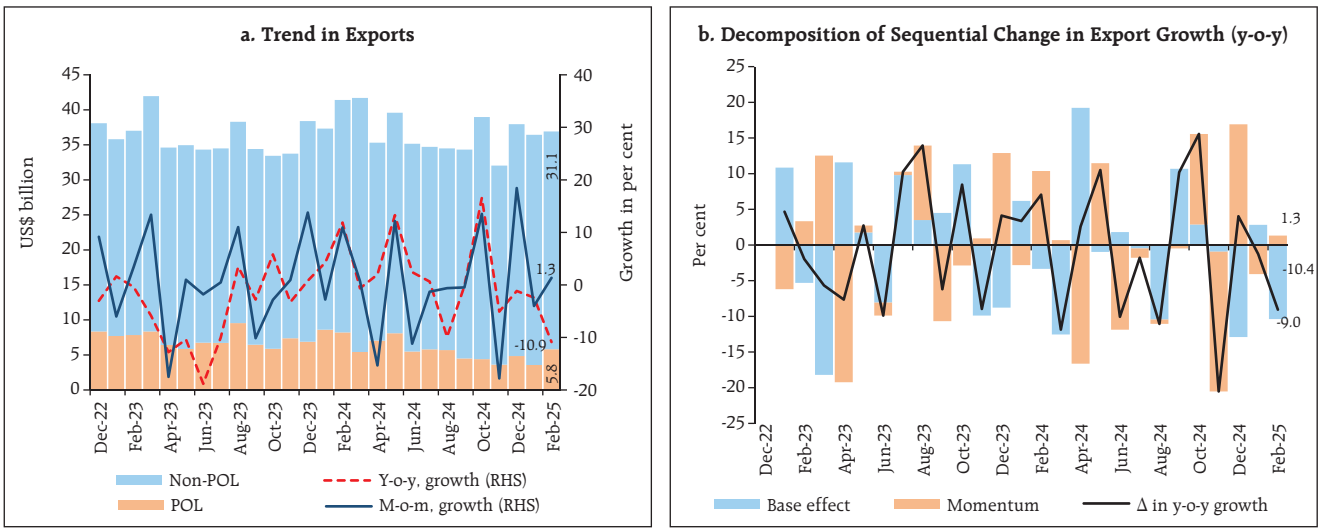
Exports of 17 out of 30 major commodities (accounting for 75.3 per cent of export basket in 2023-24) contracted on y-o-y basis in February. Petroleum products, engineering goods, chemicals and gems and jewellery contributed negatively, while electronic goods, rice, mica, coal and other ores supported export growth in February (Chart III.9).

Chart III.7: Households Demand for Work under MGNREGS



Source: Ministry of Rural Development.

Chart III.8: India's Merchandise Exports

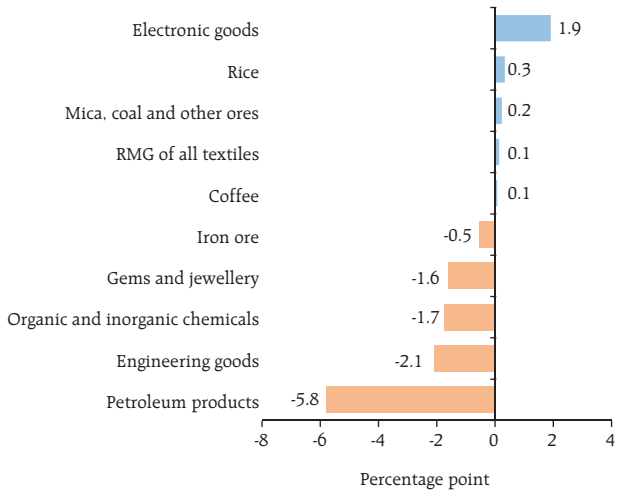


Note: POL: Petroleum, oil and lubricants.
Sources: PIB; DGCI&S; and RBI staff estimates.

During April-February 2024-25, India's merchandise exports expanded by 0.1 per cent to US$ 395.6 billion, primarily led by electronic goods, engineering goods, rice and drugs and pharmaceuticals, while petroleum products, gems and jewellery and iron ore dragged exports down.

Exports to 14 out of 20 major destinations contracted in February 2025, while exports to 13 out of 20 major destinations expanded during April-February 2024-25, with the US, the UAE and the Netherlands being the top three export destinations.

Chart III.9: India's Merchandise Exports – Relative Contribution
(February 2025 over February 2024)



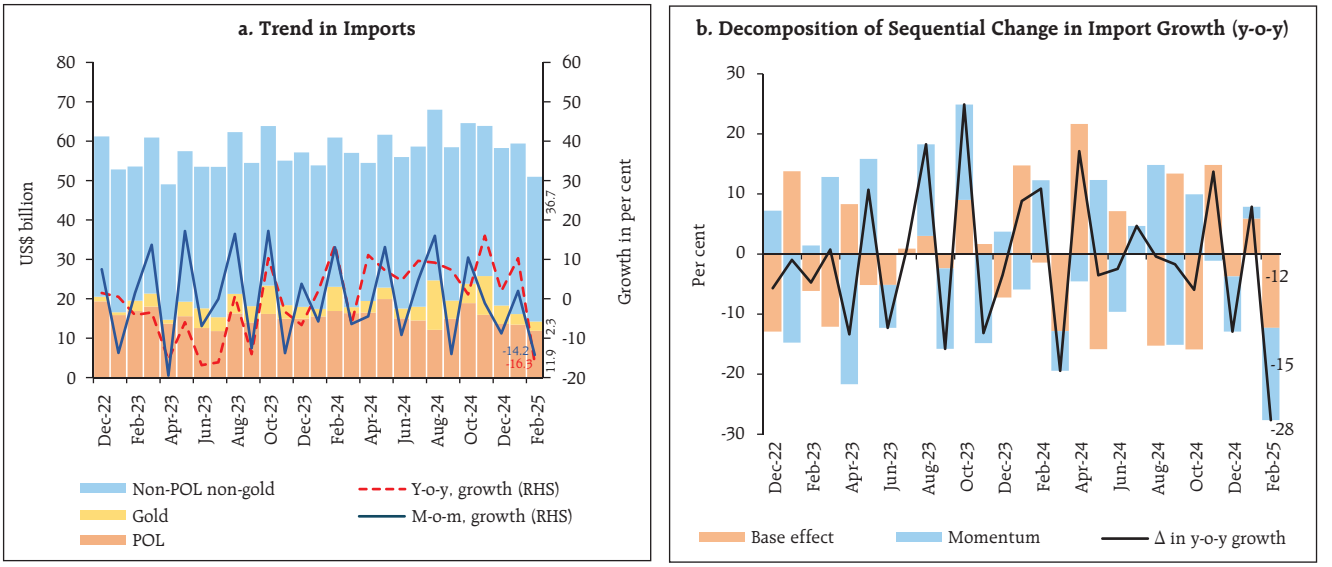
Sources: PIB; and RBI staff estimates.

The merchandise imports at US$ 51.0 billion decreased by 16.3 per cent (y-o-y) in February mainly due to a fall in oil and gold imports, after expanding for 10 consecutive months. Out of 30 major commodities, 12 commodities (accounting for 56.8 per cent of import basket) registered a contraction on y-o-y basis (Chart III.10).

Petroleum, crude and products, gold, silver, coal, coke and briquettes, *etc.*, and pearls, and precious and semi-precious stones dragged imports down, while electronic goods, chemical material and products, vegetable oil, machinery, electrical and non-electrical, and non-ferrous metals contributed positively (Chart III.11).

During April-February 2024-25, India's merchandise imports at US$ 656.7 billion increased by 5.7 per cent (y-o-y), mainly led by gold, electronic goods, petroleum, crude and products, and machinery while coal, coke and briquettes, *etc.*, pearls, precious and semi-precious stones, and iron and steel, contributed negatively.

Chart III.10: India's Merchandise Imports



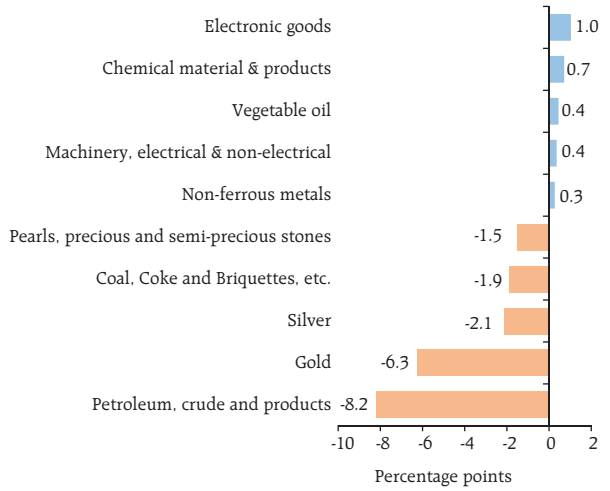
Sources: PIB; DGCI&S; and RBI staff estimates.

Imports from 13 out of 20 major source countries contracted in February 2025, while imports from 11 out of 20 major source countries expanded during April-February 2024-25. Major import source countries, *viz.*, China, Russia and the UAE witnessed imports growth during the period.

Merchandise trade deficit fell to its lowest level since August 2021 to US$ 14.1 billion driven by a fall in both oil and non-oil deficit. The share of oil deficit in trade deficit fell to 43.3 per cent in February from 44.5 per cent a year ago owing to a larger decline (Chart III.12).

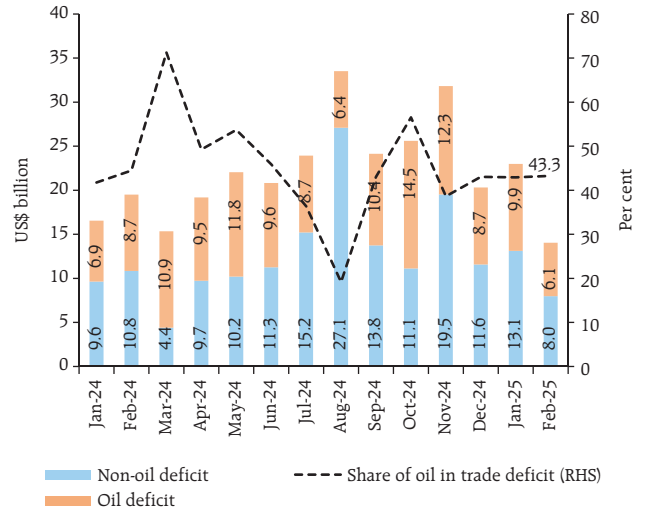
During April-February 2024-25, India's merchandise trade deficit widened to US$ 261.1 billion from US$ 225.8 billion a year ago. Petroleum

Chart III.11: India's Merchandise Imports – Relative Contribution
(February 2025 over February 2024)



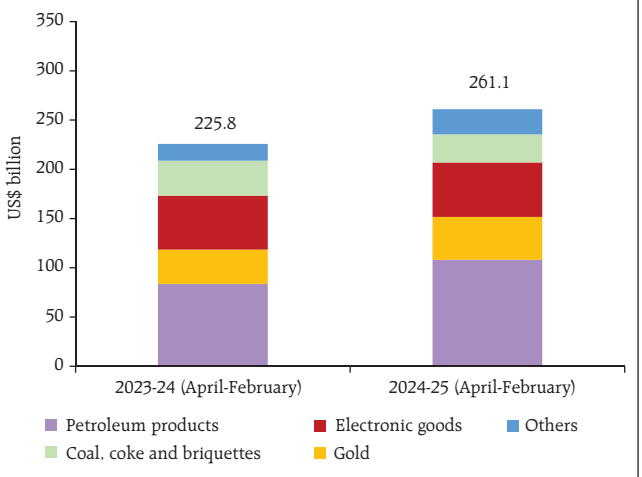
Sources: PIB; and RBI staff estimates.

Chart III.12: Decomposition of India's Merchandise Trade Deficit



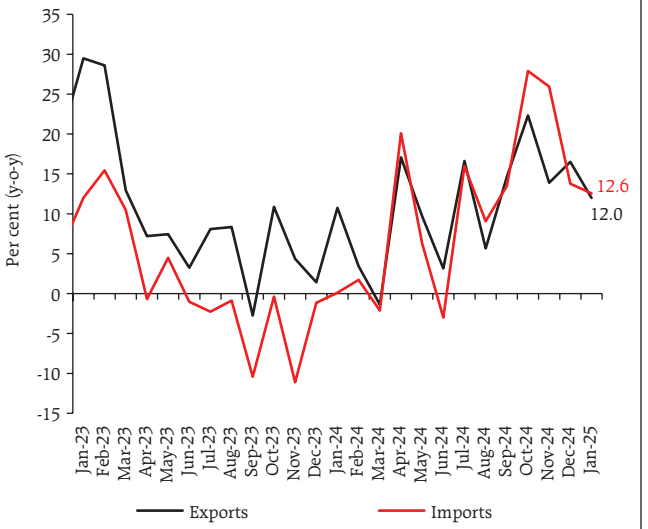
Sources: PIB; and DGCI&S.

Chart III.13: Commodity-wise Merchandise Trade Deficit



Note: Coal, coke and briquettes exports in January and February 2025 are assumed to be at the same level as in December 2024. Gold exports are estimated.
Sources: PIB; DGCI&S; and RBI staff estimates.

Chart III.14: Services Exports and Imports: Growth Rates



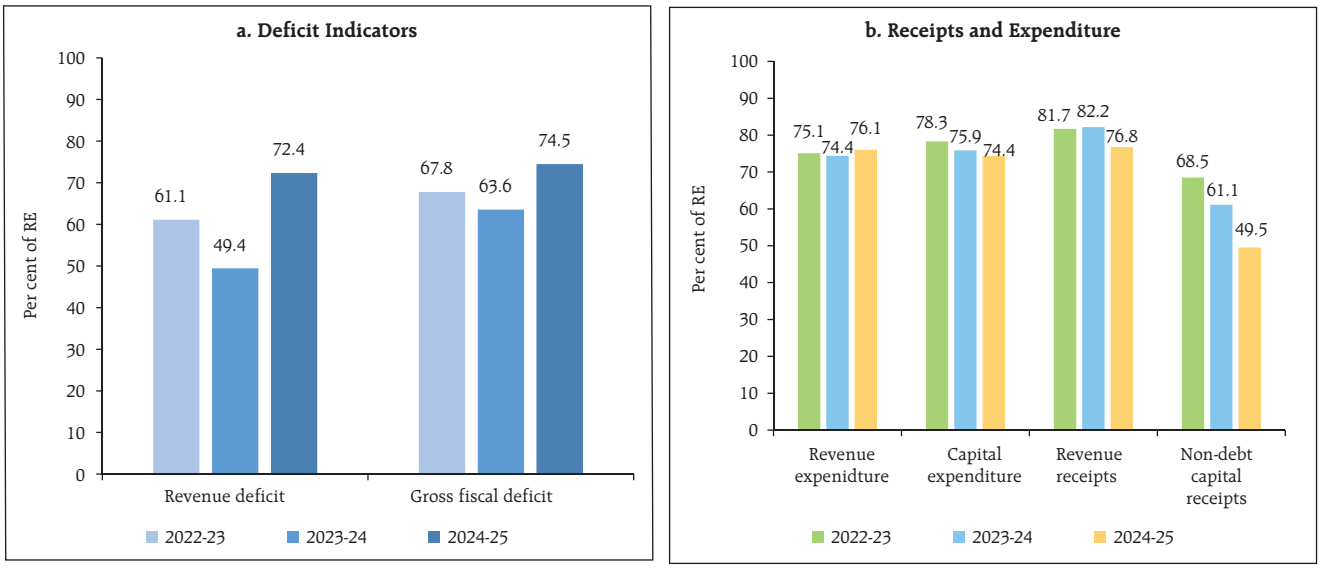
Source: RBI.

products were the largest source of deficit, followed by electronic goods and gold (Chart III.13).

In January 2025, services exports grew by 12.0 per cent (y-o-y) to US$ 34.7 billion, and services imports increased by 12.6 per cent (y-o-y) to US$ 16.7 billion (Chart III.14). Net services export earnings recorded a growth of 11.5 per cent (y-o-y) in January.

During April-January 2024-25, the gross fiscal deficit (GFD) and revenue deficit (RD) as a per cent of revised estimate (RE) stood higher than the corresponding period of the previous year mainly due to the pickup in both revenue and capital expenditure of the Union government in recent months (Chart III.15a).[11] Tax collections also continued to remain robust. The key fiscal indicators

Chart III.15: Major Fiscal Indicators during April-January 2024-25



Sources: Union budget documents; and CGA.

[11] As per the latest data released by the Controller General of Accounts (CGA).

such as revenue receipts, revenue expenditure and capital expenditure remained broadly in line with the previous year (as per cent of RE), barring the non-debt capital receipts which have been lower than the previous year (Chart III.15b).

The total expenditure of the Union government grew at 6.4 per cent *vis-à-vis* 5.9 per cent in the corresponding period of the previous year as both capital and revenue expenditure expanded. Within the Centre's revenue expenditure, the outgo on major subsidies increased by 7.0 per cent driven by higher food subsidy, as compared to a contraction of 21.0 per cent last year.

The capital expenditure incurred during April-January 2024-25 stood at 74.4 per cent of its RE for 2024-25, broadly in line with the previous year. Centre's capex witnessed consistent pick up from October 2024, compensating for the sluggishness witnessed during H1:2024-25 (Chart III.16a). Ministries with highest budgeted capex target for 2024-25 have attained substantial progress in achieving their revised capital expenditure target of 2024-25 (Chart III.16b).

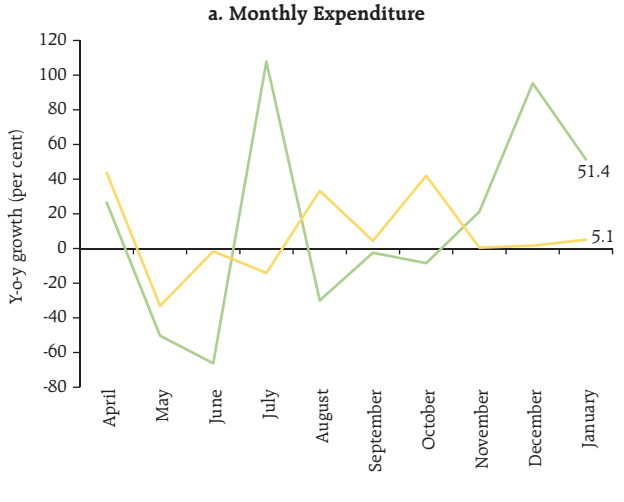
Chart III.17: Tax Revenue during April-January

Sources: Union budget documents; and CGA.

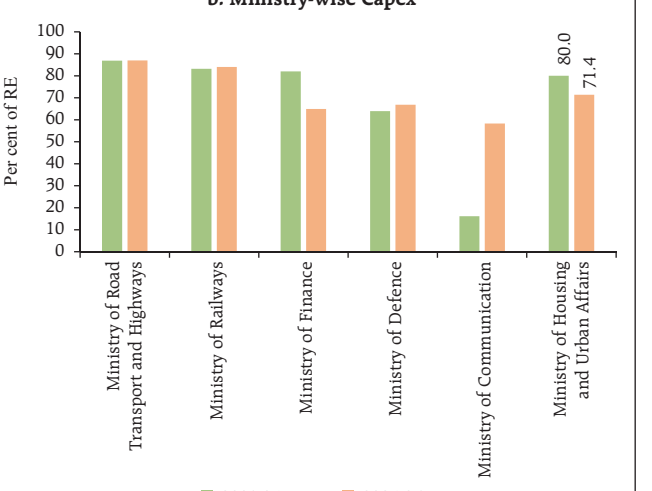
The gross tax revenue and total receipts of the Centre recorded a growth of 10.3 per cent and 6.6 per cent, respectively, in April-January 2024-25. Income tax and GST continued to be the major drivers for the Centre's robust tax collections in 2024-25. While the performance of corporation tax remained sub-par, there has been an improvement in the growth of customs duty and union excise duty (Chart III.17).

Chart III.16: Expenditure of Union Government during April-January 2024-25

a. Monthly Expenditure

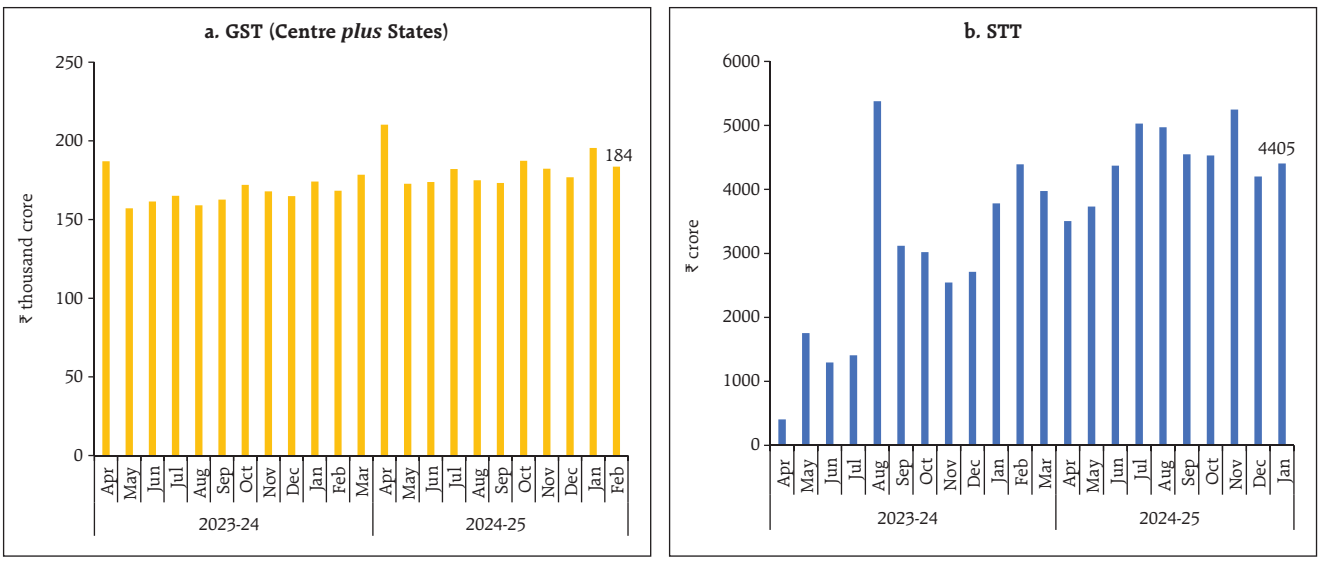


b. Ministry-wise Capex



Sources: Union budget documents; and CGA.

Chart III.18: Monthly Trends in STT and GST



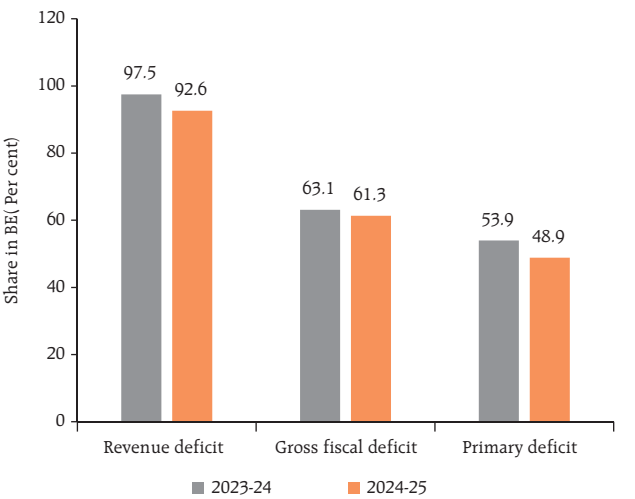
Sources: CGA; Press Information Bureau (PIB); and GST Portal.

The GST receipts (Centre *plus* States) grew by 9.1 per cent (y-oy) in February 2025 (Chart III.18a). The cumulative GST collection for April-February 2024-25 amounted to ₹20.13 lakh crore, 9.4 per cent higher than a year ago. During April-January 2024-25, the tax collection from securities transaction tax (STT) has recorded a substantial growth of 75.3 per cent raising its share in direct tax receipts to 2.6 per cent from 1.6 per cent last year (Chart III.18b).

Non-tax revenue collection registered a robust growth on the back of surplus transfer of ₹2.11 lakh crore from the Reserve Bank of India. On the other hand, the performance of non-debt capital receipts remains tepid, partly on account of lower disinvestment receipts.

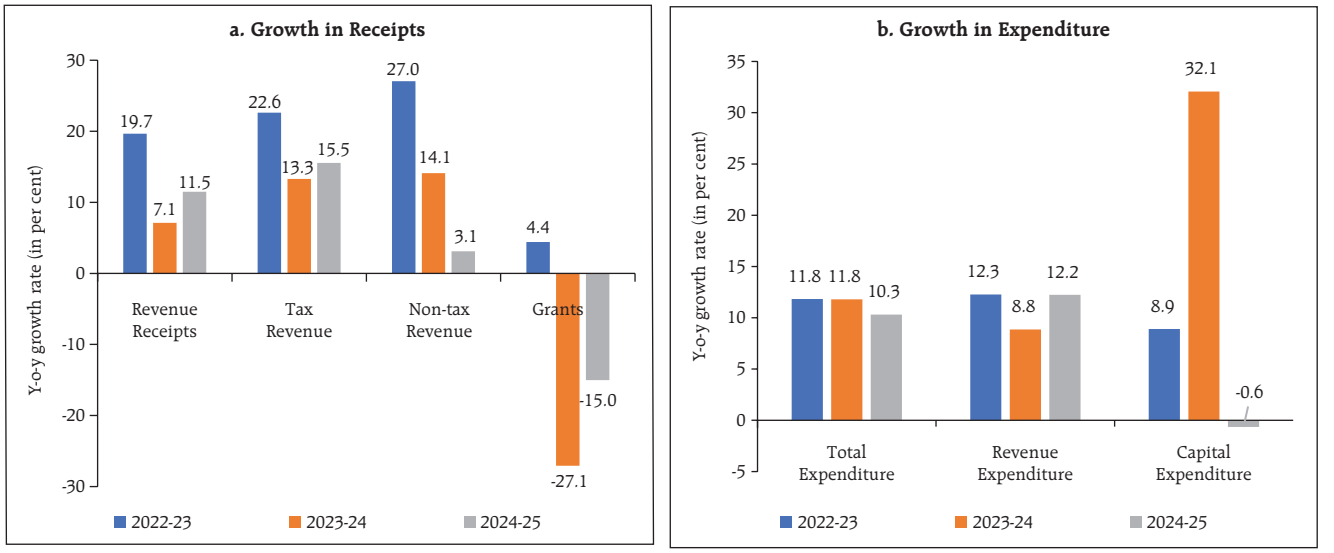
As per provisional accounts data for April-January 2024-25, States' GFD as a per cent of the budget estimates was marginally lower than last year on account of an improvement in revenue performance and a compression in capital expenditure (Chart III.19). Revenue receipts posted a robust growth, supported by higher tax revenue, even as growth in non-tax revenue moderated (Chart III.20a). Within States' own tax revenues, States' goods and services tax (SGST) witnessed robust growth and sales tax/ VAT collections showed signs of recovery from a contraction during the same period in the previous year.

Chart III.19: States' Fiscal Indicators
(April-January)



Note: Data pertains to 21 States.
Source: Comptroller and Auditor General of India (CAG).

Chart III.20: Key Fiscal Performance Indicators (April-January)



Note: Data pertains to 21 States.
Source: CAG.

On the expenditure side, growth in revenue expenditure picked up during April-January 2024-25, while capital expenditure declined (Chart III.20b). The rise in revenue expenditure, alongside a contraction in capital outlay has weakened the quality of States' spending, with the ratio of revenue expenditure to capital outlay (RECO) rising to 7.1 in April-January 2024-25 from 6.1 in the same period last year.

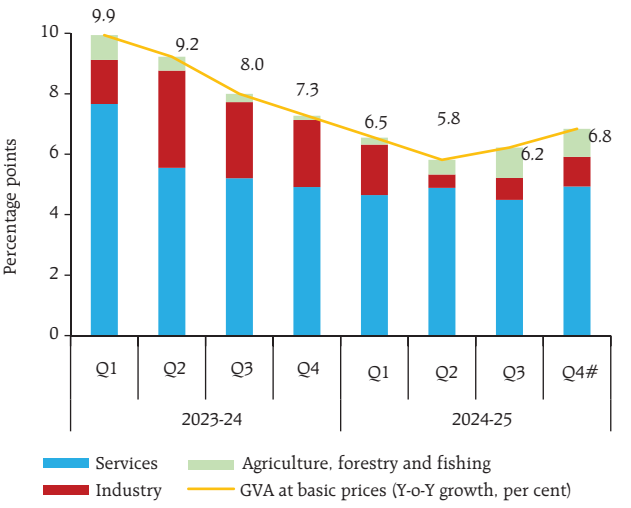
Aggregate Supply

Real gross value added (GVA) at basic prices is estimated to grow at 6.4 per cent in 2024-25 as per the SAE, similar to that in the FAE. In Q3:2024-25, real GVA growth accelerated to 6.2 per cent (y-o-y) from 5.8 per cent in the preceding quarter (Chart III.21). The growth was propelled by the agriculture and services sector, while the industry sector performed modestly.

The nominal GVA growth of listed private manufacturing companies remained unchanged from the previous quarter at 5.0 per cent (y-o-y) during Q3:2024-25. Pharmaceuticals, automobiles, and chemicals industries contributed the most to the growth together accounting for 38 per cent in total GVA. In contrast, iron and steel, petroleum and cement industries contributed negatively to overall GVA growth (Chart III.22).

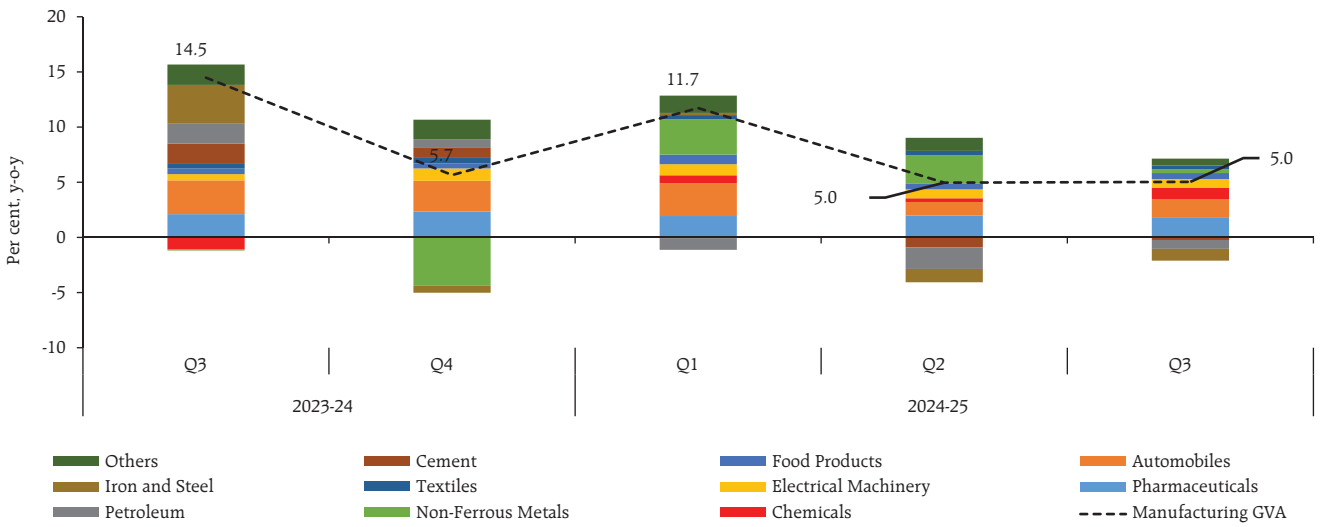
Agriculture, forestry and fishing expanded by 5.6 per cent in Q3:2024-25, owing to robust *kharif*

Chart III.21: Weighted Contribution to GVA Growth



Note: #: Implicit growth.
Sources: NSO; and RBI staff estimates

Chart III.22: Nominal GVA Growth of Manufacturing Sector: Industry Contribution



Note: Results are based on 1,675 listed private manufacturing for Q3: 2024-25.
Sources: Capitaline database; and RBI staff calculations.

foodgrains production and higher horticulture production.[12] The industrial sector showed a modest recovery in Q3 after a muted performance in the preceding quarter. Manufacturing sector – the primary driver of industrial GVA growth – registered a growth of 3.5 per cent, aided by improved profitability of the listed corporate manufacturing firms. The activity in mining and quarrying recuperated, recording a growth of 1.4 per cent in Q3:2024-25 from a contraction in Q2. Electricity, gas, water supply and other utility services grew at 5.1 per cent in Q3:2024-25 as against 3.0 per cent growth recorded in the preceding quarter. The services sector remained steady in Q3:2024-25. Construction growth moderated to 7.0 per cent compared with the preceding quarter, as reflected in moderation in steel consumption, while growth in trade, hotels, transport, and related services improved to 6.7 per cent, driven by stronger trade activity. Financial, real estate, and professional services maintained a 7.2 per cent growth rate, while public administration, defence, and other services (PADO) grew by 8.8 per cent, supported by robust growth in other services.

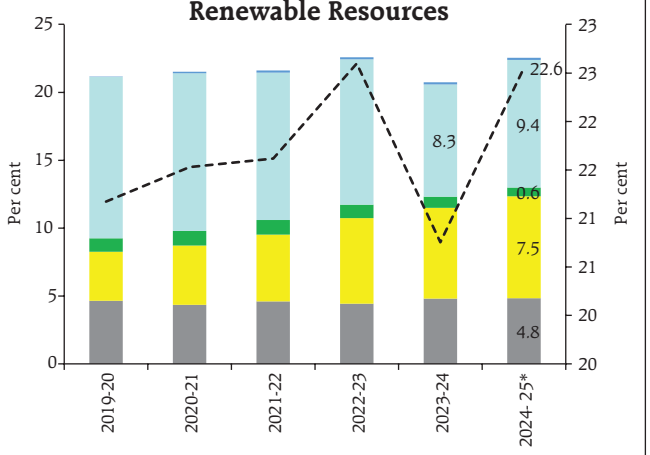
In its outlook for seasonal temperature during the hot weather season, the IMD has projected above-normal maximum temperatures over most parts of the country during March to May 2025. Above-normal temperatures may lead to an increase in power demand. However, India's rising focus on the electricity generation from renewable sources especially solar, may help in meeting increased power demand during the summer season (Chart III.23).

Solar energy remains the dominant contributor accounting for 47 per cent of the total installed renewable energy capacity. Recently, India achieved a historic milestone of surpassing 100 GW of installed solar power capacity which increased from 2.82 GW in 2014 to 100 GW in 2025.[13] With the objective to supply solar power to one crore households by March

[12] *Kharif* food production was growth 6.8 per cent higher in 2024-25. As per the first advance estimates, the production of horticultural crops during 2024-25 is placed at 362.1 million tonnes, 2.1 per cent higher than the final estimates of 2023-24 and 1.9 per cent higher than the first advance estimates of 2023-24.

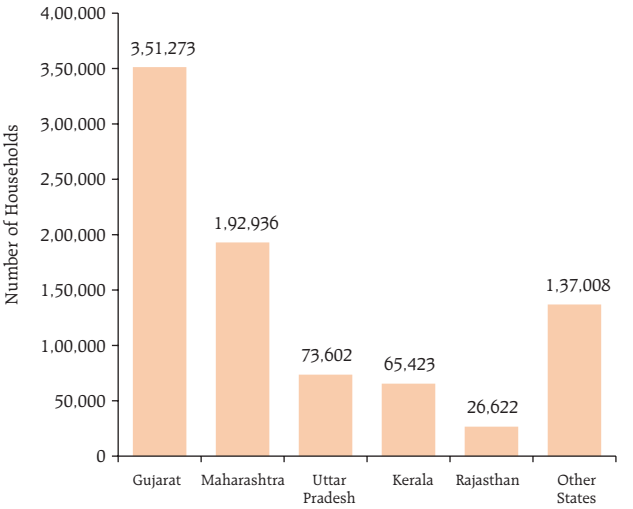
[13] https://pib.gov.in/PressReleasePage.aspx?PRID=2100603

Chart III.23: Electricity Generation from Renewable Resources



Note: * Up to January 2025.
Source: Central Electricity Authority.

Chart III.24: Rooftop Solar Panels Installations under PMSGMBY
(as of January 27, 2025)



Source: PIB.

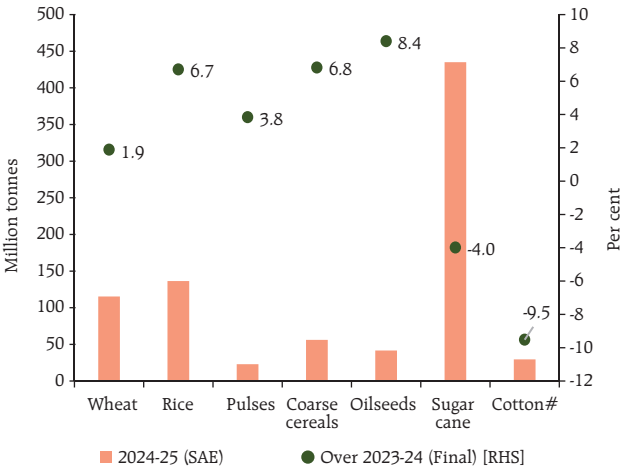
2027, *PM Surya Ghar: Muft Bijli Yojana (PMSGMBY)* facilitates the installation of rooftop solar panels. As of March 10, 2025, there were 10.09 lakh households with rooftop solar installations. Gujarat, Maharashtra, Uttar Pradesh, Kerala, and Rajasthan together accounting for more than 84 per cent of the total installations as per the state-wise data available up to January 27, 2025 (Chart III.24).

The second advance estimates of the agriculture crop production (*kharif* and *rabi*)[14] placed total foodgrains production at 330.9 million tonnes in 2024-25, 4.8 per cent higher than the final estimates of 2023-24 due to increase in both *kharif* and *rabi* production, by 6.8 per cent and 2.8 per cent, respectively (Chart III.25). Wheat (major *rabi* staple cereal) production has been estimated at record 115.4 million tonnes which is 1.9 per cent higher than the final estimates of the previous year.

As on March 07, 2025, the summer acreage was 21.1 per cent higher than the same during the previous year. Area under all the major crops was higher than last year, except for oilseeds for which it was at slightly lower level than a year ago (Chart III.26).

Reservoir levels (based on 155 major reservoirs) are in a comfortable position at 47 per cent of total

Chart III.25: Agriculture Production in 2024-25 (SAE)

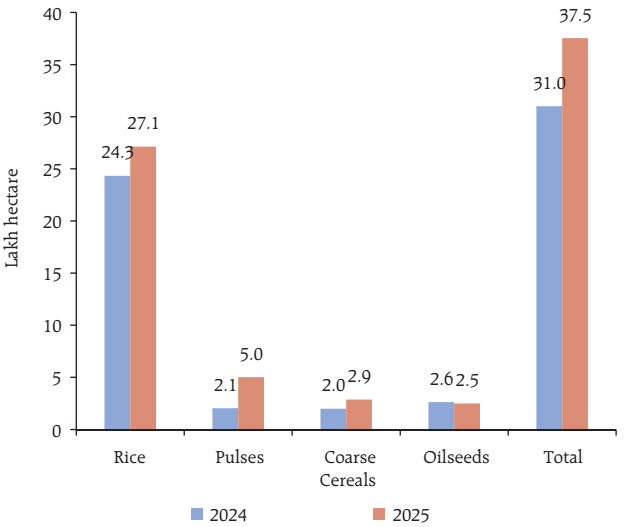


Note: Production estimates excludes the summer *(zaid)* crops.
#: Million bales of 170 kg each.
Source: Ministry of Agriculture and Farmers' Welfare.

[14] The estimates exclude the production for the summer (*zaid*) season of which the sowing is currently under progress.

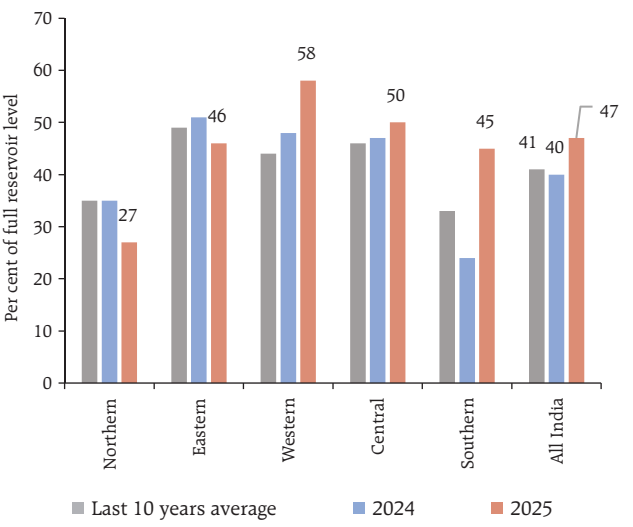
[15] https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2102149

Chart III.26: Weekly Summer *(zaid)* Sowing Progress (as on March 7)



Source: Ministry of Agriculture and Farmers' Welfare.

Chart III.27: Reservoir Level (as on March 13)

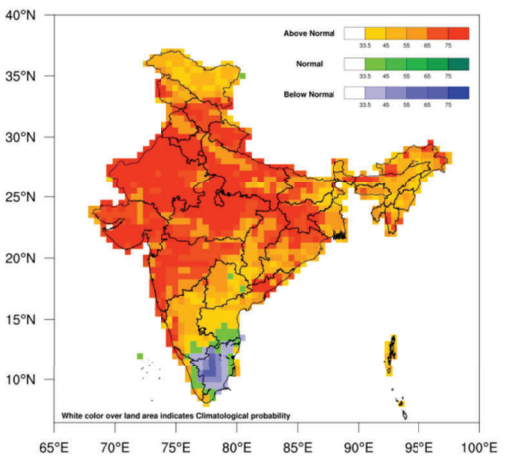


Source: Central Water Commission.

reservoir capacity (as of March 13, 2025) which is higher than the previous year as well as the decadal average levels (Chart III.27). This partially allays concerns for the standing *rabi* crops emanating from the Indian Meteorological Department (IMD's) projection of anomaly in temperature and above normal number of heatwave days for the whole summer season (March to May) in most part of the country (Chart III.28).

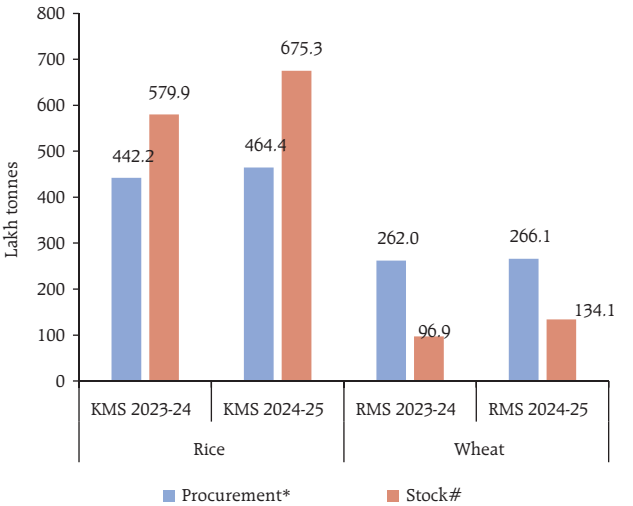
The overall public stock of foodgrains held by the Food Corporation of India (FCI) stood at 3.8 times the buffer requirements, mainly due to a higher stock of rice (Chart III.29). Rice stocks are

Chart III.28: Maximum Temperature Outlook for March 2025



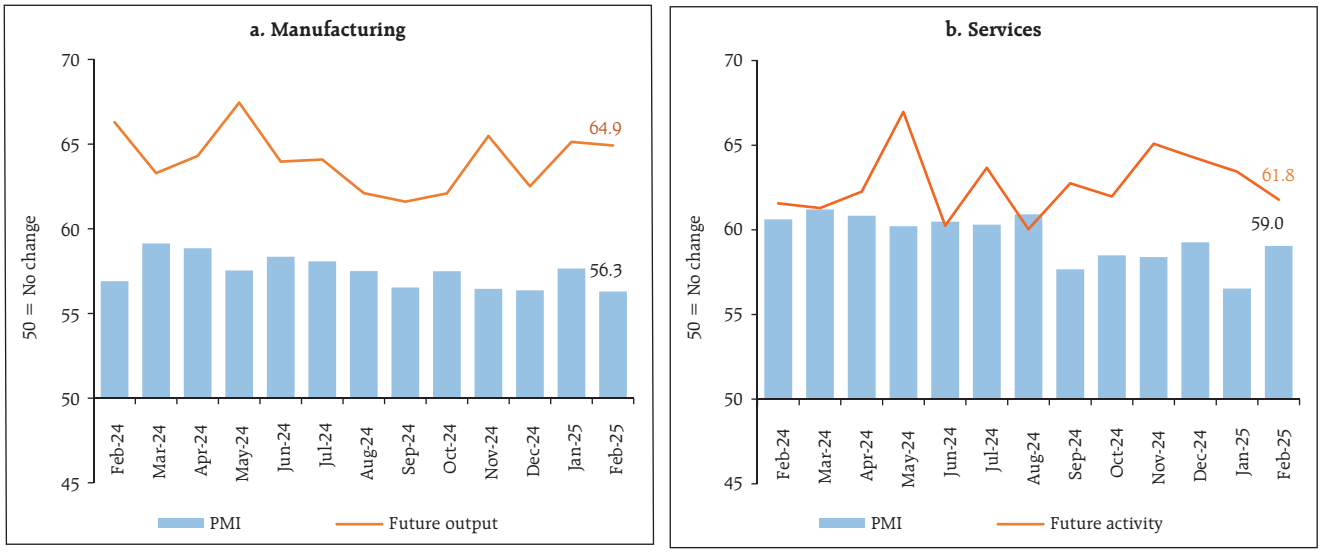
Note: Colours illustrates the most likely categories of temperatures and their probabilities.
Source: India Meteorological Department.

Chart III.29: Procurement and Stocks of Foodgrains



Note: *: As on March 11; #: As on March 01.
Source: Food Corporation of India.

Chart III.30: 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.

at 8.9 times the buffer requirement. Wheat stocks are higher than last year by 38.3 per cent and are above the buffer norm. Rice procurement during the current marketing season at 464.4 lakh tonnes (as on March 11, 2025) is 5.0 per cent higher than last year.

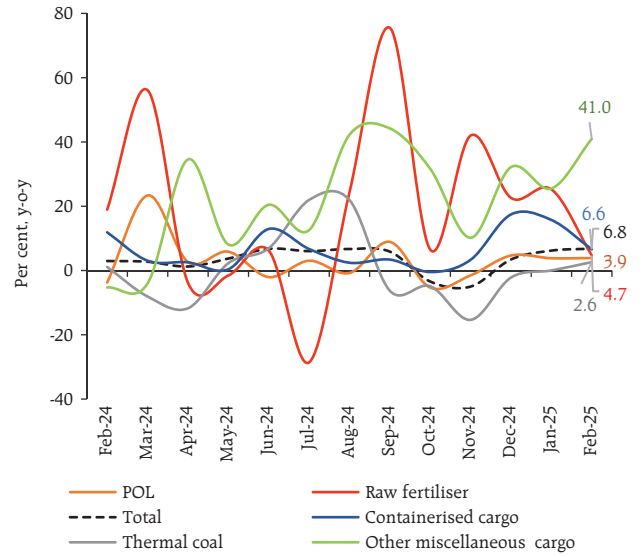
For the upcoming *rabi* marketing season (2025-26) commencing from April 01, 2025, the estimates for wheat procurement have been fixed at 310 lakh tonnes.[16] Similarly, the estimates for *rabi* rice procurement and *rabi* coarse grains (including millets) have been fixed at 70 lakh tonnes and 16 lakh tonnes, respectively.

India's manufacturing PMI moderated to a 14-month low in February due to a slowdown in new orders and output (Chart III.30a). The services PMI, recorded a sequential acceleration in February, aided by robust increase in new business (Chart III.30b).

Among the high frequency indicators of industrial activity, growth in port traffic accelerated in February 2025, driven by higher growth in other miscellaneous cargo and containerised cargo (Chart III.31).

In the construction sector, steel consumption growth accelerated to 11.2 per cent (y-o-y) in February

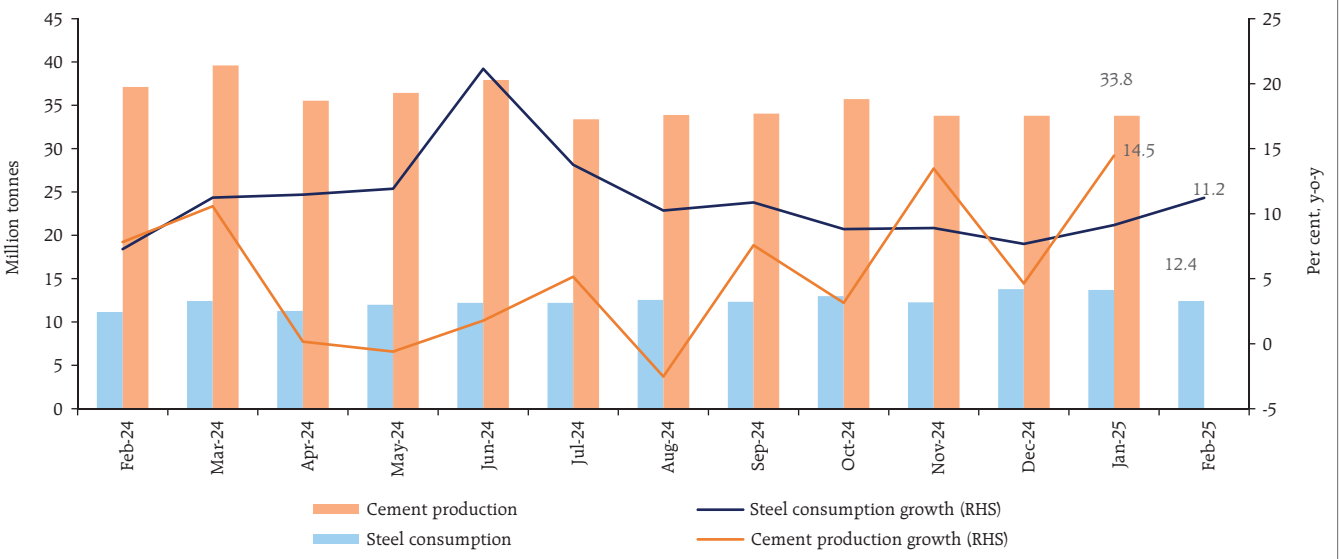
Chart III.31: Port Cargo



Source: Indian Ports Association.

[16] https://pib.gov.in/PressReleseDetail.aspx?PRID=2107076&reg=3&lang=1

Chart III.32: Steel Consumption and Cement Production



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

while the cement production levels reached a 15-month high, growing by 14.5 per cent in January (Chart III.32).

Available high frequency indicators for the services sector reflect resilience in economic activity (Table III.1).

Table III.1: High Frequency Indicators- Services

(y-o-y, per cent)

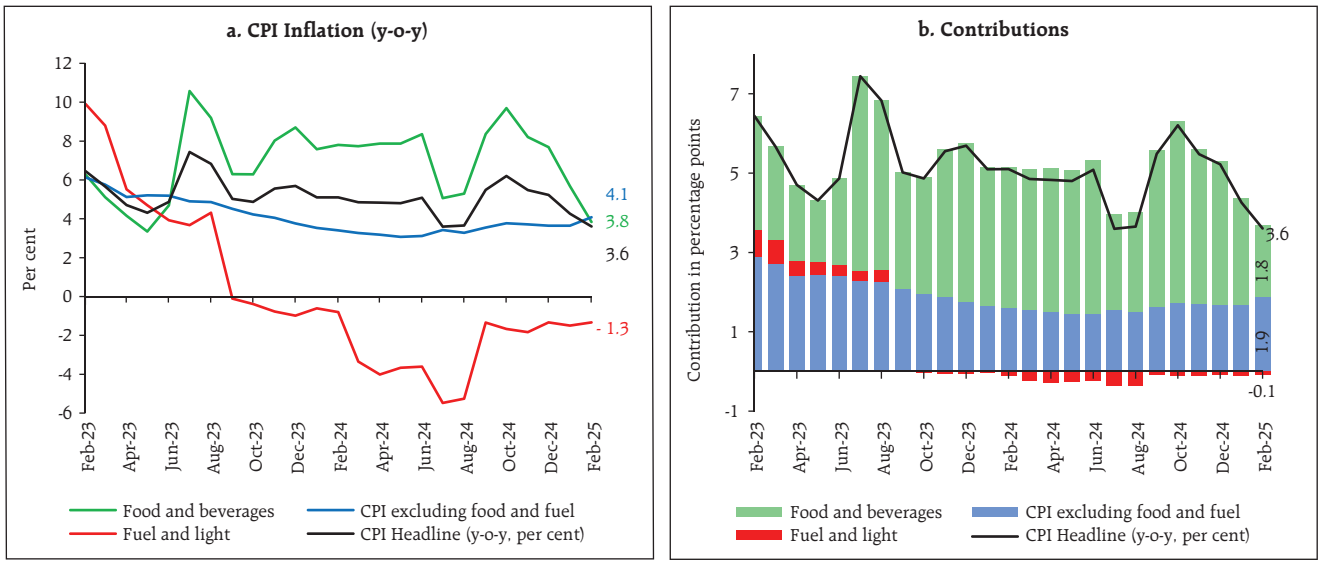
Sector	Indicator	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25
Urban demand	Passenger Vehicles Sales	9.5	8.9	1.2	4.3	4.9	-2.0	-1.6	-0.4	1.1	4.4	11.4	3.5	3.7
Rural demand	Two-Wheeler Sales	34.6	15.3	30.8	10.1	21.3	12.5	9.3	15.8	14.2	-1.1	-8.8	2.1	-9.0
	Three-Wheeler Sales	8.3	4.3	14.5	14.4	12.3	5.1	8.0	6.7	-0.7	-1.3	3.5	8.6	4.7
	Tractor Sales	-30.6	-23.1	-3.0	0.0	3.6	1.6	-5.8	3.7	22.4	-1.3	14.0	11.4	35.9
Trade, hotels, transport, communication	Commercial Vehicles Sales	-3.8		3.5			-11.0			1.3				
	Railway Freight Traffic	10.1	8.6	1.4	3.7	10.1	4.5	0.0	-5.8	1.5	1.2			
	Port Cargo Traffic	3.0	2.7	1.3	3.8	6.8	5.9	6.7	5.8	-3.4	-4.9	3.4	7.6	6.8
	Domestic Air Cargo Traffic	11.5	8.7	0.3	10.3	10.3	8.8	0.6	14.0	8.9	0.3	4.3	6.9	
	International Air Cargo Traffic	30.2	22.5	16.2	19.2	19.6	24.4	20.7	20.5	18.4	16.1	10.5	7.1	
	Domestic Air Passenger Traffic *	5.8	4.7	3.8	5.9	6.9	7.6	6.7	7.4	9.6	13.8	10.8	14.1	16.4
	International Air Passenger Traffic*	19.3	15	16.8	19.6	11.3	8.8	11.1	11.2	10.3	10.7	9.0	11.1	11.7
	GST E-way Bills (Total)	18.9	13.9	14.5	17.0	16.3	19.2	12.9	18.5	16.9	16.3	17.6	23.1	14.7
	GST E-way Bills (Intra State)	21.1	15.8	17.3	18.9	16.4	19.0	13.1	19.0	18.3	5.4	17.9	23.3	14.9
	GST E-way Bills (Inter State)	15.0	10.7	9.6	13.6	16.3	19.6	12.5	17.7	14.4	44.1	17.1	22.8	14.4
	Hotel occupancy	1.8	2.7	-1.4	-2.6	-3.1	3.6	0.7	2.1	-5.3	11.1	-0.2	1.2	
	Average revenue per room	7.8	6.7	4.8	1.8	2.8	7.6	5.2	3.5	4.8	10.7	8.9	8.7	
	Tourist Arrivals	15.8	8.0	7.7	0.3	9.0	-1.3	-4.2	0.4	-1.4	-0.1	-6.6		
Construction	Steel Consumption	7.3	11.2	11.5	11.9	21.1	13.8	10.3	10.9	8.8	8.9	7.7	9.1	11.2
	Cement Production	7.8	10.6	0.2	-0.6	1.8	5.1	-2.5	7.6	3.1	13.5	4.6	14.5	
PMI Index#	Services	60.6	61.2	60.8	60.2	60.5	60.3	60.9	57.7	58.5	58.4	59.3	56.5	59.0

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

Note: #: Data in levels. ***:** February 2025 data are based on the monthly average of daily figures. 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.

Chart III.33: Trends and Drivers of CPI Inflation



Sources: National Statistical Office (NSO); and RBI staff estimates.

Inflation

Headline inflation, as measured by y-o-y changes in the all-India consumer price index (CPI)[17], declined to a seven-month low of 3.6 per cent in February 2025 from 4.3 per cent in January (Chart III.33). The 70 bps decline in inflation was on account of a negative price momentum of around 50 bps which was further aided by a favourable base of around 20 bps. The food group recorded a negative momentum of around (-)1.6 per cent during the month while momentum in CPI fuel and core (excluding food and fuel) groups was positive at 0.1 and 0.7 per cent, respectively.

Food inflation declined to 3.8 per cent (y-o-y) in February from 5.7 per cent in January. In terms of sub-groups, vegetables, pulses and eggs recorded a sharp correction in prices and entered the deflationary zone while inflation moderated in cereals, meat and fish, and milk and products. On the other hand, inflation in oils and fats, fruits, sugar and confectionary, non-alcoholic beverages and prepared meals picked up. Spices continued to remain in deflation, although at a lower rate (Chart III.34).

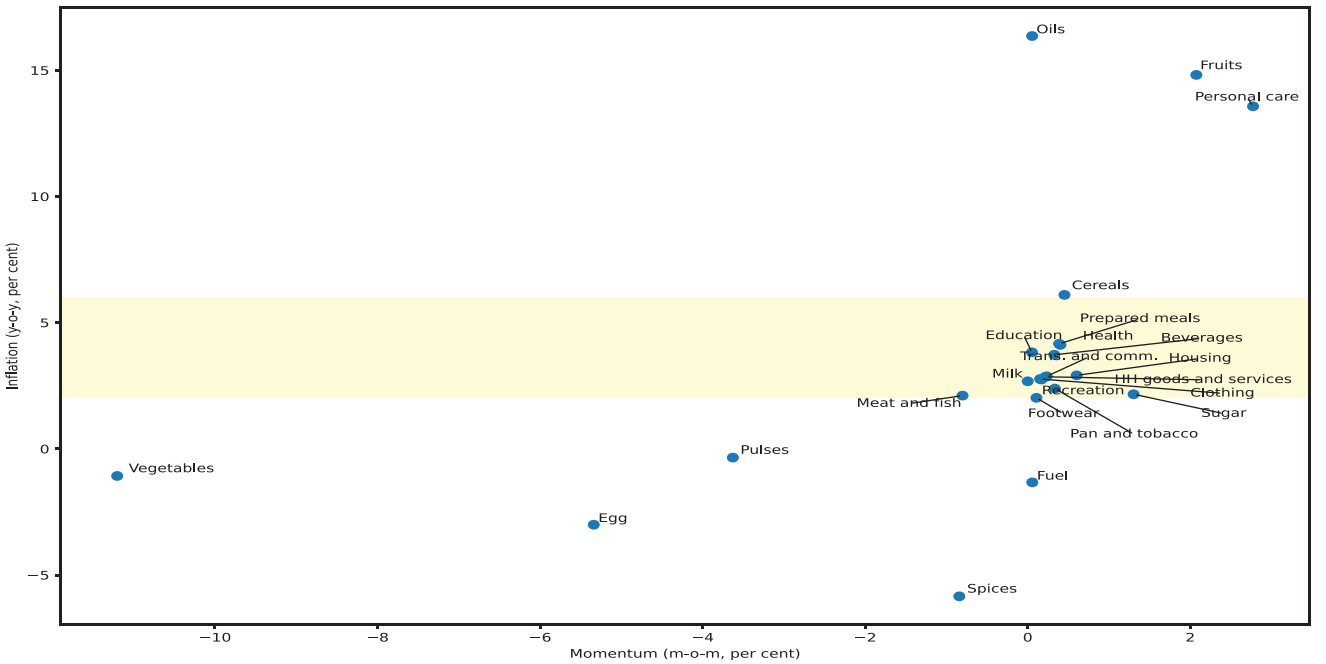
Fuel and light deflation narrowed to (-)1.3 per cent in February from (-) 1.5 per cent in January, on account of a lower rate of deflation in kerosene prices, and a higher rate of inflation in electricity prices. LPG prices continued to record a steady rate of deflation.

Core inflation increased to 4.1 per cent in February from 3.6 per cent in January. Inflation increased in pan, tobacco and intoxicants, housing, health, transport and communication, and personal care and effects, while it remained unchanged in sub-groups such as clothing and footwear, household goods and services, recreation and amusement, and education (Chart III.35).

In terms of regional distribution, rural and urban inflation eased to 3.8 per cent and 3.3 per cent, respectively, in February 2025. At the state level, inflation rate ranged from 1.3 per cent to 7.3 per cent. Majority of the states recorded inflation less than 6 per cent (Chart III.36).

[17] As per the provisional data released by the National Statistical Office (NSO) on March 12, 2025.

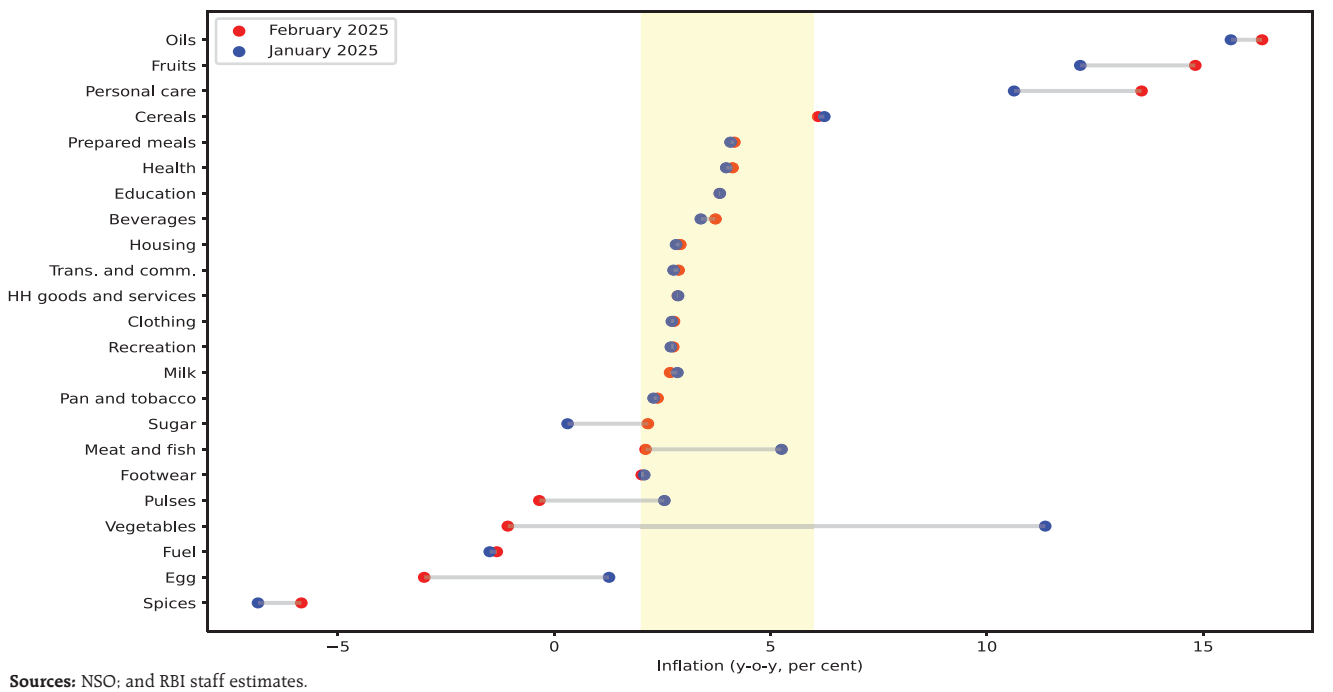
Chart III.34: Annual Inflation (y-o-y) and Momentum (m-o-m) across Sub-groups



Sources: NSO; and RBI staff estimates.

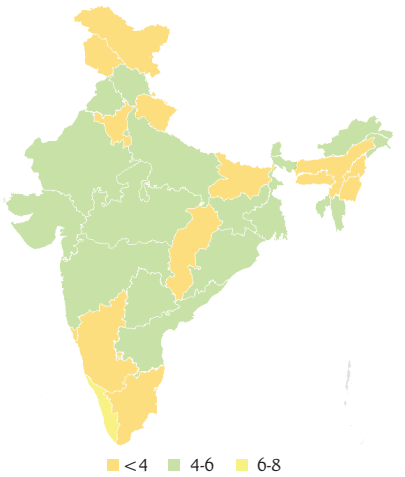
High frequency food price data for March so far (up to 17th) show an increase in cereal prices, both for rice and wheat. Edible oil prices have firmed up as well - mainly driven by palm, soybean and sunflower oil. Pulses prices, on the other hand, continued to show broad-based moderation. Prices of key vegetables including potato, onion and tomato witnessed further correction (Chart III.37).

Chart III.35: Annual Inflation across Sub-groups (February 2025 versus January 2025)



Sources: NSO; and RBI staff estimates.

Chart III.36: Spatial Distribution of Inflation February 2025
(CPI-Combined, y-o-y), (per cent)



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

Table III.2: Petroleum Products Prices

Item	Unit	Domestic Prices			Month-over-month (per cent)	
		Jan-25	Feb-25	Mar-25^	Feb-25	Mar-25^
Petrol	₹/litre	101.02	101.02	101.02	0.0	0.0
Diesel	₹/litre	90.48	90.48	90.48	0.0	0.0
Kerosene (subsidised)	₹/litre	43.93	46.37	46.23	5.6	-0.3
LPG (non-subsidised)	₹/cylinder	813.25	813.25	813.25	0.0	0.0

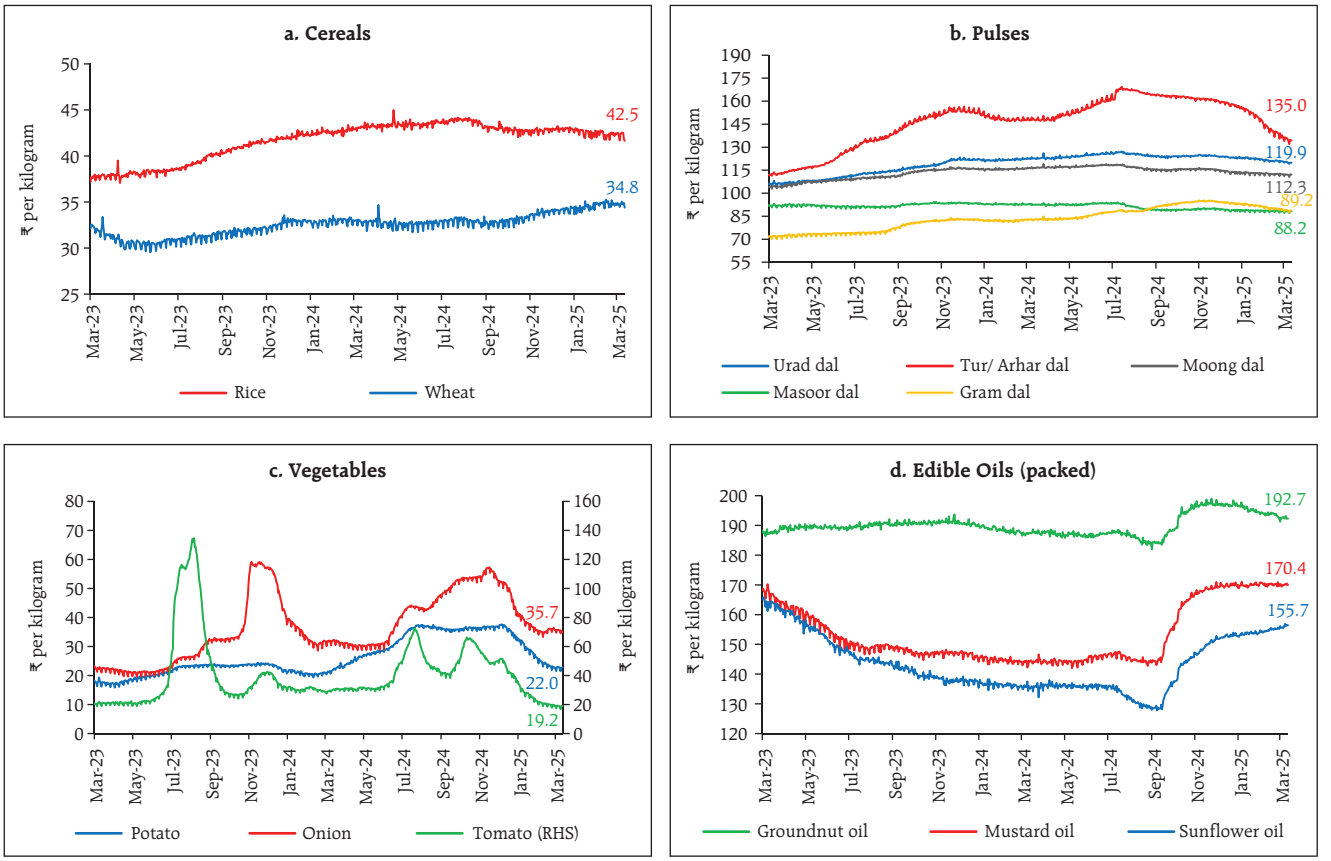
Notes: 1. ^: For the period March 1-17, 2025.
2. Other than kerosene, prices represent the average Indian Oil Corporation Limited (IOCL) prices in four major metros (Delhi, Kolkata, Mumbai and Chennai). For kerosene, prices denote the average of the subsidised prices in Kolkata, Mumbai and Chennai.

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

Retail selling prices of petrol, diesel and LPG remained unchanged in March thus far (up to 17th) while kerosene prices moderated (Table III.2).

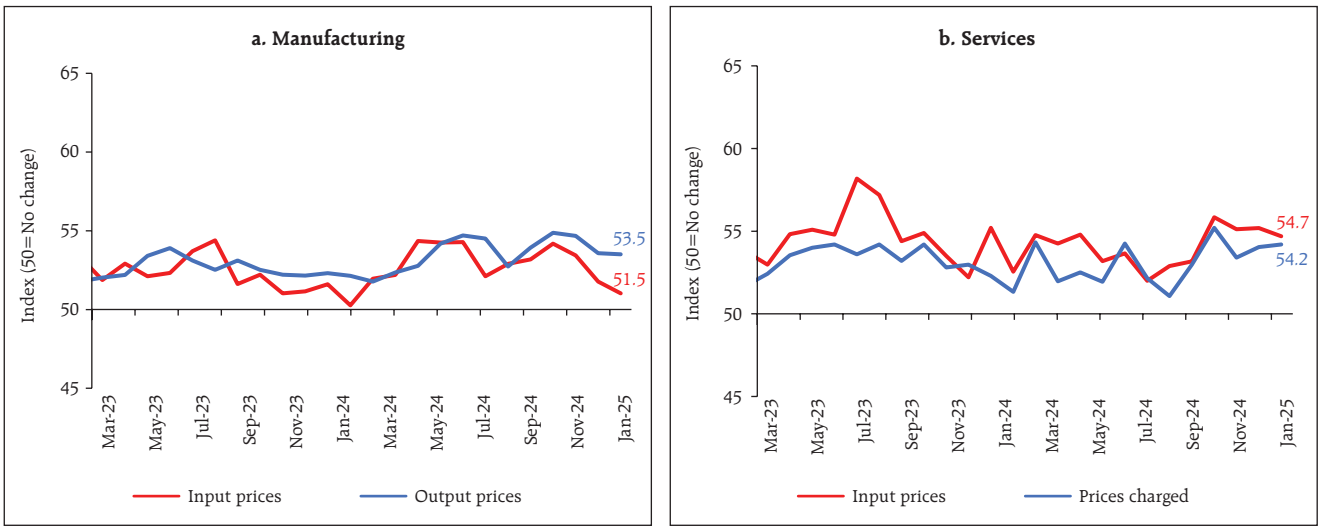
As per the PMIs, input costs recorded a slower rate of expansion in February for both manufacturing and services sector. Selling price pressures, on

Chart III.37: DCA Essential Commodity Prices



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

Chart III.38: PMI: Input and Output Prices

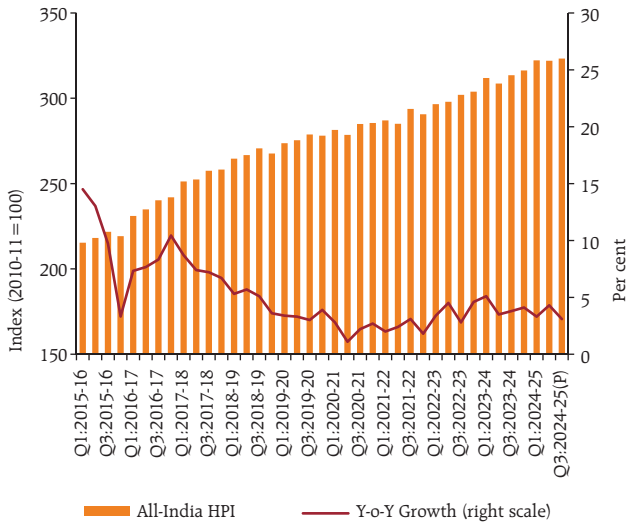


Note: A level of 50 corresponds to no change in activity and a reading above 50 denotes expansion and *vice versa*.
Source: S&P.

the other hand, slowed down marginally across manufacturing firms but increased for services firms (Chart III.38).

The all-India house price index (HPI), based on property registration data from ten major cities, increased by 3.1 per cent (y-o-y) in Q3:2024-25 as compared to 4.3 per cent in the previous quarter and 3.8 per cent a year ago (Chart III.39).

Chart III.39: Movement of House Price Index



Note: Q3:2024-25(P) data are provisional.
Sources: Registration authorities of State governments; and RBI.

IV. Financial Conditions

System liquidity remained in deficit in the latter half of February and early March (up to March 13, 2025) amidst the seasonal pick-up in currency in circulation (CiC). Since mid-February, the Reserve Bank conducted three open market operation (OMO) purchase auctions (on February 20, March 12 and March 18, 2025) of a cumulative amount of ₹1.4 lakh crore, and a 45-day variable rate repo (VRR) auction of ₹57,951 crore on February 21, 2025 to inject durable liquidity. Additionally, rupee liquidity was injected through a three-year USD/INR Buy/Sell swap auction of USD 10 billion on February 28, 2025. During the quarter so far, the Reserve Bank has injected around ₹5.5 lakh crore of durable liquidity into the banking system through a combination of OMO purchases, longer-duration VRR auctions and forex swaps (Table IV.1).

Furthermore, the Reserve Bank has been conducting daily VRR auctions since January 16 to tide over transient liquidity tightness, with standalone primary dealers (SPDs) being allowed to participate in these daily auctions. An aggregate amount of ₹9.68 lakh crore was injected into the banking system

Table IV.1: Durable liquidity measures during Q4:2024-25

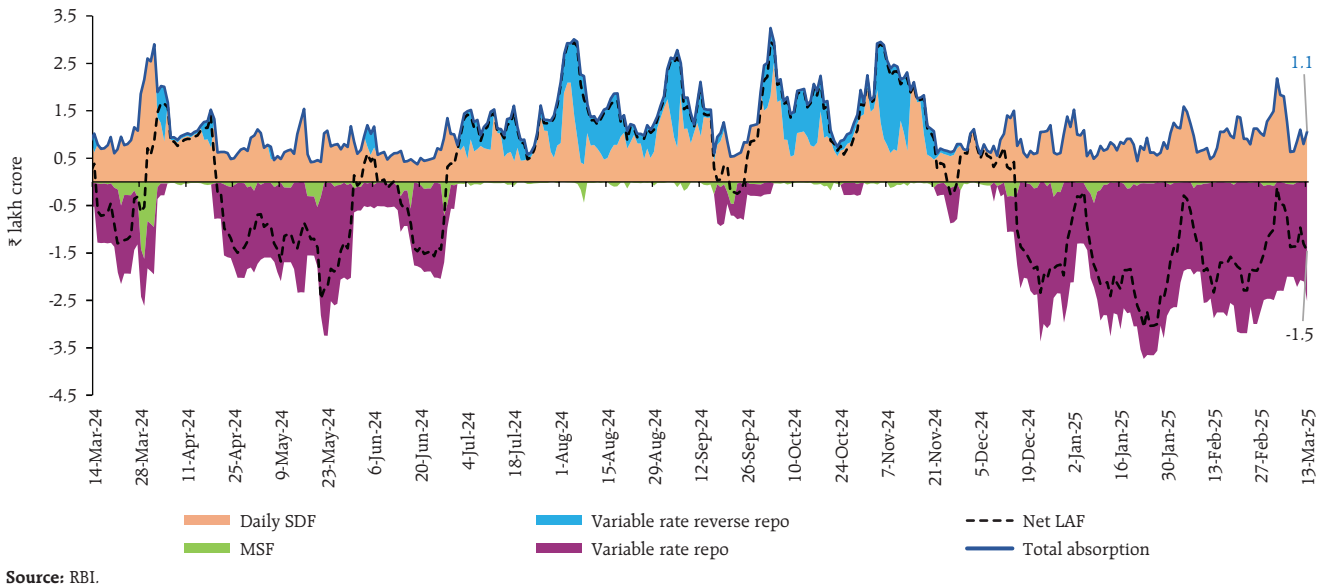
Measure	Description	Auction Date	Amount injected (in ₹ crores)
OMO Purchase	Through NDS-OM	January 2025	38,825
OMO Purchase auction		January 30, 2025	20,020
		February 13, 2025	40,000
		February 20, 2025	40,000
		March 12, 2025	50,000
		March 18, 2025	50,000
Term Repo Auctions	56-day VRR auction	February 07, 2025	50,010
	49-day VRR auction	February 14, 2025	75,003
	45-day VRR auction	February 21, 2025	57,951
USD/INR Buy Sell swap auction	Tenor: 6 months	January 31, 2025	Approx. 44,000 (USD 5.10 Billion)
	Tenor: 3 years	February 28, 2025	Approx. 88,000 (USD 10.06 Billion)
		Total	**Approx. 5,53,809**

Source: RBI.

through two main and twenty-two fine-tuning VRR operations of maturities ranging from 1 to 8 days during February 16 to March 17, 2025. This slew of measures undertaken by the Reserve Bank aided in moderating the liquidity deficit. Consequently, the average daily net injection under the liquidity adjustment facility (LAF) stood at ₹1.41 lakh crore during February 16 to March 13, 2025, as compared to ₹1.92 lakh crore during January 16 to February 15, 2025 (Chart IV.1).

Despite the prevailing liquidity deficit, banks' placement of funds under the standing deposit facility (SDF) averaged ₹1.15 lakh crore between February 16, 2025, and March 13, 2025, higher than ₹0.85 lakh crore in the previous month. The co-existence of deficit liquidity conditions and substantial fund placements under the SDF suggests the asymmetric distribution of liquidity within the banking system as well as increased liquidity preference on the part of banks. Meanwhile, daily average borrowings

Chart IV.1: Liquidity Operations



Source: RBI.

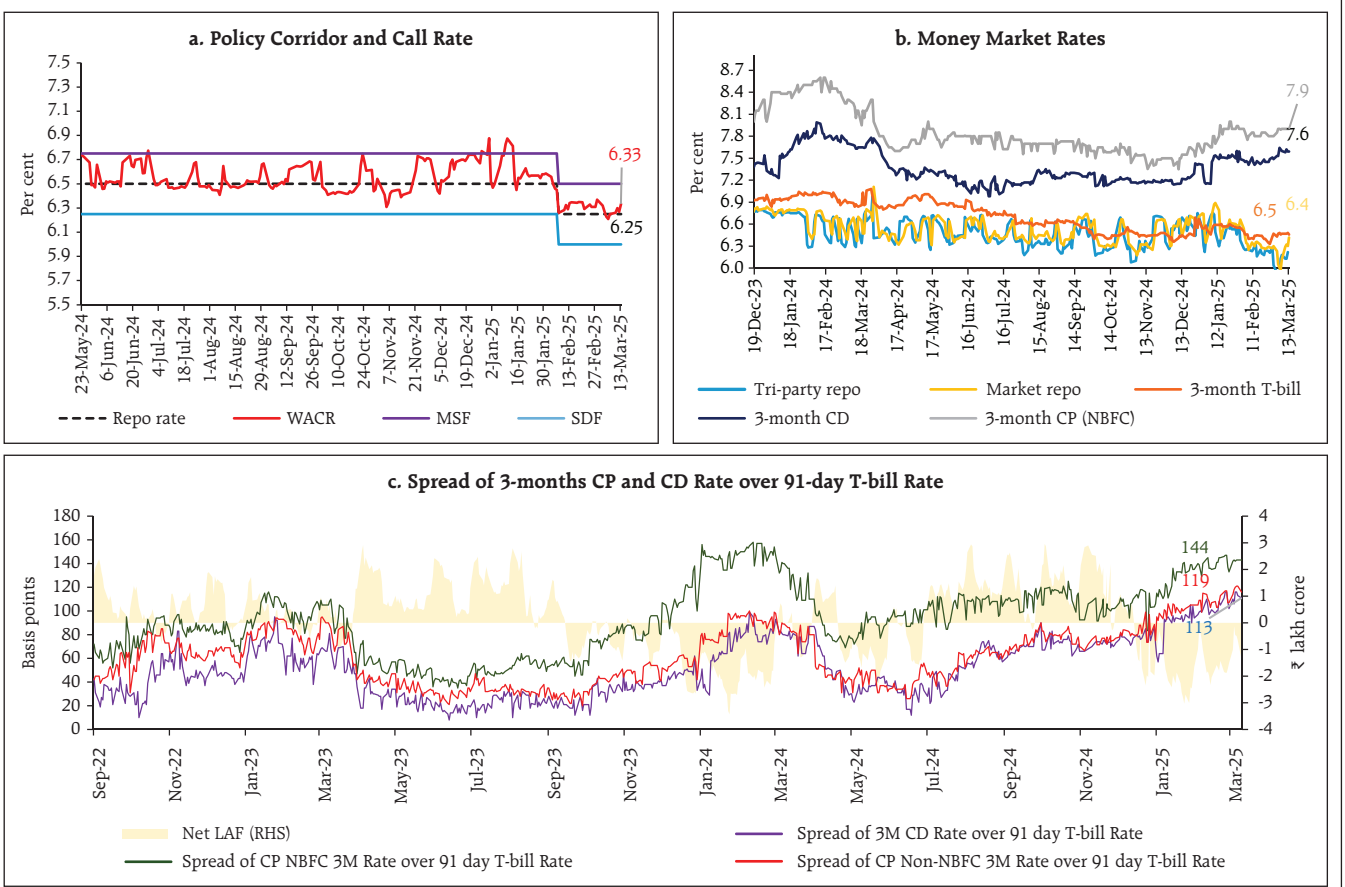
under the marginal standing facility (MSF) declined marginally to ₹0.03 lakh crore during February 16, 2025 and March 13, 2025 from ₹0.04 lakh crore in the previous period.

The weighted average call rate (WACR) – the operating target of monetary policy – remained within the policy corridor and the spread of the WACR over the policy repo rate averaged 5 basis points (bps) during February 16 and March 13, 2025, same as during January 16 to February 15, 2025 (Chart IV.2a). Rates in the collateralised segment, however, moderated below the policy repo rate amidst improving liquidity conditions.

Across the term money market segment, rates have declined with yields on 3-month treasury bills (T-bill) and 3-month commercial paper (CP) issued by non-banking financial companies (NBFCs) recording a moderation during February 16 - March 13, 2025 over the previous month (Chart IV.2b). The yields on certificates of deposit (CDs), however, marginally increased from 7.49 per cent to 7.52 per cent during the same period. The average risk premia in the money market (3-month CP [NBFC] *minus* 91-day T-bill) increased to 142 bps during February 16 - March 13, 2025 from 137 bps during Janaury 18 - February 14, 2025. Similarly, the spread of the 3-month CD rate over the 91-day T-bill rate edged up (Chart IV.2c).

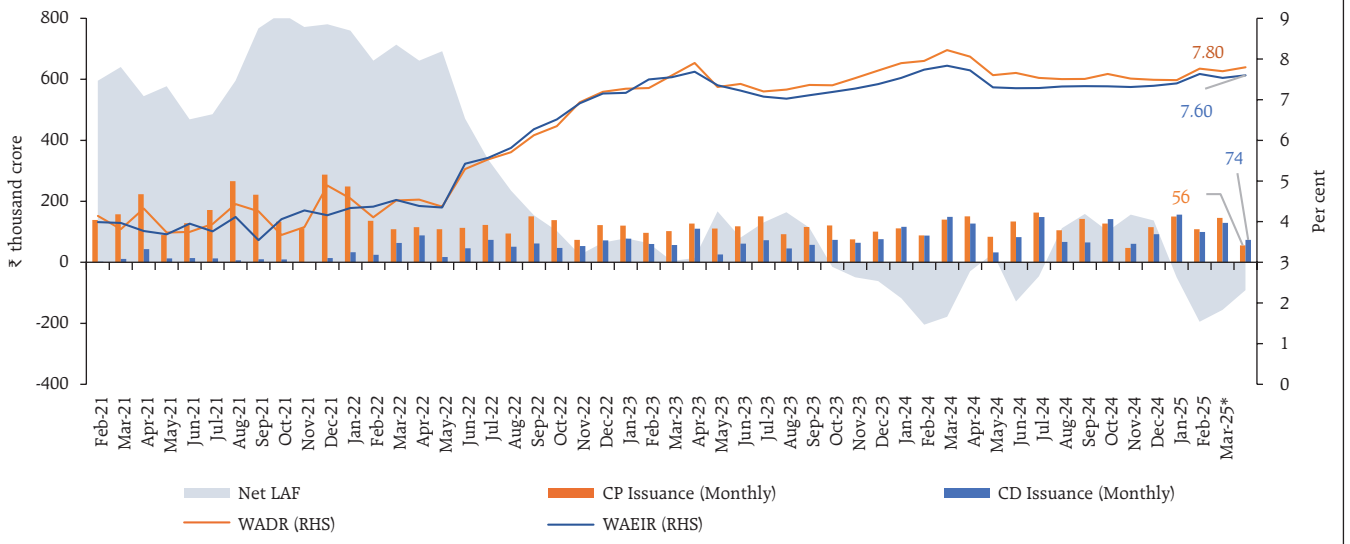
The weighted average discount rate (WADR) of CPs and the weighted average effective interest

Chart IV.2: Policy Corridor and Money Market Rates



Sources: RBI; CCIL; and Bloomberg.

Chart IV.3: WADR and WAEIR



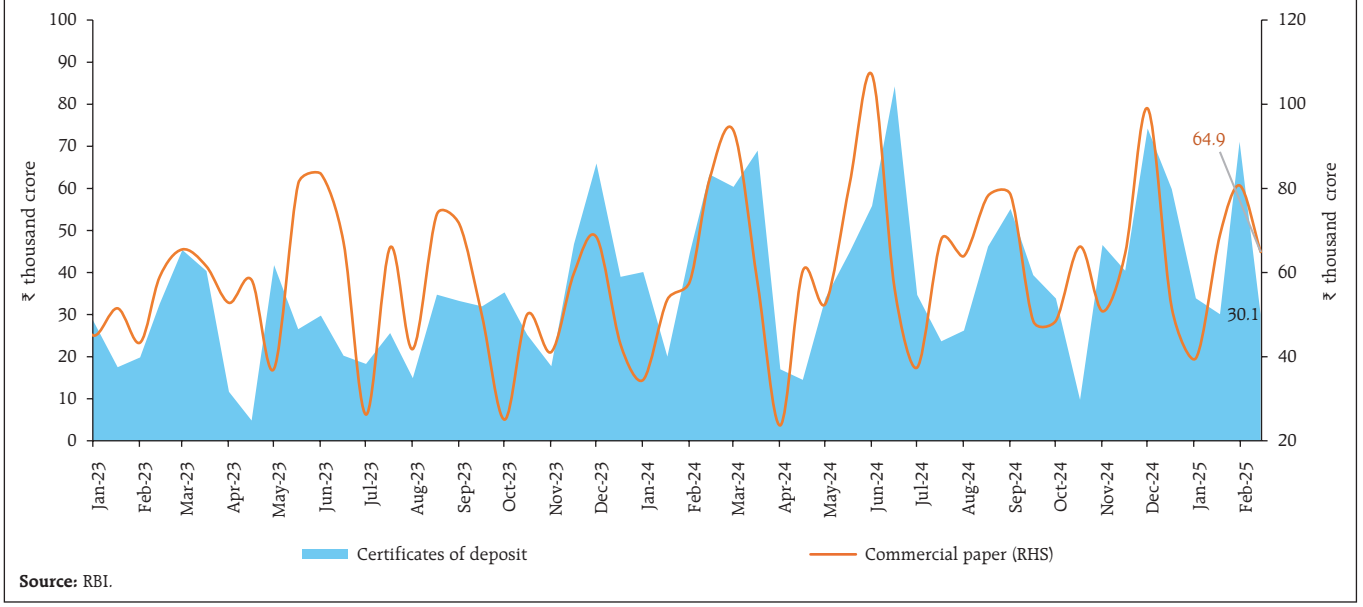
Note: *: up to March 10, 2025.
Sources: RBI; and CCIL- FTRAC.

rate (WAEIR) of CDs remained lower than the levels recorded a year ago (Chart IV.3).

Banks continue to rely on CDs to meet their funding requirements on account of the persisting gap in credit and deposit growth. In the primary market, issuances of CDs grew by 34 per cent (y-o-y) to reach an all-time high of ₹10.58 lakh crore during 2024-25 (up to March 7, 2025) [Chart IV.4]. Similarly, CP issuances at ₹13.90 lakh crore were higher by 13.5 per cent during 2024–25 (up to February 28, 2025) compared with the corresponding period a year ago.

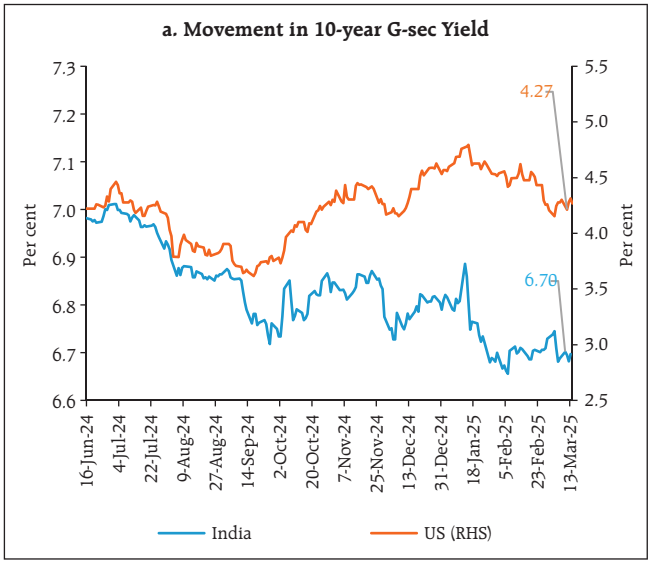
The yield on the 10-year G-sec benchmark broadly remained range-bound and was at 6.70 per cent on March 13, 2025, as compared to 6.71 per cent on

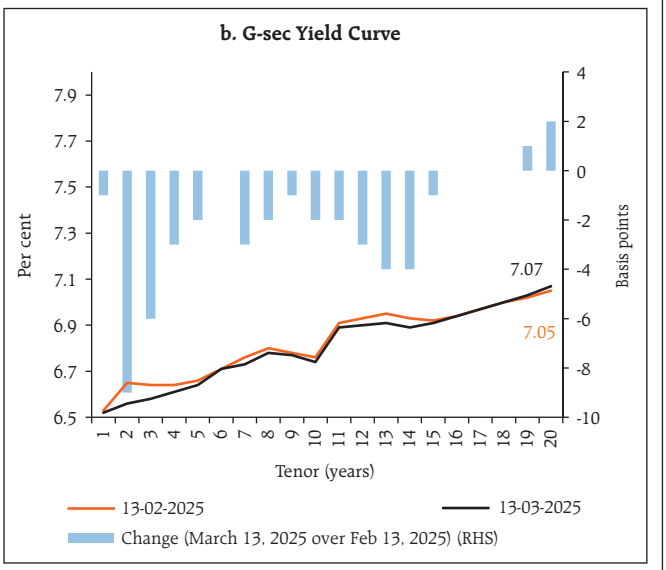
Chart IV.4: Certificates of Deposit (CDs) and Commercial Paper (CP) - Fortnightly Issuances



Source: RBI.

Chart IV.5: Developments in the G-sec Market





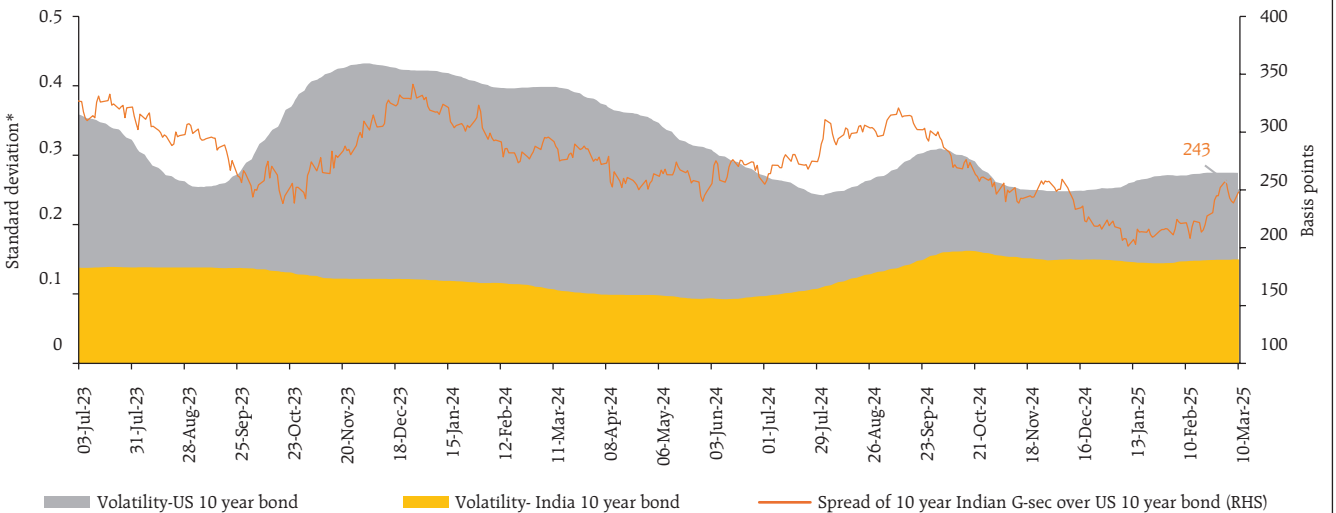
Sources: Bloomberg; CCIL; and RBI staff estimates.

February 14, 2025 (Chart IV.5a). The domestic yield curve softened in the very short and mid-segment while remaining stable for all other tenors (Chart IV.5b). Between February 16 and March 13, 2025, the average term spread (10-year G-sec yield *minus* 91-day T-bills yield) increased by 8 bps as compared to the previous period.

The spread of the 10-year Indian G-sec yield over the 10-year US bond increased in the latter half of February, mainly due to a fall in US bond yields. The volatility of yields in India remained low relative to US treasuries (Chart IV.6).

Corporate bond issuances at ₹7.94 lakh crore were 18.0 per cent higher during 2024-25 (up to

Chart IV.6 : Volatility and Spread-Bond Market



Note: *: 12-months rolling standard deviation.
Sources: Bloomberg; and RBI staff calculations.

Table IV.2: Financial Markets - Rates and Spread

Instrument	Interest Rates (per cent)			Spread (bps) (Over Corresponding Risk-free Rate)		
	Jan 16, 2025 – Feb 15, 2025	Feb 16, 2025 – Mar 12, 2025	Variation	Jan 16, 2025 – Feb 15, 2025	Feb 16, 2025 – Mar 12, 2025	Variation
1	2	3	(4 = 3-2)	5	6	(7 = 6-5)
Corporate Bonds						
(i) AAA (1-year)	7.87	7.86	-1	116	122	6
(ii) AAA (3-year)	7.64	7.67	3	90	97	7
(iii) AAA (5-year)	7.50	7.62	12	73	85	12
(iv) AA (3-year)	8.43	8.44	1	169	175	6
(v) BBB- (3-year)	12.10	12.09	-1	536	540	4

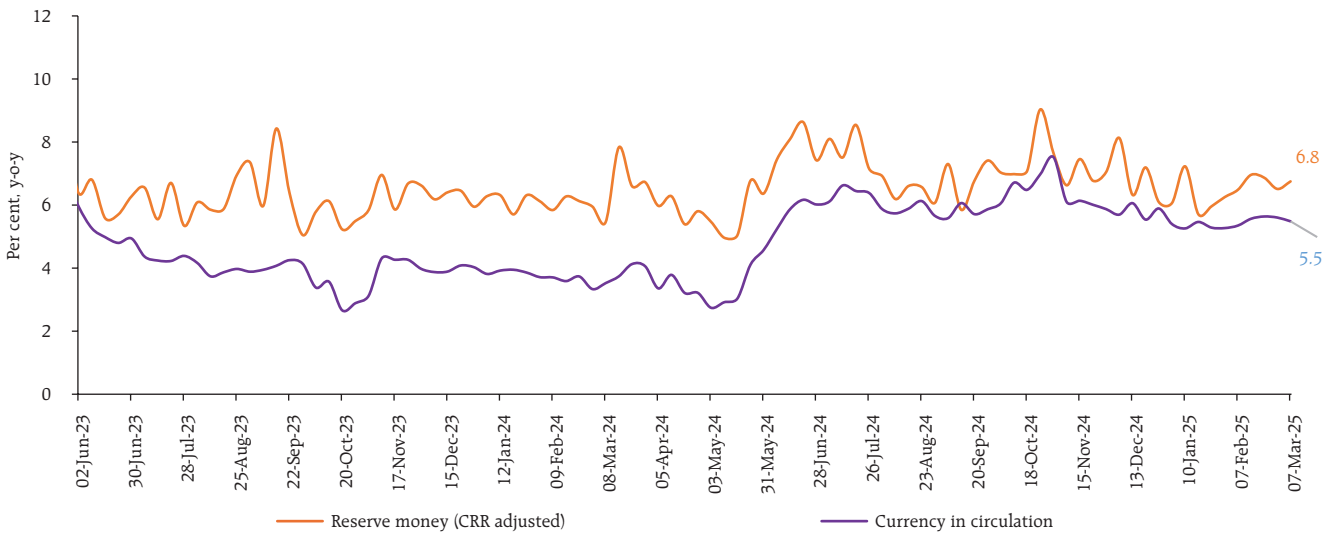
Note: Yields and spreads are computed as averages for the respective periods.
Sources: FIMMDA; and Bloomberg.

January) compared to last year. Corporate bond yields exhibited mixed trends while the corresponding risk premia increased across ratings and tenor spectrums during the second half of February till March 12, 2025 (Table IV.2).

Reserve money (RM), excluding the first-round impact of change in the cash reserve ratio (CRR), recorded a growth of 6.8 per cent (y-o-y) as of March 7, 2025 (5.5 per cent a year ago) [Chart IV.7]. Growth in CiC, the largest component of RM, stood at 5.5 per cent (y-o-y) as of March 7, 2025, as compared with 3.5 per cent a year ago.

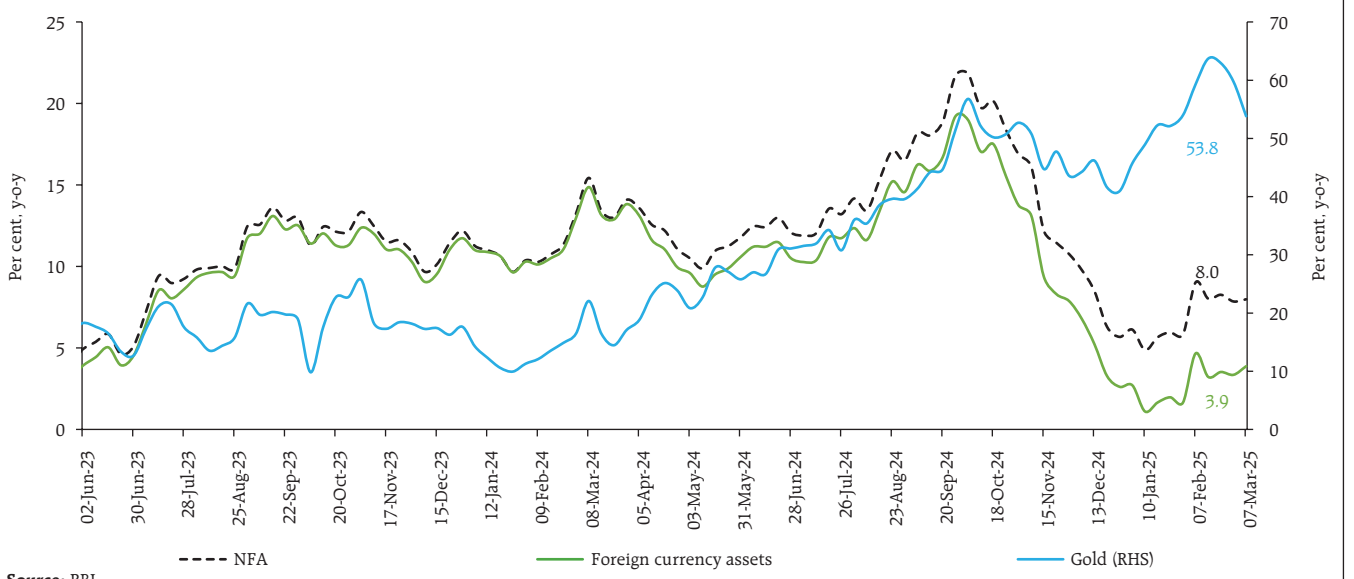
On the sources side (assets), RM comprises net domestic assets (NDA) and net foreign assets (NFA) of the Reserve Bank. Growth in foreign currency assets accelerated to 3.9 per cent (y-o-y) on March 7, 2025, from 1.6 per cent (y-o-y) at the end of January 2025 (Chart IV.8). Gold – the other major component of NFA – grew by 53.8 per cent mainly due to revaluation gains on gold prices, leading to a steady rise in its

Chart IV.7: Reserve Money and Currency in Circulation



Note: The latest data for reserve money pertains to March 07, 2025.
Source: RBI.

Chart IV.8: RBI's Net Foreign Exchange Assets (NFA) Growth

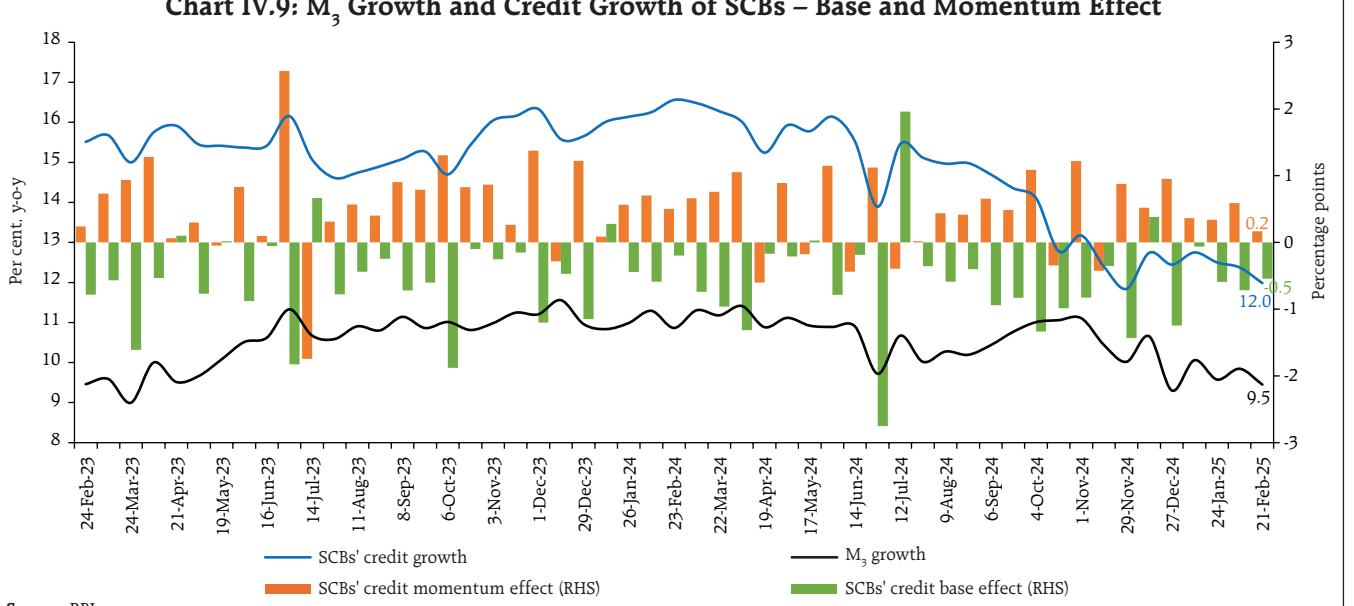


Source: RBI.

share in NFA from 8.3 per cent as of end-March 2024 to 11.7 per cent as of March 7, 2025.

As of February 21, 2025, the money supply (M_3) had increased by 9.6 per cent (year over year) (10.9 per cent a year ago).[18] Aggregate deposits with banks, accounting for around 86 per cent of M_3, increased by 10.1 per cent (11.9 per cent a year ago). Scheduled commercial banks' (SCBs') credit growth moderated to 12.0 per cent as of February 21, 2025 (16.6 per cent a year ago) due to an unfavourable base effect, partly offset by positive momentum (Chart IV.9).

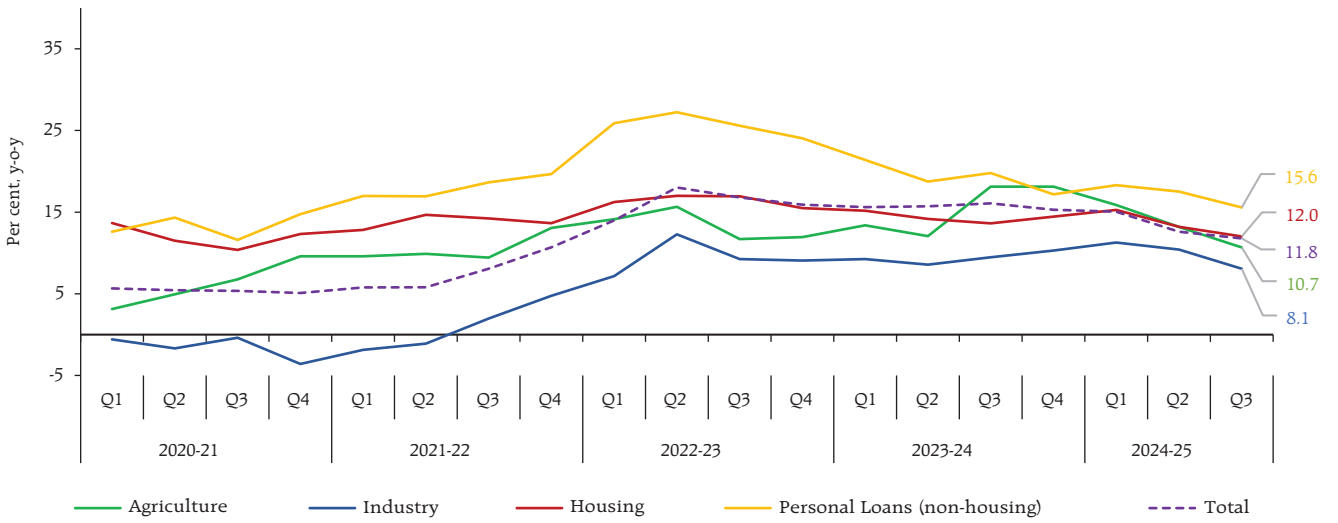
Chart IV.9: M_3 Growth and Credit Growth of SCBs – Base and Momentum Effect



Source: RBI.

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

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

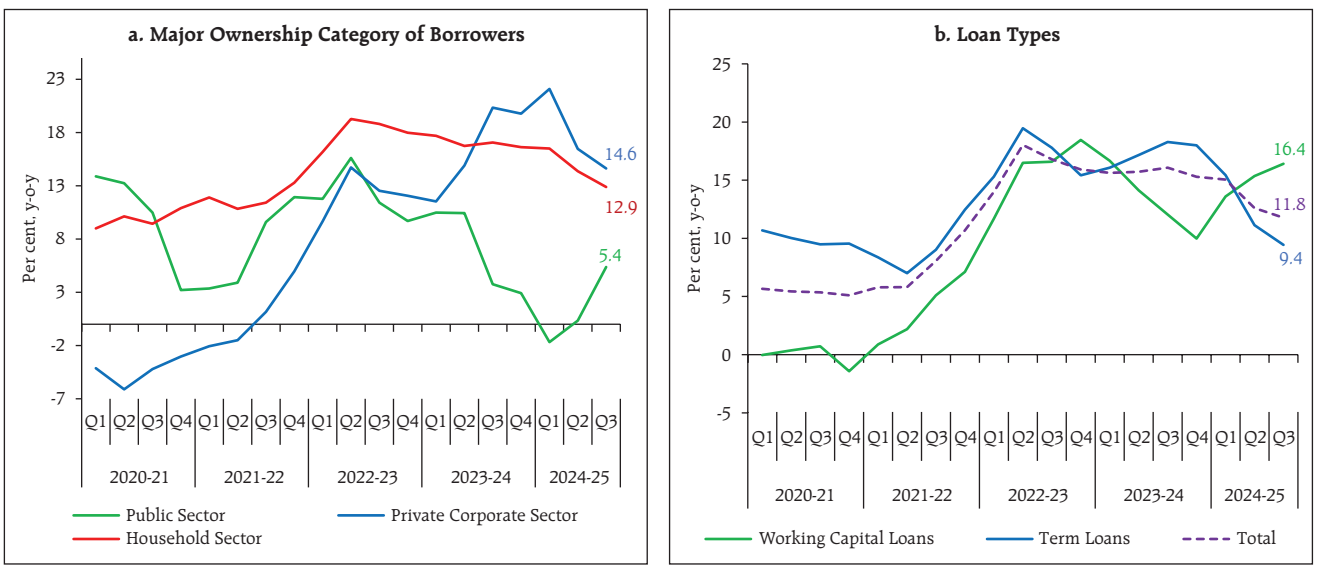


Note: For comparability, growth figures of Q2, Q3, Q4 of 2023-24 and Q1 of 2024-25 are calculated by adjusting the merger of a bank with a non-bank.
Source: RBI.

Based on the latest available quarterly data, credit continues to grow at a healthy pace despite the recent deceleration across various sectors during Q3:2024-25 (Chart IV.10). Credit growth within the personal loans segment remained the primary driver of overall credit expansion, even though there has been a moderation in unsecured personal loan segment following the increase in risk weights announced in November 2023.

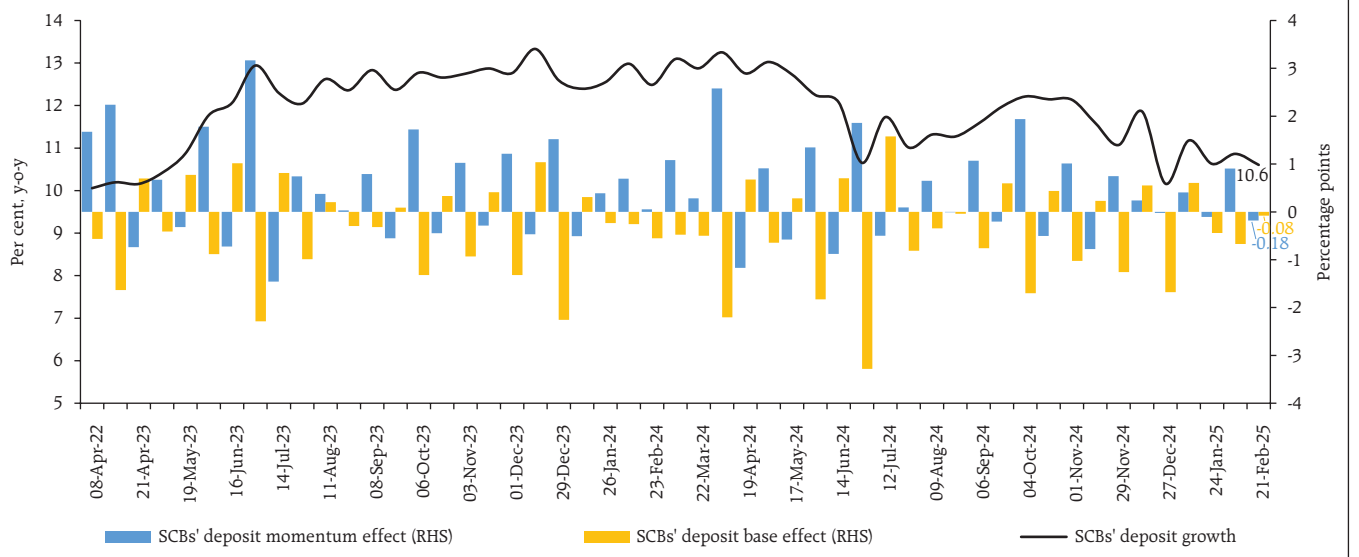
SCBs' lending to the private corporate sector, which accounted for nearly a quarter of the total bank credit, moderated in Q3:2024-25. However, credit to public sector entities continued to rise (Chart IV.11a). Growth in working capital loans

Chart IV.11: Annual Credit Growth



Source: RBI.

Chart IV.12: SCBs' Deposit Growth - Base and Momentum Effect



Source: RBI.

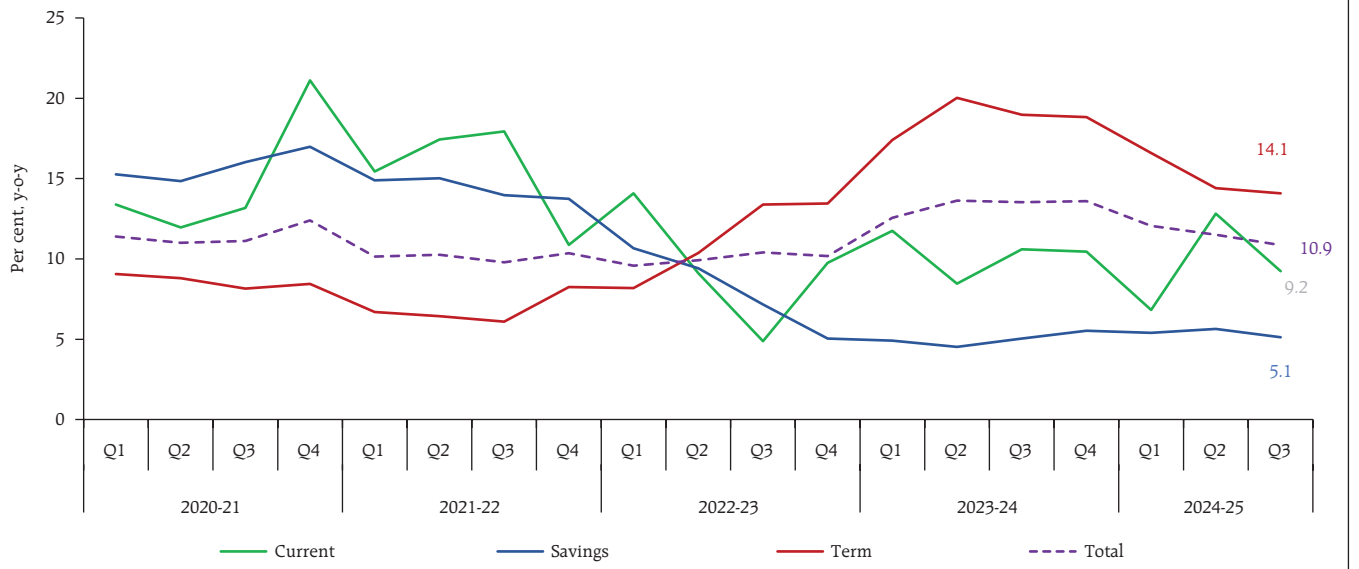
accelerated, indicating a pick-up in economic activity (Chart IV.11b).

As on February 21, 2025, SCBs' deposit growth (excluding the impact of the merger) remained at its end-January 2025 level of 10.6 per cent (Chart IV.12).

Term deposits' growth continued to outpace growth in saving deposits in Q3:2024-25 (Chart IV.13). Consequently, the share of term deposits in total deposits rose to 62.1 per cent from 60.3 per cent a year ago.

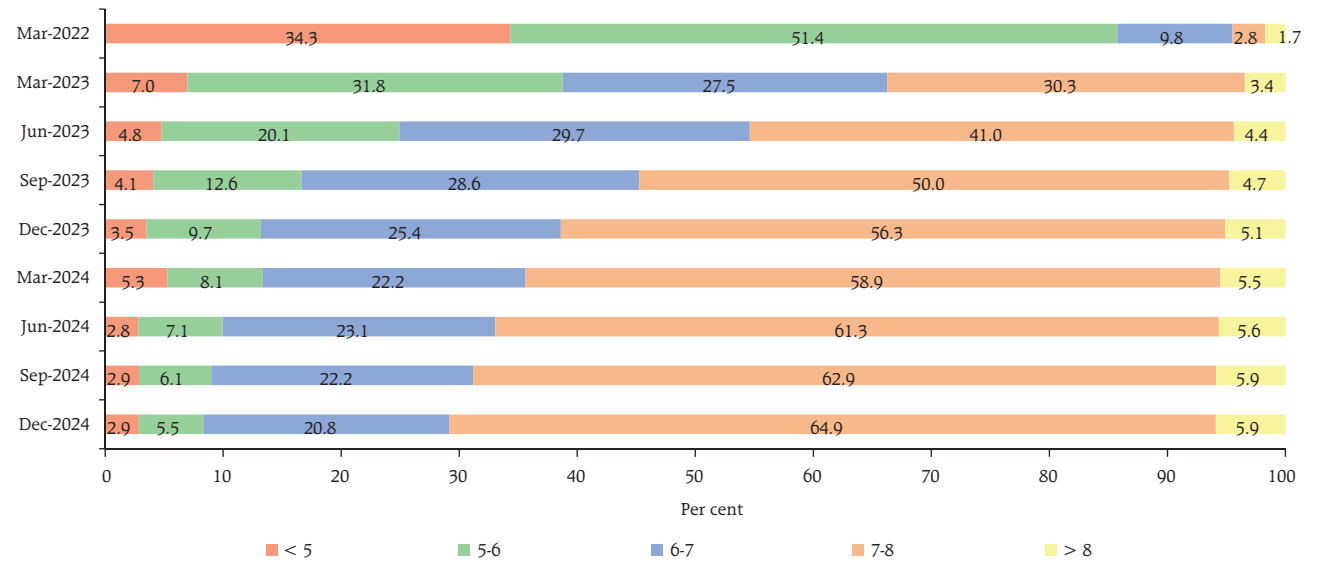
The share of deposits bearing an interest rate of 7 per cent or above (in total term deposits) increased to 70.8 per cent in December 2024, up from 61.4 per cent in December 2023 and 33.7 per cent in March 2023 (Chart IV.14).

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



Source: RBI.

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

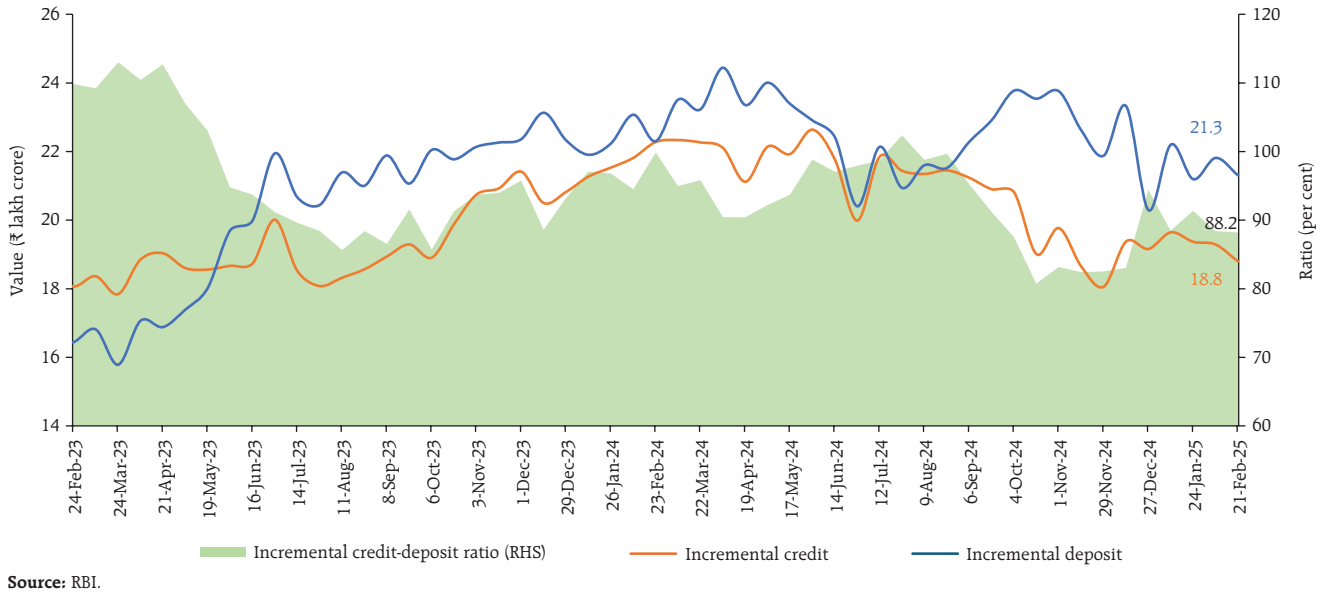


Source: RBI.

SCBs' incremental credit-deposit ratio increased from 80.7 per cent as at end-October 2024 to 88.2 per cent as on February 21, 2025 (Chart IV.15).

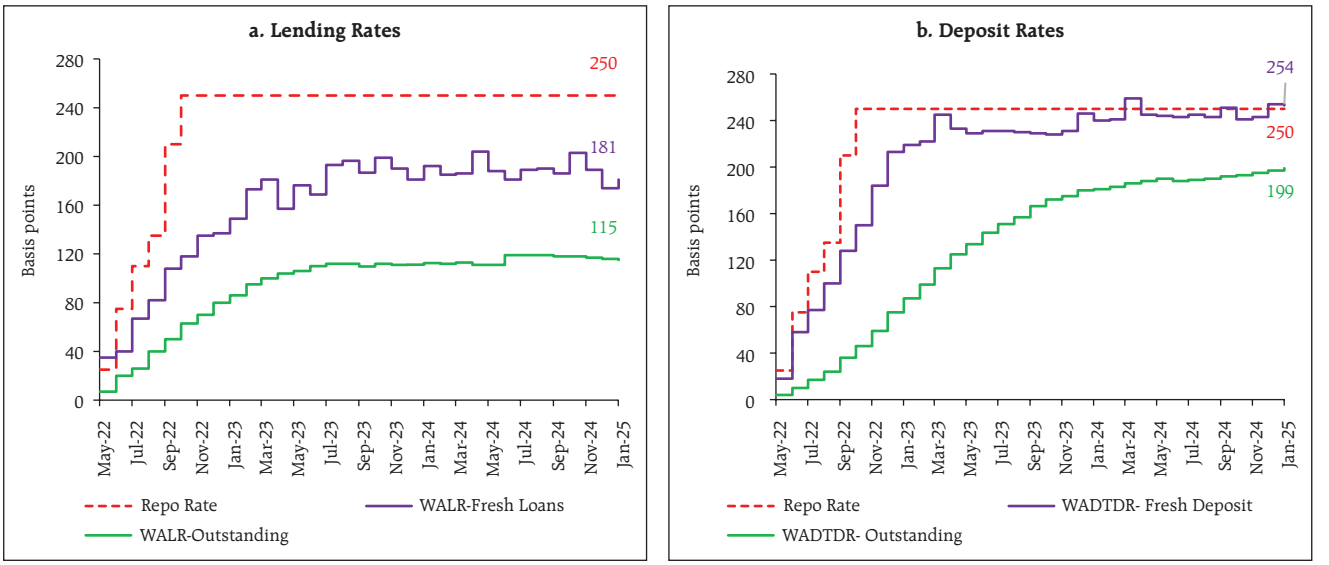
In response to the 25-bps cut in the policy repo rate during the February Policy, banks have reduced their repo-linked external benchmark-based lending rates (EBLRs) by a similar magnitude. The 1-year marginal cost of funds-based lending rates (MCLRs) of SCBs rose by 178 bps during May 2022 to January 2025. The weighted average lending rate (WALR) on fresh and outstanding rupee loans increased by 181 bps and 115 bps, respectively, during the same period (Chart IV.16a). In case of deposits, the weighted average domestic term deposit rate (WADTDR) on

Chart IV.15: Incremental Credit-Deposit Ratio



Source: RBI.

Chart IV.16: Transmission to Bank's Lending and Deposit Rates



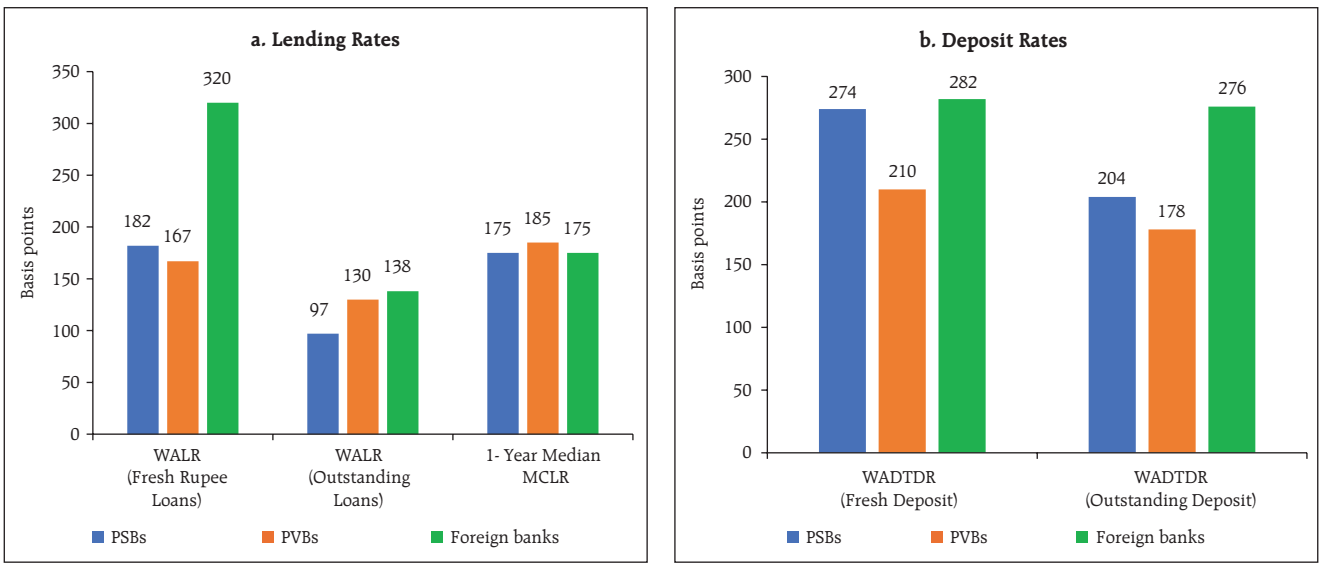
Source: RBI.

fresh deposits of SCBs, which include both retail and bulk deposits, increased by 253 bps. The WADTDR on outstanding deposits also increased by 199 bps during May 2022 to January 2025 (Chart IV.16b).

Transmission across bank groups indicates that the increase in the WALR on fresh rupee loans was higher for public sector banks (PSBs) *vis-à-vis* private sector banks (PVBs). In case of outstanding rupee loans, however, the transmission in PSBs was lower. On the other hand, transmission to deposit rates was higher for PSBs during May 2022 to January 2025 (Chart IV.17a and b).

The corporate sector showed signs of recovery during Q3:2024-25, following a subdued performance during Q2. Sales of listed private non-financial

Chart IV.17: Transmission across Bank Groups (May 2022 to January 2025)



Source: RBI

companies increased by 8.0 per cent (y-o-y) during Q3:2024-25, an improvement from 5.4 per cent in the previous quarter and 5.5 per cent in the corresponding quarter a year ago.

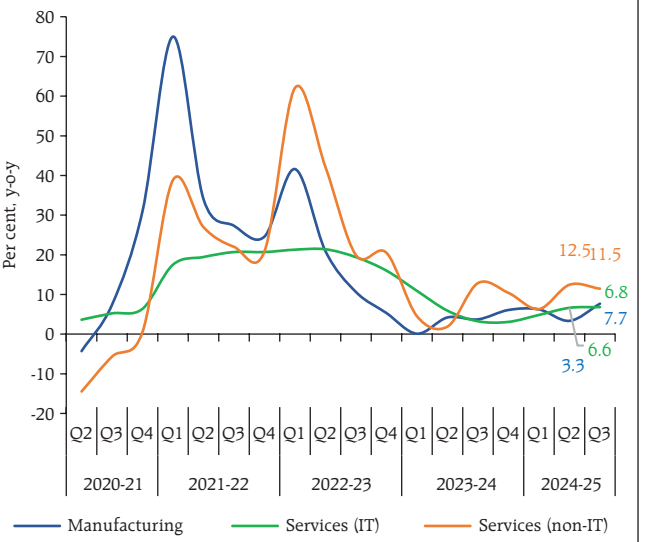
Sales growth (y-o-y) of listed private manufacturing companies improved during Q3:2024-25 (Chart IV.18). The turnaround in growth was mainly driven by higher sales in automobiles, chemicals, food products and electrical machinery industries whereas sales in the petroleum, iron and steel, and cement industries continued to contract on an annual basis during Q3, though the pace of contraction moderated (Chart IV.19).

The information technology (IT) sector recorded a higher sales growth, as compared with the previous quarter and a year ago. Sales growth of non-IT services companies continued to grow in double digits despite a deceleration. This growth was mainly driven by the 'Wholesale and Retail Trade' and 'Transport and Storage Services' segments.

With operating expenses growing at a slower pace than sales, operating profit expanded at the aggregate level during Q3:2024-25, leading to a sequential improvement of 50 bps in the operating profit margin. Margin improved across all major sectors during the quarter, aligning with their improved sales growth (Chart IV.20).

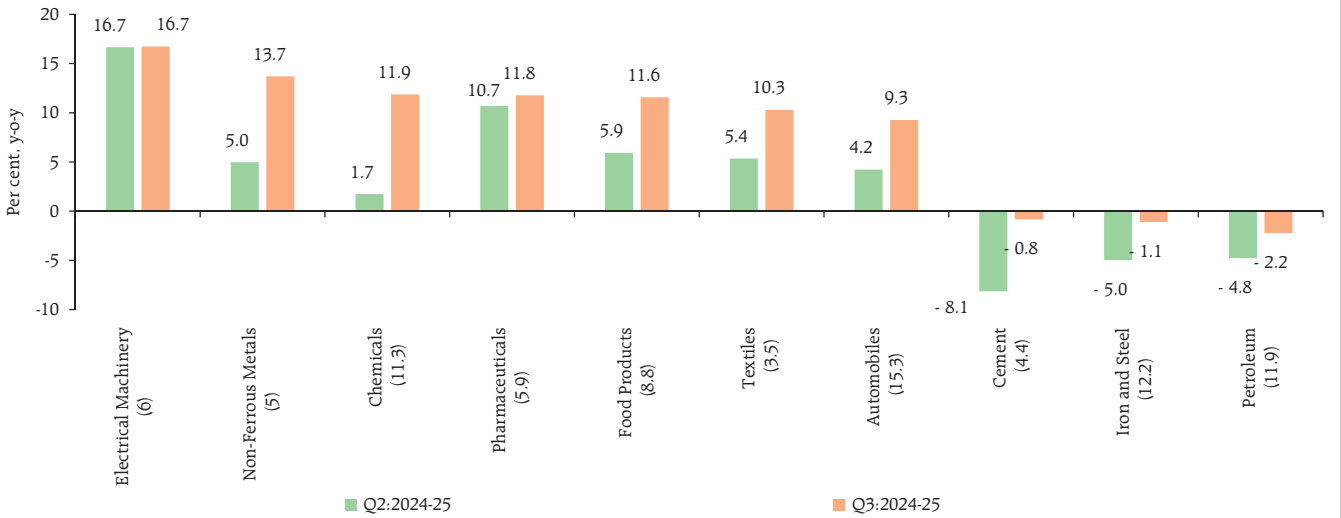
Indian equity markets continued to experience pressure in the latter half of February and early March, following persistent selling by foreign

Chart IV.18: Sales Growth



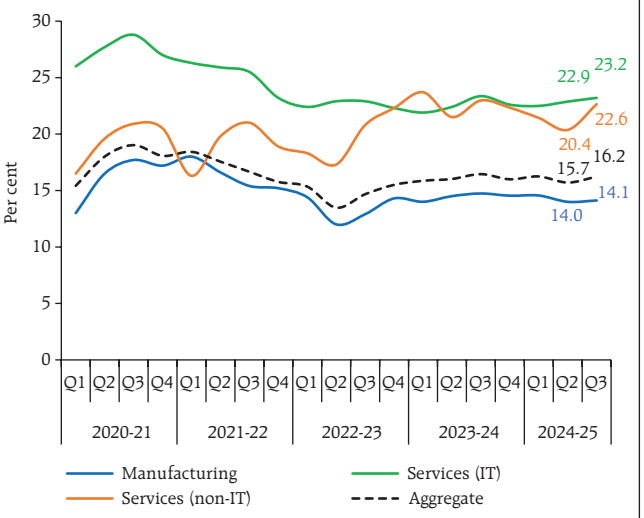
Note: Based on the results of 2,924 listed private non-financial companies.
Sources: Capitaline database; and RBI staff estimates.

Chart IV.19: Sales Growth of Major Industries in Manufacturing Sector



Note: Results are based on 1,675 listed private manufacturing for Q3:2024-25; numbers in parenthesis are sales share of industry.
Sources: Capitaline database; and RBI staff estimates.

Chart IV.20: Operating Profit Margin (Per cent of Sales)



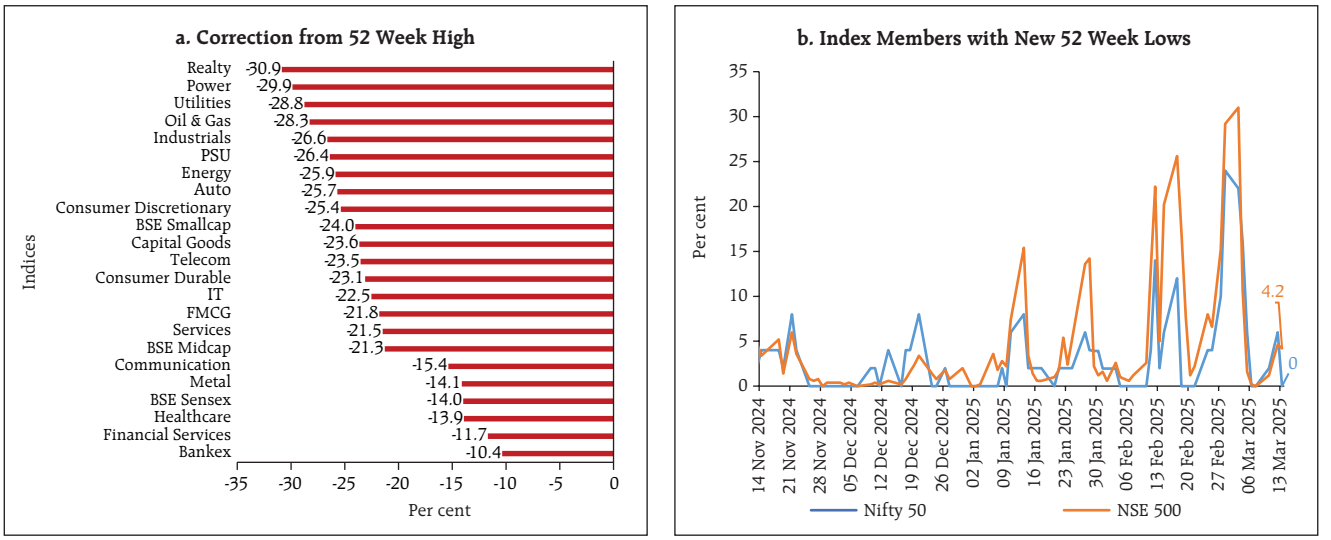
Note: Based on the results of 2,924 listed private non-financial companies.
Sources: Capitaline database; and RBI staff calculations.

institutional investors (FIIs), uncertainty surrounding the US government tariff policies and concerns over corporate earnings amid mixed global cues. Overall, the BSE Sensex declined by 2.3 per cent since February 14, 2025, to close at 74,170 on March 17, 2025. The equity market correction in recent months has been broad-based, resulting in declines across sectoral indices (Chart IV.21a). The broader market indices have experienced sharper falls, as reflected in a higher proportion of their constituents hitting 52-week lows in the recent period and notably, on March 3, 2025, 31 per cent of the constituent members of the NSE 500 index touched a fresh 52-week low, compared to 22 per cent of the Nifty 50 members (Chart IV.21b).

As per Prime Database, persistent selling by FIIs has reduced their ownership in NSE-listed companies to 17.2 per cent by end-December 2024, marking a multi-year low. In contrast, domestic institutional investors (DIIs) have increased their holdings, pushing the FII-to-DII ownership ratio to its lowest level since June 2009 (Chart IV.22).[19]

The recent market correction, coupled with regulatory measures in the equity derivatives

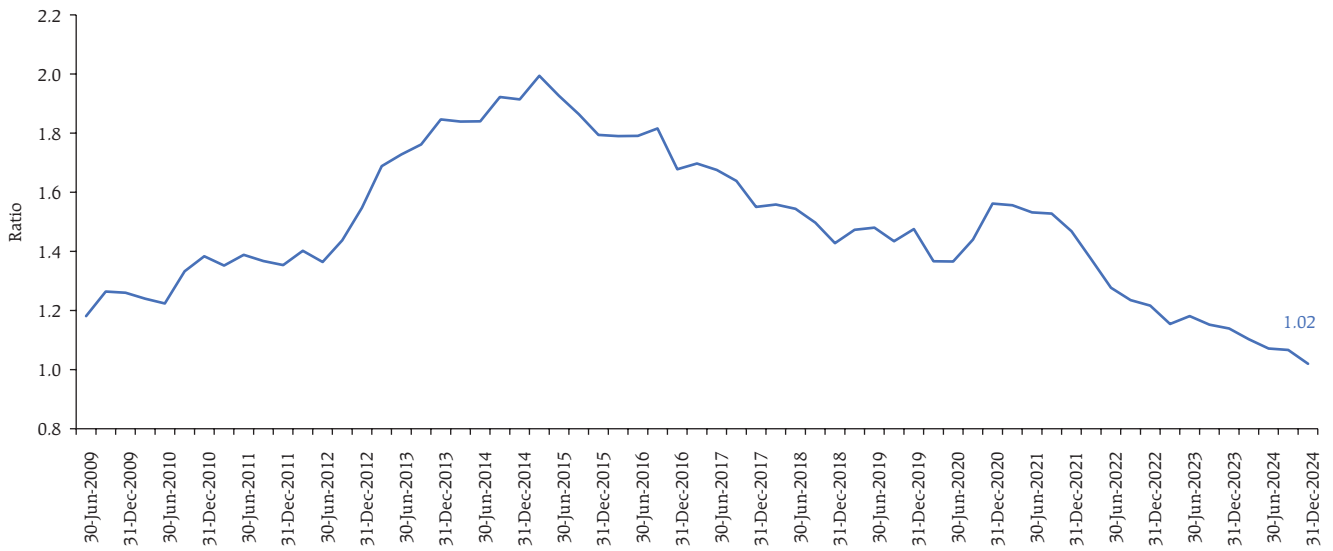
Chart IV.21: Correction in Equity Markets



Note: Data up to March 13, 2025. Calculations are based on daily closing data.
Source: Bloomberg.

[19] https://www.business-standard.com/markets/stock-market-news/diis-close-india-inc-ownership-gap-with-foreign-portfolio-investors-125020401430_1.html

Chart IV.22: FII-DII Ownership Ratio across all NSE-Listed Companies

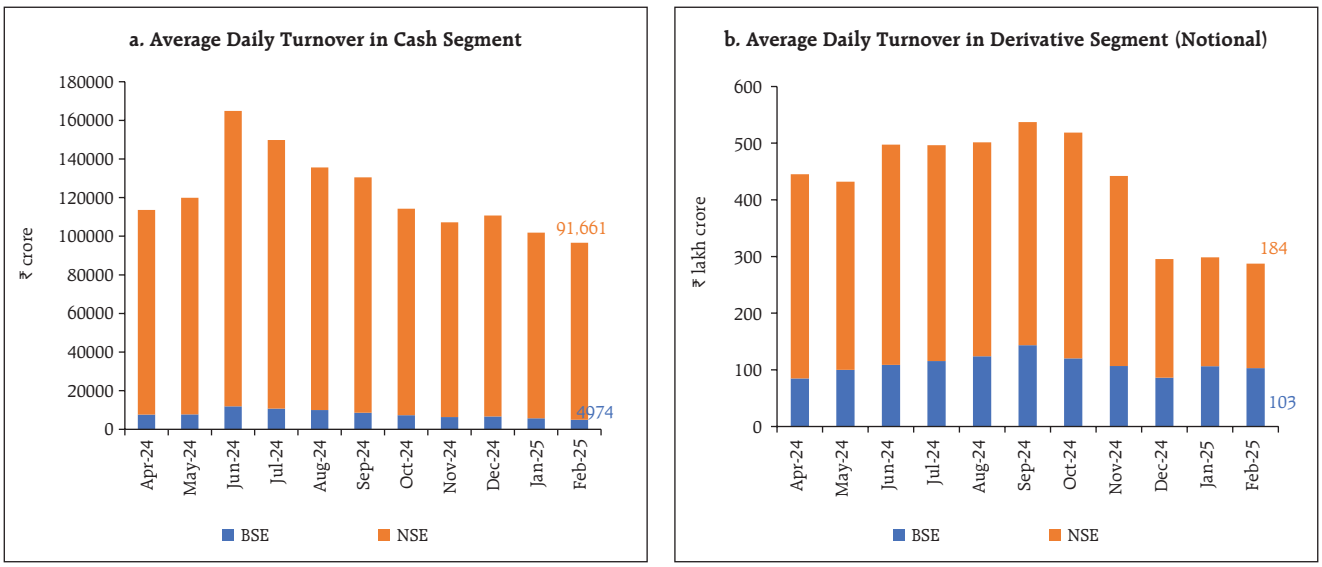


Source: Prime Database.

segment, has led to a decline in turnover across both the equity derivatives and cash segments in recent months (Chart IV.23).[20]

Weak sentiments in the secondary market also affected fund-raising activity in the primary market in January 2025 (Chart IV.24).[21]

Chart IV.23: Declining Turnover in Equity Segments

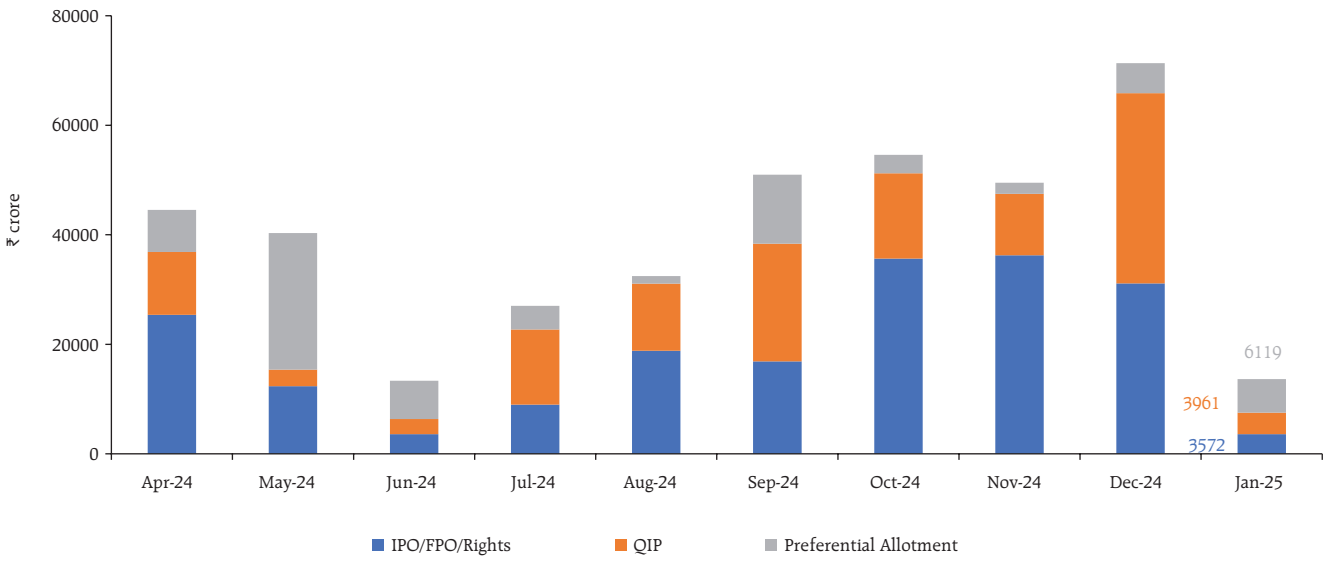


Sources: SEBI; BSE; and NSE.

[20] https://www.moneycontrol.com/news/business/markets/cash-market-turnover-slips-below-rs1-lakh-crore-in-february-hits-15-month-low-f-o-volume-lowest-since-december-23-12948385.html

[21] https://economictimes.indiatimes.com/markets/ipos/fpos/unwilling-to-bear-a-bearscare-companies-halt-ipo-fair/articleshow/118614369.cms?from=mdr

Chart IV.24: Equity Market Resource Mobilisation

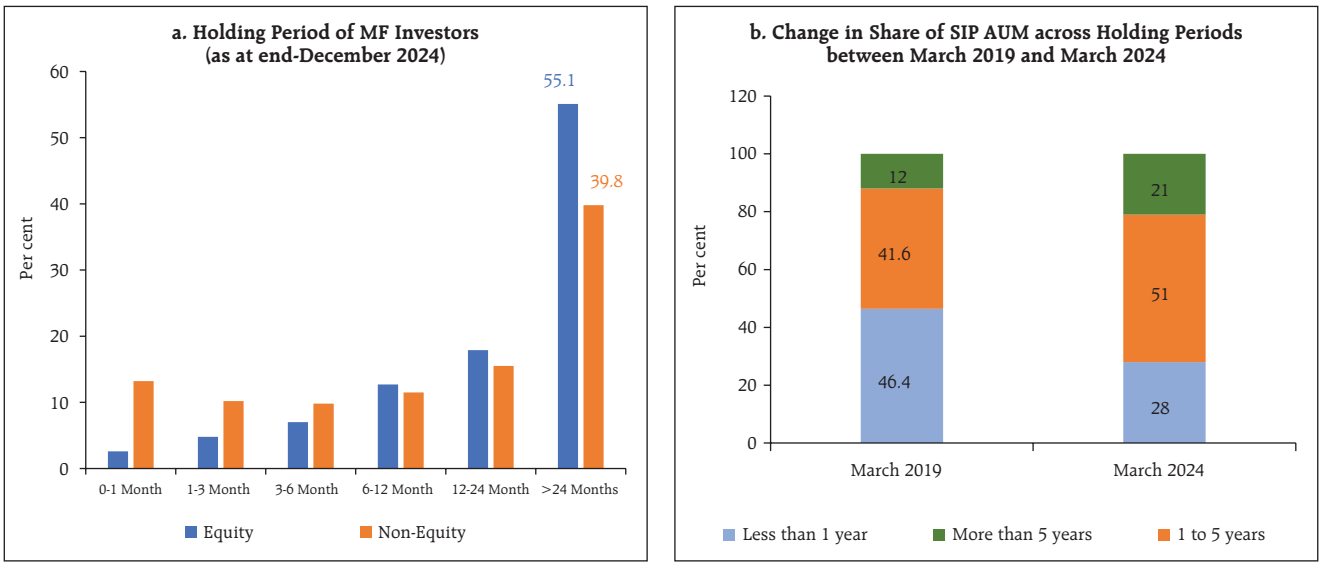


Source: SEBI.

In light of recent correction in equity markets, it is noteworthy that 60.8 per cent of retail investors' equity assets have been held for more than 24 months (Chart IV.25).[22] This indicates that retail investors have demonstrated persistence in holding onto their equity investments, particularly through mutual funds (MFs) and systematic investment plans (SIPs).

Three recent developments hold signficant potential for enhancing the financialisation of household savings. First, the introduction of micro SIP schemes[23], which will make MF products more

Chart IV.25: Holdings in Mutual Funds



Sources: AMFI; and Crisil Intelligence.

[22] https://www.amfiindia.com/Themes/Theme1/downloads/home/FolioandTicketSize.pdf

[23] https://www.financialexpress.com/money/mutual-funds-explainer-building-the-equity-culture-with-micro-sip-3761507/

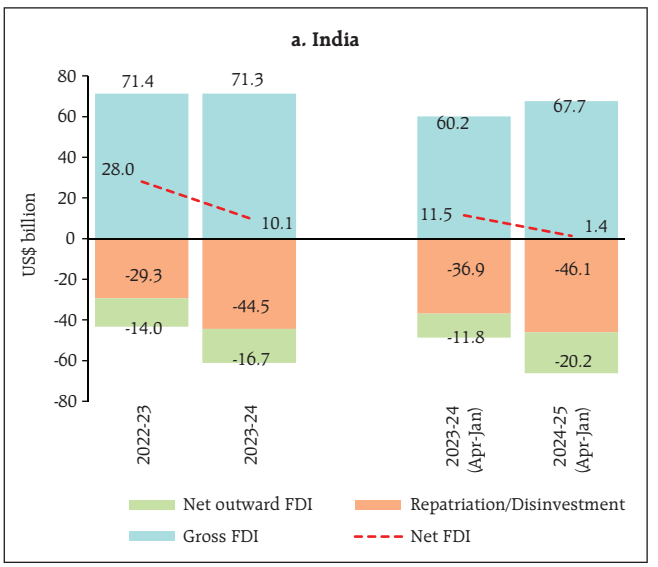
accessible to a wider audience. Second, the launch of specialised investment funds[24], designed to offer investors greater flexibility and serve as a bridge between MFs and portfolio management services (PMS). Third, the establishment of a centralised database for corporate bonds, which would provide an authentic source of information on corporate bonds in India.[25]

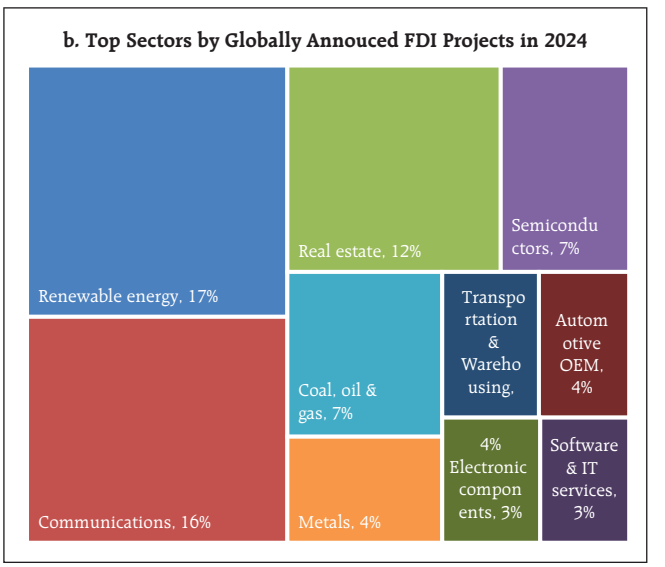
Gross inward foreign direct investment (FDI) continues to remain strong, growing by 12.4 per cent (y-o-y) to US$ 67.7 billion during 2024-25 (April-January) from US$ 60.2 billion over the corresponding period a year ago (Chart IV.26a). However, net FDI declined to US$ 1.4 billion during 2024-25 (April-January) from US$ 11.5 billion a year ago, owing to higher repatriation and outward FDI from India. Sector-wise, manufacturing received the highest share of equity inflows, followed by financial services, electricity and other energy, and communication services - together accounting for more than 60 per cent of the flows. Over 75 per cent of the flows were from Singapore, Mauritius, the US, the UAE and the Netherlands during the period.

In terms of globally annouced greenfield FDI projects, India ranked second after the US during 2024, up from sixth position in 2020. Of the total FDI projects announced worldwide worth US$ 1.8 trillion in 2024, India accounted for around 6 per cent (over US$ 100 billion). Emerging sectors – renewables, communications, semiconductors, and metals – remained the most attractive FDI sectors globally during 2024 (Chart IV.26b). In India, metals, renewable energy and semiconductors were the top industries, accounting for about 60 per cent of the total annouced FDI projects in 2024.

Foreign portfolio investment (FPI) flows continued to experience outflows in February 2025. Net FPI outflows worth US$ 4.0 billion were recorded in February, with net equity outflows of US$ 5.4 billion (Chart IV.27a). Furthermore, Global FPI flows during

Chart IV.26: Foreign Direct Investment Flows



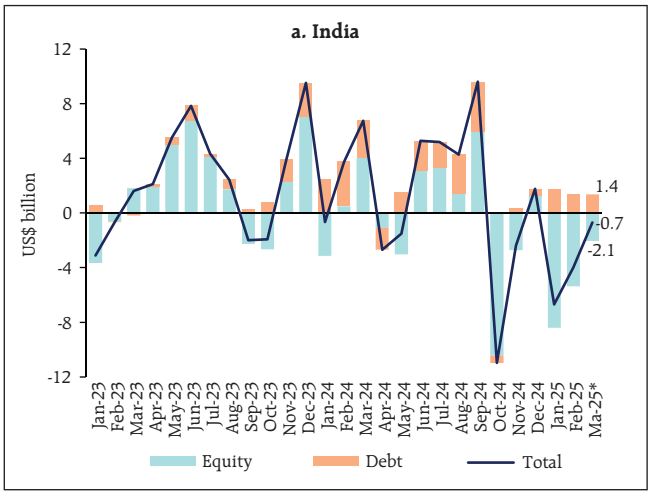


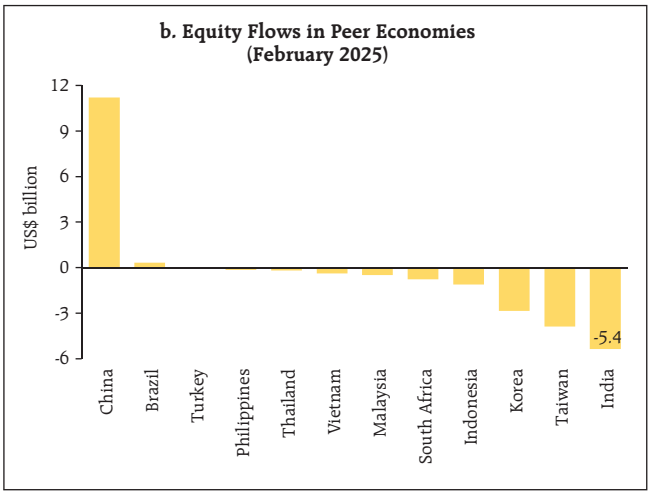
Sources: RBI; and fDi Markets.

[24] https://www.sebi.gov.in/legal/circulars/feb-2025/regulatory-framework-for-specialized-investment-funds-sif-_92299.html

[25] https://www.sebi.gov.in/media-and-notifications/press-releases/feb-2025/launch-of-bond-central-a-centralised-database-portal-for-corporate-bonds_92306.html

Chart IV.27: Net Portfolio Investments





Notes: 1. Debt also includes investments under the hybrid instruments.
2. *: Data up to March 12, 2025.
Sources: National Securities Depository Limited (NSDL); and Institute of International Finance.

the month were significantly redirected towards Chinese equities, amidst increasing optimism about revival of the Chinese economy through monetary and fiscal stimulus (Chart IV.27b). In India, FPI outrush continued in March 2025 with net outflows of US$ 0.9 billion (up to March 17).

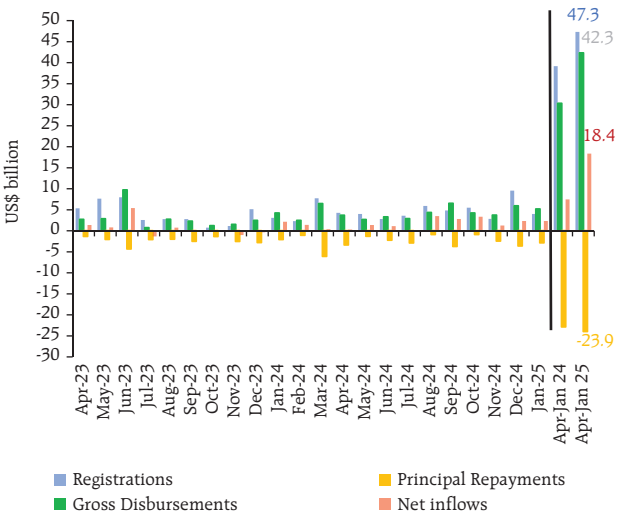
Net accretion to non-resident deposits (NRD) at US$ 14.3 billion during 2024-25 (April-January) were higher from US$ 10.2 billion a year ago, with higher accretion to all three accounts, namely, Non-Resident (External) Rupee Accounts [NR(E)RA], Non-Resident Ordinary (NRO) and Foreign Currency Non-Resident (Banks) [FCNR(B)] accounts.

External commercial borrowing (ECB) registrations (US$ 47.3 billion) and disbursements (US$ 42.3 billion) during April 2024 – January 2025 on a cumulative basis, were significantly higher than those recorded in the corresponding period of the previous year. ECB outflows due to principal repayments stood at US$ 23.9 billion during this period, resulting in robust net inflows of US$ 18.4 billion — more than twice the level observed in the corresponding period of the previous year (Chart IV.28).

Of the total ECBs registered during April 2024 - January 2025, nearly 44 per cent were intended for capital expenditure purposes (Chart IV.29).

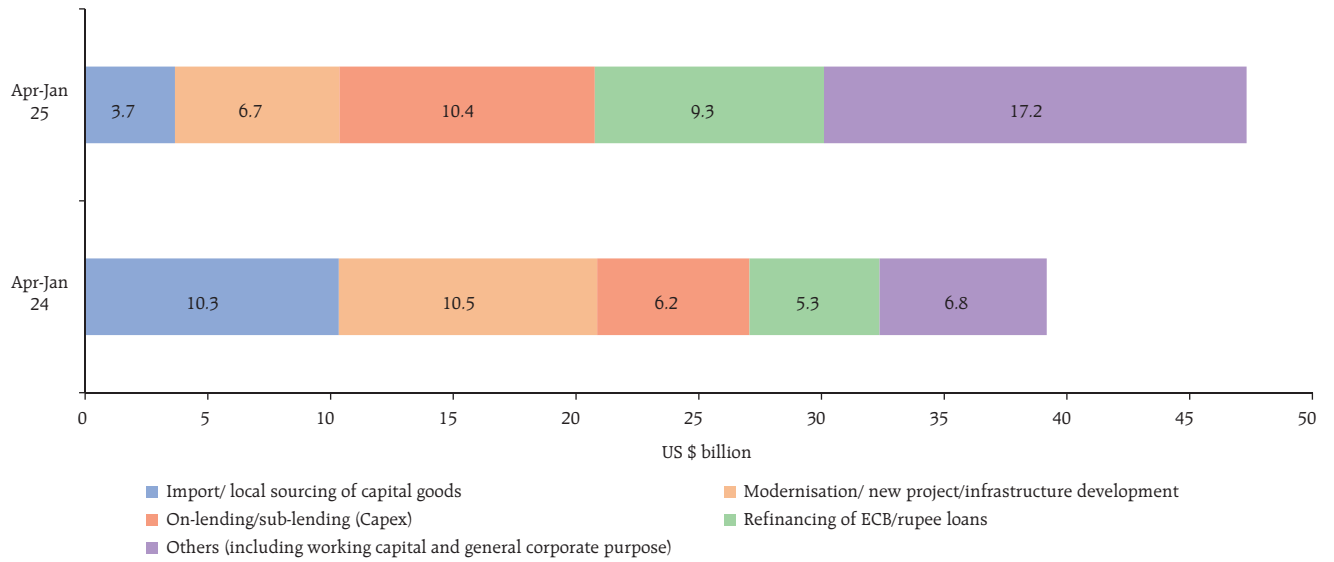
The continued decline in the secured overnight financing rate (SOFR) since August 2024 has

Chart IV.28: External Commercial Borrowings – Registrations and Flows



Source: Form ECB, RBI.

Chart IV.29: End-use of the Registered ECBs



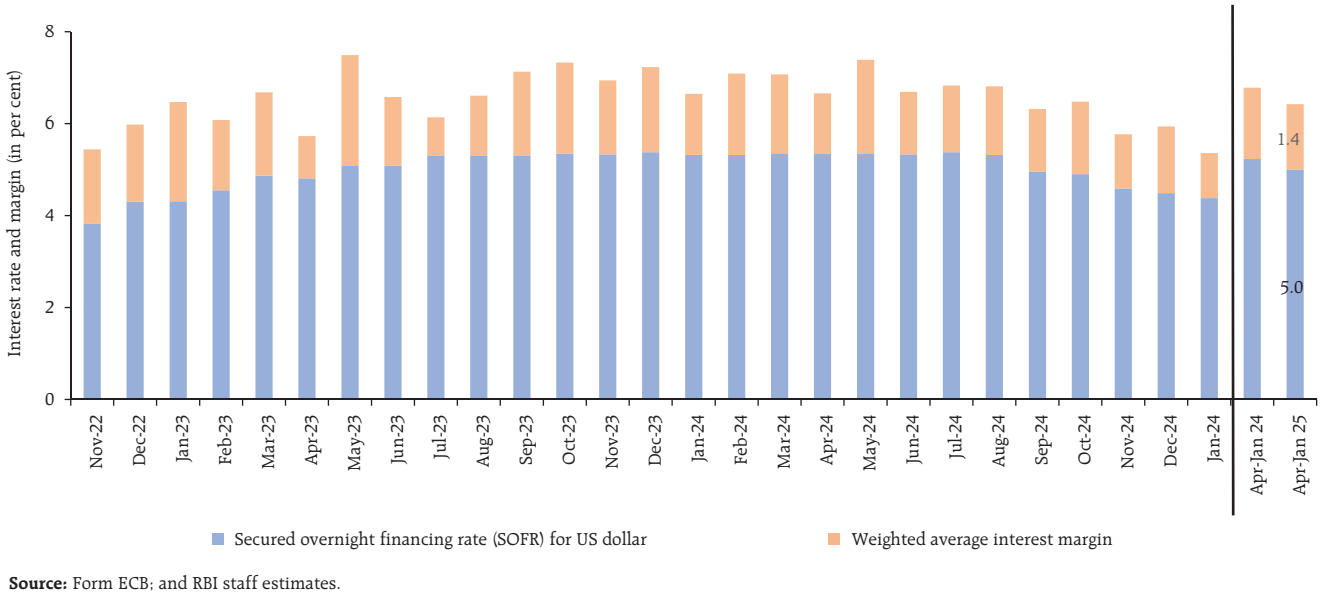
Source: Form ECB, RBI.

contributed to a reduction in the overall cost of ECBs. In January 2025, the overall cost of ECBs declined by 129 bps compared with the corresponding period of the previous year (Chart IV.30).

The Indian rupee (INR) depreciated by 0.9 per cent (m-o-m) during February 2025, weighed by heavy FPI outflows (Chart IV.31). The extent of depreciation of the INR, however, was lower than the previous month. In addition, the INR remained one of the least volatile major currency.

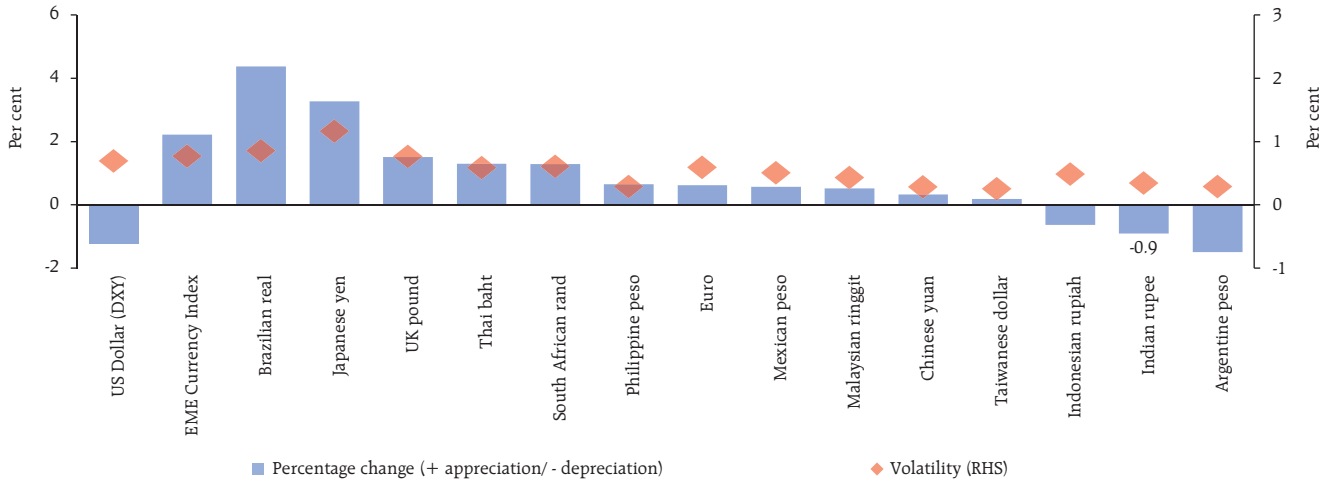
The INR depreciated by 2.4 per cent (m-o-m) in terms of the 40-currency real effective exchange rate (REER) in February 2025 due to depreciation of the INR in nominal effective terms and narrowing of

Chart IV.30: Overall Cost of ECBs



Source: Form ECB; and RBI staff estimates.

Chart IV.31: Movements of the Indian Rupee and Major Currencies against the US Dollar (February 2025 over January 2025)



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.

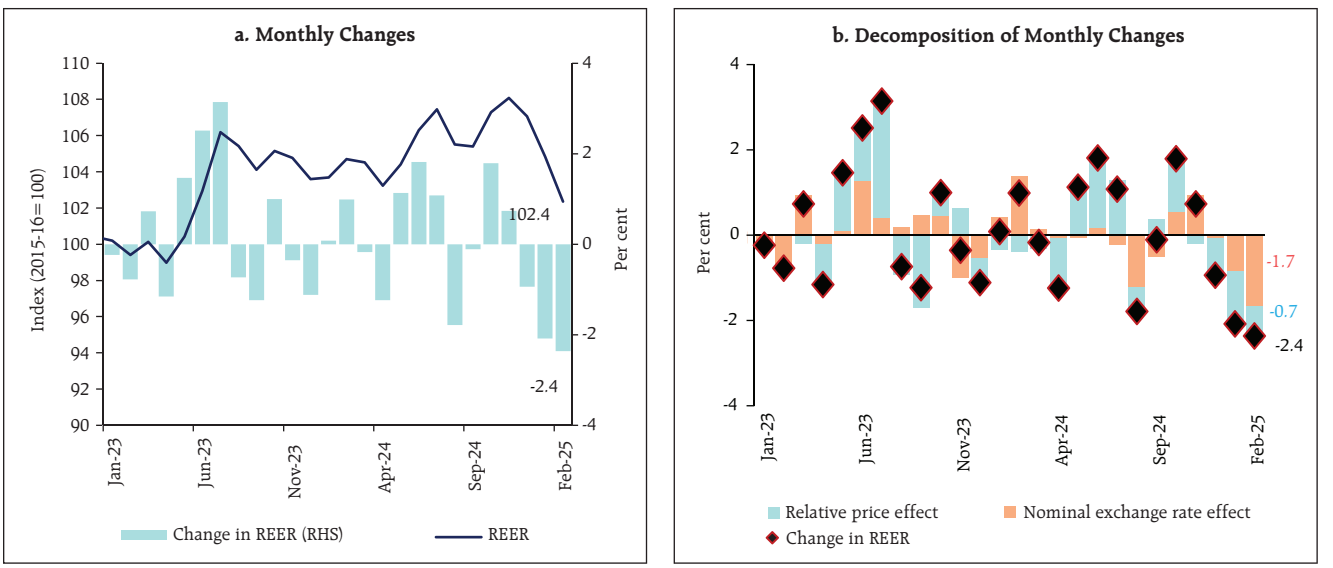
India's inflation differential with its major trading partners (Chart IV.32).

As on March 7, 2025, India held foreign exchange reserves worth US$ 654.0 billion, sufficient for over 11 months of imports and 91 per cent of external debt outstanding at end-September 2024 (Chart IV.33a). The top reserves-holding economies witnessed drawdown in forex reserves during Q3:2024-25, with some signs of recovery in 2025 (Chart IV.33b).

Payment Systems

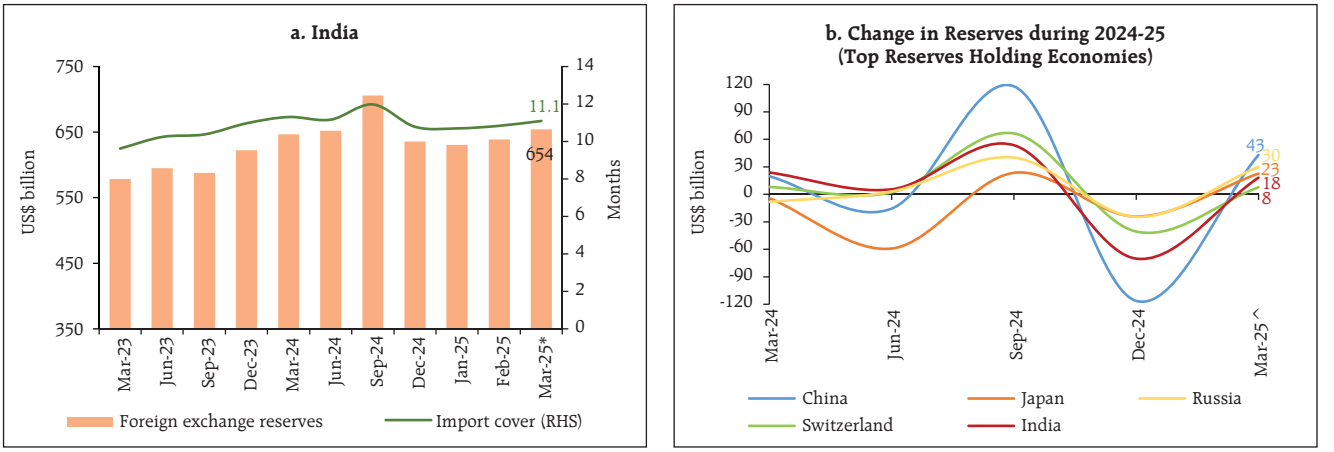
India's digital payment ecosystem expanded in February 2025, led by the Bharat Bill Payment System (BBPS) and Unified Payments Interface (UPI)

Chart IV.32: Movements in the 40-Currency Real Effective Exchange Rate



Source: RBI.

Chart IV.33: Foreign Exchange Reserves



Notes: 1. *: Data for March 7.
2. The import cover data since December 2024 is based on annualised merchandise imports for the quarter ending September 2024 as per the balance of payments statistics.
3. ^: Data for India and Russia are for March 7, 2025, end- January 2025 for Switzerland and end-February 2025 for other countries.

Sources: RBI; respective central banks; and RBI staff estimates.

(Table IV.4). The growing role of digital payments in boosting entrepreneurship and business expansion in India is evident from the rise in person-to-merchant (P2M) transactions, comprising 62.5 per cent of total UPI transactions in February 2025, up from 60.8 per cent a year ago.

In the digital finance segment, the working capital requirements of micro, small and medium enterprises (MSMEs) are increasingly being met through the Trade Receivables Discounting System (TReDS), as reflected in the sharp rise in factoring units[26] (FU) financed— which recorded a growth of 78 per cent in volume and 68 per cent in value (y-o-y) in January 2025. The average number of MSME sellers[27] registered on TReDS rose to 41,094 in January 2025

Table IV.4: Growth in Select Payment Systems

(y-o-y in per cent)

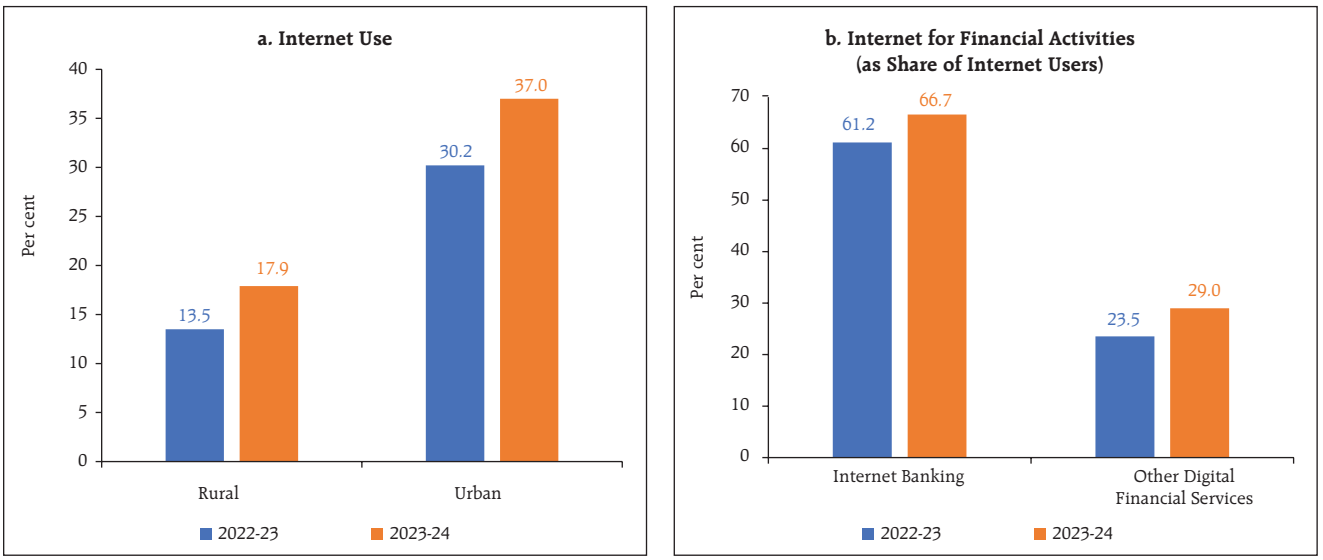
Payment Modes	Transaction Volume				Transaction Value			
	Jan-24	Jan-25	Feb-24	Feb-25	Jan-24	Jan-25	Feb-24	Feb-25
RTGS	13.1	16.1	18.8	2.5	17.1	19.1	21.2	10.2
NEFT	43.4	24.5	47.3	11.0	19.8	14.3	25.1	2.0
UPI	51.8	39.3	60.6	33.1	41.7	27.5	47.9	20.2
IMPS	7.2	-12.7	19.4	-24.3	18.6	7.1	21.2	-0.9
NACH	22.8	17.2	13.1	6.8	21.5	22.5	15.6	20.0
NETC	10.2	14.8	12.1	18.7	15.5	19.0	19.2	18.3
BBPS	24.6	97.4	29.8	87.3	75.4	276.4	85.8	240.6

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.

[26] A Factoring Unit is a nomenclature used in TReDS for invoice(s) or bill(s) of exchange. Each FU represents a confirmed obligation of the corporates or other buyers, including Government Departments and PSUs.

[27] Average number of MSME sellers is calculated as the total number of MSME sellers registered with the top three top entities under TReDS divided by three.

Chart IV.34: Use of Internet for Entrepreneurial Purposes



Sources: Annual Survey of Unincorporated Sector Enterprises, Ministry of Statistics and Programme Implementation; and RBI staff estimates.

from 24,081 a year ago. The transformation is also reflected in the rising proportion of unincorporated sector enterprises utilising the internet for entrepreneurial activities. At the national level, internet adoption increased from 21 per cent in 2022-23 to 26.7 per cent in 2023-24, with a faster uptake among urban enterprises (Chart IV.34a). Additionally, the share of enterprises using the internet for financial activities has increased (Chart IV.34b).

On the policy front, the Reserve Bank has issued the Framework for Recognising Self-Regulatory Organisations (SROs) for the Account Aggregator Ecosystem (SRO-AA) and invited applications for their recognition.[28] The National Payments Corporation of India (NPCI) introduced addendums to improve the UPI Lite functionality, including transfer-out, balance reconciliation, app passcode, and enhanced UPI limits, further enhancing user experience, especially for offline[29] transactions.[30,31]

V. Conclusion

The immediate course of the global economy is likely to be shaped by escalating trade tensions, inflationary pressures stemming from tariffs, and attendant financial market volatility. Recently announced fiscal stimulus is expected to provide a short-term boost to growth in the euro area, although sharp spikes in yields witnessed after such announcements indicate that resulting increases in long-term borrowing costs are likely to constrain very large expansions. Commodity prices have a benign outlook as a baseline case in line with the expected moderation in demand in an environment of growth slowdown. The pass-through of higher tariffs to consumer prices, however, remains a key

[28] RBI Press Releases. March 12, 2025. Invitation of applications for recognition of Self-Regulatory Organisation(s) for the Account Aggregator Ecosystem.

[29] 'Offline' as defined in the RBI Circular No. RBI/2021-22/146 CO.DPSS.POLC.No.S1264/02-14-003/2021-2022 dated December 04, 2024 - 'Framework for Facilitating Small Value Digital Payments in Offline Mode'

[30] NPCI Circular. February 21, 2025. Addendum to Introduction of UPI LITE.

[31] NPCI Circular. February 27, 2025. Addendum to Enhancement in UPI LITE Limits.

risk to inflation, which is already exhibiting signs of stubbornness in many AEs. Central banks in AEs would have to factor in such pressures while calibrating policy responses in an environment of potential slowdown in growth. EMEs, on the other hand, are likely to record higher growth than their AE counterparts, although capital outflows and potential currency depreciation remain major risks.

Domestically, macroeconomic fundamentals remain strong, and economic growth is poised to sustain momentum driven by robust domestic demand, steady investment activity, and ongoing policy-driven infrastructure development along with a pick-up in government spending. Headline inflation has moderated significantly from above 6 per cent in October 2024 to 3.6 per cent in February 2025. Robust *kharif* production, better *rabi* sowing coupled with higher reservoir levels and seasonal winter correction in vegetable prices augur well for food inflation, although volatility in commodity prices and weather anomalies remain potential upside risks to the overall inflation outlook.

While facing challenges from weakening global trade and tariff uncertainty, India's external sector continues to find support from resilient services exports, which remain less affected by global disruptions. Going forward, India's structural strengths—sound fiscal policies, a well-calibrated monetary framework, and digital transformation initiatives—are expected to provide a strong foundation for long-term sustainable economic growth.

Spatial Distribution of Monsoon and Agricultural Production

by Abhinav Narayanan and Harendra Kumar Behera ^

This study examines spatial distribution of rainfall and its influence on Kharif crop cultivation in India. By utilizing matched longitudinal data on rainfall and agricultural output at the district level, the study exploits variations in rainfall to assess its impact on crop production. The results underscore the importance of rainfall for all crops; however, extreme weather events – such as excessive or insufficient rainfall – disrupt production processes, leading to crop damage and reduced yield quality. The timing of these extreme weather events is also crucial due to differing crop production cycles. Insufficient rainfall in June and July adversely affects cereal and pulses production, while oilseeds are particularly vulnerable to excessive rainfall during the harvesting period.

Introduction

Rainfall plays a crucial role in the production of *Kharif* crops, mainly because irrigation alone cannot meet the water needs of these crops. Despite decades of research leading to the development of high-yield crop varieties, climate-resilient varieties and cropping technologies, much of the production still relies on rainfall. Climate change has altered weather patterns globally, resulting in extreme conditions such as floods, droughts, and heatwaves in India in recent years. In this context, this study examines the role of rainfall in crop production, particularly focusing on the effects of both excessive and insufficient rainfall.

Agricultural production is vital for the country's economy as the sector is contributing 18.2 per cent to GDP and employing 42.3 per cent of the workforce.[1] Consequently, rainfall influences macroeconomic policies. Fiscal policy is linked to various price support systems and agricultural subsidies, while monetary policy is affected by mechanisms aimed at maintaining price stability, which are influenced by food prices.

In a country like India, with its vast landmass and diverse agroclimatic conditions, crop production varies significantly across regions. Although various policies over time have incentivized farmers to cultivate specific crops, production remains largely influenced by local agroclimatic factors. For instance, crops such as paddy, certain pulses, and oilseeds are primarily grown in areas that receive substantial southwest monsoon rainfall. Else, the production process will be heavily irrigation-dependent that puts pressure on the alternative sources of water (groundwater, reservoirs, *etc.*). This paper uses spatial variation of rainfall across districts and estimate its impact on the production process of different *Kharif* crops. This study also estimates the effects of deficient or excess rainfall in districts cultivating these crops, and how these variations disrupt the production processes. Due to the nature of these crops, it is crucial to recognize that inadequate or excessive rainfall during the sowing or harvesting stages can have differing impacts on final production outcomes. Thus, this study tries to identify the extreme weather events in specific months that may have an impact on the different crops. Given that southwest monsoon rainfall occurs from June to September, we focus on this timeframe and the spatial distribution of rainfall in specific months to evaluate its effects on production.

The remaining part of the article is broadly structured as follows. Section II presents relevant literature on the rainfall-agriculture relationship. Section II examines the stylised facts regarding spatial distribution of rainfall and agricultural production

^ The authors are from the Department of Economic and Policy Research. The views expressed in this article are those of the authors and do not represent the views of the Reserve Bank of India

[1] https://pib.gov.in/PressReleasePage.aspx?PRID=2034943

in India. While methodology to study the impact of spatial and temporal distribution of rainfall on agricultural production is discussed in Section IV, the empirical results are provided in Section V. Section VI concludes the study.

II. Select Literature

The relationship between rainfall and agriculture in India is widely studied. For brevity, we focus on selected studies that have used granular data to study this topic. Prasanna (2014) found that monsoon rainfall has a direct and positive effect on yields in the *Kharif* season, while post monsoon rainfall affects *Rabi* crops by influencing water and soil moisture. Galle and Kazenberger (2024) used the predictions of the global climate models to estimate the impact of climate change on crop yield and found that, depending on different emission scenarios affecting rainfall and temperature, there could be a 3-22 per cent loss in rice yields between 2021-2100. Focusing on the state of Maharashtra, Zachariah *et al.* (2020) observed that rainfall deficit has a relatively stronger effect on crop production compared to rising temperatures. Ghosh and Kaustubh (2023) noted that that rainfall has a non-linear relationship with inflation mainly through its effects on agricultural GVA. Gupta *et al.* (2023) analysed state-level production and rainfall data to evaluate the importance of south-west monsoon on *Kharif* crops in the context of improvement in irrigation infrastructure and found that irrigation mitigates the impact of deficient rainfall. Other studies that focus on the relationship between rainfall and agricultural crop production include Meher *et al.* (2015); Auffhammer *et al.* (2012); Fishman (2016); Revadekar and Preethi (2012). At the aggregate level, Kapur (2018) show that excess/scanty rainfall has significant impact on agricultural activity. This paper extends the analysis by examining the effects of both insufficient and excessive rainfall during the monsoon season, utilizing district-level data to better reflect the spatial distribution of rainfall. Furthermore, we aim to identify the effects of rainfall in particular months of the monsoon season to account for the varying cropping cycles of different crops.

III. Data and Stylized Facts

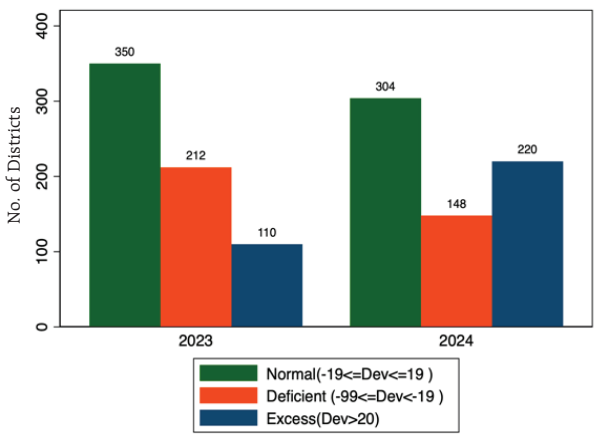
This paper uses data from India Meteorological Department (IMD) for spatial analysis of rainfall which are available at a daily and monthly frequency. The district-level agricultural production data are from Ministry of Agriculture, Government of India and collected from the Centre for Monitoring Indian Economy (CMIE) Commodities database to maintain consistency across years and districts.

The south-west monsoon in India is a seasonal wind pattern that brings the majority of the country's annual rainfall between June and September. It originates from the Indian Ocean and moves towards the Indian subcontinent, drawn by the heat of the landmass during summer. This monsoon is a critical part of India's climate and agriculture, providing essential rainfall for crops, especially during the *Kharif* season (June to October), which includes crops like rice, cotton, and pulses. After bouts of extreme heatwaves during the summer months, the south-west monsoon season in 2024 started with a deficit in June 2024 followed by an excess rainfall in July, August and September 2024. The spatial distribution of rainfall was uneven during the first two months but improved during the next two months. Districts with excess rainfall increased in 2024, while districts with deficient and normal rainfall decreased relative to 2023.

The spatial distribution of south-west monsoon rainfall in India for 2023 and 2024 shows that there was a decrease in number of districts experiencing normal rainfall in 2024 relative to 2023 (Chart 1a). However, the number of districts experiencing deficient rainfall became fewer while the number of districts with excess rainfall increased in 2024. The district dynamics show that 59 districts with normal

Chart 1: Rainfall Distribution 2023 vs. 2024

a. Rainfall Distribution by Categories



b. Rainfall Distribution by Districts and Categories

		2024 (No. of Districts)		
		Normal	**Deficient**	**Excess**
2023 (No. of Districts)	**Normal**	170	59	121
	Deficient	96	81	35
	Excess	38	8	64

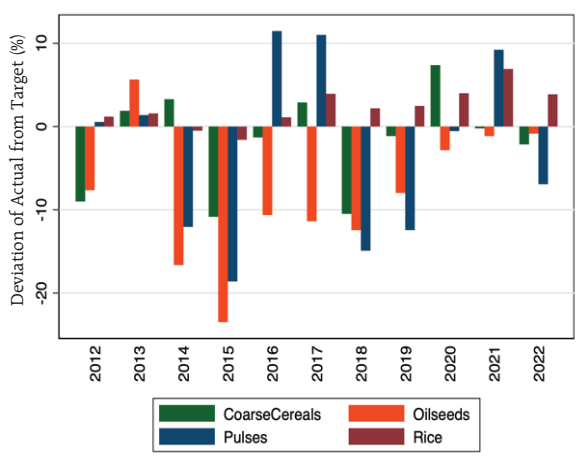
Notes: The categories of rainfall are based on the Indian Meteorological Department (IMD) definition. See https://mausam.imd.gov.in/imd_latest/monsoonfaq.pdf.
Source: IMD.

rainfall in 2023 experienced deficient rainfall in 2024, while 121 districts that received normal rainfall in 2023 saw excess rainfall in 2024 (Chart 1b). On the other hand, 96 districts that had deficient rainfall in 2023 recorded normal rainfall in 2024. Based on the underlying dynamics of spatial distribution, the net increase in districts with normal rainfall shifting from deficient conditions is 37, while net decrease in districts with normal rainfall shifting to excess rainfall is 83, comparing 2024 to 2023.

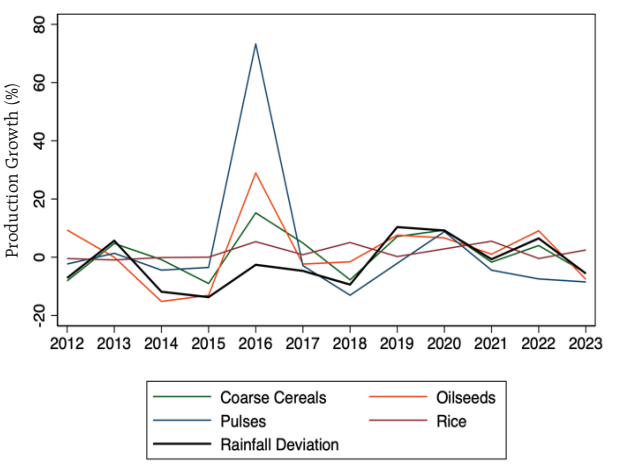
The difference in production pattern of different crop groups as compared to their targets shows that rice is the only crop that roughly meets the target production every year (Chart 2a). On the other hand, oilseeds and pulses consistently fall below the target

Chart 2: Production (Actual vs. Target) and Rainfall Deviation

a. Crop-wise Production Deviation



b. Crop-wise Production Growth



Source: Authors' estimates based on data from Directorate of Economics and Statistics, Department of Agriculture and Farmers Welfare and IMD.

production. The annual growth of the production of these four crop groups during the *Kharif* season indicates that there is a general trend of higher production during years when the south-west monsoon is better across all crops (Chart 2b). While rice production seems to follow a consistent pattern, other crops have a high dependence on monsoon rainfall, especially oilseeds and pulses. This is a known fact based on Indian agricultural pattern, while the consistency of rice production can be attributed to the high percentage of land under irrigation for rice production.

The above observations indicate that the spatial distribution of rainfall fluctuates from year to year. While it is clear that rainfall is important for *Kharif* crops, its effects on production differ among various crops depending on the magnitude and pattern of rainfall. This study seeks to examine the spatial distribution of rainfall and shed light on how it affects the production of different crops.

IV. Empirical Strategy

We match annual production data for each crop with rainfall at the district-level during the monsoon season. Additionally, we identify the month-year combinations during which the rainfall was deficient or excess. To gauge the impact spatial pattern of rainfall on crop production, we first use the following specification:

$$\ln(production)_{cdst} = \alpha_d + \theta_{st} + \beta_1 * \ln(Rainfall)_{dst} + \beta_2 * \ln(Rainfall)_{dst} * Deficient_{dst} + \beta_3 * \ln(Rainfall)_{dst} * Excess_{dst} + \beta_4 * \ln(Area\ Sown)_{dst} + \epsilon_{cdst} \quad \ldots (1)$$

Where $\ln(production)_{cdst}$ refers to the production (log) of crop *c* in district *d*, state *s* in year *t*. $\ln(Rainfall)_{dst}$ and $\ln(Area\ Sown)_{dst}$ refer to the actual rainfall and area sown in district *d*, state *s* and year *t*. $Deficient_{dst}$ and $Excess_{dst}$ takes the value 1 if there is deficient or excess rainfall in district *d* in year *t* otherwise zero, respectively. The variable of interest is β_1 which tells us the marginal impact of rainfall on crop production. Coefficients β_2 and β_3 provide the marginal impact of rainfall if a district experiences deficient or excess rainfall in the particular year. So, if all districts experienced normal rainfall in a particular year, the marginal effect of rainfall will be β_1. But if there are districts that experience deficient (or excess) rainfall during that year, the impact of rainfall is $\beta_1 + \beta_2$ (or $\beta_1 + \beta_3$).

We include district fixed effects (α_d) that control for any time invariant characteristics (*e.g.*, soil characteristics, long-term agroclimatic conditions), and any unobserved district level conditions that may influence production of a particular crop. The specification includes state specific year fixed effects (θ_{st}) that control for any macroeconomic events like policy changes (*e.g.*, minimum support prices, fertilizer subsidies, trade polices) or climatic changes (*e.g.*, *El Nino*, *La Nina*) that may occur in a particular year in a particular state which affect all districts in a state at the same time. The state specific year fixed effects also control for any state-level variables (*e.g.*, State GDP, credit, irrigation infrastructure at the state-level, *etc.*) that may influence the production process.

Since the cropping cycle differs across crops, we attempt to tease out the impact of deficient or excess rainfall in a particular month for each of the crops. To do this, we augment the first specification by including month wise interaction terms:

$$\ln(production)_{cdst} = \alpha_d + \theta_{st} + \beta_1 * \ln(Rainfall)_{dst} + \sum_{m = Jun, Jul, Aug, Sep} \beta_{2,m} * \ln(Rainfall)_{dst} * Deficient_{dstm} + \sum_{m = Jun, Jul, Aug, Sep} \beta_{3,m} * \ln(Rainfall)_{dst} * Excess_{dstm} + \beta_4 * \ln(Area\ Sown)_{dst} + \epsilon_{cdst} \quad \ldots (2)$$

Here, $Deficient_{dstm}$ (*if m = jun*) takes the value 1 if district '*d*' in year '*t*' experienced deficient rainfall

in the month of June. Similarly for the other months and for the excess rainfall. Rest of the variables carry the same interpretation as in equation 1. In this specification, we try to delve deeper to see whether excess of deficient rainfall in a particular month during the monsoon seasons matters for crop production. Specifically, what is the aggregate marginal effect of rainfall on crop production if districts experience deficient or excess rainfall in the June, July, August or September. This is important because the water and soil moisture requirement are different across crops. For example, excess rainfall during the harvesting season generally leads to crop damages and is harmful for most crops. In fact, for pulses, excess rainfall during the flowering season and deficient rainfall during sowing season are harmful for the crops. Since this analysis requires both production and rainfall data at the district level, the time period is confined to 2012-2022 based on consistent data availability across districts. One advantage of keeping a recent period of data compared to historical data is the possibility of factoring out any long-term changes that may influence crop production at the district level. In all our specifications, we cluster the standard errors at the district level to account for any serial correlation within districts.

Since actual production of a crop in a district may depend on previous year's production, a dynamic panel specification is used as a robustnbess check that includes a lagged value of production. The results from this specification are presented in the Appendix Tables A.1-A.3.

V. Results

We estimate Equation 1 for total cereals production and two major crops: paddy and maize. The results reveal that rainfall plays a crucial role in influencing agricultural output, though its effects differ across crops (Table 1). A one per cent higher rainfall increases cereals production by 0.04 per cent, a 0.03 per cent rise in paddy production, and a 0.16 per cent increase in maize production. These results indicate that maize is more responsive to changes in rainfall than paddy, likely due to the crop's dependency on natural water sources in rainfed areas.

Table 1: Impact of Rainfall on Crop Production (Cereals)

	(1)	(2)	(3)
	Cereals	**Paddy**	**Maize**
ln Rainfall(Actual)	0.038*	0.031*	0.159**
	(0.019)	(0.017)	(0.071)
ln Rainfall*Deficient	-0.007***	-0.005**	0.0002
	(0.002)	(0.002)	(0.006)
ln Rainfall*Excess	-0.003	0.002	-0.011*
	(0.002)	(0.002)	(0.006)
ln AreaSown	1.049***	1.066***	1.065***
	(0.040)	(0.040)	(0.026)
Constant	14.205***	14.245***	13.511***
	(0.245)	(0.229)	(0.499)
District FE	Yes	Yes	Yes
State*Year FE	Yes	Yes	Yes
N	4165	3807	3278
R^2	0.95	0.96	0.97

Notes: Standard errors are clustered at the district * year level.
* p<0.10, ** p<0.05, *** p<0.01
Source: Authors' estimates.

The results also highlight the asymmetric effects of rainfall deviations. Deficient rainfall has marginally negative impact on total cereals and paddy production. Paddy's limited sensitivity to rainfall shortages can be attributed to the widespread use of irrigation systems in paddy cultivation, which buffers the crop against deficient rainfall. However, maize production remains unaffected by deficient rainfall, reflecting its adaptability and potential reliance on soil moisture or farming practices suited to low-rainfall conditions.

Excessive rainfall, on the other hand, emerges as a significant constraint, particularly for maize. Excess rainfall reduces maize production by 0.011 per cent from the baseline, indicating waterlogging or prolonged periods of standing water adversely affect this crop. This is consistent with maize's physiological

characteristics, as it is highly sensitive to poor drainage and water accumulation.

Table 2 reports the regression results from equation 1 for pulses. Column 1 reports the results for overall pulses production while columns 2, 3 and 4 report the results for three major pulses grown during the *Kharif* season, namely, Arhar, Moong, and Urad. Results show that rainfall has a large positive impact on all pulses, except Moong for which rainfall is not statistically significant. A 1 per cent increase in rainfall increases overall pulses production by 0.33 per cent. Deficient rainfall seem to affect overall pulses and Arhar production and has a negative but statistically insignificant effect on Moong. Defcient rainfall seem to have positive effect on Urad production. Interestingly, excess rainfall seems to be quite harmful for all kinds of pulses. A pre-requisite for the success of Arhar and Moong is proper drainage. Ridge planting is effective in areas where sub-surface drainage is poor. This provides enough aeration for the roots during the period of excess rainfall. Overall, production of pulses seem to be quite sensitive to both deficient and excess rainfall. Thus, it requires the right amount of rainfall which is neither excess nor deficit.

We also estimate equation 1 for oilseeds, focusing on three major *Kharif* oilseeds, namely soyabean, groundnut and sunflower (Table 3). Rainfall seems to be important for overall oilseeds production with a one per cent increase in rainfall boosting production by 0.3 per cent. However, the individual responses on each of the crops are relatively weak. Deficient rainfall negatively affects oilseeds (except Sunflower) but none of the effects are statisticaly significant. Excess rainfall significantly reduces overall oilseeds production, particularly soyabean.

Soybean is a rainfed crop cultivated during the *Kharif* season and is sown only after the monsoon arrives. Farmers are advised to plant their crops only after receiving 100 mm of rainfall to ensure proper germination and steady growth. However, excess rain during the maturity stage can degrade soybean quality. While warm and humid conditions promote healthy growth, cool and wet weather hampers germination

Table 2: Impact of Rainfall on Crop Production (Pulses)

	(1)	(2)	(3)	(4)
	Pulses	**Arhar**	**Moong**	**Urad**
ln Rainfall(Actual)	0.333*** (0.107)	0.345*** (0.133)	0.203 (0.206)	0.466*** (0.130)
ln Rainfall*Deficient	-0.017** (0.008)	-0.018* (0.010)	-0.025 (0.019)	0.024*** (0.009)
ln Rainfall*Excess	-0.033*** (0.010)	-0.017* (0.010)	-0.054*** (0.020)	-0.038*** (0.009)
ln AreaSown	1.023*** (0.023)	1.034*** (0.039)	1.048*** (0.071)	1.016*** (0.030)
Constant	11.246*** (0.700)	11.253*** (0.894)	11.623*** (1.313)	9.982*** (0.875)
District FE	Yes	Yes	Yes	Yes
State*Year FE	Yes	Yes	Yes	Yes
N	3307	2519	1827	2603
R^2	0.95	0.96	0.97	0.96

Notes: Standard errors are clustered at the district * year level.
* p<0.10, ** p<0.05, *** p<0.01
Source: Authors'estimates.

Table 3: Impact of Rainfall on Crop Production (Oilseeds)

	(1)	(2)	(3)	(4)
	Oilseeds	**Soyabean**	**Groundnut**	**Sunflower**
ln Rainfall(Actual)	0.303** (0.143)	0.089 (0.084)	0.197 (0.184)	0.382 (0.316)
ln Rainfall*Deficient	-0.005 (0.010)	-0.013 (0.009)	-0.023 (0.025)	0.005 (0.020)
ln Rainfall*Excess	-0.036*** (0.010)	-0.036*** (0.009)	-0.001 (0.014)	0.0001 (0.016)
ln AreaSown	0.911*** (0.051)	0.910*** (0.042)	1.075*** (0.093)	1.028*** (0.046)
Constant	12.350*** (0.963)	13.710*** (0.585)	12.642*** (1.281)	11.171*** (1.888)
District FE	Yes	Yes	Yes	Yes
State*Year FE	Yes	Yes	Yes	Yes
N	2237	1160	1937	315
R^2	0.92	0.92	0.95	0.96

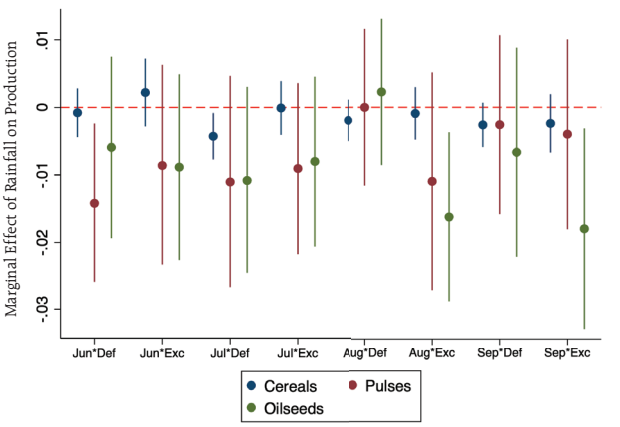
Notes: Standard errors are clustered at the district * year level.
* p<0.10, ** p<0.05, *** p<0.01
Source: Authors' estimates.

and increases the risk of seed rot. Although we do not find any significant effect of deficient or excess rainfall on groundnut, its production is sensitive to extreme conditions such as frost, severe drought, or standing water. Adequate rainfall is crucial during the flowering, pegging, and pod formation stages to achieve maximum yield and high-quality groundnuts.

Tables A.1-A.3 present the results from a dynamic panel specification. The impact of rainfall on production seems to be consistent with our baseline specification. The impact of deficient or excess rainfall, although being consistent in the direction of the effect, there are minor deviations in terms of statistical significance. For example, while excess rainfall has a statistically significant negative impact on pulses production in our baseline results, the dynamic panel estimation results are not statistically significant. On the other hand, deficient rainfall shows no significant impact on oilseeds production in our baseline specfication, but shows a negative and statistically significant effect in the dynamic panel specification. Considering these minor deviations, overall the results are found to be consistent across the two types of specifications.

The results in Table 1, 2 and 3 show how overall rainfall affect production of different crops while highlighting their vulnerability to deficient or excess rainfall. These estimates show the average of impact of deficient or excess rainfall during the entire monsoon season. However, the crop cycles are different for each of the crops based on the water requirement, soil moisture and the duration of the production cycle. For example, paddy fields must remain filled with sufficient water depths for at least 10 weeks during the growing season of the crop life cycle. On the other hand, maize must be sown at the optimum time when there is less chance of waterlogging. Similarly, pulses and oilseeds are grown during the *Kharif* season, although being dependent on rainfall, the timing and intensity of the rainfall matter.

Chart 3: Marginal Effect of Spatial Rainfall on Production



Note: The chart plots the monthly coefficient estimates along with the confidence intervals, based on latter equation specification. 'Def' and 'Exc' refer to the dummies for Deficient and Excess rainfall at the district level, respectively.
Source: Authors' estimates.

To account for the temporal aspect of rainfall while preserving its spatial variation, Equation 2 introduces monthly dummy variables for deficient or excess rainfall during the southwest monsoon season. The monthly coefficients show the marginal effect of deficient or excess rainfall in a particular month (Chart 3). The dots represent the point estimates while the vertical lines represent the 95 per cent confidence interval. The estimates show that the spatial and temporal distribution of rainfall significantly affects crop production. For cereals production, deficient rainfall in July adversely impacts production. Production of pulses is vulnerable to deficient rainfall during the sowing season, while excess rainfall in August and September is harmful for oilseeds production. Thus, depending on the sowing, germination and harvesting time of the crops, deficient or excess rainfall has a differential impact on the production.

VI. Conclusion

This article examines how rainfall affects *Kharif* crop production, with an emphasis on the spatial distribution of southwest monsoon. Our analysis

highlights the critical role of rainfall in determining the production outcomes of various crops, emphasising the differential effects of timing, intensity, and distribution. The findings indicate that, on average, rainfall is crucial for crop production. While cereals, pulses, and oilseeds benefit from timely and adequate rainfall, deviations in the form of deficiency or excess during key growth stages can lead to significant losses. Given that crop cycles vary across crops, inadequate or excessive rainfall during the sowing and harvesting periods negatively affects overall production.

Our findings suggest that in areas prone to heavy rainfall, early planting is recommended so that maize plants reach a more robust stage of growth, making them better equipped to withstand such adverse conditions. Interestingly, given paddy's high water requirement, excessive rainfall may not significantly impact its production. Paddy's ability to tolerate standing water could be the reason behind its resilience to excessive rainfall.

Overall, the results underscore the need for region-specific and crop-specific water management strategies. While rainfall generally boosts production, excess rainfall poses significant challenges, particularly for maize, pulses and oilseeds. Policymakers and agricultural extension services could use these insights to promote crop diversification, improve drainage infrastructure, and encourage planting strategies that mitigate the risks of waterlogging, thereby enhancing resilience to rainfall variability. Policymakers and agricultural practitioners must focus on improving irrigation systems and adopting resilient crop varieties to mitigate the adverse effects of rainfall variability. By addressing these challenges, farmers can achieve more stable and sustainable crop yields despite the uncertainties posed by changing monsoon patterns.

As climate change causes extreme weather events, crop production faces growing risks. In a diverse country like India, the impact of climate change will differ across regions. Thus, further research is necessary to explore how the spatial distribution of these extreme events affects agricultural production and cropping cycles. This study is an attempt towards this end.

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Appendix

Table A.1: Impact of Rainfall on Crop Production (Cereals): Dynamic Panel Estimates

	(1)	(2)	(3)
	Cereals	**Paddy**	**Maize**
ln Production(lagged)	0.929***	0.954***	0.888***
	(0.009)	(0.009)	(0.024)
ln Rainfall(Actual)	0.058***	0.034*	0.181***
	(0.018)	(0.020)	(0.052)
ln Rainfall*Deficient	-0.008***	-0.004*	-0.007
	(0.003)	(0.002)	(0.009)
ln Rainfall*Excess	-0.000	0.003	-0.007
	(0.003)	(0.004)	(0.008)
ln AreaSown	0.206***	0.133***	0.287***
	(0.020)	(0.016)	(0.035)
District FE	Yes	Yes	Yes
State*Year FE	Yes	Yes	Yes
N	3575.00	3248.00	2737.00

Notes: Standard errors are clustered at the district * year level.
* p<0.10, ** p<0.05, *** p<0.01
Source: Authors' estimates.

Table A.2: Impact of Rainfall on Crop Production (Pulses): Dynamic Panel Estimates

	(1)	(2)	(3)	(4)
	Pulses	**Arhar**	**Moong**	**Urad**
ln Production(lagged)	0.797***	1.021***	0.894***	0.809***
	(0.041)	(0.069)	(0.084)	(0.078)
ln Rainfall(Actual)	0.245***	-0.162	0.004	0.292*
	(0.094)	(0.152)	(0.179)	(0.168)
ln Rainfall*Deficient	-0.026**	-0.050***	-0.046**	0.027**
	(0.011)	(0.016)	(0.020)	(0.011)
ln Rainfall*Excess	-0.010	0.005	-0.005	-0.026*
	(0.011)	(0.017)	(0.022)	(0.015)
ln AreaSown	0.480***	0.205***	0.314***	0.323***
	(0.043)	(0.069)	(0.084)	(0.064)
District FE	Yes	Yes	Yes	Yes
State*Year FE	Yes	Yes	Yes	Yes
N	2741.00	2078.00	1447.00	2149.00

Notes: Standard errors are clustered at the district * year level.
* p<0.10, ** p<0.05, *** p<0.01
Source: Authors' estimates.

Table A.3: Impact of Rainfall on Crop Production (Oilseeds): Dynamic Panel Estimates

	(1)	(2)	(3)	(4)
	Oilseeds	**Soyabean**	**Groundnut**	**Sunflower**
ln Production(lagged)	0.940***	0.768***	1.157***	0.721***
	(0.042)	(0.054)	(0.094)	(0.050)
ln Rainfall(Actual)	0.118	0.362***	-0.292	0.534***
	(0.083)	(0.114)	(0.188)	(0.104)
ln Rainfall*Deficient	-0.020*	-0.002	-0.085**	-0.071***
	(0.012)	(0.012)	(0.041)	(0.024)
ln Rainfall*Excess	-0.014	-0.050***	0.057*	0.005
	(0.010)	(0.012)	(0.031)	(0.022)
ln AreaSown	0.183***	0.340***	-0.073	0.614***
	(0.051)	(0.059)	(0.099)	(0.068)
District FE	Yes	Yes	Yes	Yes
State*Year FE	Yes	Yes	Yes	Yes
N	2426.00	966.00	1564.00	238.00

Notes: Standard errors are clustered at the district * year level.
* p<0.10, ** p<0.05, *** p<0.01
Source: Authors' estimates.

Changing Dynamics of India's Remittances – Insights from the Sixth Round of India's Remittances Survey

by Dhirendra Gajbhiye, Sujata Kundu, Alisha George, Omkar Vinherkar, Yusra Anees and Jithin Baby ^

This article analyses results of the sixth round of India's remittances survey conducted for 2023-24. Key findings suggest that the share of advanced economies in India's inward remittances has risen, surpassing the share of Gulf economies, reflecting a shift in migration pattern towards skilled Indian diaspora. Maharashtra, followed by Kerala and Tamil Nadu continue to be the dominant recipient states. The cost of sending remittances to India is lower than the global average cost, driven by digitalisation but remains higher than the SDG target of 3 per cent for US$ 200. Furthermore, fintech companies offer affordable cross-border remittance services, fostering competition among different remittance service providers.

Introduction

India's remittances have more than doubled from US$ 55.6 billion in 2010-11 to US$ 118.7 billion in 2023-24. While financing around half of India's merchandise trade deficit[1], net remittance receipts have been an important absorber of external shocks during this period. Moreover, India's remittance receipts have generally remained higher than India's gross inward foreign direct investment (FDI) flows, thus establishing their importance as a stable source of external financing. Furthermore, following a pandemic-induced contraction of 3.6 per cent during 2020-21, remittances to India in the post pandemic period (2021-22 to 2023-24) recorded a resurgence with an average annual growth of 14.3 per cent.

Against this backdrop, this article presents the results of the sixth round of the survey on India's inward remittances conducted for 2023-24.[2] It captures various dimensions of inward remittances to India – country-wise source of remittances, state-wise destination of remittances, transaction-wise size of remittances, prevalent modes of transmission, cost of sending remittances to India and share of remittances transmitted through the digital modes *vis-à-vis* cash. The survey results are based on responses received from 30 authorised dealer (AD) banks (covering around 99 per cent of the total value of inward remittances reported under family maintenance and savings[3]). The survey also covered two major Money Transfer Operators (MTOs)[4] and two fintech companies[5] operating in cross-border remittances business. This round of survey has the following enhancements over the previous rounds to improve the coverage and data quality: (i) expanding the coverage of source countries; (ii) classifying the coverage of Rupee Drawing Arrangement (RDA) into exchange houses/MTOs and fintechs; (iii) expanding the range and number of remittance size brackets; (iv)

^ The authors are from the Department of Economic and Policy Research of the Reserve Bank of India (RBI). The views expressed in this article are those of the authors and do not represent the views of the RBI. The authors are grateful to Shri Muneesh Kapur and Dr. Sunil Kumar for their valuable comments and guidance. The authors are also grateful for the inputs received from the Authorized Persons and Remittances Division and the External Payments Division of the Foreign Exchange Department, Central Office, RBI.

[1] India's net remittance receipts have financed around 42.0 per cent of the merchandise trade deficit on an annual average basis during 2010-11 to 2023-24 (barring the pandemic year of 2020-21).

[2] The fifth round of the survey conducted for 2020-21 was published in the July 2022 issue of the RBI Monthly Bulletin. Earlier survey results were published in November 2006, April 2010, December 2013 and November 2018 issues of the RBI Monthly Bulletin.

[3] Pertaining to Foreign Exchange Transactions Electronic Reporting System (FETERS).

[4] Western Union Financial Services Inc. and MoneyGram Payment Systems Inc.

[5] Remitly Inc. and Remitbee.

covering cash/digital transfers undertaken by MTOs; and v) including two leading fintech companies providing cross-border remittance services to assess the growing impact of digitalisation.

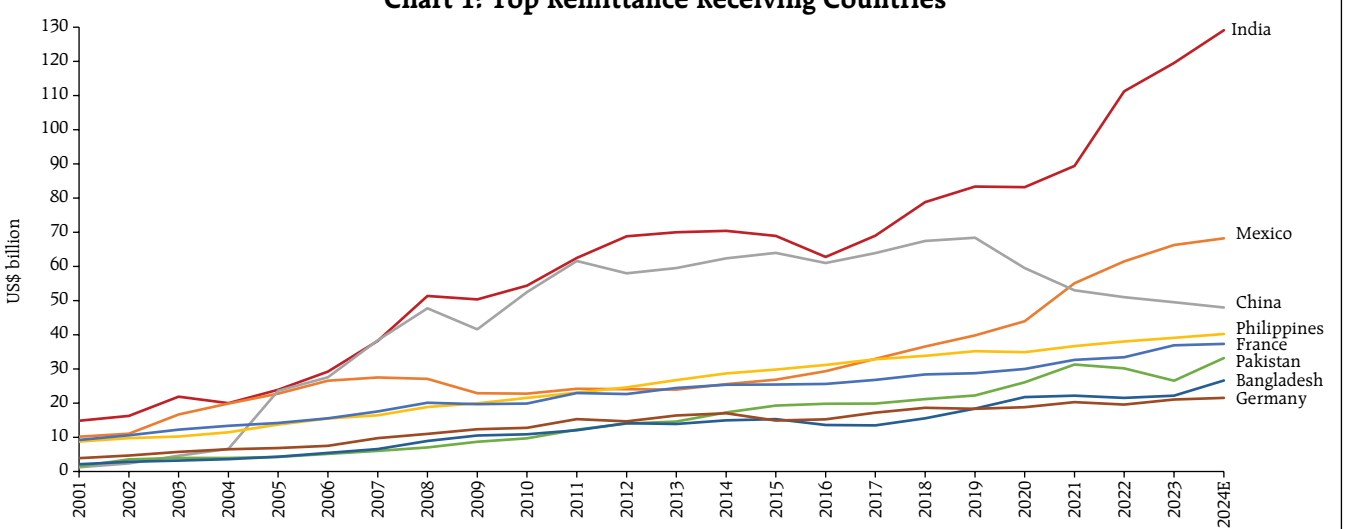
Globally, inward remittances represent the flow of cross-border household income, arising from the temporary or permanent movement of people to foreign economies. Moreover, as defined by the International Monetary Fund (IMF, 2009), two items in an economy's balance of payments (BoP) statistics relate to remittances – compensation of employees under primary income account and personal transfers under secondary income account. In the case of India, personal transfers, primarily comprising inward remittances for family maintenance from Indian workers residing abroad, and local withdrawals from non-resident deposit accounts, form the major portion of cross-border inward remittances.

The rest of the article is organised as follows – Section II presents the stylised facts on global and India's inward remittances. Section III describes the different channels of receiving remittances in India. Section IV details the findings of the sixth round of the survey. Section V concludes the article with some policy suggestions.

II. Stylised Facts

World remittances are estimated to reach US$ 905 billion in 2024, with low-and middle-income countries (LMICs) receiving more than 75 per cent (around US$ 685 billion) [Ratha *et al.*, 2024]. According to the World Bank, India has continued to remain the top recipient of remittances since 2008, with its share in world remittances rising from around 11 per cent in 2001 to about 14 per cent in 2024. Going forward, remittances to India are likely to remain elevated and are projected to increase to around US$ 160 billion in 2029 (RBI, 2024).[6] Other major recipients of remittances include Mexico, China, Philippines, France, Pakistan, and Bangladesh (Chart 1). While the flow of remittances to India remained resilient *albeit* with some year-on-year contraction during the pandemic year 2020-21, its resurgence since then has

Chart 1: Top Remittance Receiving Countries



Note: 1. E – Estimate.
2. In the case of cross-country comparison, remittances have been considered to be the sum of compensation of employees under primary income account and personal transfers under secondary income account in BoP statistics.

Source: RBI; and World Bank.

[6] Chapter 4 - Open Economy Digitalisation: Challenges and Opportunities, Report on Currency and Finance (RCF), 2023-24, RBI.

been driven by a recovery in employment conditions in the advanced economies (AEs).

India's stock of international migrants has tripled from 6.6 million in 1990 to 18.5 million in 2024, with its share in global migrants rising from 4.3 per cent to over 6 per cent during the same period.[7] Indian migrants in the Gulf Cooperation Council (GCC) countries account for around half of the total Indian migrants in the world (Chart 2a). Following the competitive edge and the penetration of Indian IT services overseas at the start of the century, the number of skilled emigrants to AEs, especially to the US, has risen significantly (Chakravorty *et al.*, 2016; Khanna and Morales, 2023). Thus, besides GCC countries, AEs have also emerged as a major source of inward remittances to India over the years, reflecting the changing dynamics of India's diaspora. As India's working age population is expected to rise till 2048, India would be the world's leading supplier of labour (RBI, 2024). Thus, the continuous upskilling and reskilling of the workforce would be crucial to leverage its potential.

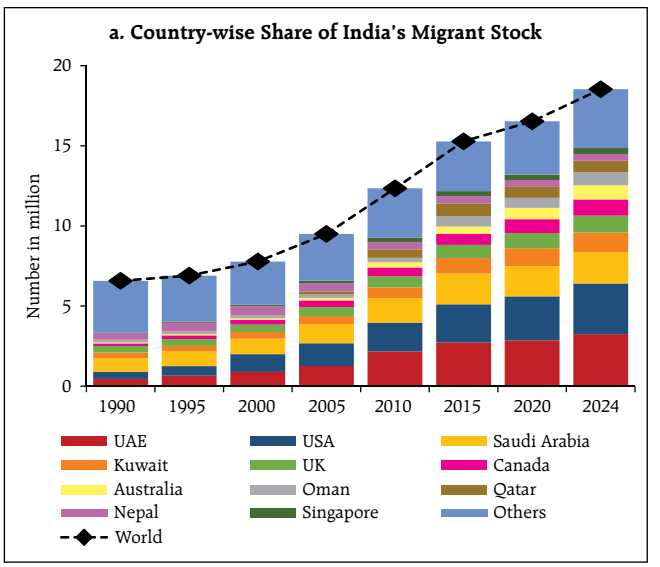
As a ratio to GDP, India's remittances have hovered around 3 per cent of GDP since 2000, while in the case of China, the ratio has remained below 0.3 per cent (Chart 2b). Philippines, on the other hand, has received much higher remittances as a percentage of GDP during the last ten years.

With the increased flow of labour across countries, remittances have become a major source of foreign earnings for many developing countries, especially for small countries where they comprise a large share of their GDP (Ratha *et al.*, 2024). As indicated earlier, in the case of India, inward remittances fund a significant per cent of the merchandise trade deficit (Chart 3a). Further, inward remittances have generally surpassed India's gross inward FDI since the beginning of the century, and has therefore, emerged as a stable source of foreign earnings (Chart 3b).

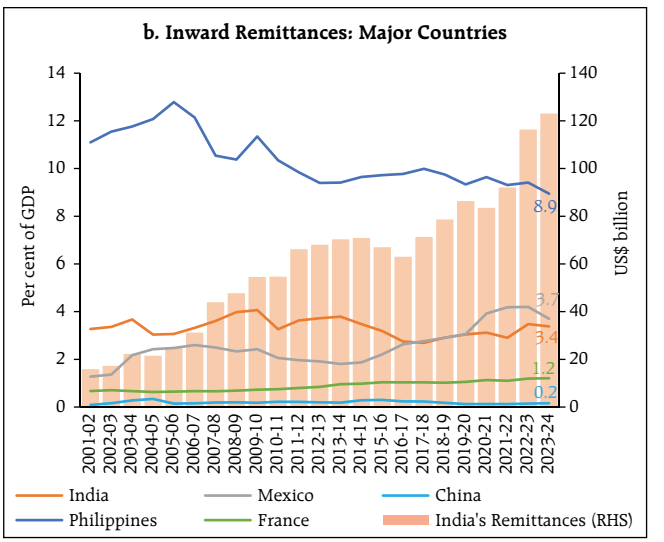
Cost of Remittances

The cost of a remittance transaction includes two elements – the fees charged at any stage of the transaction and the exchange rate conversion from

Chart 2: India's Migrant Stock and Inward Remittances



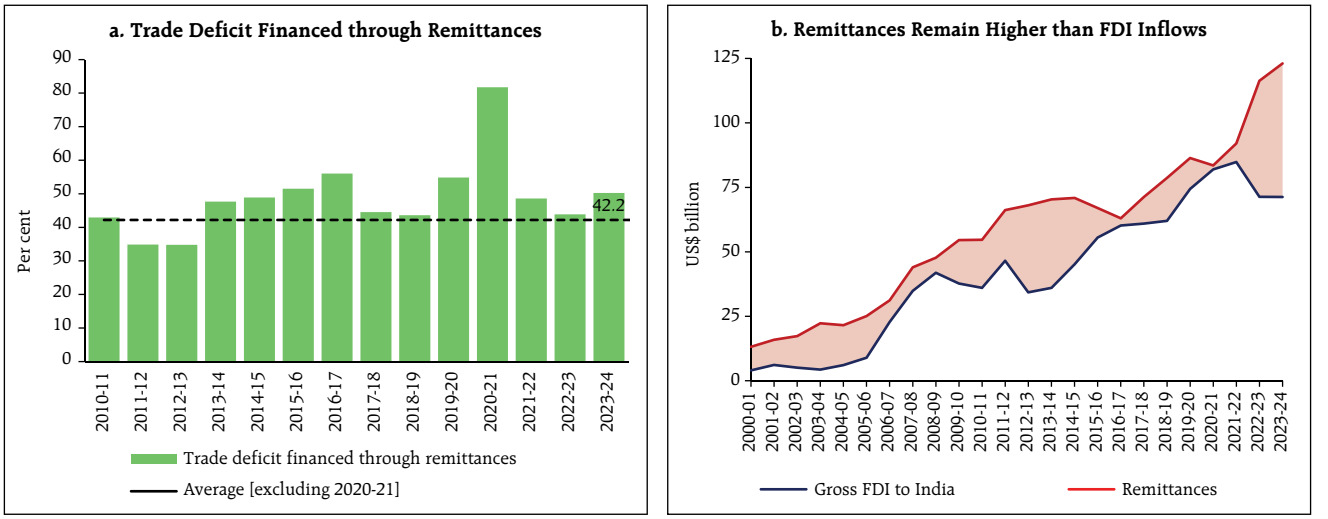
Source: United Nations Department of Economic and Social Affairs (UNDESA).



Note: Data for all countries, excluding India, are on a calendar year basis.
Source: RBI; and World Bank.

[7] Department of Economic and Social Affairs Database (2024), United Nations.

Chart 3: India's Inward Remittances *vis-à-vis* Merchandise Trade Deficit and Foreign Direct Investment Flows



Source: RBI.

local currency to the currency of the recipient country (World Bank and BIS, 2007). Given the fact that inward remittances are largely for family maintenance, the cost of sending cross-border remittances has socio-economic impact and therefore, reducing this cost has been a crucial policy agenda globally for over a decade. The World Bank's Remittance Prices Worldwide (RPW) database monitors more than 350 corridors to measure the progress towards the sustainable development goals (SDG) target.[8] The global average cost of sending US$ 200 witnessed a secular decline from 9.67 per cent in Q1:2009 to 6.65 per cent in Q2:2024, however, it continues to be higher than both the initial G20 objective (5 per cent) and SDG target (3 per cent) [World Bank, 2024]. However, in the case of India, it is pertinent to mention that with a 4.9 per cent cost of sending US$ 200 in 2023, the cost of sending remittances to India is not only below the world average cost, but has also met the initial G20 target[9] reflecting the changing dynamics of remittance costs. Moreover, India continues to remain one of the low-cost countries for sending US$ 200.

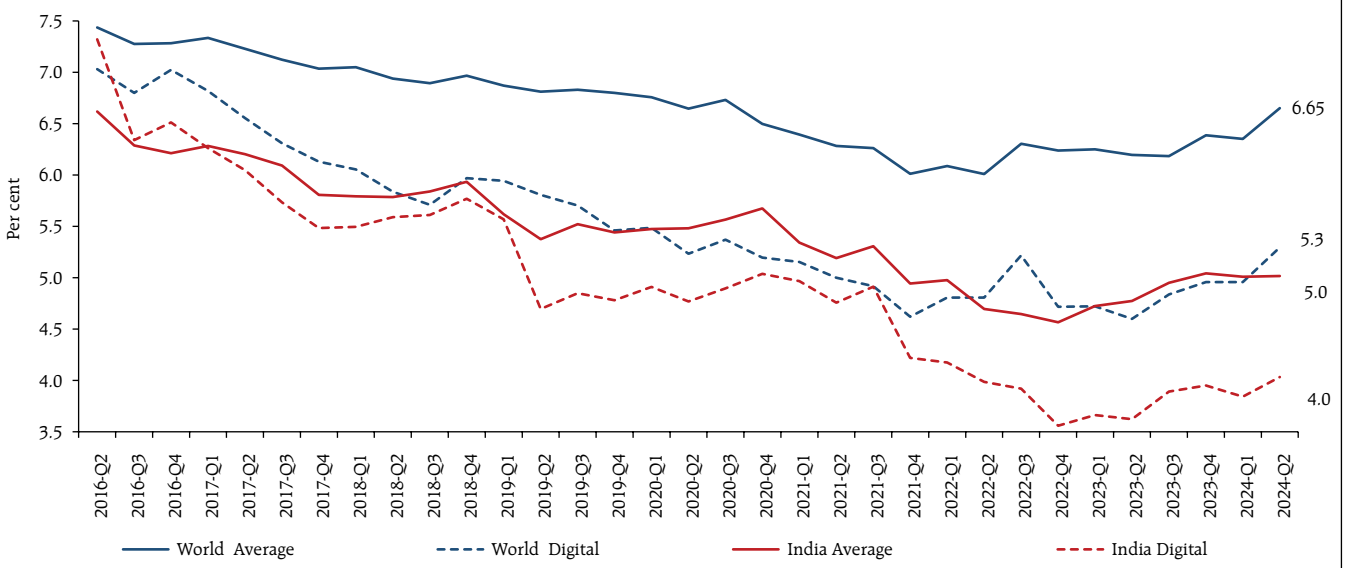
Cash and Digital Transfers

The World Bank definition of digital remittances encompasses all such transactions wherein the payment is made online or in self-assisted manner and received into a transaction account (bank or non-bank deposit taking institution), mobile money or e-money account. The proliferation of digital remittances has been rapid over the past few years especially after the COVID-19 pandemic. The MTOs have further enabled digital funding and disbursement. Mobile money-enabled international remittance transfers gained traction during the pandemic period globally, and the Global System for Mobile Communications Association (GSMA) estimated that their value more than doubled from US$ 8 billion in 2019 to US$ 17

[8] The importance of low cost of remittances was reinforced with its inclusion in the SDG with a target to bring down the average cost of migrant remittances to 3 per cent or less by 2030, and to eliminate corridors where cost is higher than 5 per cent. The targeted indicator is the global average cost of sending US$ 200 (or equivalent in local sending currency) expressed as a per cent of amount sent.

[9] The average cost of sending US$ 200 to India for Q1:2024 and Q2:2024 stood at 5.01 per cent and 5.02 per cent, respectively (World Bank, 2024).

Chart 4: Cost of Sending Inward Remittances (US$ 200) - World *vis-à-vis* India



Sources: RPW Database (2024), World Bank.

billion in 2021, and stood at US$ 29 billion in 2023 (GSMA, 2024). Globally, it has been observed that the average cost of receiving US$ 200 through remtechs[10] is significantly lower than that of the banks (RBI, 2024). The cost of digital remittance transfers, which accounted for 30 per cent of the total transactions in the RPW database during Q2:2024, was 5.3 per cent, 136 basis points lower than the global average cost (Chart 4). Similarly, the cost of digital remittances in India was 4.0 per cent as of Q2:2024, around 100 basis points lower than the average cost of 5.0 per cent for India, reflecting the rising role of digitalisation in optimising remittance costs. This underscores the importance of leveraging digital public infrastructure in home and host countries. India has been at the forefront of the efforts to enhance cross-border payments with multiple bilateral arrangements for interlinking India's Unified Payments Interface (UPI) with other fast payment systems (FPSs) across the world and its participation in Project Nexus to facilitate multilateral linkage of FPSs of four ASEAN Nations (Malaysia, Philippines, Singapore and Thailand) [RBI, 2025].

III. Different Channels of Transmitting Inward Remittances to India

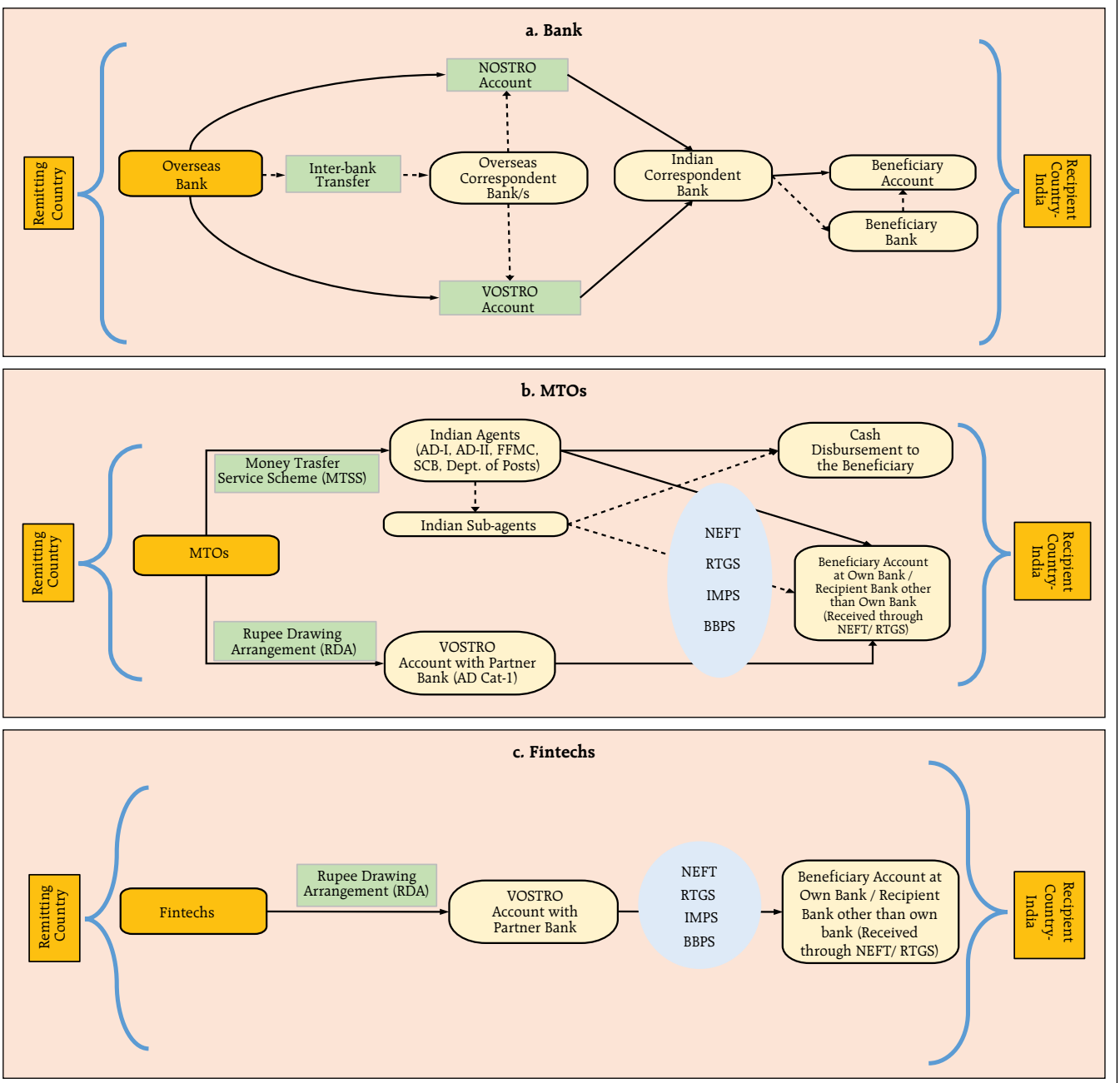
The remitting country can transfer remittances to India through three channels - (i) overseas banks; (ii) MTOs; and (iii) fintechs (also known as remtechs or digital only MTOs[11]) [Chart 5]. The overseas banks may either maintain a NOSTRO account of the correspondent bank or open a VOSTRO account with their partner bank in India. The instruction to transfer remittances may be sent using the Society for Worldwide Interbank Financial Telecommunication (SWIFT) messaging service or the bank's own application programming interface (API). The funds received by the correspondent bank / partner bank can be further sent to the beneficiaries' account *via* various payment arrangements such as National Electronic

[10] Fintechs specialising in transferring remittances.

[11] A digital-only MTO refers to money transfer operators that send remittances through digital channels (World Bank, 2024).

Funds Transfer (NEFT), Immediate Payment Service (IMPS) and Bharat Bill Payment System (BBPS). MTOs transfer funds to India *via* two schemes – Money Transfer Service Scheme (MTSS)[12] and Rupee Drawing

Chart 5: Channels of Transmitting Inward Remittances to India – A Schematic Representation



Note: 1. AD-I and AD-II: Authorised Dealer- Category I and Category II, respectively; FFMC: Full-fledged Money Changer and SCB: Scheduled Commercial Bank.
2. For inter-bank transfers, NOSTRO/ VOSTRO relationships are applicable in the case of different banking jurisdictions. Domestic payment settlements may be used in the case of same banking jurisdictions.
3. Eligible non-resident entities permitted to enter into RDA as Exchange Houses (RBI, 2022b).
4. The schematic representation does not include transmission channel as envisaged under interlinking of FPSs.

Source: RBI staff illustration.

[12] MTSS permits only personal remittances, with a cap of US$ 2,500 per transaction and 30 remittances per beneficiary annually. Transfers for trade, property purchases, investments, or charitable donations are prohibited. It involves tie-ups between overseas money transfer companies (overseas principals) and domestic entities (Indian agents) authorised by the RBI under the Payment and Settlement Systems Act, 2007.

Arrangement (RDA)[13], while fintechs[14] can operate only through the RDA channel.[15]

IV. India's Inward Remittances: Insights from the Sixth Round of the Survey

The sixth round of the survey on inward remittances[16] for 2023-24 covered 30 AD banks (capturing around 99 per cent of the value of total inward remittances reported under the purpose of family maintenance and savings), two major MTOs, and two fintech companies operating in cross-border remittance business. With the growing digitalisation of remittances, technological innovation is changing the landscape of how remittances are transferred or received.

Source of Remittances

The results of the survey highlight the gradual shift in dominance of India's remittances from the GCC countries to the AEs particularly the US, the UK, Singapore, Canada and Australia which together accounted for more than half of the remittances in 2023-24. The share of the US in India's total remittances remained largest, rising to 27.7 per cent in 2023-24 from 23.4 per cent in 2020-21 (Table 1), reflecting a steady recovery in the US job market. In the US labour force, the percentage rise in the foreign-born workers stood at 6.3 per cent in 2022 from 0.7 per cent in the pre-pandemic year of 2019; however, in the case of native-born workers the share largely remained unchanged at 1.0 per cent.[17] Furthermore, 78 per cent Indian migrants in the US are employed in high earning sectors such as management, business, science, and arts occupations (Greene and Batalova,

Table 1: Source Country-wise Share in India's Inward Remittances (Banks)

Source Country	2016-17	2020-21	2023-24
United States	22.9	23.4	27.7
United Arab Emirates	26.9	18.0	19.2
United Kingdom	3.0	6.8	10.8
Saudi Arabia	11.6	5.1	6.7
Singapore	5.5	2.4	6.6
Kuwait	6.5	1.5	3.9
Qatar	–	5.7	4.1
Canada	3.0	1.6	3.8
Oman	1.0	0.6	2.5
Australia	–	–	2.3
Bahrain	0.7	0.7	1.5
Hong Kong	-	-	1.3
Germany	0.6	0.6	1.0
Belgium	0.9	1.1	0.4
Malaysia	–	–	0.6
New Zealand	2.3	0.7	0.5
Ireland	–	–	0.4
Netherlands	–	–	0.5
Japan	–	–	0.3
Switzerland	–	–	0.4
France	0.1	0.1	0.2
Italy	–	–	0.1
Indonesia	–	–	0.2
Thailand	–	–	0.2
South Africa	–	–	0.1
Spain	–	–	0.1
Others	14.8	31.6	4.4

Note: For 2023-24, shares are derived based on two major components of inward remittances – (a) transfers for family maintenance and savings; (b) local withdrawals from non-resident deposit accounts.
Source: Data for 2016-17 and 2020-21 are sourced from the RBI's remittance surveys - RBI (2018) and RBI (2022a), respectively.

[13] RDA enables cross-border remittances through tie-ups between AD Category-I banks in India and non-resident exchange houses through their Rupee Vostro accounts in Gulf countries, Hong Kong, Singapore, Malaysia (for Malaysia only under Speed Remittance Procedure) and all other countries which are Financial Action Task Force (FATF) compliant (only under Speed Remittance Procedure). While such non-resident exchange houses could be fintechs too as per their classification in the remitting jurisdiction, fintechs as a specific category is not envisaged in the RDA scheme. RDA allows private remittances between individuals, with limited provisions for trade-related transactions capped at ₹15 lakh. Unlike MTSS, RDA has no limit on the amount or frequency of personal remittances and is exclusively for inward transfers.

[14] Fintechs that hold valid licenses issued by the local monetary/ supervisory authority concerned and have necessary authority/license to transact currency exchange/money transfer business.

[15] More recently, the RBI is also exploring the interlinking of FPSs. For example, the UPI-PayNow linkage is a pertinent example of how Singapore and India have leveraged the open banking APIs to allow account holders of participating financial institutions in the respective countries to conduct seamless transactions using their individual FPSs. (RBI, 2024).

[16] The details of the compilation methodology of inward remittances of top remittance receiving emerging economies along with their remittances surveys, if any, are mentioned in Annex Table A1.

[17] Bureau of Labor Statistics, US Department of Labor. Foreign-Born Workers: Labor Force Characteristics.

2024).[18] The share of inward remittances received from the UK has also increased to 10.8 per cent in 2023-24 from 6.8 per cent in 2020-21, which may be attributed to the 'Migration and Mobility Partnership' (May 2021) between India and the UK.[19] The number of Indians emigrating to the UK every year has more than tripled from 76,000 as on end-2020 to about 250,000 as on end-2023, of which about half were for work-related purpose.[20] There was also a notable uptick in the share of remittances from Singapore (6.6 per cent), Canada (3.8 per cent) and Australia (2.3 per cent) in 2023-24, when compared especially with the pandemic year (2020-21). In recent years, Canada continues to remain a preferred destination for Indian students pursuing higher education abroad. As on January 2024, out of a total of 13.4 lakh Indian students studying abroad, the share of students studying in Canada stood at 32.0 per cent followed by the US (25.3 per cent), the UK (13.9 per cent) and Australia (9.2 per cent).[21]

United Arab Emirates (UAE) maintained its position as the second largest source of India's remittances, with its share increasing from 18 per cent in 2020-21 to 19.2 per cent in 2023-24. UAE is the largest hub for Indian migrant workers engaged primarily in blue-collar jobs which are dominated by the construction industry followed by healthcare, hospitality, and tourism industry.[22] This is in stark contrast to the US where Indian migrants are mainly employed in the white-collar jobs, thus explaining the higher remittances received from US despite the lower number of migrants as compared to the UAE. The GCC countries (UAE, Saudi Arabia, Kuwait, Qatar, Oman and Bahrain) together contributed 38 per cent

Table 2: State-wise/UT-wise Share of India's Inward Remittances 2023-24

Destination State	2016-17	2020-21	2023-24
Maharashtra	16.7	35.2	20.5
Kerala	19.0	10.2	19.7
Tamil Nadu	8.0	9.7	10.4
Telangana	–	–	8.1
Karnataka	15.0	5.2	7.7
Andhra Pradesh	4.0	4.4	4.4
Delhi NCT	5.9	9.3	4.3
Punjab	1.7	3.0	4.2
Gujarat	2.1	3.2	3.9
Uttar Pradesh	3.1	3.7	3.0
Haryana	0.8	1.2	2.9
West Bengal	2.7	1.4	2.3
Rajasthan	1.2	1.2	1.5
Bihar	1.3	1.4	1.3
Uttarakhand	0.2	0.7	1.1
Goa	0.8	1.1	0.9
Madhya Pradesh	0.4	0.5	0.9
Odisha	0.4	0.5	0.6
Jharkhand	0.3	1.9	0.4
Jammu and Kashmir	0.2	0.3	0.4
Chandigarh	0.2	0.4	0.4
Puducherry	0.2	0.2	0.3
Himachal Pradesh	0.1	0.1	0.2
Assam	0.1	0.2	0.2
Chhattisgarh	0.1	0.3	0.1
Dadra & Nagar Haveli and Daman & Diu	–	0.1	0.08
Tripura	–	1.1	0.04
Manipur	–	–	0.03
Meghalaya	–	–	0.03
Mizoram	–	–	0.03
Ladakh	–	–	0.02
Sikkim	–	–	0.02
Nagaland	–	–	0.02
Lakshwadeep	–	–	0.01
Arunachal Pradesh	–	0.1	0.01
Andaman & Nicobar	–	–	0.01

Note: (i) For 2023-24, shares are derived based on two major components of inward remittances – (a) transfers for family maintenance and savings; (b) local withdrawals from non-resident deposit accounts.

(ii) In 2023-24, the data for all States/UTs are presented which were otherwise classified under the 'Others' category in previous rounds of the survey.

Source: Data for 2016-17 and 2020-21 are sourced from RBI (2018) and RBI (2022a), respectively.

[18] https://datausa.io/profile/soc/management-business-science-arts-occupations

[19] https://www.gov.uk/government/news/uk-india-agree-partnership-to-boost-work-visas-for-indian-nationals

[20] https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/bulletins/longterminternationalmigrationprovisional/yearendingdecember2023

[21] Data available from the Lok Sabha Unstarred Question No-894, Ministry of External Affairs, Government of India.

[22] https://www.news18.com/business/indian-migrant-workers-middle-east-uae-saudi-arabia-oman-kuwait-jobs-8945228.html

to total remittances received by India in 2023-24, higher than its share recorded in 2020-21 (COVID-19 pandemic year).[23] Lower remittances from the GCC region during the pandemic year was due to the mass return of contractual migrant workers from the region back to India.

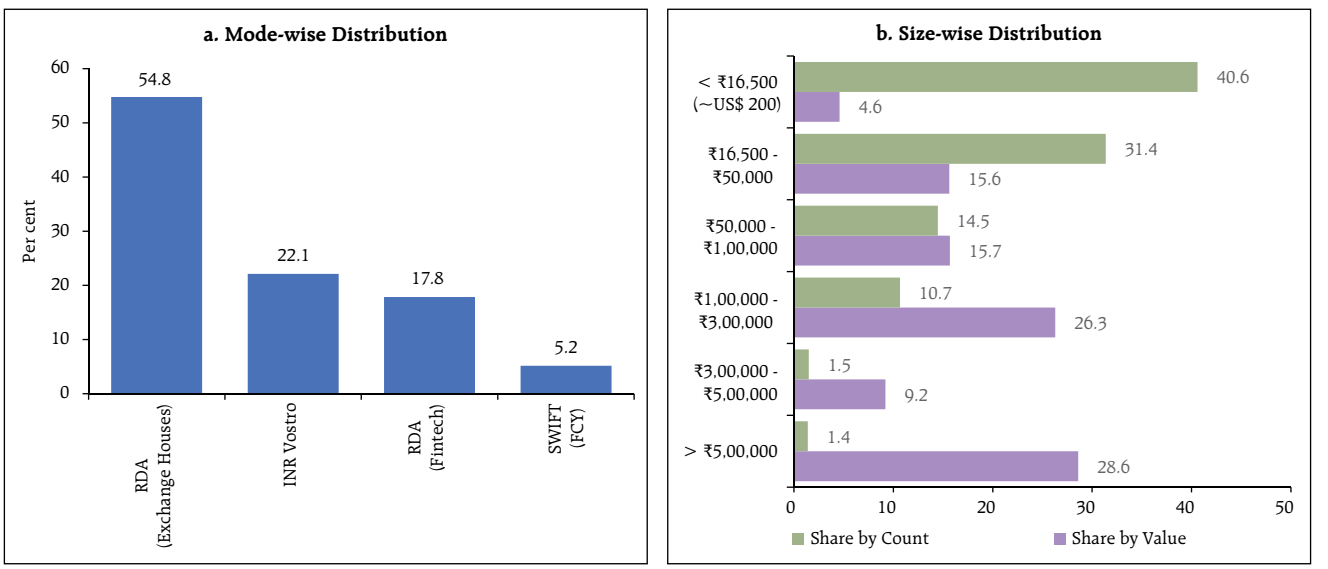
Destination of Remittances

Turning to State-wise/Union Territory (UT)-wise destinations of remittances in 2023-24, Maharashtra received the largest share of 20.5 per cent, *albeit* lower than 2020-21 (35.2 per cent) [Table 2].[24] Kerala followed closely with its share increasing to 19.7 per cent from about 10 per cent during the same period, followed by Tamil Nadu (10.4 per cent), Telangana (8.1 per cent), and Karnataka (7.7 per cent). Maharashtra, Telangana and Punjab accounted for the largest number of Indian students migrating abroad for education and staying back for employment opportunities, which is reflected in the increasing share of these states in India's inward remittances. The Kerala Migration Survey highlights that there was a considerable rise in the number of students among the total emigrants from Kerala in 2023, reflecting a rising trend of younger individuals migrating overseas, especially for educational purpose (Rajan, 2024). Additionally, the report suggests that there has been a significant shift in student migration patterns, with a growing preference for non-GCC countries as destinations. Tamil Nadu and Karnataka also send a large number of students and workers abroad.

Remittances: Mode and Size

As described in Section III, banks may receive remittances through different modes, among which the RDA channel has the highest share, followed by direct Vostro transfers by overseas banks and the RDA channel operated by fintechs (Chart 6a). The choice

Chart 6: Mode-wise and Size-wise Distribution of India's Inward Remittances during 2023-24



Source: RBI.

[23] Considering the common set of source countries across the surveys, AEs comprised 51.0 per cent of India's inward remittances, while the share of GCC countries stood at 33.7 per cent in 2023-24.

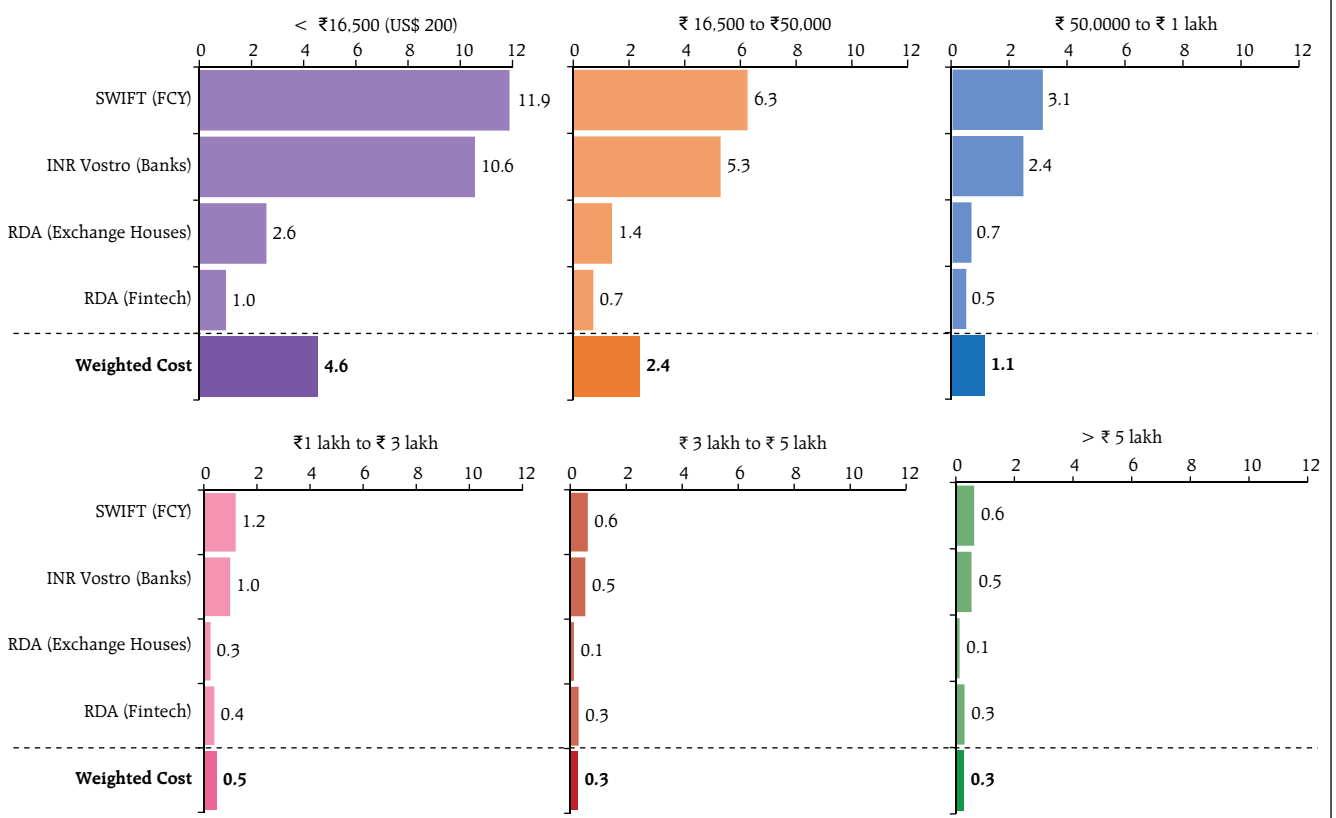
[24] Owing to the pandemic-led reverse migration to India, the share of the traditional remittance recipient states largely dependent on the GCC countries, such as Kerala, Tamil Nadu and Karnataka, almost halved in 2020-21, thereby causing a distributional shift in the state-wise share in remittances (RBI, 2022a).

of channel used by the sender depends on various factors including the penetration of formal banking channels, charges and speed of delivery (IMF, 2009). Another important factor is the implicit cost in the form of difference in exchange rates. In terms of value (size) of transactions, remittances amounting to more than ₹5 lakhs had the highest share of around 29 per cent in 2023-24 (Chart 6b). Conversely, the highest number of transactions were in the category of remittances size of less than US$ 200 and the share of larger remittances followed a decreasing trend thereon. Since the highest number of remittances are sent in lower values, the SDG goal of bringing down the average cost of sending US$ 200 to 3 per cent or less by 2030 is critical.

Cost of Inward Remittance

As per the latest round of survey, it is found that the cost varies widely depending on the mode of transfer and the size of remittance (Chart 7). The weighted average cost of inward remittance to India stood at 4.6 per cent for transaction size of less than US$ 200 and 2.4 per cent for US$ 200-500 transaction brackets. The weighted average cost of remittance for amounts less than US$ 200 was highest amongst all the transaction brackets recorded in the survey. Furthermore, within the brackets, the cost was highest for foreign currency transactions through correspondent banks' Nostro accounts, followed by INR transactions through Vostro accounts. The cost of remittances was the lowest through RDA (MTOs and

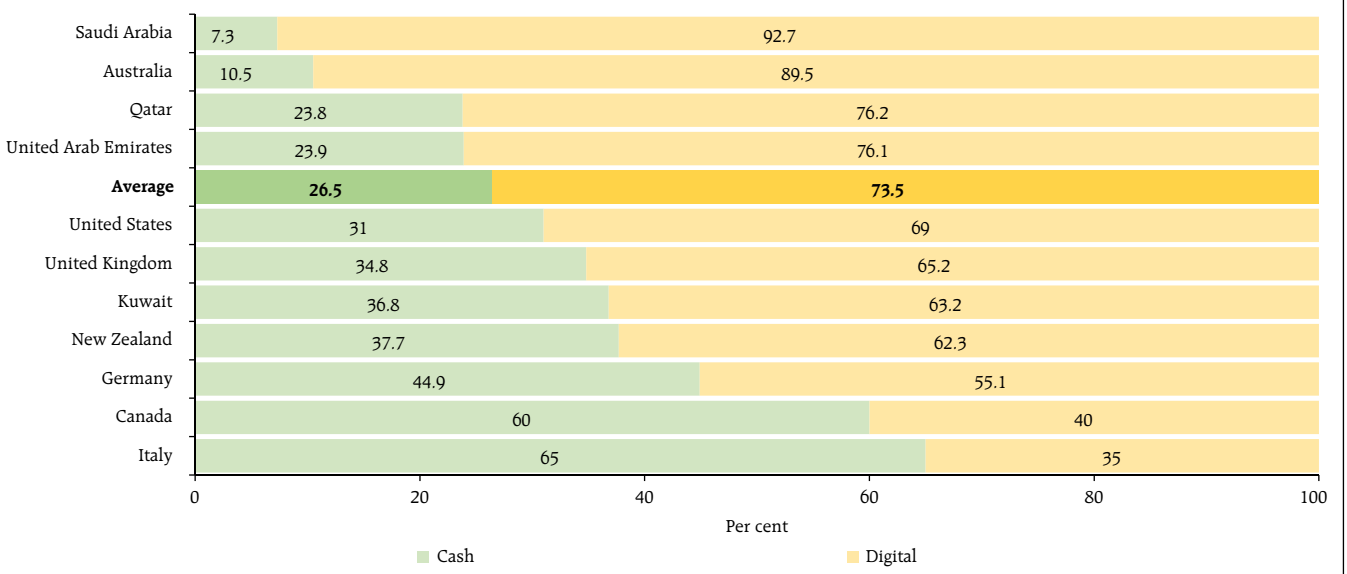
Chart 7: Mode-wise and Size-wise Total Cost of India's Inward Remittances



Note: 1. Figures represent total cost as per cent of the total value of transactions.
2. Weighted average is calculated using the shares of mode of transfer as weights for each bracket.

Source: RBI.

Chart 8: Cash-Digital Share of Remittances (MTOs)



Source: RBI.

fintechs), irrespective of the size of the remittance. The weighted average cost of remittance drops as the amount of remittance increases on account of lower fixed costs as a ratio to total cost. Fintech companies are found to offer affordable cross-border remittance services, thereby fostering competition among different remittance service providers.

The current survey round also included the share of digital remittance transactions of MTOs, and it was found that, on an average, 73.5 per cent of total remittances were received through the digital mode during 2023-24 (Chart 8). The highest digital share of transactions was observed for remittances received from Saudi Arabia (92.7 per cent), followed by Australia (89.5 per cent), Qatar (76.2 per cent) and UAE (76.1 per cent).

IV. Conclusion

India's remittances displayed a resurgence during the post-pandemic period, thereby providing a stable source of external financing. The results of the sixth round of the survey on India's remittances for 2023-24 highlight the changing dynamics of India's diaspora from the GCC countries as the pre-dominant source economies to the advanced economies. State-wise data revealed that Maharashtra remained the largest recipient, followed by Kerala, Tamil Nadu, Telangana and Karnataka. Furthermore, the RDA channel dominated the mode of transfer for banks. The cost of sending remittances varies widely depending on the mode of transfer and the transaction amount. It was found that the weighted average cost of sending remittances for amounts less than US$ 200 was the highest amongst all the transaction brackets recorded in the survey. Importantly, on an average, 73.5 per cent of total remittances received by the MTOs were through digital mode during 2023-24. This, alongside the lower cost of digital remittances *vis-à-vis* cash remittances, reflects the significance of the rising penetration of digital infrastructure globally in the remittance landscape. Moreover, the interlinking of cross-border fast payment systems may increase the ease and efficiency of such transactions. Although India's performance with regard to the reduction in the cost of sending remittances is encouraging, achieving the SDG target would require an integrated

policy focus on leveraging India's digital public infrastructure. Additionally, in order to leverage the potential of the changing dynamics of Indian diaspora, there is a need for a continuous up-skilling and re-skilling of the growing Indian workforce.

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Annex

Annex Table A1: Compilation Methodology of Inward Remittances - Top Six Remittances Receiving Emerging Economies

Sl. No	Country	Compilation Methodology of Inward Remittances	Latest Remittance Survey/Details
1	India	Remittance figures for compilation of Balance of Payments are captured by the Bank through its International Transaction Reporting System (ITRS) called Foreign Exchange Transaction reporting System (FETERS).	https://www.rbi.org.in/scripts/BS_ViewBulletin.aspx?Id=21141
2	Mexico	Banco de México in 2012 has made it mandatory for the firms (financial institutions and money transfer entities) involved in the business of personal money transfers to submit a set of monthly reports for the compilation of data on remittances.	https://www.banxico.org.mx/SieInternet/consultarDirectorioInternetAction.do?accion=consultarCuadro&idCuadro=CE81&locale=en
3	China	The State Administration of Foreign Exchange (SAFE) compiles China's remittances as a part of the balance of payments data based on the methodology and standards outlined in the Balance of Payments Manual (BPM) of the International Monetary Fund (IMF).	https://dsbb.imf.org/sdds/dqaf-base/country/CHN/category/BOP00
4	Philippines	Remittances which are part of Secondary Income in the Balance of Payments is captured through ITRS and complemented by the Cross-border Transactions Survey (CBTS).	https://psa.gov.ph/statistics/survey/labor-and-employment/survey-overseas-filipinos
5	Pakistan	The Statistics and Data Warehouse Department of the State Bank of Pakistan (SBP) compiles and disseminates data on Workers' Remittances on a monthly basis. The data are collected from banks, exchange companies and Pakistan Post Office.	https://www.sbp.org.pk/departments/stats/AdvanceNotice.pdf https://easydata.sbp.org.pk/apex/f?p=10:211:18595026959410::NO:RP:P211_DATASET_TYPE_CODE,P211_PAGE_ID:TS_GP_BOP_WR_M,210&cs=1F743692A58FE97CD791417EFAE146503
6	Bangladesh	Remittance figures for compilation of Balance of Payments are captured by the Bank through its International Transaction Reporting System (ITRS).	https://www.bb.org.bd/en/index.php/econdata/wageremitance

Source: RBI; IMF SDSS; and central bank websites.

Decoupling Economic Growth from Emissions: A LMDI Decomposition Analysis

by Madhuresh Kumar, Shobhit Goel, Manu Sharma and Muskan Garg ^

This article analyses the factors driving India's CO2 emissions growth from 2012 to 2022 using LMDI decomposition. During this time, energy-related CO2 emissions increased by 706 million tons. The main contributor was economic growth (+1073 Mt), with a smaller impact from the change in fuel mix of the economy (+78 Mt). However, gains in energy efficiency (-399 Mt), structural changes (-15 Mt), and improvements in emission intensity of electricity due to increased use of renewables (-30 Mt) helped curb emissions. India's energy efficiency improved by 1.9 percent annually, exceeding the global average. Additionally, India's growth decoupled from emissions, with a decoupling elasticity of 0.59, comparable to other lower-middle-income countries.

Introduction

The mounting body of scientific evidence on climate change has catalysed a global discourse reshaping policies, economies, and societies. The mitigating actions against climate change have accelerated in recent years with the world pivoting away from fossil fuels. More than 140 countries covering 90 per cent of global emissions have pledged net zero along with thousands of companies, cities and financial institutions (United Nations, 2023). Notwithstanding, the long-term goals of reaching net zero, the countries update their nationally determined contributions (NDCs) every five years delineating their climate action plans in the short to medium term horizon. Central to most NDCs is reducing emissions intensity, aiming to decouple economic growth from carbon emissions without compromising growth.

The falling prices of renewables have sparked a hope that this transition towards net zero could turn out to be much less painful than previously imagined. Yet, despite the fervent focus on renewable deployment; the solar, wind and other renewables (excluding large hydro and nuclear) currently account for a mere 2.1 per cent of India's total primary energy consumption (Energy Statistics, 2024). Outside of the power sector, the direct use of renewables is virtually non-existent, and the indirect use through green hydrogen, particularly in manufacturing, remains in its infancy and will require time to mature. While the deployment of renewables will play a crucial role going forward, global economies have historically achieved decoupling by improving energy efficiency and shifting from dirtier fuels like coal to cleaner alternatives such as natural gas. Additionally, many countries, especially advanced economies, have transitioned from emission-intensive manufacturing to less emission-intensive service sectors.

In its updated NDC, India has committed to significantly decouple emission from growth by reducing the emission intensity of its GDP by 45 percent by 2030, from 2005 level (UNFCCC, 2022). Against this background, this paper aims to examine the drivers of emission growth in India during the last decade and ascertain the decoupling elasticity that India achieved during the period. Structural Decomposition Analysis (SDA) and Index Decomposition Analysis (IDA) are two widely used methods for examining the factors influencing CO2 emissions. SDA, which is rooted in input-output analysis, breaks down changes in emissions into contributions from various economic sectors, allowing for a detailed examination of the structural changes in the economy (Miller and Blair,

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2009). IDA, on the other hand, uses index number theory to decompose changes in emissions into factors such as energy intensity, economic activity, and energy mix. It is particularly valued for its simplicity and ease of application in policy analysis (Ang and Zhang, 2000). In this paper, the increase in CO2 emissions during 2012-22 has been decomposed using logarithmic mean divisia index (LMDI) which is a part of the IDA method of decomposition. Emissions growth has been decomposed into five factors *viz.*, output effect, structural effect, energy intensity effect, fuel mix effect and emission factor effect. Although global research on LMDI decomposition has expanded significantly, and India has been included in numerous cross-country studies, there remains a notable lack of literature specifically focused on LMDI decomposition for the Indian economy. It is important to approach the results of cross-country studies cautiously, as the data used are often not fully homogeneous or directly comparable, and many lack access to more granular, detailed datasets. This paper tries to fill this gap in literature using the latest data sourced from energy statistics of India published by MoSPI.

The rest of the article is organised in five sections. Section II covers the literature review while data and methodology are described in section III. Sections IV and V discuss the empirical results and decoupling analysis, respectively. Concluding remarks are set out in the last section.

II. Literature Review

Index decomposition analysis (IDA) is a critical tool in energy and environmental economics, used to decompose changes in energy consumption, carbon emissions, or other aggregate indicators into their contributing factors. Over the years, various methods have been developed and refined to improve the accuracy and reliability of these decompositions. The earliest methods for decomposition analysis, including methods like the Laspeyres index, were limited by their inability to avoid residual terms, which could complicate interpretation and lead to inaccuracies (Ang and Zhang, 2000). The refined Laspeyres index approaches, such as the Fisher ideal index and the Shapley and Sun approach, provide complete decomposition, resulting in more accurate final outcomes. The Logarithmic Mean Divisia Index (LMDI) and the Arithmetic Mean Divisia Index (AMDI) are key methods within the Divisia index family. Ang (2004) outlines four tests from index number theory—factor-reversal, time-reversal, proportionality, and aggregation— to evaluate the suitability of a decomposition method. Among these, the factor-reversal test is most critical when selecting an appropriate method. Table 1 presents the properties of various decomposition methods.

The factor-reversal test ensures a complete decomposition with no unexplained residue. The time-reversal test indicates that reversing the

Table 1: Properties of IDA methods

IDA method	Factor reversal test	Time reversal test	Proportionality test	Aggregation test	Zero value robust	Negative value robust
Laspeyres	No	No	Yes	Yes	Yes	Yes
Modified Fisher decomposition	Yes	Yes	Yes	No	Yes	Yes
Shapley and Sun	Yes	Yes	Yes	Yes	Yes	Yes
AMDI	No	Yes	Yes	No	No	No
LMDI	Yes	Yes	No	Yes	Yes	No

Note: The LMDI referenced here pertains to the Logarithmic Mean Divisia Method I (LMDI I). A related variant, LMDI II, features a slightly more complex weighting scheme compared to LMDI I (Ang *et al.*, 2003).
Source: Ang (2004).

time period should yield reciprocal results. The proportionality test implies that if the determinants change by a factor of λ, the index value will also change by λ. Consistency in aggregation means that results obtained for sub-groups can be aggregated to a higher level consistently (Vartia 1976, Balk 1996, Ang 2000). Additionally, the zero-value robust test (Ang and Choi, 1997) and the negative-value robust test (Chung and Rhee, 2001) are used to determine the most appropriate decomposition method.

LMDI decomposition passes most tests except the negative value robust test. However, in our dataset there are no negative values and hence LMDI has been used in this study for decomposition. The number of terms in the Shapley/Sun method formulation increases significantly as the number of factors grows, making it difficult to implement. Consequently, LMDI is more commonly used for decomposition if there are more than three factors (Ang, 2004).

The literature on LMDI decomposition has proliferated after the seminal paper by Ang *et al.*, (1998) which laid the groundwork for the application of the LMDI method in energy-related carbon emissions analysis. The authors applied the LMDI method to decompose changes in carbon emissions in Singapore and found that energy intensity was the main driver of carbon emissions reduction, while economic activity contributed to the increase in emissions. Several other studies also observed this general trend with improvements in energy intensity being the primary driver of emission reduction (Zhang *et al.*, (2009); Wang *et al.*, (2005); Li *et al.*, (2018); Matisoff and Edwards (2014); Raupach *et al.*, (2007); Nag and Parikh (2000); Vazhayil and Balasubramanian (2019); Azevedo *et al.*, (2011); Achour and Belloumi (2016); Román-Collado and Colinet (2018)).

India has been featured in several cross-country studies (Andreoni and Galmarini (2016); Shuang *et al.* (2016); Kangyin *et al.* (2019); Henriques and Kander (2010); Inglesi-Lotz (2018); Kanitkar *et al.* (2015); Lima *et al.* (2017); Marcucci and Fragkos (2015); Solaymani (2019) and Voigt *et al.* (2014)). However, caution is needed when interpreting the findings of these studies, as the data used are not fully homogeneous or directly comparable. Moreover, many of these studies lack access to more detailed, granular data.

Surprisingly studies pertaining to Indian economy using LMDI decomposition analysis is very few. G. Ortega-Ruiz *et al.*, (2018) using LMDI have found that the economic growth of India has been the dominating driving force contributing to the increase in CO2 emissions, while the improvement in energy intensity has been the major factor in reducing the emissions. The time period of the study spans from 1990-2015 and uses data from International Energy Agency, the United States Environmental Protection Agency and the International Agency for Atomic Energy. Das and Roy (2020) also used LMDI technique to decompose the drivers of CO2 emissions for Indian economy using energy data from energy statistics published by MoSPI. Their study spanned from 1990-2013. However, during that period the renewables deployment in India was in its infancy and therefore couldn't capture the effects of rapid renewables deployment which picked up post 2015 in India.

III. Data and Methodology

III.1 Data

For the purpose of present study, the economy has been broadly classified into primary sector (agriculture, forestry and fishing), secondary sector (Mining and quarrying, manufacturing, Electricity, gas, water supply and other utility services and construction) and the rest of the economic activities have been clubbed as Tertiary sector. MoSPI publishes energy statistics of India annually which provides fuel wise sectoral final energy consumption. The sectoral emissions have been estimated from energy

Table 2: Emission Factor of Fuels

Fuel	Emission Factor (Kg of CO2 per Kwh)
Coal	0.323
Oil Products	0.25
Natural Gas	0.2106
Electricity	0.741 (2012); 0.739 (2017); 0.713 (2022)

Source: US EPA; and Our world in data.

consumption using emission intensities of fuel[1]. Emission factor per type of fuel is taken from the US EPA (2019) which is assumed to represent long-term average values (Table 2). The emission factor for grid electricity has been obtained from our world in data. CO2 emissions are calculated using the simple formula:

$$C_{ij}^{t} = EC_{ij}^{t}\, XEF_{j}^{t} \qquad (3.1)$$

where, C_{ij}^{t} = CO2 emissions for fuel type *j* and sector i in time period *t*,

EC_{ij}^{t} = Energy consumption for fuel type *j* and sector *i* in time period *t*,

EF_{j}^{t} = Emission factor for fuel type *j* in time period *t*.

The timeframe for this study spans from 2012-13 to 2022-23. The focus is solely on energy-related emissions, with process emissions being excluded from consideration.

III.2 Methodology

According to energy identity analysis, CO2 emissions can be attributed to five factors: the output effect, structural effect, energy intensity effect, fuel-mix effect, and emission-factor effect (Ang, 2003) (Table 3).

The overall emissions are further broken down by economic sectors and fuel types. The decomposition identity can be represented as follows:

[1] This approach ensures that scope 1 and scope 2 emissions of the sectors are accounted for while avoiding the risks of double counting. Scope 3 emissions are excluded to prevent the occurrence of multiple counting of emissions.

Table 3: Decomposition of CO2 Emissions

Decomposed component	Description
Output effect	The variation in energy-related CO2 emissions attributable to changes in the scale of economic activity.
Structural effect	The change in emissions explained by shifts in the structure of the economy, specifically the change in the individual sector's share of contribution in overall GDP.
Energy intensity effect	The change in emissions due to variations in energy intensity within individual sectors is defined as the energy consumed per unit of GVA output. This change reflects enhancements in production and consumption efficiency or the adoption of more advanced capital equipment.
Fuel mix effect	The change in emissions that can be attributed to the changes in the fuel composition.
Emission factor effect	The change in emissions that can be attributed to the changes in the emission factor or carbon intensity of fuel.

$$C = \sum_{ij} C_{ij} = \sum_{ij} Q \frac{Q_i}{Q} \frac{E_i}{Q_i} \frac{E_{ij}}{E_i} \frac{C_{ij}}{E_{ij}} = \sum_{ij} Q S_i I_i M_{ij} U_{ij} \quad (3.2)$$

Where C is the total CO_2 emissions and C_{ij} is the CO_2 emissions emanating from consumption of fuel j by sector i; $Q(=\sum_i Q_i)$ denotes the output effect; $S_i(=\frac{Q_i}{Q})$ is the structural effect; $I_i(=\frac{E_i}{Q_i})$ is the energy intensity effect; E_{ij} is the energy consumption from fuel j in sector i, where $E_i = \sum_j E_{ij}$ is the total energy consumed by sector i from all fuels; the fuel-mix variable is given by $M_{ij}(=\frac{E_{ij}}{E_j})$ and the CO_2 emission factor by $U_{ij}(=\frac{C_{ij}}{E_{ij}})$.

$$\Delta C_{tot} = C_T - C_0 = \Delta C_{out} + \Delta C_{str} + \Delta C_{int} + \Delta C_{mix} + \Delta C_{emf} \quad (3.3)$$

The subscripts indicate output effect, structural effect, energy intensity effect, fuel mix effect and emission factor effect. The LMDI formulae for these effects are:

$$\Delta C_{out} = \sum_{ij} \frac{C_{ij}^{T} - C_{ij}^{o}}{lnC_{ij}^{T} - lnC_{ij}^{o}} \ln\left(\frac{Q^{T}}{Q^{o}}\right) \qquad (3.4)$$

$$\Delta C_{str} = \sum_{ij} \frac{C_{ij}^{T} - C_{ij}^{o}}{lnC_{ij}^{T} - lnC_{ij}^{o}} \ln\left(\frac{S_i^{T}}{S_i^{o}}\right) \qquad (3.5)$$

$$\Delta C_{int} = \sum_{ij} \frac{C_{ij}^{T} - C_{ij}^{o}}{lnC_{ij}^{T} - lnC_{ij}^{o}} \ln\left(\frac{I_i^{T}}{I_i^{o}}\right) \qquad (3.6)$$

$$\Delta C_{mix} = \sum_{ij} \frac{C_{ij}^{T} - C_{ij}^{o}}{lnC_{ij}^{T} - lnC_{ij}^{o}} \ln\left(\frac{M_{ij}^{T}}{M_{ij}^{O}}\right) \quad (3.7)$$

$$\Delta C_{emf} = \sum_{ij} \frac{C_{ij}^{T} - C_{ij}^{o}}{lnC_{ij}^{T} - lnC_{ij}^{o}} \ln\left(\frac{U_{ij}^{T}}{U_{ij}^{O}}\right) \quad (3.8)$$

In the calculations, it is assumed that the emission factors of fuels do not change, except for electricity. Since electricity is a secondary energy source, its emission factor changes over time due to variations in its fuel mix and technical parameters.

Since LMDI method relies on logarithmic functions, it cannot handle zero values. However, this issue can be resolved by substituting very small positive numbers (*e.g.*, 10^-20) for zeros. Ang and Choi (1997) have demonstrated that LMDI tends to converge when small positive numbers replace zero values in the dataset. Another limitation of LMDI is its inability to process negative values. However, in our dataset, no negative values are present.

III.3 Decoupling Analysis

Tapio decoupling analysis is a method used to assess how changes in economic performance and environmental impact are related, focusing particularly on the decoupling of economic growth from carbon emissions. It helps to understand if an economy is growing while simultaneously reducing its environmental footprint. In the context of present study, we are interested in income elasticity of CO2 emissions which is defined as follows:

Elasticity = (Percentage Change in CO2 Emissions)/ (Percentage Change in GDP) (3.9)

Based on the elasticity coefficient, the Tapio model categorises the relationship into nine states (Table 4).

IV. Empirical Results

Total energy related emissions increased by 706 million tons during the period 2012-13 to 2022-23. The LMDI decomposition shows that total change in CO2 emission can be decomposed into a positive output effect (+1073 mt) and fuel mix effect (+78 mt), which is partially offset by a negative energy intensity effect (–399 mt)[2]. The structural (–15 mt) and emission factor effects (-30 mt) were slightly negative (Chart 1a). We break down the 10-year long period into two equal sub-periods 2012-17 and 2017-22 to investigate the individual effects. We observe similar trends that output effect is driving the emissions while improvements in energy intensity has been mitigating the rise in emissions (Chart 1b and c).

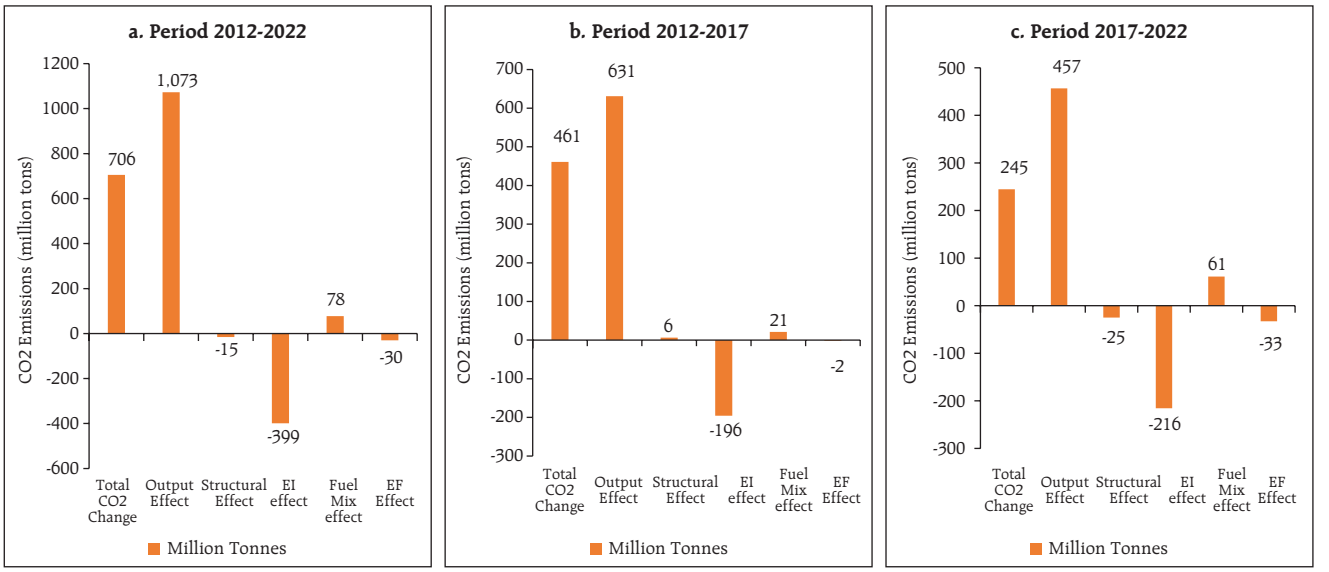
We have also decomposed the sector wise changes in CO2 emissions into four factors viz., Output effect,

Table 4: Tapio Decoupling Analysis

Percentage Change in CO2 Emissions	Percentage Change in GDP	Decoupling Elasticity (e)	Decoupling Status
< 0	> 0	e < 0	SD (Strong Decoupling)
> 0	> 0	e = 0	WD (Weak Decoupling)
< 0	< 0	0.8 ≤ e < 1.2	RC (Recessive Coupling)
> 0	> 0	e > 1.2	END (Expansive Negative Decoupling)
> 0	< 0	e < 0	SND (Strong Negative Decoupling)
< 0	< 0	0 < e ≤ 0.8	WND (Weak Negative Decoupling)
> 0	> 0	0.8 ≤ e < 1	ED (Expansive Decoupling)
> 0	> 0	e = 1	EC (Expansive Coupling)
< 0	< 0	e > 1.2	RD (Recessive Decoupling)

[2] The results of the LMDI decomposition could be interpreted as ceteris paribus effects.

Chart 1: Additive Decomposition of CO2 Emissions



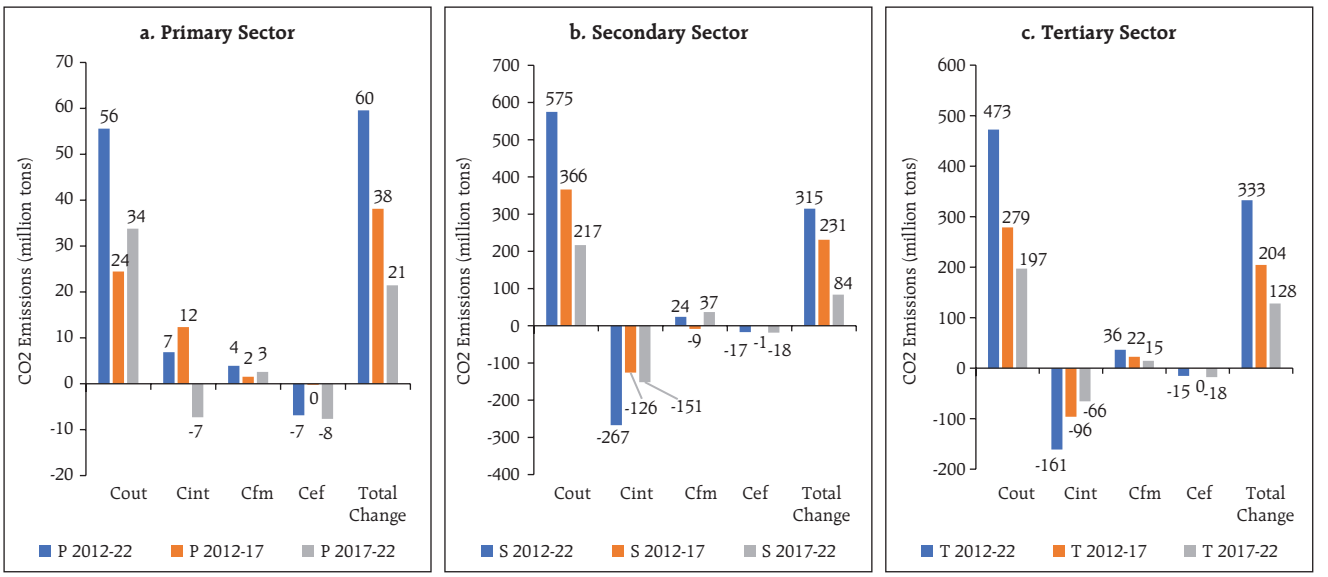
Source: Authors' calculations.

energy intensity effect, fuel mix and emission factor effects to investigate the dynamics within the sectors (Chart 2).

IV.1 Output Effect

The Output effect denotes the increase in energy-related CO2 emissions attributable to changes in the scale of economic activity. The findings of this study align with the vast body of research, which indicates that output growth plays a significant role in driving increased energy consumption and CO2 emissions. In the 2012-2017 period, the absolute magnitude of output effect was larger than the latter period as India grew much more rapidly during this period as compared to the second half which was plagued by COVID-19. At the sectoral level, only agriculture saw

Chart 2: Sector wise Decomposition of CO2 Emissions



Source: Authors' calculations.

a rise in its output effect in the 2017-22 period as it was less affected by COVID-19 than the rest of the sectors.

IV.2 Structural Effect

The share of the tertiary sector has grown during this period, reducing the shares of both primary and secondary sectors. While the decline in the emission-intensive secondary sector would typically lead to a negative structural effect, this was offset by the decreasing share of the primary sector, which is the least emission-intensive. As a result, only a minor negative structural effect was observed overall.

IV.3 Energy Intensity Effect

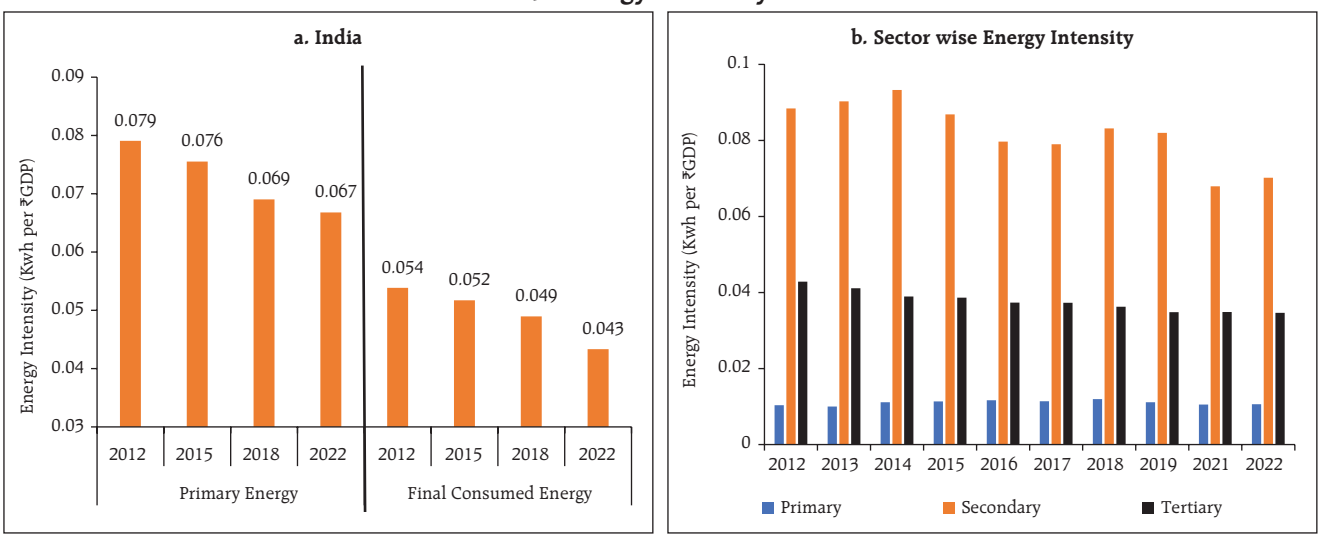
The energy intensity (EI) effect alone contributed to a reduction of 399 MT of CO2 emissions, accounting for 56 percent of the total 706 MT emissions between 2012 and 2022. This effect was particularly significant during the 2017-22 period, where it resulted in a reduction of 216 MT, representing 88 percent of the total emissions during that time, compared to 42 percent in the previous period. During 2012-22, India's energy efficiency improved with a CAGR of 1.67 percent for primary energy[3] and 2.15 percent for final energy consumption which is broadly in line with its long-term average of 1.9 per cent (Chart 3). The energy efficiency of India has been improving at a higher rate than that of the world average during 2000-23 (Table 5).

Table 5: Trend of Energy Efficiency

Region	Improvement in Energy Efficiency [2000 - 2023 (%/year)]	Region	Improvement in Energy Efficiency [2000 - 2023 (%/year)]
World	1.35	Germany	2.38
OECD	1.91	United States	2.10
G7	1.91	China	1.81
BRICS	1.62	India	1.86
European Union	2.13	Australia	1.92
North America	2.00	Vietnam	0.37
Latin America	0.67	United Kingdom	3.22

Sources: World bank; Ourworldindata; and Authors' calculations.

Chart 3: Energy Intensity Trends



Note: GDP for various years is reported at 2011-12 prices.
Sources: Authors' Calculation use; and Energy Statistics of India.

[3] Primary energy refers to energy sources as they are found in nature before undergoing any conversion or transformation. A significant portion of primary energy is being lost in transformation and distribution. Final consumed energy is the energy that has been delivered to end users for consumption. It represents the energy that is actually used in homes, businesses, and industries.

IV.4 Fuel mix effect

India's final energy consumption is shifting towards electricity, reducing the share of coal (Table 6)[4]. Although oil and natural gas have seen slight increases, electricity, which is more emission-intensive than other fuels, has led to a net positive change in the fuel mix effect.

The situation with electricity warrants closer examination. Electrification in transport and industry is often hailed as a major step forward in the fight against climate change. Electricity is indeed a highly efficient form of delivered energy compared to other fossil fuels. However, in countries that rely heavily on coal or lignite to power their thermal plants, CO2 emissions per kilowatt-hour (kWh) are significantly higher. In India, for example, 1 kWh of grid electricity consumed emits 0.741 kg of CO2, which is three times more polluting than other energy sources. In a traditional coal-fired power plant, about 70-73 percent of the energy from coal is lost in the conversion process from chemical to heat to electrical energy. Additionally, 21 percent of the remaining electricity is lost during transmission and distribution. However, the higher efficiency of electricity somewhat offsets its higher emission factor.

IV.5 Emission Factor Effect

The negative emission factor effect is primarily driven by the deployment of renewables, with additional contributions from improvements in the efficiency of existing thermal power plants. The large-scale deployment of renewables is a relatively recent development, which explains why the emission factor effect during 2012-2017 was minimal and only became significant in the latter half of the study period. Currently, solar and wind accounted for just 2.1 percent of the total primary energy supply. However, going ahead, renewables are expected to play a much larger role as their falling costs increasingly displace fossil fuels, not only in the power sector but also through the indirect electrification of industries *via* green hydrogen. India has already auctioned a substantial amount of green hydrogen capacity under the National Green Hydrogen Mission, which is expected to come online soon.

Table 6: Fuel Mix of India*

Fuel	2012	2017	2022
Coal	36.0	33.4	30.6
Oil	40.1	41.5	41.2
NG	6.0	5.7	6.4
Electricity	17.9	19.4	21.9

*: Based on final energy consumption.
Sources: Energy Statistics of India; and Authors' calculations.

[4] The falling share of coal in final consumed energy should not be construed as the share of coal has fallen in the primary energy supply. In India, bulk of the electricity is being produced by coal power and the share of renewables is picking up only recently.

V. Decoupling Analysis

Tapio decoupling analysis indicates that India has achieved weak decoupling during this period, with a decoupling elasticity of 0.59, which is similar to that of other lower-middle-income countries (LMICs). Rapid urbanisation and the demand for infrastructure development, including roads, buildings, and energy facilities, increases energy consumption and emissions, leading to higher elasticity. However, upper middle income and high-income countries have achieved much lower elasticities during the period (Table 7).

The primary sector initially demonstrated a worsening relationship between economic growth

Table 7: Country Group Wise Decoupling Elasticity

Entity	$\frac{\delta C_i^t}{C_i^0}$	$\frac{\delta Q_i^t}{Q_i^0}$	Decoupling Elasticity
India	0.43	0.73	0.59
High-income countries	-0.08	0.20	-0.41
Lower-middle-income countries	0.34	0.58	0.59
Upper-middle-income countries	0.12	0.54	0.23
Low-Income Countries	0.17	0.29	0.61
World	0.06	0.31	0.20

Sources: World Bank; Ourworldindata; and Authors' calculations.

Table 8: Decoupling of CO2 emissions from Growth

Sector	Period	$\frac{\delta C_i^t}{C_i^0}$	$\frac{\delta Q_i^t}{Q_i^0}$	Decoupling Elasticity	Score
Overall GDP	2012-22	0.43	0.73	0.59	WD
	2012-17	0.34	0.21	1.65	END
Primary Sector	2017-22	0.14	0.23	0.61	WD
	2012-22	0.53	0.49	1.09	EC
	2012-17	0.23	0.39	0.59	WD
Secondary Sector	2017-22	0.07	0.18	0.37	WD
	2012-22	0.31	0.64	0.49	WD
	2012-17	0.34	0.49	0.69	WD
Tertiary Sector	2017-22	0.16	0.26	0.62	WD
	2012-22	0.55	0.87	0.64	WD

Sources: MoSPI; and Authors' calculations.

and carbon emissions. While this trend improved in the second half of the period, emissions continued to outpace GDP growth. The secondary sector experienced the most rapid decoupling, followed by the tertiary sector. Moreover, India's overall carbon intensity decreased at an accelerated pace during the latter part of the study, corresponding to increased renewable energy adoption and growing environmental consciousness among businesses and the public (Table 8).

VI. Conclusion

This paper has analysed the factors driving emission growth in India over the last decade (2012-2022) using LMDI decomposition. During this period, energy-related CO2 emissions rose by 706 million tons. The primary driver of this increase was the output effect (+1073 Mt), with a minor contribution from the fuel mix effect (+78 Mt), which was influenced by the growing share of electricity—a highly emission-intensive source in India. However, the energy intensity effect (-399 Mt) helped to moderate the rise in emissions, reflecting a 1.9 percent annual improvement in energy efficiency. This rate of improvement is consistent with India's long-term trend from 2000-2023 and exceeds the global average for the same period.

The structural effect (-15 Mt) was slightly negative, as the GDP share of the less emission-intensive tertiary sector increased at the expense of the more emission-intensive secondary sector. However, a decline in the low-emission primary sector's share limited the potential emission reductions from structural changes. Additionally, the emission factor effect (-30 Mt) was also negative, driven by the reduction in emission intensity of grid electricity due to the growing share of renewable energy in the grid. It's worth noting that this effect was minimal from 2012-2017 but became more significant in the latter half of the decade.

Despite the emphasis on renewables, solar and wind accounted for only 2.1 per cent of total primary energy in 2022-23. However, going ahead, the emission factor effect is expected to play a more prominent role as renewables increasingly replace fossil fuels and green hydrogen usage expands in industries.

India achieved a decoupling elasticity of 0.59 during this period, a figure that aligns with the decoupling elasticities observed in other lower-middle-income countries. While upper-middle and high-income countries have achieved much lower decoupling elasticities, India's figure is commendable given its development needs which includes

rapid urbanisation and significant investments in infrastructure and construction.

India has made considerable strides in decoupling emissions from economic growth, but further efforts are essential to accelerate progress toward achieving net zero. To this end, India should intensify its focus on expanding renewable energy. Solar and wind power tariffs are now lower than those for new coal power plants, dispelling earlier concerns about the high costs of renewables (CEA, 2024 and CERC, 2024). The levelised cost of electricity (LCOE) for solar PV combined with battery storage[5] in India is already more competitive than that of new coal-fired plants[6] and is expected to continue decreasing (IEA, 2024). In addition to scaling up renewable energy, maintaining a strong emphasis on improving energy efficiency is crucial, as it remains a powerful tool for reducing carbon emissions.

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[5] Solar PV with storage = solar PV installation paired with four-hour duration battery storage, scaled to 20 per cent of the output capacity of the solar PV.

[6] The tariffs discovered in the renewable energy round the clock (RE-RTC) tenders have remained highly competitive against the conventional sources, with recent bid tariffs in the range of ₹4.0-4.5 per unit (Mint, 2023).

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Market Access and IMF Arrangements: Evidence from Across the Globe

by Shruti Joshi and PSS Vidyasagar ^

The article analyses the availing of International Monetary Fund (IMF) loans by various countries and establishes a link between market access and dependence on IMF's funds over the period 2000-2023. It is found that Emerging Market and Developing Economies (EMDEs) continue to rely on IMF resources for managing liquidity pressures on account of their limited access to international financial markets and alternate sources of funding.

Introduction

Since the mid-1980s, the world has witnessed a remarkable acceleration in global trade and financial integration on the back of increased cross-border trade, investments, and financial flows (IMF, 2016). While this increased integration offers benefits such as growth, innovations, and economies of scale, it also presents risks (Villaverde and Maza, 2011; Ahmad, 2019). The higher interconnectedness can lead to cross-border contagion of financial stress and periods of amplified distress in vulnerable countries through sudden swings in financial flows, which can lead to a significant change in countries' gross and net foreign asset positions worldwide (Giglio, *et al.,* 2016; Lane and Milesi-Ferretti, 2006) and/or through trade disruptions, which can reduce financial flows to countries (Attinasi, *et al.,* 2022). In the post-pandemic years, a confluence of factors such as geo-economic fragmentation, elevated global debt, and heightened macroeconomic policy uncertainty poses balance-of-payments (BoP) risks for countries with weak buffers and high foreign currency debt (GFSR, 2024).

IMF, as the centre of Global Financial Safety Net (GFSN), acts as the lender of last resort for countries with acute balance of payments pressures due to its near universal membership and resource size. Existing studies have found that countries that obtain IMF assistance usually have weak macroeconomic fundamentals, such as higher current account deficit, low international reserves, high fiscal deficit, low per capita income, and exchange rate imbalances, and their vulnerability can be exacerbated by global factors such as global business cycle, a steep rise in international commodity prices and world interest rates (Bird and Orne, 1986; Cornelieus, 1987; Joyce, 1992; Bird and Rowlands, 2002; Joyce, 2004; Elekdag, 2008). However, with increased access to international capital markets and alternative funding sources such as swap lines and Regional Financing Arrangements (RFAs), countries now have more options to address external funding needs. Moreover, the non-concessional IMF loans are offered at market-determined rates, which, although potentially lower than market rates[1], may still be unappealing because of the performance conditions and the associated stigma (Kawai, 2010).

It is observed, however, that a host of emerging market and developing economies (EMDEs) continue to rely on IMF loan arrangements, also known as IMF Programs. For instance, in the last decade (during 2014-2024), EMDEs entered a total of 329 IMF arrangements, of which, nearly half of the programs/ arrangements were non-concessional loans. On the other hand, advanced economies (AEs) have not entered the IMF arrangements since 2014. In the new millennium, while the dependence of EMDEs on IMF loans has been greater, several fast growing large EMDEs, including India and China did not have to take recourse to the IMF loans. In fact, these economies had been the primary drivers of global growth, barring the COVID period, where nearly the entire globe recorded negative growth. The fast growing EMs continue to be global drivers of growth and are characterized

^ The authors are from the International Department, Reserve Bank of India. The views presented in this article are those of the authors and do not represent the views of the Reserve Bank of India.

[1] https://www.imf.org/en/About/Factsheets/IMF-Lending.

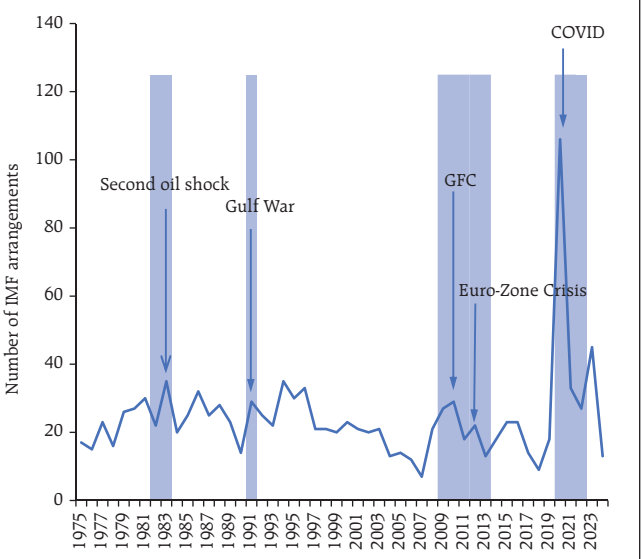
by relatively robust macroeconomic fundamentals. In fact, several large and fast growing EMDEs had turned creditors to the IMF in the aftermath of the Global Financial Crisis (GFC). In the backdrop, this article aims at identifying the key factors driving the recourse to IMF programs by countries. The remainder of the article is organised as follows: Section II gives an overview of access of IMF loans across regions; Section III analyses the link between the demand for the Fund's loans and market access of countries; and section IV contains the concluding observations.

II. Demand for IMF Loans

Historically, it is observed that demand for IMF loans increases during global downturns. For instance, during the global recession of 1983 triggered by oil shock and a subsequent debt crisis in Latin America, many EMDEs, especially in Latin America and Sub-Saharan Africa (SSA), suffered long-lasting slowdown in growth (Kose *et al.*, 2020). As a result, IMF stepped up its lending programs during 1982-83 to these regions. For instance, around 85 per cent of the Fund lending in 1983 was to Latin America and SSA. Next, IMF lending increased during the Gulf war, where 50 per cent of the lending in 1991 was to the Asia-Pacific Region (APR), which was affected adversely by the increased crude prices. Similarly, during the GFC and Eurozone crisis, there was a rise in IMF arrangements to some European countries, while the COVID crisis resulted in demand for Fund resources across the world (Chart 1).

The IMF has multiple instruments/windows to meet the funding requirements of member countries. The "reserve tranche," which is the member's unconditional drawing right on the IMF,[2] allows a member country to draw from the IMF at short notice in need of balance of payments financing. Further, IMF's loans are extended under two heads, *viz.*, the

Chart 1: Number of IMF Arrangements



Source: IMF Country Finance data.

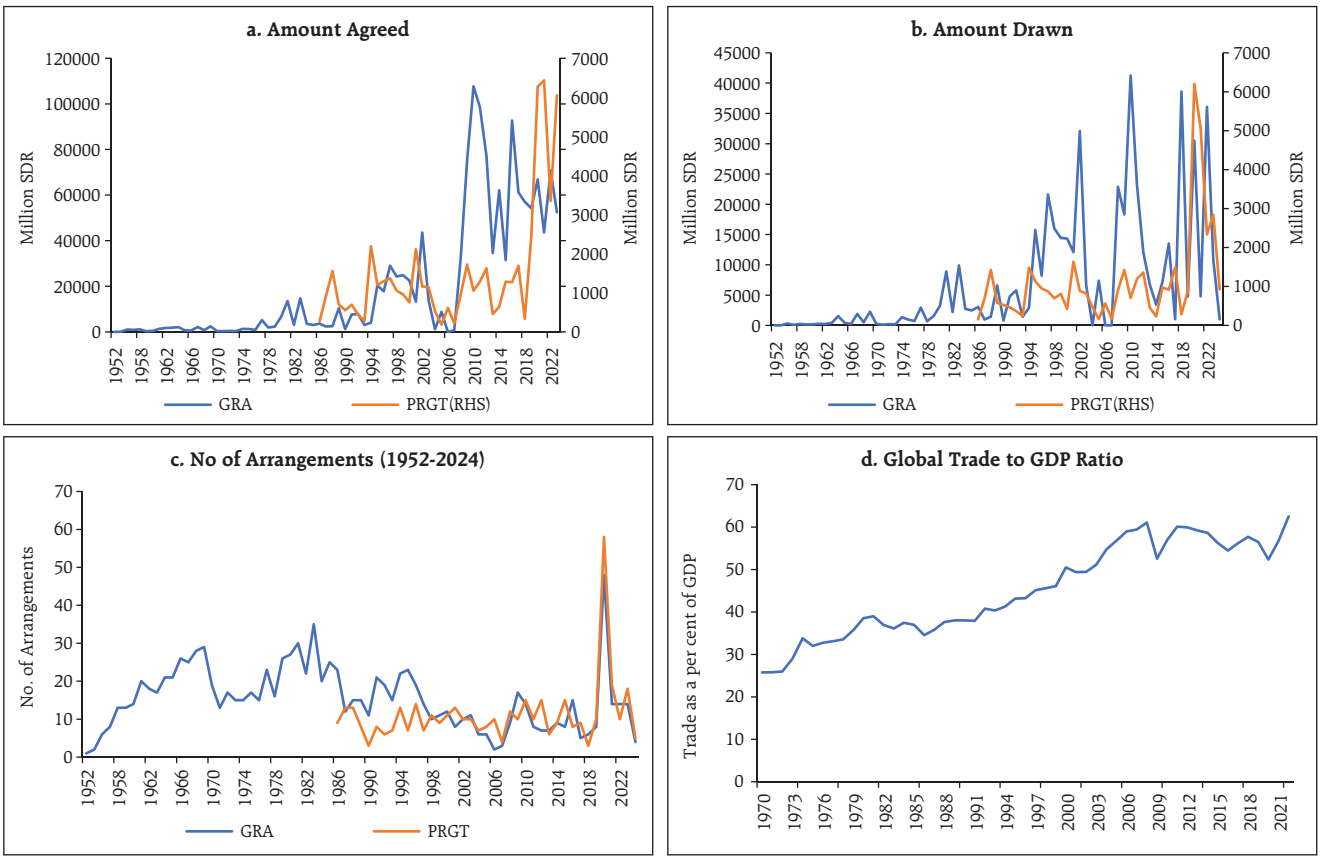
general resource account (GRA) that provides loans at market-based rates, and the Trust-based concessional support to eligible countries (predominantly low-income countries), of which the Poverty Reduction and Growth Trust (PRGT) is the predominant source. Both these have different lines of credit facilities with similar conditionalities and provide short-term to long-term financing support.

The access to IMF loans is determined by members' quotas, with the loan quantum typically being a multiple of the quota.[3] As the PRGT countries are low-income developing countries, the quantum of loans availed by them is significantly smaller than the loans availed by other members through GRA (little less than 12 per cent of GRA amount accessed in 2023), though the number of PRGT arrangements is nearly equal to GRA arrangements (Chart 2c). The quantum of IMF support as well as the number of IMF arrangements availed by members increased substantially during the new millennium, particularly

[2] The reserve tranche is created by the foreign exchange portion of the quota subscription, plus increase (decrease) through the IMF's sale (repurchase) of the member's currency to meet the demand for use of IMF resources by other members in need of balance of payments financing.

[3] Currently, the normal access limit is 145 per cent; and cumulative access is 435 per cent of quota. In 2023, access limits were increased temporarily to meet the demands arising from COVID pandemic with normal access limit at 200 per cent, and cumulative access limit at 600 per cent of quota. This temporary increase in access limits is set to expire at the end of 2024.

Chart 2: IMF Loans to All Members



Note: Amount agreed refers to the sanctioned amount under an arrangement and amount drawn is the amount of money drawn/utilised by the member.
Sources: IMF Country Finance data; and Authors' own calculations.

during periods of shocks (Chart 2a and 2b). This is in line with the increased global interconnectedness which seems to have accelerated transmission of global spillovers resulting in external financing problem in member countries (Chart 2d).[4]

II.1 Region-wise Borrowing from IMF

In terms of number of arrangements as well as quantum of loans under GRA, the Western Hemisphere Region (WHR[5]) - predominantly Latin America - is the largest borrower, whereas SSA[6] is the largest borrower from PRGT (Chart 3). Moreover, some countries within WHR, SSA and APR[7] have repeatedly borrowed from the IMF.

The temporal distribution of IMF loans across regions reveals that in the initial period of IMF operations, they were availed mostly by what

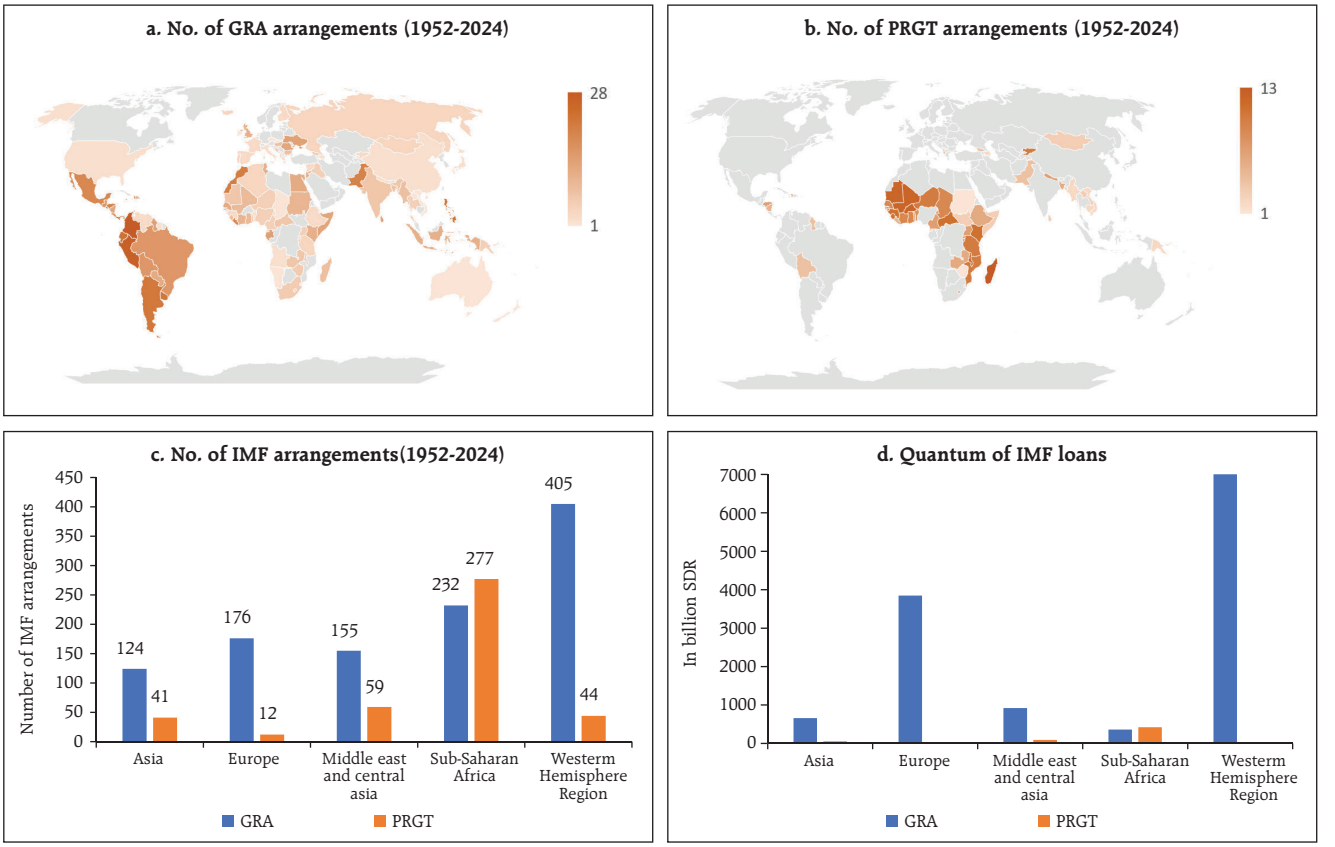
[4] The correlation between trade to GDP ratio and total amount drawn from IMF during 1970 to 2024 is 0.54 indicating that greater interconnectedness is associated with greater amounts drawn from IMF.

[5] WHR comprises the Americas and Caribbean and includes Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, the Unite States of America, Uruguay, and Venezuela.

[6] SSA comprises: Angola, Benin, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Congo DR, Cote d'Ivoire, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome & Principe, Senegal, Seychelles, Sierra Leone, South Africa, South Sudan, Tanzania, Togo, Uganda, Zambia, and Zimbabwe.

[7] APR comprises of Australia, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Fiji, Korea, Hong-Kong India, Indonesia, Kiribati, Laos, Maldives, Marshall Islands, Micronesia, Mongolia, Myanmar, Nauru, Nepal, New Zealand. Palau, Papua New Guinea, Philippines, Samoa, Singapore Solomon Islands, Sri Lanka, Thailand, Timor-Leste, Taiwan Tonga, Tuvalu, Vanuatu, and Vietnam.

Chart 3: Worldwide Distribution of IMF Arrangements



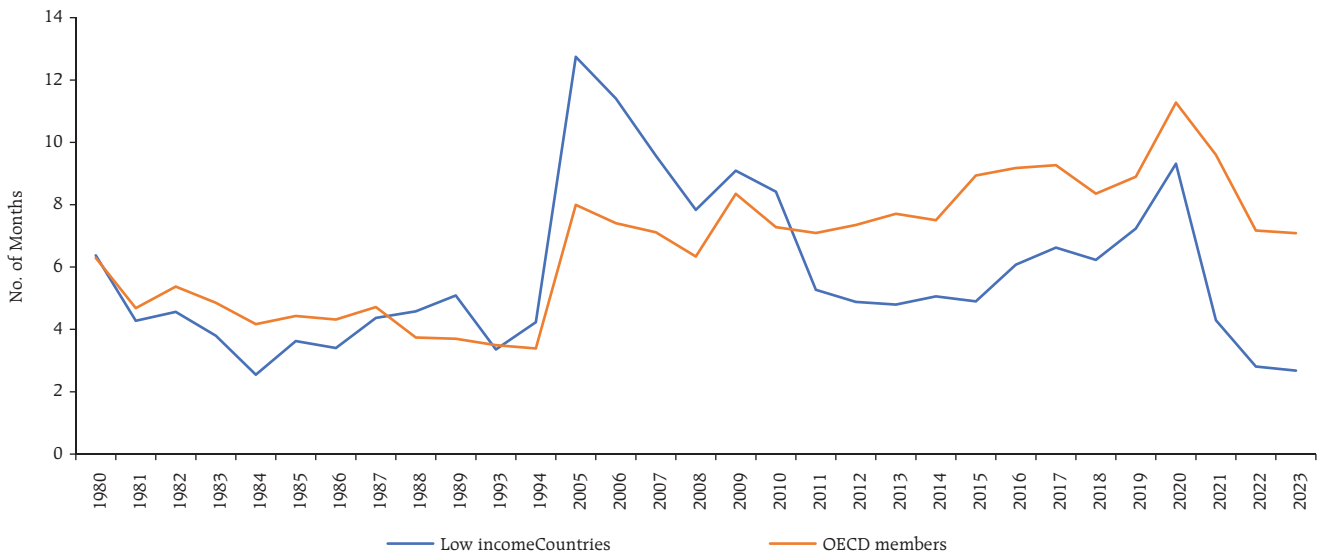
Sources: IMF Country Finance data; and Authors' own calculations.

are now the AEs. However, the demand for IMF loans from AEs waned over the period, barring the exceptional case of GFC-Eurozone crisis, where some AEs (Greece, Ireland, Portugal, Cyprus) availed extraordinarily large amounts of loans from the IMF. One of the driving factors for obtaining IMF financing is the deteriorating external funding/ liquidity position (as proxied by indicators such as the import cover of forex reserves, the share of short-term debt, debt service ratio, *etc.*) for low-income countries (as identified by their eligibility for support of International Development Agency (IDA) of the World Bank). The import cover for AEs (proxied by OECD countries) has improved consistently from 1995, barring dips during crisis periods, whereas the same has turned weak for low-income countries from 2003 (even before the onset of GFC) and remained weak thereafter (Chart 4).

II.2 Role of Regional Financing Arrangements (RFAs)

In the face of BoP issues, the first line of defence is country's own resources, such as forex reserves, followed by other options such as swaps - both bilateral and from RFAs - and market borrowings which are more likely to be preferred to meet BoP financing needs, as these financing options do not have the stigma that is attached to borrowing from the IMF. Finally, countries tend to resort to IMF loans and/or official bilateral loans when other options do not appear to be feasible. As stated above, import cover of AEs remained comfortable and their credit ratings have generally been in the investment grade, leading to comfortable liquidity access from

Chart 4: Import Cover - Reserves as Months of Import



Source: World Development Indicators, World Bank.

international capital markets. The sovereign ratings for most of the low income countries (LICs) and EMDEs, on the other hand, have been non-investible grade, with several LICs not having country ratings, thereby, severely restricting their market access. However, the relatively better postioned EMDEs, such as ASEAN region, BRICS and some Latin American countries had access to RFAs or currency swap agreements (Annex Tables A2, A3 and A4).

The access to alternative sources of funding through RFAs or currency swap arrangements for these fast-growing economies reduced their reliance on IMF loans. For instance, ASEAN+3 countries[8] launched the Chiang Mai Initiative Multilateralisation (CMIM), which came into effect in 2010, to address short term liquidity needs in the region. Since its formation, the CMIM member countries did not borrow from the IMF, whereas prior to 2010 few ASEAN countries such as Korea and Philippines were repeat borrowers from the IMF. Similarly, BRICS countries have entered into the BRICS contingent reserve arrangement (CRA) in 2015 and since then only South-Africa entered into Fund's arrangement during COVID crisis. In 2002, the European Union formed the EU-BoP facility for non-eurozone countries[9] and in 2012 post the Eurozone crisis, the European Stability Mechanism[10] (ESM) was put into place which led to a drop in IMF borrowings by the member countries. Likewise, in 1978, the FLAR - Latin American Reserve Fund[11] - was established, leading to a fall in the number of IMF arrangements for its member countries (Chart 5). However, the drop in IMF borrowing amongst the members was not as steep for FLAR as compared to the members of other RFAs. Nevertheless, there were no withdrawals from IMF arrangements for countries like Colombia, Peru and Paraguay.

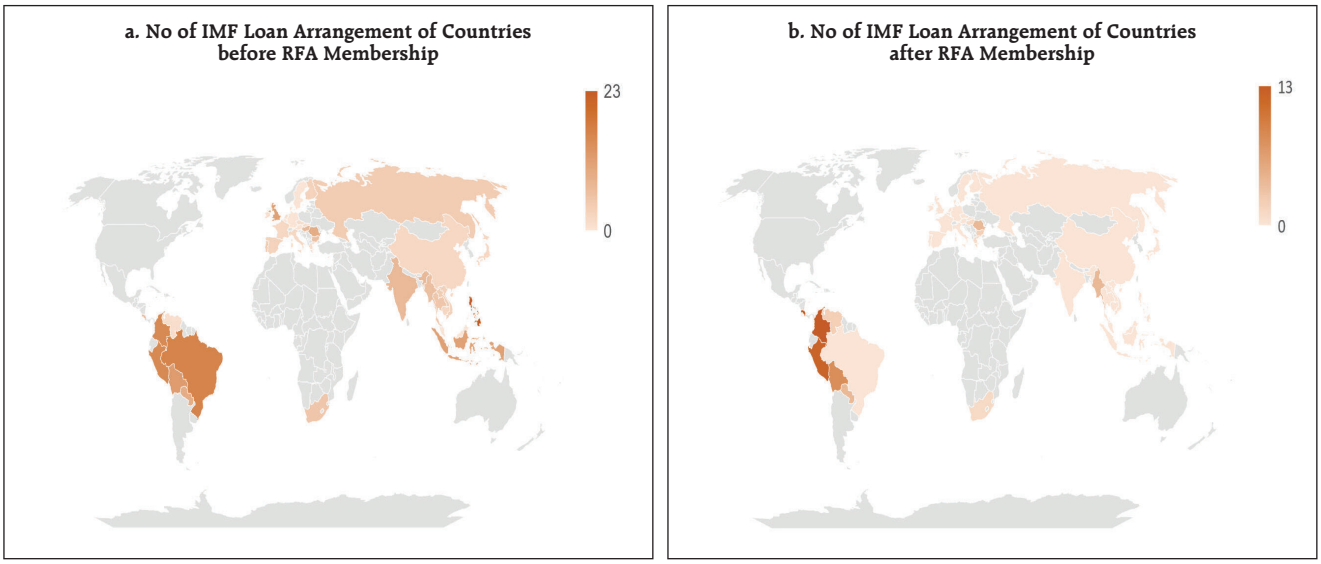
[8] Brunei Darussalam, Cambodia, China, Indonesia, Japan, Korea, Lao People's Democratic Republic, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam, and Hong Kong.

[9] Bulgaria, Czech Republic, Denmark, Hungary, Poland, Romania, Sweden, and United Kingdom.

[10] Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia, and Spain.

[11] Members include Bolivia, Columbia, Costa Rica, Peru, Paraguay, Uruguay, and Venezuela.

Chart 5: IMF Loan Arrangements and RFA Membership



Sources: IMF Country Finance data; and Authors' own calculations.

III. Market Access and IMF Arrangements

Higher country risk profiles lead to higher borrowing costs as market demand higher returns to compensate for the additional risk. Therefore, factors such as poor sovereign ratings, or even absence of sovereign ratings as well as high credit default spreads, for a given country limit their access to international capital markets. Under such circumstances, borrowing from the IMF may be the only feasible option available for such countries, apart from borrowing from official bilateral creditors. However, borrowings from official bilateral creditors may also not be a preferred option for countries, as some of the heavily indebted countries such as Zambia faced debt distress, leading to difficult debt restructuring process in the G20 Common Framework for Debt Treatments.

The market access of countries and recourse to IMF loans by countries which availed loans from the IMF is analysed in this context, with focus on select episodes of global turbulence such as the GFC (2008-2010), Eurozone Crisis (2012-14) and COVID crisis (2020-2021).

A disaggregated analysis of data on country default spreads and risk premium for the post 2000 period, made available by Damodaran (2024), reveals that most of the countries that availed IMF loans are countries with non-investible grade sovereign ratings, and hence, are considered high-risk borrowers in the international capital markets which restricted their market access. These borrowers are mostly concentrated in WHR, SSA and APR, and are mostly low-income countries and EMDEs. For instance, in WHR, countries like Ecuador, Honduras and Jamaica borrowed from the IMF multiple times, and had non-investible grade ratings resulting in higher country risk premium (CRP) and default spreads. Similarly, many countries of SSA availing loan under PRGT such as, Madagascar, Malawi and São Tomé and Príncipe amongst others, do not have any country ratings available (Table 1).

Coming to specific episodes of stress in the new millennium during the GFC, although AEs were at the epicenter of the crisis, there was a spillover to the rest of the world, followed by a period of slowdown in growth (Kose *et al.*, 2020). Next, during the Eurozone-crisis, Cyprus, Greece, Ireland, Portugal, and Spain were the major crisis hit countries in Europe (Gourinchas *et al.*, 2023). Most of the countries which

Table 1: Multiple Borrowers during 2000-2023 (> 5 times)

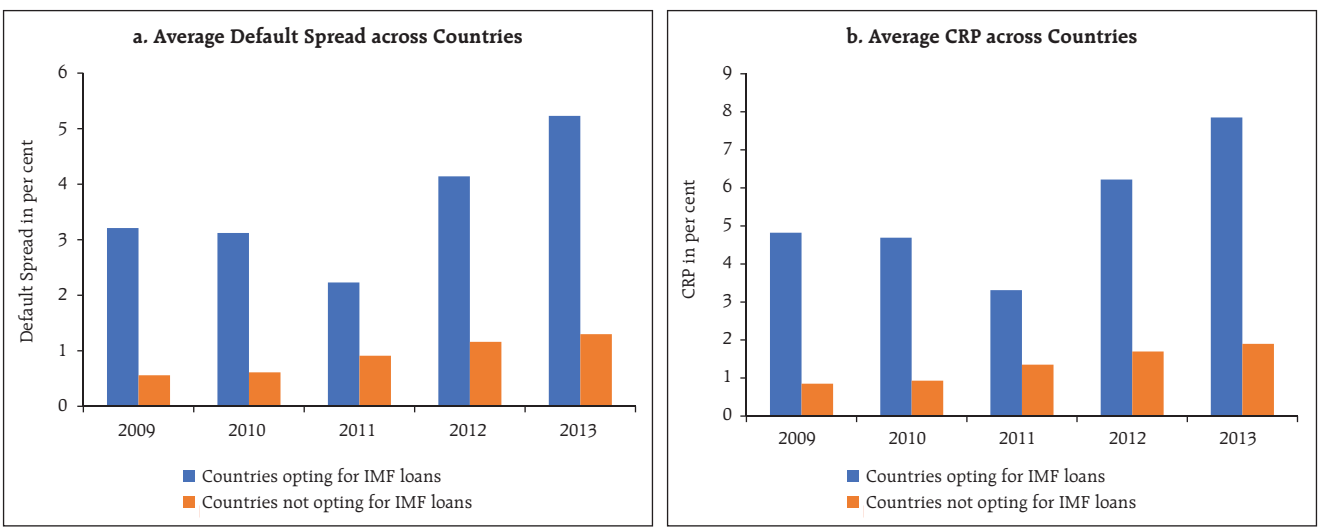
		GRA		PRGT	
	Country	CRP (in per cent)	Default Spread (in per cent)	CRP (in per cent)	Default Spread (in per cent)
WHR	Ecuador	14	42		
	Honduras	7.1	29		
	Jamaica	7.3	23		
SSA	Madagascar			N.A.	N.A.
	Malawi			N.A.	N.A.
	São Tomé and Príncipe			N.A.	N.A.

Notes: 1. Default spread is estimated using the local currency sovereign rating from Moody's and it is calculated as the difference over a default free government bond rate. CRP is calculated by scaling up the default spread by relative equity market volatility, which in turn is calculated as the ratio of the S&P Emerging Market Equity Index standard deviation to the BAML Emerging Public Bond index standard deviation.
2. The CRP estimated using the above methodology are directly available from database made available by Damodaran (2024).
3. N.A. represents no country rating available.

Source: Damodaran (2024)

availed IMF loans during the GFC and Eurozone crisis periods were rated Baa or lower on Moody's rating scale or did not have any ratings available. For instance, Armenia, Colombia, El salvador, Bangladesh, Jamaica and Morocco, among others, had speculative grade or low investment grade ratings, while Angola, Congo, Comoros, Ethiopia and Ghanna, among others had no ratings available (Annex Tables A2 and A3). On the other hand, the credit-worthiness of countries which did not borrow from the IMF, despite being affected by the GFC and Eurozone crisis, remained stable as they enjoyed investible grade ratings.These, *inter alia*, included Finland, France, Germany, Sweden, and the USA. The average default spread for countries which borrowed money from IMF during 2009-2014 was in the range of 3 to 5 percent whereas it was 0.6 to 1 percent for those countries which did not borrow from IMF. Similarly, the CRP were in the range of 4 to 8 percent, and 0.9 to 1.9 percent for these two groups of countries (Chart 6).

Chart 6: GFC and Eurozone Crisis Period



Note: The CRP and sovereign default spread data are available from Damodaran (2024). It is a comprehensive data set updated every year providing country wise and regional breakdown of sovereign ratings, default spread, credit default swaps and country risk premiums. This data is available from 2000 until 2023.
Sources: Damodaran (2024); and Authors' own calculations.

Secondly, some AEs, *viz.*, Greece, Portugal, and Ireland entered the IMF loan arrangements during 2008-11 due to their mounting public and private sector debts. During this period, these countries faced rating downgrades, leading to curtailed market access. For instance, Greece was downgraded from A2 to Ba1 from 2009 to 2010 and Ireland was downgraded from Aa1 to Baa1 in the same period. Portugal was downgraded from A1 in 2010 to Ba2 in 2011. Iceland and Latvia had also drawn money from IMF in 2008 following their rating downgrades in 2007. Iceland was downgraded from Aaa in 2007 to Baa1 in 2008 and Latvia was downgraded from A2 to A3 (Annex Table A2). Similarly, African countries such as Angola, Djibouti, Dominican Republic Congo, Ghana, Mali, Niger, Togo, availed IMF PRGT financing and did not have sovereign ratings for the relevant period. On the other hand, Ireland, Portugal and Spain, despite being downgraded from medium investment grade to non-investible grade between 2012-14, did not enter into the Fund's loan arrangement due to availability of financial assistance from the European Financial Stability Facility(EFSF)[12], which was formed in 2012.

Additionally, some countries signed IMF programs to enhance their market access, and did not need to take recourse to borrowals from the IMF. The IMF's flexible credit line (FCL) is designed for this purpose for countries with strong macroeconomic fundamentals such as sustainable external position, low inflation and sound public finances[13]. The IMF certification that these countries have very strong macroeconomic fundamentals has a positive market announcemnt effect leading to easier access to funding from international capital markets. Similarly, the precautionary and liquidity line (PLL) is available for countries which may have some vulnerabilties which preclude them from FCL, though otherwise they may have reasonable macrofundamentals. Nevertheless, access to PLL also acts as a market signal about assured IMF funds. However, the CRP for Morocco did not decline even after grant of the PLL, possible on account of the fact that PLL does not send a market signal that the country has strong macroeconomic fundamentals. On the other hand, the CRP increased for Morocco, after the PLL expired. (Table 2).

During the COVID pandemic (2020 – 2021), borrowing countries from the WHR and SSA regions were more as compared to other regions (Annex Table A4). Countries in this region had higher risk premium and lower ratings *vis-à-vis* non-borrowers. For instance, the average CRP for countries whch borrowed from IMF was 5.1 and 5.4 per cent in 2020 and 2021, respectively, whereas it was 2.7 and 2.8 per cent for the non-borrowers. In fact, these regions have also been repeated borrowers from IMF due to their poor market access. For instance, Latin America and Caribbean had the highest CRP (5.0 per cent) and a higher default spread (3.7 per cent) after Africa, whereas EMDEs from Asia had a lower CRP (3.6 per cent) and default spread (2.6 per cent). AEs had the lowest avergae default spread (0.7 per cent) and CRP

Table 2: Country Risk Premium

(in per cent)

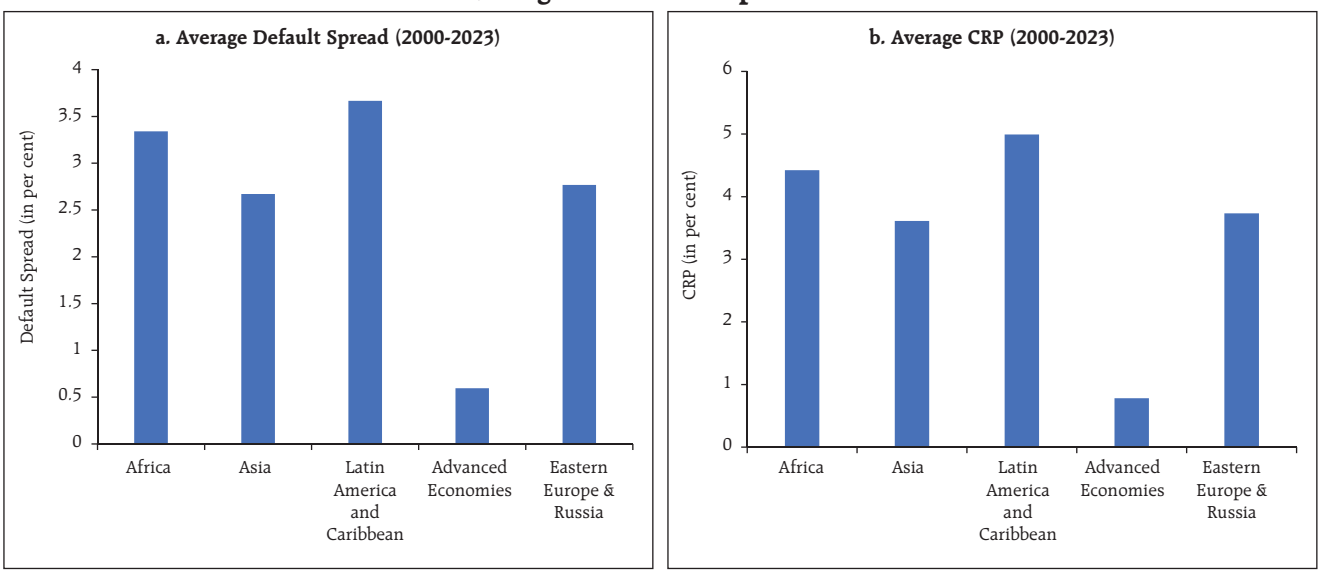
Country	FCL		
	Pre-FCL CRP (2008)	During FCL CRP (2009-11)	After FCL CRP (2012)
Colombia	3.9	3.0	3.0
Mexico	3.0	2.3	2.3
Poland	2.4	1.5	1.0
	PLL		
	Pre PLL (2011)	During PLL (2012)	After PLL (2013)
Morocco	3.6	3.6	3.7

Sources: Damodaran (2024); and Authors' own calculations.

[12] EFSF disbursement dashboard.

[13] https://www.imf.org/en/About/Factsheets/Sheets/2023/Flexible-Credit-Line-FCL.

Chart 7: Regional Default Spread and CRP



Sources: Damodaran (2024); and Authors' own calculations.

(0.8 per cent), and thus, they did not need recourse to IMF loans (Chart 7). Also, some of the fast-growing EMDEs, especially in the APR region, had better market access and did not need to borrow from the IMF.

A panel regression with country fixed effects model has been estimated to establish the link between market access and IMF loans. The regression is estimated on the amount of loans drawn by countries with the relevant country risk premium as the explanatory variable[14], and has the following specification:

$$Amount\ Drawn_{it} = \alpha + \beta CRP_{it} + Global\ Shock + Country\ Fixed\ Effects$$

In the above equation,

amount drawn refers to the amount of IMF loan support availed by country i in year t in SDR million; market access is measured through country risk premium (CRP), and global shock indicates time dummies for GFC, Euro-zone and COVID crisis.

The sample comprises of an unbalanced panel[15] of 124 countries which have borrwed from IMF during 2000 to 2024. This regression is run for the whole sample period with country fixed effects which takes into account the country-specific factors. In model 1, the impact of CRP is examined without controling for the global schocks. In model 2, 3, 4 and 5, separate dummies are added to account for the three shocks viz GFC, Euro-Zone and COVID. And in model 5 all the three shock dummies are added together.

The regression results reveal that countries with lower market access as indicated by a higher country risk preimum availed greater financial support from the IMF. These results were significant across all the five models which indicates that it is the lack of market access which drives countries to borrow more from IMF. The regression parameter for CRP without time dummies is significant at 90% confidence interval. On the other hand, the estimated parameters for CRP with time dummies turns significant at 99% confidence interval. This appears to indicate that while higher CRPs (*i.e.*, lack of market access) is a significant factor

[14] Since CRP is calculated using the default spreads, we only include CRP in the regression analysis to avoid multicollinearity.

[15] All 124 countries have not borrowed in a given year, and hence, the sample is an unbalanced panel.

Table 3: Panel Regression Results

	Amount Drawn (2000-2024)
Model 1: Without Global Shock Dummies	
Country Risk Premium	149.2*(2.5)
Country Fixed Effects	Yes
Number of Obervations	312
Model 2: Global Financial Crisis Dummy (2008-2010)	
Country Risk Premium	143.5* (2.4)
GFC Dummy	8.2 (1.0)
Country Fixed Effects	Yes
Number of Obervations	312
Model 3: Euro Zone Crisis Dummy (2012-2014)	
Country Risk Premium	160.2***(2.6)
Euro-Zone Crisis Dummy	-4.9 (-0.9)
Country Fixed Effects	Yes
Number of Obervations	312
Model 4: COVID(2020-2021)	
Country Risk Premium	185.8***(2.8)
COVID Dummy	5.3 (0.1)
Country Fixed Effects	Yes
Number of Obervations	312
Model 5: All Global Shocks	
Country Risk Premium	189.9*** (2.9)
GFC Dummy	8.7* (1.7)
Euro-Zone Crisis Dummy	-2.5 (-0.4)
COVID Dummy	6.0 (0.1)
Country Fixed Effects	Yes
Number of Obervations	312

t-statistics in parentheses. *: p<0.1, **: p<0.05, and ***: p<0.01

in driving countries' recourse to the IMF loans, the shock events accentuate the countries' recourse to IMF loans (Table 3).

As stated before, the recourse of countries to IMF loans has increased during crisis periods. This is probably on account of the fact that crisis episodes leads to worsening of macroeconomic fundamentals and an increase in the country risk preimum of the affected countries, which in turn reduces their market access and makes them resort to IMF loans.

V. Conclusion

This article shows that there has been an increased dependence on IMF loans in the last three decades across regions, particularly for the LICs and some EMDEs, in conjunction with rising economic integration across the globe. Countries with availability of alternate sources of funding including swap lines and RFAs, and had market access through better ratings usually did not avail IMF loans. On the other hand, the borrowers from IMF generally had weak ratings and limited market access. Further, shock events appear to increase the dependence of countries on IMF loans as these event appear to restrict market of crisis affected countries through increased CRPs. Some IMF programs such as FCL and PCL, which are designed for the purpose of enhancing market access for countries with robust macroeconomic fundamentals, appear to have served their purpose. Predominantly, the countries without or limited market access and alternate resources avail IMF loans, which points to the role of the IMF as the global lender of last resort and highlights its central role in the GFSN.

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Annex Tables

Table A1: Moody's Rating Scale

Investible Grade	Aaa	Prime
	Aa1, Aa2 and Aa31	High Grade
	A1, A2 and A3	Upper Medium Grade
	Baa1, Baa2 and Baa3	Lower Medium Grade
Speculative Grade	Ba1, Ba2 and Ba3	Non-Investment grade speculative
	B1, B2 and B3	Highly Speculative
	Caa1, Caa2 and Caa3	Substantial Risk
	Ca	Extremely Speculative
	C	Default
	D	

Table A2: Global Financial Crisis

Countries which borrowed from IMF during 2008-11

Country	2008		2009		2010		2011	
	Rating	CRP	Rating	CRP	Rating	CRP	Rating	CRP
Angola			na	na				
Armenia	Ba2	6	Ba2	4.5	Ba2	4.125		
Colombia			Baa3	3	Baa3	3	Baa3	3
Comoros			na	na				
Congo	na	na						
Djibouti	na	na						
Dominican Republic			B2	8.25				
El Salvador			Ba1	3.75	WR*	15		
Ethiopia			na	na				
Ghana			na	na				
Greece			A2	1.57	Ba1	3.6		
Iceland	Baa1	3						
Ireland			A	0.45	Baa1	2.25		
Jamaica					B3	9		
Latvia	A3	2.625						
Malawi	na	na						
Mali	na	na						
Niger	na	na						
Portugal					A1	1.275	Ba2	4.125
Togo	na	na						

Note: *WR: Rating withdrawn; na: no ratings available.
Source: Damodaran (2024).

Select Countries which did not borrow from IMF during 2008-11

Country	2008		2009		2010		2011	
	Rating	CRP	Rating	CRP	Rating	CRP	Rating	CRP
Austria	Aaa	0	Aaa	0	Aaa	0	Aaa	0
Belgium	Aa1	1.05	Aa1	0.45	Aa1	0.375	Aa3	1.05
Denmark	Aaa	0	Aaa	0	Aaa	0	Aaa	0
Finland	Aaa	0	Aaa	0	Aaa	0	Aaa	0
France	Aaa	0	Aaa	0	Aaa	0	Aaa	0
Germany	Aaa	0	Aaa	0	Aaa	0	Aaa	0
Italy	Aa2	1.5	Aa2	0.9	Aa2	0.75	A2	1.5
Sweden	Aaa	0	Aaa	0	Aaa	0	Aaa	0
United Kingdom	Aaa	0	Aaa	0	Aaa	0	Aaa	0
United States of America	Aaa	0	Aaa	0	Aaa	0	Aaa	0

Source: Damodaran (2024).

Table A3: Euro-Zone Crisis

Countries which borrowed from IMF during 2012-14

Country	2012		2013		2014	
	Rating	CRP	Rating	CRP	Rating	CRP
Albania					B1	6.75
Armenia					Ba2	4.50
Bangladesh	Ba3	4.88				
Burkina Faso			B2	8.25		
Bosnia and Herzegovina	B3	9.00				
Colombia			Baa3	3.30		
Cyprus	B3	9.00	Caa3	15	B3	9.75
Georgia	Ba3	4.88			Ba3	5.40
Greece	Caa3	15.00	Caa3	15	Caa1	11.25
Honduras					B3	9.75
Jamaica			Caa3	15		
Jordan	Ba2	4.13				
Mexico	Baa1	2.25			A3	1.80
Morocco	Ba1	3.60			Ba1	3.75
Pakistan			Caa1	11.25		
Poland			A2	1.28		
Romania			Baa3	3.30		
St. Vincent & the Grenadines					B3	9.75
Tunisia			Ba3	5.40		
Ukraine					Caa3	15

Source: Damodaran (2024).

Countries which did not borrow from IMF during 2012-14

Country	2012		2013		2014	
	Rating	CRP	Rating	CRP	Rating	CRP
Ireland	Ba1	3.60	Ba1	3.75	Baa1	2.40
Portugal	Ba3	4.88	Ba3	5.40	Ba1	3.75
Spain	Baa3	3	Baa3	3.30	Baa2	2.85

Source: Damodaran (2024).

Table A4: COVID Crisis

Select Countries which Borrowed from IMF

Country	2020		2021	
	Ratings	CRP	Ratings	CRP
Bahamas	Ba2	2.91	Ba3	3.56
Benin	B2	5.33	B1	4.45
Bolivia	B2	5.33	B2	5.44
Bosnia and Herzegovina	B3	6.30	B3	6.43
Burkina Faso	B2	5.33	B2	5.44
Cameroon	B2	5.33	B2	5.44
Cape Verde	B2	5.33	B3	6.43
Congo (Democratic Republic of)	Caa1	7.26	Caa1	7.41
Costa Rica	B2	5.33	B2	5.44
Côte d'Ivoire	Ba3	3.49	Ba3	3.56
Dominican Republic	Ba3	3.49	Ba3	3.56
Ecuador	Caa3	9.68	Caa3	9.89
El Salvador	B3	6.30	Caa1	7.41
Ethiopia	B2	5.33	Caa2	8.90
Gabon	Caa1	7.26	Caa1	7.41
Ghana	B3	6.30	B3	6.43
Guatemala	Ba1	2.42	Ba1	2.47
Jamaica	B2	5.33	B2	5.44
Jordan	B1	4.36	B1	4.45
Kenya	B2	5.33	B2	5.44
Mali	Caa1	7.26	Caa1	7.41
Moldova	B3	6.30	B3	6.43
Mongolia	B3	6.30	B3	6.43
Montenegro	B1	4.36	B1	4.45
Mozambique	Caa2	8.72	Caa2	8.90
Namibia	Ba3	3.49	Ba3	3.56
Nicaragua	B3	6.30	B3	6.43
Niger	B3	6.30	B3	6.43
Nigeria	B2	5.33	B2	5.44
Pakistan	B3	6.30	B3	6.43
Panama	Baa1	1.55	Baa2	1.88
Papua New Guinea	B2	5.33	B2	5.44
Paraguay	Ba1	2.42	Ba1	2.47
Peru	A3	1.16	Baa1	1.58
Rwanda	B2	5.33	B2	5.44
Senegal	Ba3	3.49	Ba3	3.56
Solomon Islands	B3	6.30	Caa1	7.41
South Africa	Ba2	2.91	Ba2	2.97
Tunisia	B2	5.33	Caa1	7.41
Uganda	B2	5.33	B2	5.44

Source: Damodaran (2024).

CURRENT STATISTICS

Select Economic Indicators

Reserve Bank of India

Money and Banking

Prices and Production

Government Accounts and Treasury Bills

Financial Markets

External Sector

Payment and Settlement Systems

Occasional Series

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Notes: .. = Not available.

– = Nil/Negligible.

P = Preliminary/Provisional. PR = Partially Revised.

No. 1: Select Economic Indicators

Item	2023-24	2023-24		2024-25	
		Q2	Q3	Q2	Q3
	1	2	3	4	5
1 Real Sector (% Change)					
1.1 GVA at Basic Prices	8.6	9.2	8.0	5.8	6.2
1.1.1 Agriculture	2.7	3.7	1.5	4.1	5.6
1.1.2 Industry	11.0	15.3	12.6	2.0	3.5
1.1.3 Services	9.2	8.3	8.5	7.4	7.3
1.1a Final Consumption Expenditure	5.9	5.1	5.3	5.6	7.1
1.1b Gross Fixed Capital Formation	8.8	11.7	9.3	5.8	5.7
	2023-24	**2023**	**2024**		**2025**
		Dec.	**Jan.**	**Dec.**	**Jan.**
	1	2	3	4	5
1.2 Index of Industrial Production	5.9	4.4	4.2	3.5	5.0
2 Money and Banking (% Change)					
2.1 Scheduled Commercial Banks					
2.1.1 Deposits	12.9	12.6	12.5	10.2	11.6
	(13.5)	(13.3)	(13.2)	(9.8)	(11.3)
2.1.2 Credit #	16.3	15.6	16.1	12.4	12.9
	(20.2)	(20.0)	(20.3)	(11.2)	(11.8)
2.1.2.1 Non-food Credit #	16.3	15.8	16.2	12.4	12.9
	(20.2)	(20.1)	(20.4)	(11.1)	(11.8)
2.1.3 Investment in Govt. Securities	11.1	15.6	13.2	11.1	10.4
	(12.8)	(17.6)	(15.0)	(10.1)	(9.6)
2.2 Money Stock Measures					
2.2.1 Reserve Money (M0)	5.6	6.0	6.3	4.9	4.4
2.2.2 Broad Money (M3)	11.1	11.0	11.0	9.3	9.6
	(11.6)	(11.5)	(11.5)	(9.0)	(9.3)
3 Ratios (%)					
3.1 Cash Reserve Ratio	4.50	4.50	4.50	4.25	4.00
3.2 Statutory Liquidity Ratio	18.00	18.00	18.00	18.00	18.00
3.3 Cash-Deposit Ratio	5.0	5.2	5.1	4.7	4.6
	(5.0)	(5.2)	(5.1)	(4.7)	(4.5)
3.4 Credit-Deposit Ratio	78.1	77.1	77.7	78.7	78.6
	(80.3)	(79.5)	(80.0)	(80.4)	(80.3)
3.5 Incremental Credit-Deposit Ratio #	95.8	89.1	95.6	86.1	83.8
	(113.4)	(111.9)	(117.5)	(82.6)	(81.0)
3.6 Investment-Deposit Ratio	29.5	29.5	29.5	29.8	29.4
	(29.8)	(29.8)	(29.8)	(29.9)	(29.5)
3.7 Incremental Investment-Deposit Ratio	25.8	24.7	24.5	32.6	27.7
	(28.4)	(28.2)	(27.7)	(30.8)	(26.3)
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	8.95/10.25	9.10/10.25	9.10/10.40	9.10/10.40
4.7 MCLR (Overnight)	8.00/8.60	7.95/8.50	8.00/8.60	8.15/8.45	8.15/8.45
4.8 Term Deposit Rate >1 Year	6.50/7.25	6.50/7.25	6.50/7.25	6.00/7.25	6.00/7.25
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	6.81	6.77	6.71	6.57
4.11 91-Day Treasury Bill (Primary) Yield	-	6.93	7.04	6.55	6.56
4.12 182-Day Treasury Bill (Primary) Yield	7.28	7.16	7.18	6.70	6.67
4.13 364-Day Treasury Bill (Primary) Yield	7.31	7.13	7.15	6.69	6.63
4.14 10-Year G-Sec Par Yield (FBIL)	7.31	7.20	7.15	6.76	6.71
5 Reference Rate and Forward Premia					
5.1 INR-US$ Spot Rate (Rs. Per Foreign Currency)	83.37	83.12	83.12	85.59	86.64
5.2 INR-Euro Spot Rate (Rs. Per Foreign Currency)	90.22	92.00	90.42	89.11	90.01
5.3 Forward Premia of US$ 1-month (%)	1.00	1.23	1.30	3.70	2.80
3-month (%)	1.11	1.65	1.59	2.91	2.69
6-month (%)	1.31	1.51	1.60	2.61	2.30
6 Inflation (%)					
6.1 All India Consumer Price Index	5.4	5.7	5.1	5.2	4.3
6.2 Consumer Price Index for Industrial Workers	5.19	4.9	4.6	3.5	3.1
6.3 Wholesale Price Index	-0.7	0.9	0.3	2.6	2.3
6.3.1 Primary Articles	3.5	5.7	4.1	6.0	4.7
6.3.2 Fuel and Power	-4.7	-1.4	-0.4	-2.6	-2.8
6.3.3 Manufactured Products	-1.7	-0.8	-1.2	2.1	2.5
7 Foreign Trade (% Change)					
7.1 Imports	-5.3	-6.6	2.0	1.9	10.3
7.2 Exports	-3.1	0.8	4.3	-1.2	-2.4

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						
	2024-25	2024	2025				
		Feb.	Jan. 31	Feb. 07	Feb. 14	Feb. 21	Feb. 28
	1	2	3	4	5	6	7
1 Issue Department							
1.1 Liabilities							
1.1.1 Notes in Circulation	3482333	3423265	3564965	3596638	3606046	3615412	3615574
1.1.2 Notes held in Banking Department	11	13	12	15	14	12	14
1.1/1.2 Total Liabilities (Total Notes Issued) or Assets	**3482344**	**3423278**	**3564977**	**3596653**	**3606060**	**3615424**	**3615588**
1.2 Assets							
1.2.1 Gold	162996	148980	217109	223243	227652	228657	226730
1.2.2 Foreign Securities	3318885	3274006	3347525	3373139	3378001	3386454	3388603
1.2.3 Rupee Coin	463	293	343	271	407	313	255
1.2.4 Government of India Rupee Securities	-	-	-	-	-	-	-
2 Banking Department							
2.1 Liabilities							
2.1.1 Deposits	1782333	1656495	1446595	1382908	1433291	1530307	1445017
2.1.1.1 Central Government	101	101	101	100	100	101	101
2.1.1.2 Market Stabilisation Scheme			-	-	-	-	-
2.1.1.3 State Governments	42	42	42	42	43	42	42
2.1.1.4 Scheduled Commercial Banks	1008618	909400	924083	878388	953498	888462	927189
2.1.1.5 Scheduled State Co-operative Banks	10092	8520	7772	7929	7798	7826	7452
2.1.1.6 Non-Scheduled State Co-operative Banks	6412	5127	4567	5154	4873	5018	4814
2.1.1.7 Other Banks	48725	47991	46275	46118	45756	46181	46630
2.1.1.8 Others	545400	540867	362067	346482	327887	482446	363484
2.1.1.9 Financial Institution Outside India	162944	144448	101688	98695	93336	100231	95305
2.1.2 Other Liabilities	1804747	1712392	2034572	2124837	2110913	2125676	2173208
2.1/2.2 Total Liabilities or Assets	**3587080**	**3368888**	**3481167**	**3507746**	**3544204**	**3655983**	**3618225**
2.2 Assets							
2.2.1 Notes and Coins	11	13	12	15	14	12	14
2.2.2 Balances Held Abroad	1480408	1315955	1344426	1420016	1341554	1364059	1402695
2.2.3 Loans and Advances							
2.2.3.1 Central Government	-	-	-	-	-	-	-
2.2.3.2 State Governments	2300	14809	19332	35454	25646	22112	22937
2.2.3.3 Scheduled Commercial Banks	266021	256374	256989	185420	261331	301901	229480
2.2.3.4 Scheduled State Co-op.Banks	-	35	-	-	-	35	-
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	9066	20988	18951	23894	26632	28827
2.2.3.9 Financial Institution Outside India	162650	142640	101053	98469	93021	99679	94847
2.2.4 Bills Purchased and Discounted							
2.2.4.1 Internal	-	-	-	-	-	-	-
2.2.4.2 Government Treasury Bills	-	-	-	-	-	-	-
2.2.5 Investments	1365425	1364312	1319974	1319818	1360558	1401314	1401615
2.2.6 Other Assets	297868	265683	418394	429601	438187	440241	437810
2.2.6.1 Gold	272028	247933	396899	408114	416172	418010	414488

* 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
Jan. 1, 2025	-	-	-	-	666	115712	-	-	-	-115046
Jan. 2, 2025	-	-	-	-	15	152048	-543	-	-	-152576
Jan. 3, 2025	-	-	-	-	2179	99805	-	-	-	-97626
Jan. 4, 2025	-	-	-	-	1398	94806	-	-	-	-93408
Jan. 5, 2025	-	-	-	-	342	94235	-	-	-	-93893
Jan. 6, 2025	-	-	-	-	15860	54274	-	-	-	-38414
Jan. 7, 2025	-	-	50007	-	24676	66630	57	-	-	8110
Jan. 8, 2025	-	-	-	-	44652	48937	-408	-	-	-4693
Jan. 9, 2025	-	-	50004	-	20639	56581	980	-	-	15042
Jan. 10, 2025	-	-	275011	-	17638	76178	-	-	-	216471
Jan. 11, 2025	-	-	-	-	5712	50540	-	-	-	-44828
Jan. 12, 2025	-	-	-	-	5882	53734	-	-	-	-47852
Jan. 13, 2025	-	-	50008	-	539	84042	-	-	-	-33495
Jan. 14, 2025	-	-	-	-	2069	77450	1020	-	-	-74361
Jan. 15, 2025	-	-	3980	-	794	66409	-635	-	2570	-59700
Jan. 16, 2025	-	-	30760	-	1138	84506	611	-	4480	-47517
Jan. 17, 2025	-	-	33467	-	4096	80248	24	-	3125	-39536
Jan. 18, 2025	-	-	-	-	14661	83219	-	-	-	-68558
Jan. 19, 2025	-	-	-	-	13064	71692	-	-	-	-58628
Jan. 20, 2025	-	-	75772	-	4461	78650	-10	-	4980	6553
Jan. 21, 2025	-	-	71900	-	8207	43894	-	-	1355	37568
Jan. 22, 2025	-	-	125009	-	3349	75393	-	-	4045	57010
Jan. 23, 2025	-	-	145683	-	2831	67458	-	-	3900	84956
Jan. 24, 2025	-	-	362107	-	3232	92874	-	-	6570	279035
Jan. 25, 2025	-	-	-	-	3351	53731	-	-	-	-50380
Jan. 26, 2025	-	-	-	-	3459	54345	-	-	-	-50886
Jan. 27, 2025	-	-	193661	-	682	55881	0	-	4710	143172
Jan. 28, 2025	-	-	139281	-	1779	61541	-	-	3080	82599
Jan. 29, 2025	-	-	166833	-	522	83366	-	-	-	83989
Jan. 30, 2025	-	-	117354	-	3099	69667	-	-	-	50786
Jan. 31, 2025	-	-	100013	-	6311	102895	-	-	20020	23449

No. 4: Sale/ Purchase of U.S. Dollar by the RBI

i) Operations in onshore / offshore OTC segment

Item	2023-24	2024		2025
		Jan.	Dec.	Jan.
	1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US $ Million) (1.1-1.2)	41271	1950	-15150	-11139
1.1 Purchase (+)	194296	10400	53898	49145
1.2 Sale (–)	153025	8450	69048	60284
2 ₹ equivalent at contract rate (₹ Crores)	339528	16205	-128753	-95388
3 Cumulative (over end-March) (US $ Million)	41271	19465	-36106	-47245
(₹ Crore)	339528	158524	-306406	-401795
4 Outstanding Net Forward Sales (-)/ Purchase (+) at the end of month (US $ Million)	-541	9974	-67938	-77528

ii) Operations in currency futures segment

Item	2023-24	2024		2025
		Jan.	Dec.	Jan.
	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	1050	3552	3703
1.2 Sale (–)	7930	1050	3552	3703
2 Outstanding Net Currency Futures Sales (-)/ Purchase (+) at the end of month (US $ Million)	-1080	0	-3450	-2683

No. 4 A : Maturity Breakdown (by Residual Maturity) of Outstanding Forwards of RBI (US $ Million)

Item	As on January 31 , 2025		
	Long (+)	Short (-)	Net (1-2)
	1	2	3
1. Upto 1 month	5100	26045	-20945
2. More than 1 month and upto 3 months	0	25978	-25978
3. More than 3 months and upto 1 year	0	30605	-30605
4. More than 1 year	0	0	0
Total (1+2+3+4)	**5100**	**82628**	**-77528**

No. 5: RBI's Standing Facilities

(₹ Crore)

Item	As on the Last Reporting Friday							
	2023-24	2024					2025	
		Feb. 23	Sep. 20	Oct. 18	Nov. 29	Dec. 27	Jan. 24	Feb. 21
	1	2	3	4	5	6	7	8
1 MSF	49906	144270	21731	4216	18513	31127	3232	500
2 Export Credit Refinance for Scheduled Banks								
2.1 Limit	-	-	-	-	-	-	-	-
2.2 Outstanding	-	-	-	-	-	-	-	-
3 Liquidity Facility for PDs								
3.1 Limit	9900	9900	9900	9900	9900	9900	9900	9900
3.2 Outstanding	9810	9066	8547	7223	8428	8459	9556	9096
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	153336	30278	11439	26941	39586	12788	9596

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	2024		2025	
		Jan. 26	Dec. 27	Jan. 10	Jan. 24
	1	2	3	4	5
1 Currency with the Public (1.1 + 1.2 + 1.3 – 1.4)	3410276	3323406	3459977	3497219	3503602
1.1 Notes in Circulation	3477795	3386177	3524608	3553367	3563413
1.2 Circulation of Rupee Coin	32689	32144	34940	34940	34940
1.3 Circulation of Small Coins	743	743	743	743	743
1.4 Cash on Hand with Banks	101185	95801	101225	92748	96376
2 Deposit Money of the Public	2681424	2578240	2812342	2722910	2756006
2.1 Demand Deposits with Banks	2586888	2497829	2710713	2619285	2651712
2.2 'Other' Deposits with Reserve Bank	94536	80411	101629	103625	104294
3 M1 (1 + 2)	**6091700**	**5901646**	**6272318**	**6220129**	**6259608**
4 Post Office Saving Bank Deposits	195777	218498	200889	200889	200889
5 M2 (3 + 4)	**6287477**	**6120144**	**6473207**	**6421018**	**6460497**
6 Time Deposits with Banks	18739918	18399864	20240455	20425953	20369151
	(18848160)	(18516165)	(20307146)	(20491381)	(20433390)
7 M3 (3 + 6)	24831618	24301509	26512774	26646082	26628759
	(24939860)	(24417811)	(26579464)	(26711510)	(26692999)
8 Total Post Office Deposits	1313366	1268920	1379283	1379283	1379283
9 M4 (7 + 8)	26144984	25570429	27892057	28025365	28008042
	(26253226)	(25686731)	(27958747)	(28090793)	(28072282)

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	2024		2025	
		Jan. 26	Dec. 27	Jan. 10	Jan. 24
	1	2	3	4	5
1 Net Bank Credit to Government	**7512016**	**7116700**	**7850250**	**7987492**	**7937526**
1 Net Bank Credit to Government (Including Merger)	(7603571)	(7210188)	(7901119)	(8038367)	(7988402)
1.1 RBI's net credit to Government (1.1.1–1.1.2)	1193213	934359	1000891	1104710	1047893
1.1.1 Claims on Government	1370428	1372005	1276034	1270175	1309316
1.1.1.1 Central Government	1363828	1359195	1254193	1255555	1288822
1.1.1.2 State Governments	6600	12810	21841	14620	20495
1.1.2 Government deposits with RBI	177215	437646	275143	165465	261423
1.1.2.1 Central Government	177172	437603	275101	165423	261381
1.1.2.2 State Governments	42	42	42	42	42
1.2 Other Banks' Credit to Government	6318803	6182341	6849360	6882782	6889633
1.2 Other Banks Credit to Government (Including Merger)	(6410358)	(6275829)	(6900228)	(6933657)	(6940509)
2 Bank Credit to Commercial Sector	**16672145**	**16239988**	**18090813**	**18156833**	**18230417**
2 Bank Credit to Commercial Sector (Including Merger)	(17202832)	(16793224)	(18529356)	(18589884)	(18672006)
2.1 RBI's credit to commercial sector	14406	5237	10519	10512	22760
2.2 Other banks' credit to commercial sector	16657739	16234750	18080294	18146321	18207657
2.2 Other banks credit to commercial sector (Including Merger)	(17188426)	(16787986)	(18518837)	(18579372)	(18649246)
2.2.1 Bank credit by commercial banks	15901477	15490356	17304495	17367609	17426890
2.2.1 Bank credit by commercial banks (Including Merger)	(16432164)	(16043592)	(17743037)	(17800660)	(17868479)
2.2.2 Bank credit by co-operative banks	738194	726809	757258	759628	761677
2.2.3 Investments by commercial and co-operative banks in other securities	18068	17586	18541	19085	19091
2.2.3 Investments by commercial and co-operative banks in other securities (Including Merger)	(18068)	(17586)	(18541)	(19085)	(19091)
3 Net Foreign Exchange Assets of Banking Sector (3.1 + 3.2)	**5567504**	**5275455**	**5691089**	**5592318**	**5638730**
3.1 RBIs net foreign exchange assets (3.1.1 - 3.1.2)	5241083	4975898	5324382	5225611	5272023
3.1.1 Gross foreign assets	5241083	4975899	5324384	5225611	5272019
3.1.2 Foreign liabilities	0	1	2	0	-4
3.2 Other banks' net foreign exchange assets	326421	299557	366707	366707	366707
4 Government's Currency Liabilities to the Public	**33432**	**32887**	**35683**	**35683**	**35683**
5 Banking Sector's Net Non-monetary Liabilities	**4953478**	**4363521**	**5155062**	**5126245**	**5213597**
5 Banking Sectors Net Non-monetary Liabilities (Including Merger)	(5467477)	(4893943)	(5577783)	(5544742)	(5641822)
5.1 Net non-monetary liabilities of RBI	1790134	1721382	1891177	1910748	1986997
5.2 Net non-monetary liabilities of other banks (residual)	3163344	2642139	3263885	3215497	3226600
5.2 Net non-monetary liabilities of other banks (residual) (Including Merger)	(3677343)	(3172560)	(3686606)	(3633995)	(3654825)
M_3(1+2+3+4–5)	**24831618**	**24301509**	**26512774**	**26646082**	**26628759**
M3 (1+2+3+4-5) (Including Merger)	(24939860)	(24417811)	(26579464)	(26711510)	(26692999)

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	2024		2025	
		Jan. 26	Dec. 27	Jan. 10	Jan. 24
	1	2	3	4	5
Monetary Aggregates					
NM_1 (1.1+1.2.1+1.3)	6091700	5901646	6272318	6220129	6259608
NM_2 (NM_1 + 1.2.2.1)	14424855	14090468	15252461	15282992	15296176
NM2 (NM1 + 1.2.2.1) (Including Merger)	(14473564)	(14142803)	(15282471)	(15312435)	(15325083)
NM_3 (NM_2 +1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	25387764	24909855	27183290	27283273	27294849
NM3 (NM2 + 1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 - 2.4 - 2.5) (Including Merger)	(25496006)	(25026157)	(27249981)	(27348701)	(27359088)
1 Components					
1.1 Currency with the Public	3410276	3323406	3459977	3497219	3503602
1.2 Aggregate Deposits of Residents	21105009	20695211	22666584	22758981	22732973
1.2 Aggregate Deposits of Residents (Including Merger)	(21213252)	(20811512)	(22733275)	(22824409)	(22797212)
1.2.1 Demand Deposits	2586888	2497829	2710713	2619285	2651712
1.2.2 Time Deposits of Residents	18518121	18197382	19955872	20139696	20081261
1.2.2 Time Deposits of Residents (Including Merger)	(18626364)	(18313684)	(20022562)	(20205125)	(20145500)
1.2.2.1 Short-term Time Deposits	8333155	8188822	8980142	9062863	9036567
1.2.2.1 Short-term Time Deposits (Including Merger)	(8381864)	(8241158)	(9010153)	(9092306)	(9065475)
1.2.2.1.1 Certificates of Deposits (CDs)	369399	353658	499061	494242	503843
1.2.2.2 Long-term Time Deposits	10184967	10008560	10975729	11076833	11044693
1.2.2.2 Long-term Time Deposits (Including Merger)	(10244500)	(10072526)	(11012409)	(11112819)	(11080025)
1.3 'Other' Deposits with RBI	94536	80411	101629	103625	104294
1.4 Call/Term Funding from Financial Institutions	777942	810828	955100	923448	953980
2 Sources					
2.1 Domestic Credit	25295986	24461941	27103156	27346110	27384392
2.1 Domestic Credit (Including Merger)	(25918227)	(25108664)	(27592567)	(27830036)	(27876856)
2.1.1 Net Bank Credit to the Government	7512016	7116700	7850250	7987492	7937526
2.1.1 Net Bank Credit to the Government (Including Merger)	(7603571)	(7210188)	(7901119)	(8038367)	(7988402)
2.1.1.1 Net RBI credit to the Government	1193213	934359	1000891	1104710	1047893
2.1.1.2 Credit to the Government by the Banking System	6318803	6182341	6849360	6882782	6889633
2.1.1.2 Credit to the Government by the Banking System (Including Merger)	(6410358)	(6275829)	(6900228)	(6933657)	(6940509)
2.1.2 Bank Credit to the Commercial Sector	17783970	17345240	19252905	19358618	19446866
2.1.2 Bank Credit to the Commercial Sector (Including Merger)	(18314656)	(17898476)	(19691448)	(19791669)	(19888454)
2.1.2.1 RBI Credit to the Commercial Sector	14406	5237	10519	10512	22760
2.1.2.2 Credit to the Commercial Sector by the Banking System	17769564	17340003	19242386	19348106	19424106
2.1.2.2 Credit to the Commercial Sector by the Banking System (Including Merger)	(18300250)	(17893239)	(19680929)	(19781157)	(19865694)
2.1.2.2.1 Other Investments (Non-SLR Securities)	1089184	1087256	1146977	1189681	1201967
2.2 Government's Currency Liabilities to the Public	33432	32887	35683	35683	35683
2.3 Net Foreign Exchange Assets of the Banking Sector	5111079	4952946	5300371	5247997	5321759
2.3.1 Net Foreign Exchange Assets of the RBI	5241083	4975898	5324382	5225611	5272023
2.3.2 Net Foreign Currency Assets of the Banking System	-130004	-22951	-24011	22386	49737
2.4 Capital Account	3912897	3977586	4396751	4403935	4467201
2.5 Other items (net)	1653834	1090755	1281889	1361080	1408009

Figures in parentheses include the impact of merger of a non-bank with a bank.

No. 9: Liquidity Aggregates

(₹ Crore)

Aggregates	2023-24	2024			2025
		Jan.	Nov.	Dec.	Jan.
	1	2	3	4	5
1 NM_3	**25387764**	**24909855**	**27122450**	**27183290**	**27294849**
	(25496006)	(25026157)	(27191610)	(27249981)	(27359088)
2 Postal Deposits	729246	713503	732774	732774	732774
3 L_1 (1 + 2)	**26117010**	**25623358**	**27855224**	**27916064**	**28027623**
	(26225252)	(25739660)	(27924384)	(27982755)	(28091862)
4 Liabilities of Financial Institutions	85150	76805	66263	73559	75298
4.1 Term Money Borrowings	2375	1990	26	16	16
4.2 Certificates of Deposit	70245	61750	52765	59920	61430
4.3 Term Deposits	12531	13065	13473	13622	13852
5 L_2 (3 + 4)	**26202160**	**25700164**	**27921487**	**27989623**	**28102921**
	(26310403)	(25816465)	(27990647)	(28056313)	(28167160)
6 Public Deposits with Non-Banking Financial Companies	102994	..	..	116921	..
7 L_3 (5 + 6)	**26305155**	**..**	**..**	**28106544**	**..**

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	2024		2025	
		Jan. 26	Dec. 27	Jan. 10	Jan. 24
	1	2	3	4	5
1 Components					
1.1 Currency in Circulation	3511461	3419207	3561202	3589967	3599978
1.2 Bankers' Deposits with the RBI	1025449	994201	1000260	988744	948414
1.2.1 Scheduled Commercial Banks	956011	933808	939428	930602	889895
1.3 'Other' Deposits with the RBI	94536	80411	101629	103625	104294
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	4631446	4493820	4663090	4682337	4652687
2 Sources					
2.1 RBI's Domestic Credit	1147066	1206417	1194202	1331790	1331978
2.1.1 Net RBI credit to the Government	1193213	934359	1000891	1104710	1047893
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	921591	979092	1090132	1027441
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	1358899	1253916	1255213	1288414
2.1.1.1.3.1 Central Government Securities	1363369	1358899	1253916	1255213	1288414
2.1.1.1.4 Rupee Coins	459	296	278	342	408
2.1.1.1.5 Deposits of the Central Government	177172	437603	275101	165423	261381
2.1.1.2 Net RBI credit to State Governments	6557	12768	21798	14578	20452
2.1.2 RBI's Claims on Banks	-60553	266820	182792	216568	261325
2.1.2.1 Loans and Advances to Scheduled Commercial Banks	-60553	266820	182792	216568	261325
2.1.3 RBI's Credit to Commercial Sector	14406	5237	10519	10512	22760
2.1.3.1 Loans and Advances to Primary Dealers	9358	3174	8459	8546	9556
2.1.3.2 Loans and Advances to NABARD	-	-	-	-	-
2.2 Government's Currency Liabilities to the Public	33432	32887	35683	35683	35683
2.3 Net Foreign Exchange Assets of the RBI	5241083	4975898	5324382	5225611	5272023
2.3.1 Gold	439319	394644	566843	583572	600379
2.3.2 Foreign Currency Assets	4801764	4581255	4757541	4642039	4671640
2.4 Capital Account	1589134	1670689	1803583	1812997	1870465
2.5 Other Items (net)	201000	50693	87594	97750	116532

No. 11: Reserve Money - Components and Sources

(₹ Crore)

Item	2023-24	Outstanding as on March 31/last Fridays of the month/Fridays					
		2024	2025				
		Jan. 26	Jan. 3	Jan. 10	Jan. 17	Jan. 24	Jan. 31
	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	4493820	4632320	4682337	4653249	4652687	4689418
1 Components							
1.1 Currency in Circulation	3511461	3419207	3561655	3589967	3594621	3599978	3600982
1.2 Bankers' Deposits with RBI	1025449	994201	967198	988744	954987	948414	982697
1.3 'Other' Deposits with RBI	94536	80411	103468	103625	103641	104294	105739
2 Sources							
2.1 Net Reserve Bank Credit to Government	1193213	934359	1177644	1104710	1144445	1047893	1189067
2.2 Reserve Bank Credit to Banks	-60553	266820	30725	216568	181949	261325	154192
2.3 Reserve Bank Credit to Commercial Sector	14406	5237	9952	10512	15982	22760	22953
2.4 Net Foreign Exchange Assets of RBI	5241083	4975898	5290108	5225611	5249634	5272023	5305327
2.5 Government's Currency Liabilities to the Public	33432	32887	35683	35683	35683	35683	36017
2.6 Net Non- Monetary Liabilities of RBI	1790134	1721382	1911792	1910748	1974445	1986997	2018138

No. 12: Commercial Bank Survey

(₹ Crore)

Item	Outstanding as on last reporting Fridays of the month/ reporting Fridays of the month				
	2023-24	2024		2025	
		Jan. 26	Dec. 27	Jan. 10	Jan. 24
	1	2	3	4	5
1 Components					
1.1 Aggregate Deposits of Residents	20145188	19740368	21711317	21799489	21774443
	(20253430)	(19856670)	(21778008)	(21864918)	(21838682)
1.1.1 Demand Deposits	2443853	2355015	2569573	2478180	2510913
1.1.2 Time Deposits of Residents	17701334	17385354	19141745	19321310	19263530
	(17809577)	(17501655)	(19208435)	(19386738)	(19327769)
1.1.2.1 Short-term Time Deposits	7965600	7823409	8613785	8694589	8668588
1.1.2.1.1 Certificates of Deposits (CDs)	369399	353658	499061	494242	503843
1.1.2.2 Long-term Time Deposits	9735734	9561944	10527960	10626720	10594941
1.2 Call/Term Funding from Financial Institutions	777942	810828	955100	923448	953980
2 Sources					
2.1 Domestic Credit	23019606	22467590	25002766	25138245	25219289
	(23641847)	(23114313)	(25492177)	(25622171)	(25711754)
2.1.1 Credit to the Government	6014054	5879874	6544381	6577038	6584147
	(6105610)	(5973361)	(6595249)	(6627913)	(6635022)
2.1.2 Credit to the Commercial Sector	17005551	16587716	18458385	18561207	18635143
	(17536238)	(17140952)	(18896928)	(18994258)	(19076731)
2.1.2.1 Bank Credit	15901477	15490356	17304495	17367609	17426890
	(16432164)	(16043592)	(17743037)	(17800660)	(17868479)
2.1.2.1.1 Non-food Credit	15878397	15444737	17248356	17309886	17370711
	(16409083)	(15997973)	(17686899)	(17742937)	(17812300)
2.1.2.2 Net Credit to Primary Dealers	22904	18260	15378	12367	14744
2.1.2.3 Investments in Other Approved Securities	949	807	498	513	504
2.1.2.4 Other Investments (in non-SLR Securities)	1080222	1078293	1138015	1180718	1193005
2.2 Net Foreign Currency Assets of Commercial Banks (2.2.1-2.2.2-2.2.3)	-130004	-22951	-24011	22386	49737
2.2.1 Foreign Currency Assets	241661	300706	443646	489771	520849
2.2.2 Non-resident Foreign Currency Repatriable Fixed Deposits	221796	202482	284584	286257	287890
2.2.3 Overseas Foreign Currency Borrowings	149868	121175	183074	181129	183222
2.3 Net Bank Reserves (2.3.1+2.3.2-2.3.3)	893350	751085	845902	795218	713399
2.3.1 Balances with the RBI	931483	933808	939428	930602	889895
2.3.2 Cash in Hand	89433	84097	89267	81185	84829
2.3.3 Loans and Advances from the RBI	127566	266820	182792	216568	261325
2.4 Capital Account	2299592	2282726	2568998	2566767	2572565
2.5 Other items (net) (2.1+2.2+2.3-2.4-1.1-1.2)	560230	361801	589242	666145	681437
2.5.1 Other Demand and Time Liabilities (net of 2.2.3)	787560	769739	813552	801722	807699
2.5.2 Net Inter-Bank Liabilities (other than to PDs)	197781	194211	132284	144231	153034

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	2024		2025	
		Jan. 26	Dec. 27	Jan. 10	Jan. 24
	1	2	3	4	5
1 SLR Securities	6106558	5974168	6595747	6628426	6635526
	(6015003)	(5880681)	(6544879)	(6577551)	(6584651)
2 Other Government Securities (Non-SLR)	177136	177924	157389	161152	164435
3 Commercial Paper	61175	49323	60941	60955	58059
4 Shares issued by					
4.1 PSUs	8475	8879	13264	13168	13078
4.2 Private Corporate Sector	77722	80230	97546	96894	96841
4.3 Others	5624	5616	7491	7481	7505
5 Bonds/Debentures issued by					
5.1 PSUs	103070	96460	127702	125328	125694
5.2 Private Corporate Sector	287596	284842	232630	235197	234938
5.3 Others	124690	109879	157698	156511	156608
6 Instruments issued by					
6.1 Mutual funds	62499	81790	92068	130665	141035
6.2 Financial institutions	172340	183109	191321	193367	194810

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	2024		2025	2023-24	2024		2025
		Jan.	Dec.	Jan.		Jan.	Dec.	Jan.
	1	2	3	4	5	6	7	8
Number of Reporting Banks	210	210	208	208	137	137	135	135
1 Liabilities to the Banking System	**554117**	**539209**	**461496**	**453754**	**549351**	**534661**	**456515**	**448167**
1.1 Demand and Time Deposits from Banks	298452	269499	296174	282726	294471	265719	291575	277698
1.2 Borrowings from Banks	182566	197881	138393	140165	182429	197782	138334	139948
1.3 Other Demand and Time Liabilities	73100	71829	26929	30863	72452	71160	26606	30521
2 Liabilities to Others	**22664868**	**22220145**	**24491884**	**24920355**	**22190597**	**21760894**	**24014317**	**24436108**
2.1 Aggregate Deposits	20932067	20501415	22522349	22944468	20475226	20059152	22062591	22478747
	(20823825)	(20385113)	(22455658)	(22880802)	(20366984)	(19942850)	(21995901)	(22415081)
2.1.1 Demand	2492916	2403089	2617452	2713641	2443853	2355015	2569573	2665610
2.1.2 Time	18439151	18098326	19904896	20230827	18031373	17704137	19493019	19813137
2.2 Borrowings	782260	815756	959775	905090	777942	810828	955100	900495
2.3 Other Demand and Time Liabilities	950541	902974	1009761	1070797	937428	890914	996626	1056866
3 Borrowings from Reserve Bank	**222716**	**337637**	**244697**	**256989**	**222716**	**337637**	**244697**	**256989**
3.1 Against Usance Bills /Promissory Notes	-	-	-	-	-	-	-	-
3.2 Others	222716	337637	244697	256989	222716	337637	244697	256989
4 Cash in Hand and Balances with Reserve Bank	1043272	1039630	1051004	1040610	1020916	1017905	1028694	1019921
4.1 Cash in Hand	91886	86504	91928	98119	89433	84097	89267	95838
4.2 Balances with Reserve Bank	951386	953126	959076	942491	931483	933808	939428	924083
5 Assets with the Banking System	**455057**	**431114**	**410612**	**394465**	**374474**	**358710**	**339609**	**321252**
5.1 Balances with Other Banks	246384	244412	271169	252244	198327	199024	216738	199731
5.1.1 In Current Account	12010	12583	16333	12608	8971	10038	13938	10034
5.1.2 In Other Accounts	234373	231829	254836	239636	189357	188986	202800	189697
5.2 Money at Call and Short Notice	39614	39669	30173	33505	12355	17404	18342	19311
5.3 Advances to Banks	51325	44910	42099	42812	48368	42300	40682	39374
5.4 Other Assets	117734	102122	67172	65903	115424	99982	63847	62835
6 Investment	**6256962**	**6122017**	**6747371**	**6785751**	**6106558**	**5974168**	**6595747**	**6633676**
	(6165407)	(6028529)	(6696503)	(6734869)	(6015003)	(5880681)	(6544879)	(6582794)
6.1 Government Securities	6249319	6115133	6739533	6777484	6105610	5973361	6595249	6633133
6.2 Other Approved Securities	7643	6884	7839	8267	949	807	498	544
7 Bank Credit	**16866336**	**16472360**	**18194821**	**18514465**	**16432164**	**16043592**	**17743037**	**18055619**
	(16335650)	(15919124)	(17756278)	(18076210)	(15901477)	(15490356)	(17304495)	(17617364)
7a Food Credit	75472	94822	106755	105577	23081	45619	56139	54961
7.1 Loans, Cash-credits and Overdrafts	16565348	16190447	17870643	18178056	16134303	15764523	17422048	17722634
7.2 Inland Bills-Purchased	60471	51383	73546	76575	60467	51372	72063	74881
7.3 Inland Bills-Discounted	199761	191500	212904	216741	197358	189237	211819	215621
7.4 Foreign Bills-Purchased	16662	16786	15770	18142	16412	16575	15551	17917
7.5 Foreign Bills-Discounted	24094	22244	21957	24951	23624	21885	21557	24565

Note: Data in column Nos. (4) & (8) are Provisional
Data since July 2023 include the impact of the merger of a non-bank with a bank.
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	2024		2025	Financial year so far	Y-o-Y
		Jan. 26	Dec. 27	Jan. 24	2024-25	2025
	1	2	3	4	%	%
I. Bank Credit (II + III)	**16432164**	**16043592**	**17742873**	**17874756**	**8.8**	**11.4**
	(15901477)	(15490356)	(17304330)	(17433167)	(9.6)	(12.5)
II. Food Credit	**23081**	**45619**	**56139**	**56179**	**143.4**	**23.1**
III. Non-food Credit	**16409083**	**15997973**	**17686734**	**17818577**	**8.6**	**11.4**
	(15878397)	(15444737)	(17248192)	(17376988)	(9.4)	(12.5)
1. Agriculture & Allied Activities	**2071251**	**2009090**	**2239028**	**2253510**	**8.8**	**12.2**
2. Industry (Micro and Small, Medium and Large)	**3652804**	**3586425**	**3854429**	**3874601**	**6.1**	**8.0**
	(3635810)	(3569346)	(3842044)	(3862535)	(6.2)	(8.2)
2.1 Micro and Small	726315	710740	771039	778391	7.2	9.5
2.2 Medium	303998	292053	348108	345986	13.8	18.5
2.3 Large	2622490	2583632	2735282	2750224	4.9	6.4
3. Services	**4592227**	**4457085**	**4962520**	**5013597**	**9.2**	**12.5**
	(4490467)	(4341029)	(4888308)	(4941743)	(10.0)	(13.8)
3.1 Transport Operators	230175	227091	252966	253917	10.3	11.8
3.2 Computer Software	25917	26312	31582	33729	30.1	28.2
3.3 Tourism, Hotels & Restaurants	77513	76956	80218	81478	5.1	5.9
3.4 Shipping	7067	7104	7102	7180	1.6	1.1
3.5 Aviation	43248	44372	45979	44788	3.6	0.9
3.6 Professional Services	167234	161390	189578	190859	14.1	18.3
3.7 Trade	1025752	987612	1111227	1131031	10.3	14.5
3.7.1. Wholesale Trade[1]	538744	518664	584857	612701	13.7	18.1
3.7.2 Retail Trade	487008	468948	526370	518330	6.4	10.5
3.8 Commercial Real Estate	469013	459751	520913	523535	11.6	13.9
	(400470)	(377941)	(470949)	(476106)	(18.9)	(26.0)
3.9 Non-Banking Financial Companies (NBFCs)[2] of which,	1548027	1503363	1621767	1618650	4.6	7.7
3.9.1 Housing Finance Companies (HFCs)	325626	337673	319910	325646	0.0	-3.6
3.9.2 Public Financial Institutions (PFIs)	226963	210586	218657	219865	-3.1	4.4
3.10 Other Services[3]	998281	963135	1101188	1128430	13.0	17.2
	(978198)	(942207)	(1084711)	(1112253)	(13.7)	(18.0)
4. Personal Loans	**5331290**	**5214317**	**5794866**	**5831547**	**9.4**	**11.8**
	(4919468)	(4794254)	(5442956)	(5473924)	(11.3)	(14.2)
4.1 Consumer Durables	23713	24147	24012	23508	-0.9	-2.6
4.2 Housing	2718715	2658077	2931739	2950974	8.5	11.0
	(2331935)	(2263913)	(2601206)	(2614403)	(12.1)	(15.5)
4.3 Advances against Fixed Deposits	125239	116831	140998	135900	8.5	16.3
4.4 Advances to Individuals against share & bonds	8492	7340	9791	9765	15.0	33.0
4.5 Credit Card Outstanding	257016	258503	291087	292084	13.6	13.0
4.6 Education	119380	117186	133140	135864	13.8	15.9
4.7 Vehicle Loans	573398	560968	613302	615236	7.3	9.7
4.8 Loan against gold jewellery[4]	102562	101115	172581	178861	74.4	76.9
4.9 Other Personal Loans	1402775	1370150	1478217	1489354	6.2	8.7
	(1377966)	(1344544)	(1456900)	(1468357)	(6.6)	(9.2)
5. Priority Sector (Memo)						
(i) Agriculture & Allied Activities[5]	2081856	2028944	2236648	2248829	8.0	10.8
(ii) Micro & Small Enterprises[6]	1974191	1939655	2145252	2191766	11.0	13.0
(iii) Medium Enterprises[7]	490703	470617	575433	574228	17.0	22.0
(iv) Housing	755222	756997	751317	747261	-1.1	-1.3
	(660572)	(659871)	(667336)	(664181)	(0.5)	(0.7)
(v) Education Loans	62235	61682	62993	63056	1.3	2.2
(vi) Renewable Energy	5991	5564	8034	7559	26.2	35.8
(vii) Social Infrastructure	2613	2580	999	983	-62.4	-61.9
(viii) Export Credit	11774	11882	12352	12739	8.2	7.2
(ix) Others	61336	64169	55134	53143	-13.4	-17.2
(x) Weaker Sections including net PSLC- SF/MF	1647778	1619097	1748608	1793997	8.9	10.8

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 Since May 2024, a bank has changed the classification of a category of agricultural loan into "Loans against gold jewellery" under retail segment.

5 "Agriculture and Allied Activities" under the priority sector also include priority sector lending certificates (PSLCs).

6 "Micro and Small Enterprises" under the priority sector include credit to micro and small enterprises in industry and services sectors and also include PSLCs.

7 "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	2024		2025	Financial year so far	Y-o-Y
		Jan. 26	Dec. 27	Jan. 24	2025-26	2025
	1	2	3	4	%	%
2 Industries (2.1 to 2.19)	3652804	3586425	3854429	3874601	6.1	8.0
	(3635810)	(3569346)	(3842044)	(3862535)	(6.2)	(8.2)
2.1 Mining & Quarrying (incl. Coal)	54166	52757	53892	53191	-1.8	0.8
2.2 Food Processing	208864	195763	211986	217363	4.1	11.0
2.2.1 Sugar	26383	19920	19889	23147	-12.3	16.2
2.2.2 Edible Oils & Vanaspati	19700	19802	21798	21313	8.2	7.6
2.2.3 Tea	5692	5967	6470	6116	7.5	2.5
2.2.4 Others	157089	150074	163829	166786	6.2	11.1
2.3 Beverage & Tobacco	31136	28624	30669	30468	-2.1	6.4
2.4 Textiles	256048	252975	264055	267676	4.5	5.8
2.4.1 Cotton Textiles	99199	96847	98163	101271	2.1	4.6
2.4.2 Jute Textiles	4280	4233	4340	4328	1.1	2.2
2.4.3 Man-Made Textiles	45111	45854	48251	49071	8.8	7.0
2.4.4 Other Textiles	107458	106041	113303	113005	5.2	6.6
2.5 Leather & Leather Products	12588	12134	12804	12711	1.0	4.8
2.6 Wood & Wood Products	23839	23748	26601	26895	12.8	13.2
2.7 Paper & Paper Products	46426	45875	51508	51885	11.8	13.1
2.8 Petroleum, Coal Products & Nuclear Fuels	132356	129735	139840	154402	16.7	19.0
2.9 Chemicals & Chemical Products	249347	242309	263647	265385	6.4	9.5
2.9.1 Fertiliser	37569	33977	31829	31244	-16.8	-8.0
2.9.2 Drugs & Pharmaceuticals	81036	79658	88026	88010	8.6	10.5
2.9.3 Petro Chemicals	23157	22679	26038	27832	20.2	22.7
2.9.4 Others	107584	105995	117754	118299	10.0	11.6
2.10 Rubber, Plastic & their Products	90420	89863	98914	100175	10.8	11.5
2.11 Glass & Glassware	12090	11732	12507	12611	4.3	7.5
2.12 Cement & Cement Products	59757	59193	61541	60576	1.4	2.3
2.13 Basic Metal & Metal Product	384447	380536	432757	434354	13.0	14.1
2.13.1 Iron & Steel	273803	269707	306185	308145	12.5	14.3
2.13.2 Other Metal & Metal Product	110645	110830	126572	126210	14.1	13.9
2.14 All Engineering	196643	194009	227079	229142	16.5	18.1
2.14.1 Electronics	43175	44413	50108	51243	18.7	15.4
2.14.2 Others	153468	149596	176972	177899	15.9	18.9
2.15 Vehicles, Vehicle Parts & Transport Equipment	113185	109035	115180	117775	4.1	8.0
2.16 Gems & Jewellery	84860	82137	87797	86364	1.8	5.1
2.17 Construction	133520	133824	143789	145199	8.7	8.5
2.18 Infrastructure	1304096	1288823	1314369	1309202	0.4	1.6
2.18.1 Power	644042	636084	656191	664682	3.2	4.5
2.18.2 Telecommunications	138192	136797	124624	124061	-10.2	-9.3
2.18.3 Roads	318072	317275	325833	314494	-1.1	-0.9
2.18.4 Airports	7280	6888	8733	8682	19.3	26.0
2.18.5 Ports	6681	7171	6282	5465	-18.2	-23.8
2.18.6 Railways	13062	12074	13325	13306	1.9	10.2
2.18.7 Other Infrastructure	176767	172534	179380	178513	1.0	3.5
2.19 Other Industries	259016	253352	305493	299228	15.5	18.1

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						
		Dec. 29	Oct. 18	Oct. 25	Nov. 01	Nov. 15	Nov. 29	Dec. 13	Dec. 27
	1	2	3	4	5	6	7	8	9
Number of Reporting Banks	33	33	34	34	34	34	34	34	34
1 Aggregate Deposits (2.1.1.2+2.2.1.2)	**138788.9**	**134207.5**	**131965.1**	**132037.8**	**132552.8**	**138073.1**	**138154.1**	**131867.2**	**140702.2**
2 Demand and Time Liabilities									
2.1 Demand Liabilities	**30226.7**	**28479.2**	**25419.0**	**25724.0**	**25854.5**	**26021.8**	**26562.1**	**26329.5**	**25817.1**
2.1.1 Deposits									
2.1.1.1 Inter-Bank	9101.3	6777.1	7243.0	7210.1	7147.7	7239.1	6670.1	6850.3	6676.5
2.1.1.2 Others	15000.4	14679.1	13121.6	13179.2	13327.5	13293.6	13187.7	12967.4	13201.0
2.1.2 Borrowings from Banks	130.0		190.0	639.7	574.6	449.8	1454.3	1576.4	997.9
2.1.3 Other Demand Liabilities	5995.0	7023.0	4864.4	4695.0	4804.7	5039.2	5249.9	4935.4	4941.7
2.2 Time Liabilities	**198141.8**	**178662.9**	**177986.9**	**177577.6**	**177539.8**	**178177.3**	**176625.0**	**168281.8**	**179599.5**
2.2.1 Deposits									
2.2.1.1 Inter-Bank	72308.4	55648.9	56392.3	56169.6	55653.7	51788.5	50047.3	47748.7	50440.5
2.2.1.2 Others	123788.5	119528.4	118843.5	118858.6	119225.3	124779.5	124966.4	118899.8	127501.2
2.2.2 Borrowings from Banks	673.6	2244.3	1712.2	1460.2	1591.7	651.9	651.9	651.9	651.9
2.2.3 Other Time Liabilities	1371.3	1241.3	1038.9	1089.2	1069.1	957.3	959.5	981.4	1005.9
3 Borrowing from Reserve Bank	0.0							0.0	0.0
4 Borrowings from a notified bank / Government	95914.5	88584.8	89225.0	88927.0	89398.0	173712.9	112111.7	114646.7	112137.9
4.1 Demand	27317.7	22764.0	25217.3	24980.3	25033.3	102827.6	45109.3	44426.4	44100.3
4.2 Time	68596.8	65820.8	64007.2	64224.1	64364.7	70885.3	67002.4	70220.3	68037.6
5 Cash in Hand and Balances with Reserve Bank	**16263.7**	**11065.3**	**12371.3**	**11411.6**	**13169.8**	**12004.2**	**11145.5**	**12024.9**	**11868.9**
5.1 Cash in Hand	960.0	766.3	838.2	818.0	828.9	772.6	821.1	773.9	845.0
5.2 Balance with Reserve Bank	15303.7	10299.0	11533.2	10593.6	12340.9	11231.6	10324.4	11251.0	11023.9
6 Balances with Other Banks in Current Account	**2088.1**	**1645.3**	**1229.3**	**1135.9**	**1084.0**	**1035.0**	**1118.1**	**1287.5**	**1010.4**
7 Investments in Government Securities	**77700.5**	**74036.6**	**73111.6**	**73805.6**	**74545.3**	**75275.2**	**75074.9**	**74143.9**	**74779.2**
8 Money at Call and Short Notice	**34355.3**	**23160.0**	**17854.6**	**16692.6**	**16150.3**	**15588.7**	**12457.8**	**13852.0**	**12854.5**
9 Bank Credit (10.1+11)	**135141.9**	**132527.0**	**135003.0**	**136490.2**	**136802.8**	**167629.4**	**166666.0**	**141596.3**	**168136.4**
10 Advances									
10.1 Loans, Cash-Credits and Overdrafts	**134936.8**	**132420.5**	**134807.4**	**136282.1**	**136593.9**	**167432.0**	**166480.4**	**141403.7**	**167935.8**
10.2 Due from Banks	142185.2	133287.7	141859.4	142706.5	143073.6	113950.8	111546.4	110681.2	110877.6
11 Bills Purchased and Discounted	205.1	106.5	195.6	208.1	208.9	197.4	185.6	192.6	200.6

Prices and Production

No. 18: Consumer Price Index (Base: 2012=100)

Group/Sub group	2023-24			Rural			Urban			Combined		
	Rural	Urban	Combined	Feb.24	Jan.25	Feb.25 (P)	Feb.24	Jan.25	Feb.25 (P)	Feb.24	Jan.25	Feb.25 (P)
	1	2	3	4	5	6	7	8	9	10	11	12
1 Food and beverages	**185.9**	**192.7**	**188.4**	**187.8**	**198.8**	**195.4**	**194.6**	**204.6**	**201.3**	**190.3**	**200.9**	**197.6**
1.1 Cereals and products	181.4	181.7	181.5	188.6	199.8	200.6	188.3	197.5	198.6	188.5	199.1	200.0
1.2 Meat and fish	213.0	221.3	215.9	214.8	220.9	219.2	223.9	230.8	228.9	218.0	224.4	222.6
1.3 Egg	185.4	189.5	187.0	201.7	206.0	194.8	204.7	210.8	200.0	202.9	207.9	196.8
1.4 Milk and products	181.4	181.5	181.4	182.9	187.7	187.6	183.2	188.2	188.4	183.0	187.9	187.9
1.5 Oils and fats	165.3	158.7	162.9	160.2	189.0	188.9	155.1	175.6	176.0	158.3	184.1	184.2
1.6 Fruits	172.1	179.9	175.7	169.2	192.0	195.0	174.0	193.8	198.8	171.4	192.8	196.8
1.7 Vegetables	183.9	229.9	199.5	179.8	203.5	181.3	226.1	245.6	217.0	195.5	217.8	193.4
1.8 Pulses and products	192.2	196.5	193.7	200.8	207.7	200.2	206.0	213.0	205.2	202.6	209.5	201.9
1.9 Sugar and confectionery	126.2	128.1	126.9	128.7	129.6	131.4	130.7	132.4	133.8	129.4	130.5	132.2
1.10 Spices	238.0	228.4	234.8	240.7	227.2	224.9	232.0	222.9	222.0	237.8	225.8	223.9
1.11 Non-alcoholic beverages	180.7	168.2	175.5	182.2	187.7	188.3	169.9	176.6	177.2	177.1	183.1	183.7
1.12 Prepared meals, snacks, sweets	193.3	200.9	196.8	195.4	201.7	202.4	204.0	212.9	213.9	199.4	206.9	207.7
2 Pan, tobacco and intoxicants	**202.0**	**207.1**	**203.3**	**203.7**	**208.3**	**209.0**	**209.5**	**212.6**	**213.2**	**205.2**	**209.4**	**210.1**
3 Clothing and footwear	**192.9**	**181.5**	**188.4**	**194.8**	**199.7**	**199.8**	**183.4**	**188.1**	**188.6**	**190.3**	**195.1**	**195.4**
3.1 Clothing	193.5	183.5	189.6	195.4	200.6	200.7	185.5	190.3	190.8	191.5	196.5	196.8
3.2 Footwear	189.4	170.2	181.4	190.9	193.9	194.1	172.0	176.0	176.2	183.0	186.5	186.7
4 Housing	--	**176.7**	**176.7**	--	--	--	**178.5**	**182.6**	**183.7**	**178.5**	**182.6**	**183.7**
5 Fuel and light	**183.0**	**178.9**	**181.4**	**183.8**	**182.8**	**182.8**	**175.6**	**170.6**	**171.0**	**180.7**	**178.2**	**178.3**
6 Miscellaneous	**181.7**	**173.7**	**177.8**	**183.8**	**191.5**	**192.8**	**175.5**	**182.7**	**183.7**	**179.8**	**187.2**	**188.4**
6.1 Household goods and services	181.5	171.8	176.9	183.3	187.3	187.7	173.3	178.8	179.2	178.6	183.3	183.7
6.2 Health	190.8	185.2	188.7	193.8	200.8	201.6	188.3	195.4	196.2	191.7	198.8	199.6
6.3 Transport and communication	171.1	161.4	166.0	172.2	177.3	177.7	162.3	166.1	166.5	167.0	171.4	171.8
6.4 Recreation and amusement	175.8	171.1	173.2	177.4	181.6	182.0	172.5	177.1	177.3	174.6	179.1	179.4
6.5 Education	184.0	179.1	181.1	186.0	192.5	192.6	180.9	188.0	188.2	183.0	189.9	190.0
6.6 Personal care and effects	186.3	187.4	186.8	188.8	208.4	214.1	190.1	210.3	216.3	189.3	209.2	215.0
General Index (All Groups)	**185.6**	**182.4**	**184.1**	**187.4**	**195.9**	**194.5**	**184.0**	**190.6**	**190.1**	**185.8**	**193.4**	**192.5**

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	2024		2025
				Jan.	Dec.	Jan.
	1	2	3	4	5	6
1 Consumer Price Index for Industrial Workers	2016	2.88	137.9	138.9	143.7	143.2
2 Consumer Price Index for Agricultural Labourers	1986-87	5.89	1229	1258	1320	1316
3 Consumer Price Index for Rural Labourers	1986-87	-	1240	1268	1331	1328

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	2024		2025
		Jan.	Dec.	Jan.
	1	2	3	4
1 Standard Gold (₹ per 10 grams)	60624	62322	76195	79079
2 Silver (₹ per kilogram)	72243	71723	89265	90020

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	2024		2025	
			Feb.	Dec.	Jan.(P)	Feb.(P)
	1	2	3	4	5	6
1 ALL COMMODITIES	**100.000**	**151.4**	**151.2**	**155.7**	**154.7**	**154.8**
1.1 PRIMARY ARTICLES	**22.618**	**183.0**	**181.5**	**193.8**	**189.9**	**186.6**
1.1.1 FOOD ARTICLES	**15.256**	**191.3**	**189.4**	**207.5**	**199.9**	**195.8**
1.1.1.1 Food Grains (Cereals+Pulses)	3.462	193.8	201.5	213.7	213.2	212.1
1.1.1.2 Fruits & Vegetables	3.475	210.2	187.7	244.7	210.8	198.1
1.1.1.3 Milk	4.440	180.3	183.5	185.6	187.2	186.4
1.1.1.4 Eggs, Meat & Fish	2.402	172.1	169.0	174.7	174.7	171.5
1.1.1.5 Condiments & Spices	0.529	235.4	248.9	240.2	232.6	213.1
1.1.1.6 Other Food Articles	0.948	189.5	197.6	216.3	217.1	223.0
1.1.2 NON-FOOD ARTICLES	**4.119**	**162.4**	**159.1**	**166.2**	**167.4**	**166.8**
1.1.2.1 Fibres	0.839	168.0	159.6	159.3	161.7	161.8
1.1.2.2 Oil Seeds	1.115	185.0	178.7	182.8	183.0	178.9
1.1.2.3 Other non-food Articles	1.960	134.9	133.3	140.7	142.7	143.1
1.1.2.4 Floriculture	0.204	279.7	297.9	349.3	343.7	349.2
1.1.3 MINERALS	**0.833**	**217.7**	**225.0**	**230.1**	**230.1**	**227.2**
1.1.3.1 Metallic Minerals	0.648	204.2	209.7	219.1	219.1	216.3
1.1.3.2 Other Minerals	0.185	265.0	278.9	268.7	268.8	265.5
1.1.4 CRUDE PETROLEUM & NATURAL GAS	**2.410**	**153.6**	**155.0**	**141.9**	**150.9**	**148.7**
1.2 FUEL & POWER	**13.152**	**152.0**	**154.9**	**151.8**	**150.6**	**153.8**
1.2.1 COAL	**2.138**	**136.4**	**136.0**	**135.6**	**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	241.8	231.2	231.2	231.0
1.2.2 MINERAL OILS	**7.950**	**159.0**	**159.2**	**153.9**	**155.0**	**157.9**
1.2.3 ELECTRICITY	**3.064**	**145.0**	**157.0**	**157.5**	**149.7**	**156.1**
1.3 MANUFACTURED PRODUCTS	**64.231**	**140.2**	**139.8**	**143.0**	**143.2**	**143.8**
1.3.1 MANUFACTURE OF FOOD PRODUCTS	**9.122**	**160.5**	**160.1**	**176.8**	**177.0**	**177.8**
1.3.1.1 Processing and Preserving of meat	0.134	145.3	147.4	155.7	156.8	158.1
1.3.1.2 Processing and Preserving of fish, Crustaceans, Molluscs and products thereof	0.204	142.9	143.2	143.5	145.1	146.0
1.3.1.3 Processing and Preserving of fruit and Vegetables	0.138	130.4	130.0	133.3	132.8	132.3
1.3.1.4 Vegetable and Animal oils and Fats	2.643	145.0	141.1	185.6	186.6	188.5
1.3.1.5 Dairy products	1.165	179.1	179.1	182.1	182.0	182.8
1.3.1.6 Grain mill products	2.010	175.6	181.8	189.5	189.6	189.8
1.3.1.7 Starches and Starch products	0.110	157.1	165.7	165.1	164.5	162.8
1.3.1.8 Bakery products	0.215	165.4	166.0	173.7	174.7	174.9
1.3.1.9 Sugar, Molasses & honey	1.163	134.6	136.9	136.0	138.3	141.4
1.3.1.10 Cocoa, Chocolate and Sugar confectionery	0.175	139.8	143.6	167.2	168.3	172.2
1.3.1.11 Macaroni, Noodles, Couscous and Similar farinaceous products	0.026	149.9	149.3	166.4	161.0	159.2
1.3.1.12 Tea & Coffee products	0.371	176.2	150.1	173.0	161.8	156.1
1.3.1.13 Processed condiments & salt	0.163	192.1	196.9	192.5	193.8	192.1
1.3.1.14 Processed ready to eat food	0.024	146.3	148.1	154.7	155.5	154.7
1.3.1.15 Health supplements	0.225	179.1	179.7	189.0	189.6	188.1
1.3.1.16 Prepared animal feeds	0.356	208.3	203.7	201.7	200.4	197.4
1.3.2 MANUFACTURE OF BEVERAGES	**0.909**	**131.5**	**132.3**	**134.5**	**134.4**	**134.5**
1.3.2.1 Wines & spirits	0.408	133.3	133.9	137.0	136.9	137.4
1.3.2.2 Malt liquors and Malt	0.225	135.6	136.1	139.0	138.9	138.9
1.3.2.3 Soft drinks; Production of mineral waters and Other bottled waters	0.275	125.5	126.8	127.2	127.1	126.5
1.3.3 MANUFACTURE OF TOBACCO PRODUCTS	**0.514**	**173.5**	**175.2**	**180.3**	**177.4**	**180.0**
1.3.3.1 Tobacco products	0.514	173.5	175.2	180.3	177.4	180.0

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2024		2025	
			Feb.	Dec.	Jan.(P)	Feb.(P)
	1	2	3	4	5	6
1.3.4 MANUFACTURE OF TEXTILES	**4.881**	**134.6**	**134.4**	**136.8**	**136.9**	**137.0**
1.3.4.1 Preparation and Spinning of textile fibres	2.582	120.1	119.8	120.7	120.6	120.8
1.3.4.2 Weaving & Finishing of textiles	1.509	157.5	156.5	161.2	160.9	161.1
1.3.4.3 Knitted and Crocheted fabrics	0.193	120.0	120.3	123.7	124.1	124.8
1.3.4.4 Made-up textile articles, Except apparel	0.299	156.6	157.5	161.5	161.7	160.4
1.3.4.5 Cordage, Rope, Twine and Netting	0.098	139.2	139.9	144.4	146.1	147.8
1.3.4.6 Other textiles	0.201	129.6	132.5	133.7	136.7	136.5
1.3.5 MANUFACTURE OF WEARING APPAREL	**0.814**	**150.8**	**151.7**	**154.4**	**154.1**	**154.3**
1.3.5.1 Manufacture of Wearing Apparel (woven), Except fur Apparel	0.593	148.7	148.8	151.6	151.4	151.8
1.3.5.2 Knitted and Crocheted apparel	0.221	156.6	159.3	161.9	161.3	161.2
1.3.6 MANUFACTURE OF LEATHER AND RELATED PRODUCTS	**0.535**	**124.1**	**123.7**	**126.0**	**126.3**	**125.8**
1.3.6.1 Tanning and Dressing of leather; Dressing and Dyeing of fur	0.142	107.3	103.6	108.6	108.9	107.7
1.3.6.2 Luggage, HandbAgs, Saddlery and Harness	0.075	140.9	140.9	142.4	142.4	143.0
1.3.6.3 Footwear	0.318	127.7	128.5	129.9	130.3	129.9
1.3.7 MANUFACTURE OF WOOD AND PRODUCTS OF WOOD AND CORK	**0.772**	**146.6**	**149.5**	**148.3**	**149.3**	**148.8**
1.3.7.1 Saw milling and Planing of wood	0.124	137.8	140.0	140.7	141.6	141.6
1.3.7.2 Veneer sheets; Manufacture of plywood, Laminboard, Particle board and Other panels and Boards	0.493	146.1	149.9	147.5	148.7	147.5
1.3.7.3 Builder's carpentry and Joinery	0.036	206.4	210.3	214.6	214.5	215.1
1.3.7.4 Wooden containers	0.119	139.8	139.7	139.5	140.4	141.7
1.3.8 MANUFACTURE OF PAPER AND PAPER PRODUCTS	**1.113**	**140.3**	**137.9**	**138.3**	**139.4**	**140.8**
1.3.8.1 Pulp, Paper and Paperboard	0.493	147.6	145.4	143.2	143.9	145.2
1.3.8.2 Corrugated paper and Paperboard and Containers of paper and Paperboard	0.314	140.9	142.1	148.9	149.6	150.8
1.3.8.3 Other articles of paper and Paperboard	0.306	128.0	121.3	119.7	121.5	123.7
1.3.9 PRINTING AND REPRODUCTION OF RECORDED MEDIA	**0.676**	**182.3**	**184.2**	**188.7**	**189.8**	**190.7**
1.3.9.1 Printing	0.676	182.3	184.2	188.7	189.8	190.7
1.3.10 MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS	**6.465**	**136.9**	**135.4**	**136.5**	**136.7**	**137.1**
1.3.10.1 Basic chemicals	1.433	139.9	136.7	139.7	139.3	140.7
1.3.10.2 Fertilizers and Nitrogen compounds	1.485	142.8	142.0	143.0	143.4	143.6
1.3.10.3 Plastic and Synthetic rubber in primary form	1.001	132.3	131.8	132.9	133.5	134.1
1.3.10.4 Pesticides and Other agrochemical products	0.454	132.8	130.0	128.7	129.2	129.2
1.3.10.5 Paints, Varnishes and Similar coatings, Printing ink and Mastics	0.491	143.7	142.9	138.6	139.2	138.5
1.3.10.6 Soap and Detergents, Cleaning and Polishing preparations, Perfumes and Toilet preparations	0.612	139.7	138.6	140.4	140.4	140.8
1.3.10.7 Other chemical products	0.692	134.4	133.2	135.1	135.0	135.1
1.3.10.8 Man-made fibres	0.296	103.6	103.4	103.9	104.3	104.1
1.3.11 MANUFACTURE OF PHARMACEUTICALS, MEDICINAL CHEMICAL AND BOTANICAL PRODUCTS	**1.993**	**142.9**	**143.9**	**144.0**	**145.0**	**145.0**
1.3.11.1 Pharmaceuticals, Medicinal chemical and Botanical products	1.993	142.9	143.9	144.0	145.0	145.0
1.3.12 MANUFACTURE OF RUBBER AND PLASTICS PRODUCTS	**2.299**	**127.5**	**127.7**	**129.0**	**129.3**	**129.7**
1.3.12.1 Rubber Tyres and Tubes; Retreading and Rebuilding of Rubber Tyres	0.609	113.7	113.9	117.1	116.9	117.2
1.3.12.2 Other Rubber Products	0.272	107.3	108.3	112.3	112.4	113.0
1.3.12.3 Plastics products	1.418	137.3	137.4	137.3	137.9	138.3
1.3.13 MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS	**3.202**	**134.7**	**133.8**	**131.7**	**131.8**	**132.6**
1.3.13.1 Glass and Glass products	0.295	163.8	164.2	163.2	163.5	163.8
1.3.13.2 Refractory products	0.223	119.7	119.4	125.2	125.3	126.2
1.3.13.3 Clay Building Materials	0.121	123.9	115.1	123.3	131.9	132.4
1.3.13.4 Other Porcelain and Ceramic Products	0.222	122.3	124.0	124.6	124.9	125.1
1.3.13.5 Cement, Lime and Plaster	1.645	137.3	136.2	130.2	130.0	131.2

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2024		2025	
			Feb.	Dec.	Jan.(P)	Feb.(P)
	1	2	3	4	5	6
1.3.13.6 Articles of Concrete, Cement and Plaster	0.292	137.7	137.0	140.2	139.6	140.4
1.3.13.7 Cutting, Shaping and Finishing of Stone	0.234	130.3	131.2	135.9	135.5	136.0
1.3.13.8 Other Non-Metallic Mineral Products	0.169	102.4	101.5	94.6	94.1	92.2
1.3.14 MANUFACTURE OF BASIC METALS	**9.646**	**141.0**	**138.5**	**137.5**	**137.1**	**137.6**
1.3.14.1 Inputs into steel making	1.411	140.3	134.9	129.1	129.3	129.2
1.3.14.2 Metallic Iron	0.653	153.6	150.4	133.4	131.8	131.6
1.3.14.3 Mild Steel - Semi Finished Steel	1.274	119.9	116.7	116.8	116.7	117.3
1.3.14.4 Mild Steel -Long Products	1.081	141.3	138.3	139.5	138.7	138.4
1.3.14.5 Mild Steel - Flat products	1.144	143.4	140.3	130.1	129.9	129.6
1.3.14.6 Alloy steel other than Stainless Steel- Shapes	0.067	137.6	133.4	132.3	132.8	132.1
1.3.14.7 Stainless Steel - Semi Finished	0.924	136.4	129.4	129.1	127.7	127.4
1.3.14.8 Pipes & tubes	0.205	169.7	169.5	162.3	164.1	164.1
1.3.14.9 Non-ferrous metals incl. precious metals	1.693	144.8	145.0	157.5	157.3	160.8
1.3.14.10 Castings	0.925	141.0	144.1	145.3	144.8	144.6
1.3.14.11 Forgings of steel	0.271	173.3	172.4	172.1	172.4	169.7
1.3.15 MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENT	**3.155**	**138.6**	**137.6**	**135.9**	**135.4**	**136.2**
1.3.15.1 Structural Metal Products	1.031	132.3	130.7	130.8	130.2	132.0
1.3.15.2 Tanks, Reservoirs and Containers of Metal	0.660	157.6	156.0	147.8	147.4	147.0
1.3.15.3 Steam generators, Except Central Heating Hot Water Boilers	0.145	106.3	105.6	107.6	111.1	108.0
1.3.15.4 Forging, Pressing, Stamping and Roll-Forming of Metal; Powder Metallurgy	0.383	141.4	139.5	140.8	137.9	139.6
1.3.15.5 Cutlery, Hand Tools and General Hardware	0.208	108.4	109.4	102.1	102.5	102.5
1.3.15.6 Other Fabricated Metal Products	0.728	143.8	144.0	144.8	144.8	145.6
1.3.16 MANUFACTURE OF COMPUTER, ELECTRONIC AND OPTICAL PRODUCTS	**2.009**	**119.3**	**119.5**	**121.3**	**121.5**	**121.5**
1.3.16.1 Electronic Components	0.402	115.0	114.6	118.3	118.3	119.0
1.3.16.2 Computers and Peripheral Equipment	0.336	135.3	135.1	132.7	132.7	131.0
1.3.16.3 Communication Equipment	0.310	136.1	139.3	146.2	146.3	146.2
1.3.16.4 Consumer Electronics	0.641	103.6	102.7	99.8	100.0	100.6
1.3.16.5 Measuring, Testing, Navigating and Control equipment	0.181	113.8	114.0	121.1	121.9	121.9
1.3.16.6 Watches and Clocks	0.076	157.2	159.8	172.7	172.7	172.2
1.3.16.7 Irradiation, Electromedical and Electrotherapeutic equipment	0.055	108.3	108.3	115.5	116.1	117.0
1.3.16.8 Optical instruments and Photographic equipment	0.008	103.8	105.3	108.9	108.9	108.3
1.3.17 MANUFACTURE OF ELECTRICAL EQUIPMENT	**2.930**	**131.4**	**131.8**	**133.9**	**134.1**	**134.1**
1.3.17.1 Electric motors, Generators, Transformers and Electricity distribution and Control apparatus	1.298	130.1	131.3	133.0	133.1	133.0
1.3.17.2 Batteries and Accumulators	0.236	137.8	139.2	141.3	140.9	141.5
1.3.17.3 Fibre optic cables for data transmission or live transmission of images	0.133	123.4	122.4	118.0	116.8	115.9
1.3.17.4 Other electronic and Electric wires and Cables	0.428	146.1	145.2	154.0	154.8	155.2
1.3.17.5 Wiring devices, Electric lighting & display equipment	0.263	116.8	117.8	117.7	117.9	117.8
1.3.17.6 Domestic appliances	0.366	133.8	133.1	131.5	132.0	132.0
1.3.17.7 Other electrical equipment	0.206	120.9	120.6	125.0	124.7	124.8
1.3.18 MANUFACTURE OF MACHINERY AND EQUIPMENT	**4.789**	**129.0**	**130.0**	**130.5**	**131.0**	**131.2**
1.3.18.1 Engines and Turbines, Except aircraft, Vehicle and Two wheeler engines	0.638	128.9	131.2	132.5	133.3	134.5
1.3.18.2 Fluid power equipment	0.162	131.9	132.2	134.9	135.6	135.7
1.3.18.3 Other pumps, Compressors, Taps and Valves	0.552	117.4	118.0	118.9	118.8	119.0
1.3.18.4 Bearings, Gears, Gearing and Driving elements	0.340	127.7	130.5	129.6	129.7	128.6
1.3.18.5 Ovens, Furnaces and Furnace burners	0.008	83.7	85.2	87.0	87.4	87.3
1.3.18.6 Lifting and Handling equipment	0.285	128.6	129.8	129.9	129.6	130.0

No. 21: Wholesale Price Index (Concld.)

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2024		2025	
			Feb.	Dec.	Jan.(P)	Feb.(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	144.1	141.5	142.0	140.3
1.3.18.9 Agricultural and Forestry machinery	0.833	142.5	144.1	145.8	146.7	147.0
1.3.18.10 Metal-forming machinery and Machine tools	0.224	122.5	122.6	123.1	123.1	123.3
1.3.18.11 Machinery for mining, Quarrying and Construction	0.371	88.6	88.8	90.0	91.0	91.3
1.3.18.12 Machinery for food, Beverage and Tobacco processing	0.228	124.4	124.3	126.0	126.9	127.1
1.3.18.13 Machinery for textile, Apparel and Leather production	0.192	137.2	137.8	141.3	141.6	145.1
1.3.18.14 Other special-purpose machinery	0.468	144.7	146.0	144.0	143.9	144.2
1.3.18.15 Renewable electricity generating equipment	0.046	70.8	70.0	69.0	69.0	69.3
1.3.19 MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS	**4.969**	**128.4**	**128.9**	**130.0**	**130.1**	**130.2**
1.3.19.1 Motor vehicles	2.600	128.5	129.5	130.8	131.0	131.0
1.3.19.2 Parts and Accessories for motor vehicles	2.368	128.2	128.3	129.1	129.0	129.3
1.3.20 MANUFACTURE OF OTHER TRANSPORT EQUIPMENT	**1.648**	**143.1**	**143.5**	**145.7**	**145.7**	**145.9**
1.3.20.1 Building of ships and Floating structures	0.117	163.7	163.7	177.9	188.4	188.4
1.3.20.2 Railway locomotives and Rolling stock	0.110	107.4	108.4	108.8	108.4	109.3
1.3.20.3 Motor cycles	1.302	144.7	145.2	146.8	146.0	146.2
1.3.20.4 Bicycles and Invalid carriages	0.117	137.9	137.9	135.1	134.4	134.5
1.3.20.5 Other transport equipment	0.002	159.2	160.5	163.7	165.7	164.9
1.3.21 MANUFACTURE OF FURNITURE	**0.727**	**159.6**	**158.8**	**161.3**	**161.8**	**162.0**
1.3.21.1 Furniture	0.727	159.6	158.8	161.3	161.8	162.0
1.3.22 OTHER MANUFACTURING	**1.064**	**158.2**	**161.5**	**183.1**	**186.9**	**197.0**
1.3.22.1 Jewellery and Related articles	0.996	157.9	161.6	184.6	188.8	199.5
1.3.22.2 Musical instruments	0.001	187.0	191.9	200.6	197.2	199.9
1.3.22.3 Sports goods	0.012	155.2	155.2	167.9	167.7	168.2
1.3.22.4 Games and Toys	0.005	159.6	159.9	163.7	164.4	164.9
1.3.22.5 Medical and Dental instruments and Supplies	0.049	163.1	161.2	158.6	156.5	156.5
2 FOOD INDEX	**24.378**	**179.8**	**178.4**	**196.0**	**191.4**	**189.0**

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	April-January		January	
				2023-24	2024-25	2024	2025
	1	2	3	4	5	6	7
General Index	100.00	138.5	146.7	145.3	151.4	153.6	161.3
1 Sectoral Classification							
1.1 Mining	14.37	119.9	128.9	125.1	129.3	144.3	150.7
1.2 Manufacturing	77.63	137.1	144.7	143.5	149.5	150.8	159.1
1.3 Electricity	7.99	185.2	198.3	198.8	209.0	197.1	201.9
2 Use-Based Classification							
2.1 Primary Goods	34.05	139.2	147.7	146.1	152.0	154.3	162.8
2.2 Capital Goods	8.22	100.3	106.6	104.1	109.7	108.3	116.8
2.3 Intermediate Goods	17.22	149.4	157.3	156.1	163.3	163.8	172.3
2.4 Infrastructure/ Construction Goods	12.34	160.7	176.3	174.1	185.0	186.6	199.6
2.5 Consumer Durables	12.84	114.5	118.6	117.1	127.2	121.4	130.2
2.6 Consumer Non-Durables	15.33	147.7	153.7	154.0	152.0	164.9	164.5

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 – January			
	2024-25 (Revised Estimates)	2024-25 (Actuals)	2023-24 (Actuals)	Percentage to Revised Estimates	
				2024-25	2023-24
	1	2	3	4	5
1 Revenue Receipts	**3087960**	**2371188**	**2217909**	**76.8**	**82.2**
1.1 Tax Revenue (Net)	2556960	1903558	1879840	74.4	80.9
1.2 Non-Tax Revenue	531000	467630	338069	88.1	90.0
2 Non Debt Capital Receipt	**59000**	**29224**	**34219**	**49.5**	**61.1**
2.1 Recovery of Loans	26000	20205	21664	77.7	83.3
2.2 Other Receipts	33000	9019	12555	27.3	41.9
3 Total Receipts (excluding borrowings) (1+2)	**3146960**	**2400412**	**2252128**	**76.3**	**81.7**
4 Revenue Expenditure of which :	3698058	2812595	2633543	76.1	74.4
4.1 Interest Payments	1137940	875461	821731	76.9	77.9
5 Capital Expenditure	1018429	757359	721187	74.4	75.9
6 Total Expenditure (4+5)	**4716487**	**3569954**	**3354730**	**75.7**	**74.7**
7 Revenue Deficit (4-1)	**610098**	**441407**	**415634**	**72.4**	**49.4**
8 Fiscal Deficit (6-3)	**1569527**	**1169542**	**1102602**	**74.5**	**63.6**
9 Gross Primary Deficit (8-4.1)	**431587**	**294081**	**280871**	**68.1**	**41.3**

Source: Controller General of Accounts (CGA), Ministry of Finance, Government of India and Union Budget 2025-26.

No. 24: Treasury Bills – Ownership Pattern

(₹ Crore)

Item	2023-24	2024		2025				
		Feb. 2	Dec. 27	Jan. 3	Jan. 10	Jan. 17	Jan. 24	Jan. 31
	1	2	3	4	5	6	7	8
1 91-day								
1.1 Banks	18054	9131	8030	4580	7076	7197	6520	7728
1.2 Primary Dealers	22676	22804	6404	9295	14235	13720	14311	13506
1.3 State Governments	5701	24142	109146	108346	108361	96762	78012	78400
1.4 Others	88670	77464	88165	92226	89489	95883	100968	107166
2 182-day								
2.1 Banks	84913	73296	49106	47781	44071	42769	39047	36704
2.2 Primary Dealers	87779	72085	34108	37733	38116	42521	46104	51382
2.3 State Governments	4070	5037	8515	7515	7515	8265	8268	8243
2.4 Others	102311	83623	80386	80087	86713	84110	86549	85014
3 364-day								
3.1 Banks	91819	98282	76181	75174	73432	70970	72359	73685
3.2 Primary Dealers	159085	166658	104156	109132	107108	108408	108412	109263
3.3 State Governments	41487	44282	35184	35185	35341	35656	34014	36794
3.4 Others	165095	179060	160663	155695	158461	158622	156229	153053
4 14-day Intermediate								
4.1 Banks								
4.2 Primary Dealers								
4.3 State Governments	318736	150113	173736	120024	247038	243703	298216	271755
4.4 Others	442	181	449	1764	673	1839	838	694
Total Treasury Bills (Excluding 14 day Intermediate T Bills) #	871662	855865	760045	762745	769916	764882	750794	760937

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)	Cut-off 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										
Jan. 1	12000	95	32115	26	16	11974	26	12000	98.38	6.5961
Jan. 8	12000	109	27051	6243	54	11957	6243	18200	98.38	6.5940
Jan. 15	12000	108	31166	13435	53	11966	13435	25401	98.38	6.6036
Jan. 22	12000	130	32847	7452	77	11948	7452	19400	98.38	6.6089
Jan. 29	12000	138	39833	2879	44	11959	2879	14838	98.39	6.5625
182-day Treasury Bills										
2024-25										
Jan. 1	8000	96	21130	42	38	7958	42	8000	96.76	6.7199
Jan. 8	8000	124	25863	1332	38	7968	1332	9300	96.77	6.6995
Jan. 15	8000	89	19631	780	48	7970	780	8750	96.76	6.7186
Jan. 22	8000	102	20279	980	42	7978	980	8958	96.76	6.7068
Jan. 29	8000	84	25022	1019	41	7981	1019	9000	96.78	6.6691
364-day Treasury Bills										
2024-25										
Jan. 1	8000	111	22719	176	34	7986	176	8162	93.74	6.6998
Jan. 8	8000	119	27817	203	52	7968	203	8172	93.75	6.6895
Jan. 15	8000	119	24784	1309	50	7967	1309	9276	93.73	6.7038
Jan. 22	8000	131	38752	1036	19	7989	1036	9025	93.76	6.6789
Jan. 29	8000	138	41006	2931	27	7990	2931	10921	93.79	6.6345

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
January 1, 2025	5.10-6.70	6.52
January 2, 2025	5.10-6.60	6.47
January 3, 2025	5.10-6.75	6.50
January 4, 2025	5.75-6.60	6.12
January 6, 2025	5.10-6.80	6.64
January 7, 2025	5.10-6.95	6.73
January 8, 2025	5.10-7.05	6.74
January 9, 2025	5.10-7.05	6.82
January 10, 2025	5.10-7.10	6.87
January 13, 2025	5.70-7.10	6.81
January 14, 2025	5.50-6.75	6.52
January 15, 2025	5.10-6.70	6.45
January 16, 2025	5.10-6.80	6.55
January 17, 2025	5.50-6.80	6.54
January 18, 2025	5.75-6.70	6.12
January 20, 2025	5.10-6.85	6.62
January 21, 2025	5.10-6.90	6.57
January 22, 2025	5.10-6.70	6.56
January 23, 2025	5.10-6.75	6.57
January 24, 2025	5.10-6.70	6.56
January 27, 2025	5.10-6.65	6.57
January 28, 2025	5.10-6.65	6.55
January 29, 2025	5.10-6.65	6.58
January 30, 2025	5.10-6.65	6.58
January 31, 2025	5.10-6.70	6.59
February 01 ,2025	5.50-6.65	6.23
February 03 ,2025	5.10-6.65	6.55
February 04 ,2025	5.10-6.65	6.49
February 05 ,2025	5.15-6.60	6.46
February 06 ,2025	5.15-6.60	6.45
February 07 ,2025	5.15-6.55	6.25
February 10 ,2025	5.15-6.45	6.29
February 11 ,2025	5.15-6.42	6.32
February 12 ,2025	5.15-6.40	6.29
February 13 ,2025	5.15-6.50	6.34
February 14 ,2025	5.15-6.50	6.35
February 15 ,2025	5.25-6.50	5.89

Note: Includes Notice Money.

No. 27: Certificates of Deposit

Item	2024			2025		2025	
	Jan. 26	Dec. 13	Dec. 27	Jan. 10	Jan. 24	Feb. 7	Feb. 21
	1	2	3	4	5	6	7
1 Amount Outstanding (₹ Crore)	355281.29	488257.46	494416.56	493930.59	499396.94	519276.82	513816.40
1.1 Issued during the fortnight (₹ Crore)	20013.21	74226.34	59838.75	33890.42	30080.60	71093.96	30077.77
2 Rate of Interest (per cent)	7.07-8.02	6.96-7.75	7.02-7.85	7.05-7.48	7.07-7.88	7.03-7.83	7.02-7.93

No. 28: Commercial Paper

Item	2024			2025		2025	
	Jan. 31	Dec. 15	Dec. 31	Jan. 15	Jan. 31	Feb. 15	Feb. 28
	1	2	3	4	5	6	7
1 Amount Outstanding (₹ Crore)	377707.20	463801.30	435779.45	450242.05	456483.15	479257.25	465926.95
1.1 Reported during the fortnight (₹ Crore)	53532.05	98956.25	51524.05	39647.30	69001.15	80693.35	64880.85
2 Rate of Interest (per cent)	7.00-14.74	7.00-11.89	6.98-12.00	7.06-12.12	7.12-13.77	6.97-12.40	6.78-12.24

No. 29: Average Daily Turnover in Select Financial Markets

(₹ Crore)

Item	2023-24	2024		2025				
		Feb. 2	Dec. 27	Jan. 3	Jan. 10	Jan. 17	Jan. 24	Jan. 31
	1	2	3	4	5	6	7	8
1 Call Money	17761	19483	18396	15234	17914	16683	20631	23225
2 Notice Money	2550	4491	177	4005	376	6107	598	4419
3 Term Money	871	1478	539	1113	1324	217	798	976
4 Triparty Repo	601363	687384	698889	770717	653486	779174	649147	744181
5 Market Repo	574534	635275	452238	614692	536952	661241	525850	606457
6 Repo in Corporate Bond	1817	1980	8475	8232	7738	7717	6711	7411
7 Forex (US $ million)	95115	112243	130014	109915	129738	147970	133491	137918
8 Govt. of India Dated Securities	90992	131234	63621	71586	134354	133314	127533	126216
9 State Govt. Securities	6102	6282	10874	8577	4615	7851	7675	10831
10 Treasury Bills								
10.1 91-Day	5378	5796	6006	4367	3821	7629	6107	5708
10.2 182-Day	6079	2837	3089	3330	2701	2031	2691	2525
10.3 364-Day	4307	5371	2669	5103	3959	2288	1893	3326
10.4 Cash Management Bills			0	0	0	0	0	0
11 Total Govt. Securities (8+9+10)	112858	151521	86258	92962	149450	153113	145899	148605
11.1 RBI	492	1705	306	7	329	2452	4307	5572

No. 30: New Capital Issues by Non-Government Public Limited Companies

(Amount in ₹ Crore)

Security & Type of Issue	2023-24		2023-24 (Apr.-Jan.)		2024-25 (Apr.-Jan.) *		Jan. 2024		Jan. 2025 *	
	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**	**268**	**61023**	**411**	**192589**	**25**	**3612**	**43**	**3572**
1.1 Public	272	65832	217	54292	289	175203	22	3419	28	3066
1.2 Rights	67	15110	51	6731	122	17388	3	194	15	507
2 Public Issue of Bonds/ Debentures	**44**	**16342**	**37**	**15122**	**38**	**7397**	**5**	**2190**	**5**	**685**
3 Total (1+2)	**383**	**97284**	**305**	**76145**	**449**	**199986**	**30**	**5802**	**48**	**4257**
3.1 Public	316	82174	254	69414	327	182599	27	5609	33	3750
3.2 Rights	67	15110	51	6731	122	17388	3	194	15	507

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.
3. The table covers only public and rights issuances of equity and debt. It does not include data on private placement of debt, qualified institutional placements and preferential allotments.
Source : Securities and Exchange Board of India.
* : Data is Provisional

External Sector

No. 31: Foreign Trade

Item	Unit	2023-24	2024					2025
			Jan.	Sep.	Oct.	Nov.	Dec.	Jan.
		1	2	3	4	5	6	7
1 Exports	₹ Crore	3618952	310239	287698	327476	270300	322469	314229
	US $ Million	437072	37324	34328	38972	32040	37944	36426
1.1 Oil	₹ Crore	696850	71607	37790	37000	30517	41187	30726
	US $ Million	84157	8615	4509	4403	3617	4846	3562
1.2 Non-oil	₹ Crore	2922102	238632	249908	290476	239783	281283	283503
	US $ Million	352915	28709	29819	34568	28422	33097	32864
2 Imports	₹ Crore	5616042	447827	490071	542709	538789	495169	512618
	US $ Million	678215	53877	58475	64585	63865	58265	59423
2.1 Oil	₹ Crore	1480232	129050	124924	158683	134207	115546	115868
	US $ Million	178733	15526	14906	18884	15908	13596	13432
2.2 Non-oil	₹ Crore	4135810	318777	365147	384026	404583	379623	396750
	US $ Million	499482	38351	43569	45701	47957	44669	45992
3 Trade Balance	₹ Crore	-1997090	-137588	-202373	-215233	-268490	-172700	-198389
	US $ Million	-241143	-16553	-24147	-25614	-31825	-20321	-22997
3.1 Oil	₹ Crore	-783382	-57443	-87135	-121683	-103689	-74359	-85142
	US $ Million	-94576	-6911	-10397	-14481	-12291	-8750	-9870
3.2 Non-oil	₹ Crore	-1213708	-80145	-115239	-93550	-164800	-98340	-113247
	US $ Million	-146567	-9642	-13750	-11133	-19534	-11571	-13128

Note: Data in the table are provisional.
Source: Directorate General of Commercial Intelligence and Statistics.

No. 32: Foreign Exchange Reserves

Item	Unit	2024	2025					
		Mar. 01	Jan. 24	Jan. 31	Feb. 07	Feb. 14	Feb. 21	Feb. 28
		1	2	3	4	5	6	7
1 Total Reserves	**₹ Crore**	**5187144**	**5426706**	**5461741**	**5580726**	**5519832**	**5553750**	**5589313**
	US $ Million	**625626**	**629557**	**630607**	**638261**	**635721**	**640479**	**638698**
1.1 Foreign Currency Assets	₹ Crore	4595222	4636524	4656917	4757453	4685135	4715811	4754944
	US $ Million	554231	537891	537684	544106	539591	543843	543350
1.2 Gold	₹ Crore	401430	600379	614007	631357	643824	646668	641218
	US $ Million	48417	69651	70893	72208	74150	74576	73272
	Volume (Metric Tonnes)	816.99	877.14	879.01	879.01	879.01	879.01	879.01
1.3 SDRs	SDRs Million	13694	13705	13705	13705	13706	13706	13706
	₹ Crore	150733	153955	154942	156319	155398	155830	157504
	US $ Million	18180	17861	17889	17878	17897	17971	17998
1.4 Reserve Tranche Position in IMF	₹ Crore	39760	35848	35875	35597	35476	35441	35646
	US $ Million	4798	4154	4141	4069	4083	4090	4078

* 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	2024		2025	2023-24	2024-25
		Jan.	Dec.	Jan. (P)	Apr.-Jan.	Apr.-Jan.(P)
	1	2	3	4	5	6
1 NRI Deposits	**151879**	**147732**	**161804**	**161206**	**10160**	**14308**
1.1 FCNR(B)	25733	23517	32198	32752	4154	7018
1.2 NR(E)RA	98624	97466	99565	98494	2689	3708
1.3 NRO	27522	26749	30041	29961	3317	3582

P: Provisional.

No. 34: Foreign Investment Inflows

(US $ Million)

Item	2023-24	2023-24	2024-25 (P)	2024 (P)		2025
		Apr.-Jan.	Apr.-Jan.	Jan.	Dec.	Jan.
	1	2	3	4	5	6
1.1 Net Foreign Direct Investment (1.1.1-1.1.2)	**10129**	**11523**	**1393**	**3677**	**467**	**916**
1.1.1 Direct Investment to India (1.1.1.1-1.1.1.2)	**26807**	**23308**	**21592**	**4548**	**2257**	**3719**
1.1.1.1 Gross Inflows/Gross Investments	**71279**	**60173**	**67653**	**8352**	**6633**	**5784**
1.1.1.1.1 Equity	45817	39175	44835	6120	4458	3451
1.1.1.1.1.1 Government (SIA/FIPB)	585	474	1864	147	1248	16
1.1.1.1.1.2 RBI	31826	26582	29954	5516	1543	2588
1.1.1.1.1.3 Acquisition of shares	12013	10975	12216	332	1583	759
1.1.1.1.1.4 Equity capital of unincorporated bodies	1394	1143	800	125	85	88
1.1.1.1.2 Reinvested earnings	19768	16213	18113	1777	1792	1854
1.1.1.1.3 Other capital	5694	4785	4704	454	383	479
1.1.1.2 Repatriation/Disinvestment	**44472**	**36865**	**46061**	**3804**	**4377**	**2065**
1.1.1.2.1 Equity	41334	34045	44320	3645	4299	2009
1.1.1.2.2 Other capital	3137	2819	1741	159	77	56
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**	**11785**	**20198**	**871**	**1790**	**2803**
1.1.2.1 Equity capital	9111	6317	11796	414	1166	1928
1.1.2.2 Reinvested Earnings	5786	4821	5046	482	505	505
1.1.2.3 Other Capital	5406	3801	6155	210	651	561
1.1.2.4 Repatriation/Disinvestment	3624	3154	2799	235	532	191
1.2 Net Portfolio Investment (1.2.1+1.2.2+1.2.3-1.2.4)	**44081**	**32550**	**2661**	**-139**	**1712**	**-6591**
1.2.1 GDRs/ADRs	-	-	-	-	-	-
1.2.2 FIIs	44626	32970	2424	-77	1766	-6683
1.2.3 Offshore funds and others	-	-	-	-	-	-
1.2.4 Portfolio investment by India	544	419	-236	62	54	-91
1 Foreign Investment Inflows	**54210**	**44073**	**4054**	**3538**	**2179**	**-5676**

P: Provisional

No. 35: Outward Remittances under the Liberalised Remittance Scheme (LRS) for Resident Individuals

(US $ Million)

Item	2023-24	2024			2025
		Jan.	Nov.	Dec.	Jan.
	1	2	3	4	5
1 Outward Remittances under the LRS	**31735.74**	**2619.71**	**1946.43**	**2315.96**	**2768.89**
1.1 Deposit	916.45	33.88	40.21	48.10	58.20
1.2 Purchase of immovable property	242.51	17.31	23.53	30.14	34.19
1.3 Investment in equity/debt	1510.89	59.87	85.79	179.34	104.98
1.4 Gift	3580.27	209.58	216.51	229.47	232.76
1.5 Donations	11.31	0.82	0.62	0.63	0.63
1.6 Travel	17006.27	1549.97	1113.78	1323.64	1646.74
1.7 Maintenance of close relatives	4611.53	267.02	276.78	279.02	308.76
1.8 Medical Treatment	79.62	9.32	7.49	5.13	4.47
1.9 Studies Abroad	3478.65	449.46	172.40	210.20	368.21
1.10 Others	298.23	22.47	9.32	10.31	9.96

No. 36: Indices of Nominal Effective Exchange Rate (NEER) and Real Effective Exchange Rate (REER) of the Indian Rupee

Item	2022-23	2023-24	2024	2025	
			Feb	Jan	Feb
	1	2	3	4	5
40-Currency Basket (Base: 2015-16=100)					
1 Trade-Weighted					
1.1 NEER	91.20	90.75	91.94	90.88	89.36
1.2 REER	102.78	103.71	104.71	104.84	102.37
2 Export-Weighted					
2.1 NEER	93.01	93.13	94.37	93.26	91.98
2.2 REER	101.10	101.22	102.00	101.77	99.60
6-Currency Basket (Trade-weighted)					
1 Base : 2015-16 =100					
1.1 NEER	85.93	83.62	83.77	82.02	80.93
1.2 REER	101.80	101.66	101.95	102.29	100.33
2 Base : 2022-23 =100					
2.1 NEER	100.00	97.31	97.48	95.45	94.18
2.2 REER	100.00	99.86	100.14	100.48	98.55

Note: Data for 2023-24 and 2024-25 so far is provisional.

No. 37: External Commercial Borrowings (ECBs) – Registrations

(Amount in US $ Million)

Item	2024-25	2024		2025
		Jan.	Dec.	Jan.
	1	2	3	4
1 Automatic Route				
1.1 Number	1188	77	112	108
1.2 Amount	29461	1820	6234	1978
2 Approval Route				
2.1 Number	33	5	12	5
2.2 Amount	19748	1270	3309	2020
3 Total (1+2)				
3.1 Number	1221	82	124	113
3.2 Amount	49209	3090	9543	3998
4 Weighted Average Maturity (in years)	5.60	3.70	4.50	5.80
5 Interest Rate (per cent)				
5.1 Weighted Average Margin over alternative reference rate (ARR) for Floating Rate Loans@	1.66	1.33	1.45	0.98
5.2 Interest rate range for Fixed Rate Loans	0.00-27.00	0.00-11.00	0.00-10.60	0.00-11.00
Borrower Category				
I. Corporate Manufacturing	15836	166	3685	242
II. Corporate-Infrastructure	15916	706	533	831
a.) Transport	1505	100	0	0
b.) Energy	3513	55	0	398
c.) Water and Sanitation	33	0	0	0
d.) Communication	6309	0	0	13
e.) Social and Commercial Infrastructure	115	1	0	0
f.) Exploration,Mining and Refinery	2480	550	530	207
g.) Other Sub-Sectors	1961	0	3	213
III. Corporate Service-Sector	1526	13	685	115
IV. Other Entities	1728	0	3	1000
a.) units in SEZ	1	0	3	0
b.) SIDBI	0	0	0	0
c.) Exim Bank	1727	0	0	1000
V. Banks	0	0	0	0
VI. Financial Institution (Other than NBFC)	20	20	-	0
VII. NBFCs	13361	2145	4614	1792
a). NBFC- IFC/AFC	7734	1437	3042	1370
b). NBFC-MFI	531	0	0	56
c). NBFC-Others	5096	708	1572	366
VIII. Non-Government Organization (NGO)	0	0	0	0
IX. Micro Finance Institution (MFI)	0	0	0	0
X. Others	822	40	23	18

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	Jul-Sep 2023			Jul-Sep 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance Of Payments (1+2+3)	**438441**	**435922**	**2519**	**553557**	**534943**	**18614**
1 Current Account (1.1+ 1.2)	**231670**	**242956**	**-11286**	**245671**	**256854**	**-11182**
1.1 Merchandise	**108254**	**172799**	**-64544**	**103967**	**179285**	**-75319**
1.2 Invisibles (1.2.1+1.2.2+1.2.3)	**123416**	**70158**	**53258**	**141705**	**77568**	**64137**
1.2.1 Services	83352	43411	39940	93493	48943	44550
1.2.1.1 Travel	7482	8662	-1180	7635	9367	-1732
1.2.1.2 Transportation	7054	7277	-223	8792	9188	-396
1.2.1.3 Insurance	828	821	7	902	786	116
1.2.1.4 G.n.i.e.	140	244	-104	147	316	-169
1.2.1.5 Miscellaneous	67848	26408	41440	76017	29287	46730
1.2.1.5.1 Software Services	39570	4333	35237	44164	4539	39624
1.2.1.5.2 Business Services	21472	13673	7799	25176	15548	9628
1.2.1.5.3 Financial Services	2069	1183	887	2190	1265	926
1.2.1.5.4 Communication Services	887	365	522	519	497	21
1.2.2 Transfers	28147	3221	24926	31938	2829	29109
1.2.2.1 Official	23	267	-244	28	265	-237
1.2.2.2 Private	28124	2954	25170	31910	2564	29346
1.2.3 Income	11917	23526	-11608	16274	25796	-9522
1.2.3.1 Investment Income	10158	22609	-12451	14279	24774	-10494
1.2.3.2 Compensation of Employees	1760	917	843	1995	1023	972
2 Capital Account (2.1+2.2+2.3+2.4+2.5)	**205807**	**192966**	**12841**	**307885**	**277368**	**30518**
2.1 Foreign Investment (2.1.1+2.1.2)	**128572**	**124460**	**4112**	**203323**	**185710**	**17612**
2.1.1 Foreign Direct Investment	16586	17420	-834	21214	23452	-2238
2.1.1.1 In India	15722	12686	3036	20666	15622	5044
2.1.1.1.1 Equity	9877	12278	-2401	13847	15016	-1169
2.1.1.1.2 Reinvested Earnings	4740		4740	5559		5559
2.1.1.1.3 Other Capital	1105	409	697	1261	606	655
2.1.1.2 Abroad	864	4734	-3870	548	7830	-7282
2.1.1.2.1 Equity	864	1683	-820	548	4313	-3765
2.1.1.2.2 Reinvested Earnings	0	1446	-1446	0	1514	-1514
2.1.1.2.3 Other Capital	0	1604	-1604	0	2003	-2003
2.1.2 Portfolio Investment	111986	107040	4947	182108	162258	19850
2.1.2.1 In India	111127	105841	5286	181433	161618	19815
2.1.2.1.1 FIIs	111127	105841	5286	181433	161618	19815
2.1.2.1.1.1 Equity	101529	97937	3593	160273	149590	10683
2.1.2.1.1.2 Debt	9598	7905	1693	21160	12028	9132
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	859	1198	-339	675	640	35
2.2 Loans (2.2.1+2.2.2+2.2.3)	**29728**	**26453**	**3274**	**38662**	**31126**	**7536**
2.2.1 External Assistance	2601	1800	802	3727	1581	2146
2.2.1.1 By India	9	49	-40	8	30	-22
2.2.1.2 To India	2592	1751	842	3720	1551	2168
2.2.2 Commercial Borrowings	7464	10422	-2958	17443	15416	2027
2.2.2.1 By India	2853	3926	-1073	5059	8028	-2969
2.2.2.2 To India	4612	6496	-1884	12384	7388	4996
2.2.3 Short Term to India	19662	14232	5430	17492	14129	3363
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	17632	14232	3400	14817	14129	688
2.2.3.2 Suppliers' Credit up to 180 days	2030	0	2030	2675	0	2675
2.3 Banking Capital (2.3.1+2.3.2)	**34020**	**29686**	**4333**	**52432**	**46345**	**6087**
2.3.1 Commercial Banks	34020	29614	4405	52112	46345	5767
2.3.1.1 Assets	8673	11210	-2538	17627	18853	-1226
2.3.1.2 Liabilities	25347	18404	6943	34485	27492	6993
2.3.1.2.1 Non-Resident Deposits	21257	18048	3209	28921	22753	6167
2.3.2 Others	0	72	-72	319	0	319
2.4 Rupee Debt Service	**0**	**1**	**-1**	**0**	**2**	**-2**
2.5 Other Capital	**13488**	**12365**	**1123**	**13469**	**14184**	**-716**
3 Errors & Omissions	**963**	**0**	**963**	**0**	**722**	**-722**
4 Monetary Movements (4.1+ 4.2)	**0**	**2519**	**-2519**	**0**	**18614**	**-18614**
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	2519	-2519	0	18614	-18614

Note: P: Preliminary.

No. 39: India's Overall Balance of Payments

(₹ Crore)

Item	Jul-Sep 2023			Jul-Sep 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance Of Payments (1+2+3)	**3624220**	**3603401**	**20819**	**4636946**	**4481027**	**155919**
1 Current Account (1.1+ 1.2)	**1915021**	**2008316**	**-93295**	**2057901**	**2151571**	**-93670**
1.1 Merchandise	**894849**	**1428380**	**-533531**	**870890**	**1501809**	**-630919**
1.2 Invisibles (1.2.1+1.2.2+1.2.3)	**1020172**	**579936**	**440236**	**1187011**	**649762**	**537249**
1.2.1 Services	688997	358846	330151	783157	409979	373178
1.2.1.1 Travel	61845	71601	-9756	63958	78464	-14506
1.2.1.2 Transportation	58311	60151	-1840	73649	76965	-3316
1.2.1.3 Insurance	6842	6785	57	7553	6581	972
1.2.1.4 G.n.i.e.	1154	2018	-863	1228	2643	-1415
1.2.1.5 Miscellaneous	560846	218292	342554	636769	245326	391443
1.2.1.5.1 Software Services	327091	35818	291272	369945	38026	331920
1.2.1.5.2 Business Services	177488	113019	64469	210894	130244	80650
1.2.1.5.3 Financial Services	17106	9777	7329	18349	10595	7754
1.2.1.5.4 Communication Services	7334	3015	4319	4345	4167	177
1.2.2 Transfers	232665	26623	206042	267531	23696	243835
1.2.2.1 Official	189	2206	-2018	232	2218	-1985
1.2.2.2 Private	232476	24416	208060	267298	21478	245821
1.2.3 Income	98510	194468	-95957	136323	216087	-79763
1.2.3.1 Investment Income	83966	186888	-102922	119611	207519	-87908
1.2.3.2 Compensation of Employees	14544	7579	6965	16712	8568	8145
2 Capital Account (2.1+2.2+2.3+2.4+2.5)	**1701234**	**1595084**	**106150**	**2579045**	**2323409**	**255635**
2.1 Foreign Investment (2.1.1+2.1.2)	**1062795**	**1028803**	**33993**	**1703161**	**1555629**	**147532**
2.1.1 Foreign Direct Investment	137100	143996	-6896	177706	196451	-18745
2.1.1.1 In India	129962	104866	25096	173115	130862	42253
2.1.1.1.1 Equity	81644	101488	-19844	115988	125784	-9796
2.1.1.1.2 Reinvested Earnings	39181	0	39181	46563	0	46563
2.1.1.1.3 Other Capital	9137	3378	5759	10564	5078	5486
2.1.1.2 Abroad	7138	39130	-31992	4591	65589	-60998
2.1.1.2.1 Equity	7138	13916	-6778	4591	36128	-31537
2.1.1.2.2 Reinvested Earnings	0	11956	-11956	0	12680	-12680
2.1.1.2.3 Other Capital	0	13258	-13258	0	16780	-16780
2.1.2 Portfolio Investment	925695	884807	40889	1525455	1359178	166277
2.1.2.1 In India	918597	874902	43695	1519799	1353816	165984
2.1.2.1.1 FIIs	918597	874902	43695	1519799	1353816	165984
2.1.2.1.1.1 Equity	839257	809559	29698	1342550	1253064	89486
2.1.2.1.1.2 Debt	79340	65343	13997	177250	100752	76498
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	7099	9905	-2806	5656	5363	293
2.2 Loans (2.2.1+2.2.2+2.2.3)	**245733**	**218667**	**27066**	**323859**	**260732**	**63127**
2.2.1 External Assistance	21502	14877	6626	31222	13242	17979
2.2.1.1 By India	72	404	-331	64	247	-184
2.2.1.2 To India	21430	14473	6957	31158	12995	18163
2.2.2 Commercial Borrowings	61702	86150	-24448	146114	129136	16979
2.2.2.1 By India	23582	32453	-8871	42379	67249	-24870
2.2.2.2 To India	38120	53697	-15577	103735	61887	41849
2.2.3 Short Term to India	162529	117640	44888	146523	118354	28169
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	145745	117640	28105	124117	118354	5763
2.2.3.2 Suppliers' Credit up to 180 days	16783	0	16783	22406	0	22406
2.3 Banking Capital (2.3.1+2.3.2)	**281213**	**245392**	**35820**	**439202**	**388217**	**50985**
2.3.1 Commercial Banks	281213	244798	36415	436527	388217	48311
2.3.1.1 Assets	71689	92667	-20978	147657	157925	-10268
2.3.1.2 Liabilities	209524	152131	57393	288870	230292	58579
2.3.1.2.1 Non-Resident Deposits	175715	149187	26528	242259	190597	51662
2.3.2 Others	0	594	-594	2675	0	2675
2.4 Rupee Debt Service	**0**	**12**	**-12**	**0**	**15**	**-15**
2.5 Other Capital	**111493**	**102211**	**9282**	**112822**	**118816**	**-5994**
3 Errors & Omissions	**7964**	**0**	**7964**	**0**	**6046**	**-6046**
4 Monetary Movements (4.1+ 4.2)	**0**	**20819**	**-20819**	**0**	**155919**	**-155919**
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	20819	-20819	0	155919	-155919

Note: P: Preliminary.

No. 40: Standard Presentation of BoP in India as per BPM6

(US$ Million)

Item	Jul-Sep 2023			Jul-Sep 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	**231670**	**242934**	**-11264**	**245671**	**256828**	**-11157**
1.A Goods and Services (1.A.a+1.A.b)	**191606**	**216210**	**-24604**	**197459**	**228229**	**-30769**
1.A.a Goods (1.A.a.1 to 1.A.a.3)	**108254**	**172799**	**-64544**	**103967**	**179285**	**-75319**
1.A.a.1 General merchandise on a BOP basis	107367	160246	-52879	103981	161701	-57720
1.A.a.2 Net exports of goods under merchanting	888	0	888	-14	0	-14
1.A.a.3 Nonmonetary gold		12553	-12553		17585	-17585
1.A.b Services (1.A.b.1 to 1.A.b.13)	**83352**	**43411**	**39940**	**93493**	**48943**	**44550**
1.A.b.1 Manufacturing services on physical inputs owned by others	283	39	244	276	20	256
1.A.b.2 Maintenance and repair services n.i.e.	56	308	-251	90	263	-172
1.A.b.3 Transport	7054	7277	-223	8792	9188	-396
1.A.b.4 Travel	7482	8662	-1180	7635	9367	-1732
1.A.b.5 Construction	954	677	277	1263	951	312
1.A.b.6 Insurance and pension services	828	821	7	902	786	116
1.A.b.7 Financial services	2069	1183	887	2190	1265	926
1.A.b.8 Charges for the use of intellectual property n.i.e.	422	3341	-2919	448	3877	-3428
1.A.b.9 Telecommunications, computer, and information services	40546	4968	35578	44772	5333	39439
1.A.b.10 Other business services	21472	13673	7799	25176	15548	9628
1.A.b.11 Personal, cultural, and recreational services	1211	2080	-869	1107	1794	-688
1.A.b.12 Government goods and services n.i.e.	140	244	-104	147	316	-169
1.A.b.13 Others n.i.e.	835	140	695	694	237	458
1.B Primary Income (1.B.1 to 1.B.3)	**11917**	**23526**	**-11608**	**16274**	**25796**	**-9522**
1.B.1 Compensation of employees	1760	917	843	1995	1023	972
1.B.2 Investment income	8939	22196	-13257	12849	24336	-11486
1.B.2.1 Direct investment	2322	12281	-9959	2725	13008	-10283
1.B.2.2 Portfolio investment	84	3657	-3573	78	4152	-4074
1.B.2.3 Other investment	520	6040	-5520	1168	6953	-5785
1.B.2.4 Reserve assets	6013	217	5796	8878	223	8655
1.B.3 Other primary income	1219	413	806	1430	438	992
1.C Secondary Income (1.C.1+1.C.2)	**28146**	**3198**	**24948**	**31937**	**2803**	**29134**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	28124	2954	25170	31910	2564	29346
1.C.1.1 Personal transfers (Current transfers between resident and/non-resident households)	27335	2040	25296	31084	1803	29282
1.C.1.2 Other current transfers	788	914	-126	826	761	64
1.C.2 General government	22	245	-222	27	239	-212
2 Capital Account (2.1+2.2)	**151**	**202**	**-51**	**186**	**192**	**-6**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	9	91	-82	7	68	-61
2.2 Capital transfers	142	110	31	179	124	55
3 Financial Account (3.1 to 3.5)	**205657**	**195305**	**10352**	**307700**	**295815**	**11885**
3.1 Direct Investment (3.1A+3.1B)	**16586**	**17420**	**-834**	**21214**	**23452**	**-2238**
3.1.A Direct Investment in India	15722	12686	3036	20666	15622	5044
3.1.A.1 Equity and investment fund shares	14617	12278	2339	19405	15016	4389
3.1.A.1.1 Equity other than reinvestment of earnings	9877	12278	-2401	13847	15016	-1169
3.1.A.1.2 Reinvestment of earnings	4740		4740	5559		5559
3.1.A.2 Debt instruments	1105	409	697	1261	606	655
3.1.A.2.1 Direct investor in direct investment enterprises	1105	409	697	1261	606	655
3.1.B Direct Investment by India	864	4734	-3870	548	7830	-7282
3.1.B.1 Equity and investment fund shares	864	3130	-2266	548	5827	-5279
3.1.B.1.1 Equity other than reinvestment of earnings	864	1683	-820	548	4313	-3765
3.1.B.1.2 Reinvestment of earnings		1446	-1446		1514	-1514
3.1.B.2 Debt instruments	0	1604	-1604	0	2003	-2003
3.1.B.2.1 Direct investor in direct investment enterprises		1604	-1604		2003	-2003
3.2 Portfolio Investment	**111986**	**107040**	**4947**	**182108**	**162258**	**19850**
3.2.A Portfolio Investment in India	111127	105841	5286	181433	161618	19815
3.2.1 Equity and investment fund shares	101529	97937	3593	160273	149590	10683
3.2.2 Debt securities	9598	7905	1693	21160	12028	9132
3.2.B Portfolio Investment by India	859	1198	-339	675	640	35
3.3 Financial derivatives (other than reserves) and employee stock options	**5476**	**7362**	**-1887**	**6359**	**11892**	**-5533**
3.4 Other investment	**71609**	**60964**	**10645**	**98018**	**79598**	**18419**
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	21257	18120	3137	29240	22753	6487
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	0	72	-72	319	0	319
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	21257	18048	3209	28921	22753	6167
3.4.2.3 General government			0			0
3.4.2.4 Other sectors			0			0
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	22828	23788	-960	44362	40589	3773
3.4.3.A Loans to India	19967	19813	153	39295	32531	6764
3.4.3.B Loans by India	2862	3975	-1113	5067	8058	-2991
3.4.4 Insurance, pension, and standardized guarantee schemes	144	10	134	47	3	44
3.4.5 Trade credit and advances	19662	14232	5430	17492	14129	3363
3.4.6 Other accounts receivable/payable - other	7718	4814	2903	6877	2124	4753
3.4.7 Special drawing rights	0		0	0		0
3.5 Reserve assets	**0**	**2519**	**-2519**	**0**	**18614**	**-18614**
3.5.1 Monetary gold			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
3.5.4 Other reserve assets (Foreign Currency Assets)	0	2519	-2519	0	18614	-18614
4 Total assets/liabilities	**205657**	**195305**	**10352**	**307700**	**295815**	**11885**
4.1 Equity and investment fund shares	123488	121915	1574	187308	182969	4339
4.2 Debt instruments	74451	66057	8394	113515	92108	21407
4.3 Other financial assets and liabilities	7718	7333	385	6877	20738	-13861
5 Net errors and omissions	**963**	**0**	**963**	**0**	**722**	**-722**

Note: P: Preliminary.

No. 41: Standard Presentation of BoP in India as per BPM6

(₹ Crore)

Item	Jul-Sep 2023			Jul-Sep 2024 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	**1915018**	**2008132**	**-93114**	**2057899**	**2151355**	**-93457**
1.A Goods and Services (1.A.a+1.A.b)	**1583846**	**1787226**	**-203380**	**1654047**	**1911789**	**-257742**
1.A.a Goods (1.A.a.1 to 1.A.a.3)	**894849**	**1428380**	**-533531**	**870890**	**1501809**	**-630919**
1.A.a.1 General merchandise on a BOP basis	887510	1324618	-437107	871011	1354507	-483496
1.A.a.2 Net exports of goods under merchanting	7339	0	7339	-121	0	-121
1.A.a.3 Nonmonetary gold	0	103763	-103763	0	147303	-147303
1.A.b Services (1.A.b.1 to 1.A.b.13)	**688997**	**358846**	**330151**	**783157**	**409979**	**373178**
1.A.b.1 Manufacturing services on physical inputs owned by others	2339	320	2019	2316	169	2147
1.A.b.2 Maintenance and repair services n.i.e.	465	2544	-2078	755	2199	-1444
1.A.b.3 Transport	58311	60151	-1840	73649	76965	-3316
1.A.b.4 Travel	61845	71601	-9756	63958	78464	-14506
1.A.b.5 Construction	7887	5598	2289	10580	7963	2616
1.A.b.6 Insurance and pension services	6842	6785	57	7553	6581	972
1.A.b.7 Financial services	17106	9777	7329	18349	10595	7754
1.A.b.8 Charges for the use of intellectual property n.i.e.	3485	27618	-24133	3754	32473	-28719
1.A.b.9 Telecommunications, computer, and information services	335161	41064	294097	375037	44672	330366
1.A.b.10 Other business services	177488	113019	64469	210894	130244	80650
1.A.b.11 Personal, cultural, and recreational services	10012	17193	-7180	9269	15029	-5760
1.A.b.12 Government goods and services n.i.e.	1154	2018	-863	1228	2643	-1415
1.A.b.13 Others n.i.e.	6902	1160	5742	5815	1982	3834
1.B Primary Income (1.B.1 to 1.B.3)	**98510**	**194468**	**-95957**	**136323**	**216087**	**-79763**
1.B.1 Compensation of employees	14544	7579	6965	16712	8568	8145
1.B.2 Investment income	73890	183473	-109583	107633	203850	-96217
1.B.2.1 Direct investment	19194	101520	-82327	22828	108966	-86138
1.B.2.2 Portfolio investment	692	30227	-29535	653	34776	-34123
1.B.2.3 Other investment	4298	49928	-45630	9783	58239	-48455
1.B.2.4 Reserve assets	49705	1797	47908	74369	1870	72499
1.B.3 Other primary income	10076	3415	6661	11978	3669	8309
1.C Secondary Income (1.C.1+1.C.2)	**232662**	**26438**	**206224**	**267528**	**23480**	**244048**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	232476	24416	208060	267298	21478	245821
1.C.1.1 Personal transfers (Current transfers between resident and/non-resident households)	225958	16860	209099	260383	15102	245281
1.C.1.2 Other current transfers	6518	7557	-1039	6915	6376	539
1.C.2 General government	186	2022	-1836	230	2002	-1772
2 Capital Account (2.1+2.2)	**1245**	**1668**	**-423**	**1558**	**1611**	**-53**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	74	755	-680	57	570	-513
2.2 Capital transfers	1170	913	257	1501	1041	460
3 Financial Account (3.1 to 3.5)	**1699992**	**1614420**	**85572**	**2577489**	**2477933**	**99556**
3.1 Direct Investment (3.1A+3.1B)	**137100**	**143996**	**-6896**	**177706**	**196451**	**-18745**
3.1.A Direct Investment in India	129962	104866	25096	173115	130862	42253
3.1.A.1 Equity and investment fund shares	120825	101488	19336	162551	125784	36767
3.1.A.1.1 Equity other than reinvestment of earnings	81644	101488	-19844	115988	125784	-9796
3.1.A.1.2 Reinvestment of earnings	39181	0	39181	46563	0	46563
3.1.A.2 Debt instruments	9137	3378	5759	10564	5078	5486
3.1.A.2.1 Direct investor in direct investment enterprises	9137	3378	5759	10564	5078	5486
3.1.B Direct Investment by India	7138	39130	-31992	4591	65589	-60998
3.1.B.1 Equity and investment fund shares	7138	25872	-18734	4591	48809	-44218
3.1.B.1.1 Equity other than reinvestment of earnings	7138	13916	-6778	4591	36128	-31537
3.1.B.1.2 Reinvestment of earnings	0	11956	-11956	0	12680	-12680
3.1.B.2 Debt instruments	0	13258	-13258	0	16780	-16780
3.1.B.2.1 Direct investor in direct investment enterprises	0	13258	-13258	0	16780	-16780
3.2 Portfolio Investment	**925695**	**884807**	**40889**	**1525455**	**1359178**	**166277**
3.2.A Portfolio Investment in India	918597	874902	43695	1519799	1353816	165984
3.2.1 Equity and investment fund shares	839257	809559	29698	1342550	1253064	89486
3.2.2 Debt securities	79340	65343	13997	177250	100752	76498
3.2.B Portfolio Investment by India	7099	9905	-2806	5656	5363	293
3.3 Financial derivatives (other than reserves) and employee stock options	**45263**	**60858**	**-15595**	**53269**	**99618**	**-46349**
3.4 Other investment	**591934**	**503940**	**87993**	**821059**	**666767**	**154291**
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	175715	149782	25933	244933	190597	54337
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	0	594	-594	2675	0	2675
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	175715	149187	26528	242259	190597	51662
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)	188702	196637	-7935	371605	339998	31607
3.4.3.A Loans to India	165048	163780	1267	329162	272501	56660
3.4.3.B Loans by India	23654	32857	-9202	42443	67497	-25054
3.4.4 Insurance, pension, and standardized guarantee schemes	1194	85	1109	393	25	368
3.4.5 Trade credit and advances	162529	117640	44888	146523	118354	28169
3.4.6 Other accounts receivable/payable - other	63794	39797	23998	57605	17794	39811
3.4.7 Special drawing rights	0	0	0	0	0	0
3.5 Reserve assets	**0**	**20819**	**-20819**	**0**	**155919**	**-155919**
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	20819	-20819	0	155919	-155919
4 Total assets/liabilities	**1699992**	**1614420**	**85572**	**2577489**	**2477933**	**99556**
4.1 Equity and investment fund shares	1020775	1007766	13008	1569010	1532662	36348
4.2 Debt instruments	615423	546038	69385	950874	771559	179316
4.3 Other financial assets and liabilities	63794	60616	3179	57605	173712	-116108
5 Net errors and omissions	**7964**	**0**	**7964**	**0**	**6046**	**-6046**

Note: P: Preliminary.

No. 42: India's International Investment Position

(US$ Million)

Item	As on Financial Year/Quarter End							
	2023-24		2023		2024			
			Sep.		Jun.		Sep.	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	1	2	3	4	5	6	7	8
1. Direct investment Abroad/in India	242271	542931	232097	528679	246248	552865	253530	555484
1.1 Equity Capital*	153343	511142	146159	497612	156225	520706	161504	523010
1.2 Other Capital	88927	31789	85938	31067	90023	32160	92026	32474
2. Portfolio investment	12162	277038	12096	259358	12103	277140	12306	293649
2.1 Equity	10644	162061	8974	154634	10367	160898	10983	170934
2.2 Debt	1517	114977	3122	104723	1736	116242	1323	122715
3. Other investment	132654	575068	120311	546182	140952	589624	146190	617176
3.1 Trade credit	33450	123662	30854	124733	32865	126576	32428	129931
3.2 Loan	17547	221738	11962	208669	20803	224823	22147	240166
3.3 Currency and Deposits	53519	154787	45711	146166	57747	160628	56105	164076
3.4 Other Assets/Liabilities	28138	74880	31784	66615	29537	77597	35510	83002
4. Reserves	646419		587714		651997		705782	
5. Total Assets/ Liabilities	1033505	1395036	952218	1334219	1051300	1419629	1117808	1466309
6. Net IIP (Assets - Liabilities)	-361531		-382001		-368329		-348501	

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	2024		2025	FY 2023-24	2024		2025
		Jan.	Dec.	Jan.		Jan.	Dec.	Jan.
	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	3.74	3.78	4.88	259206893	21705635	27448820	30296790
1.1 Govt. Securities Clearing (1.1.1 to 1.1.3)	16.80	1.42	1.49	1.77	170464587	14658627	16506680	17807347
1.1.1 Outright	9.51	0.79	0.84	1.10	13463848	1100547	1348782	1627265
1.1.2 Repo	4.94	0.43	0.41	0.41	76718788	6039056	6377679	7288494
1.1.3 Tri-party Repo	2.35	0.21	0.24	0.25	80281951	7519024	8780219	8891588
1.2 Forex Clearing	24.92	2.21	2.16	2.94	80984671	6439543	9919285	11164125
1.3 Rupee Derivatives @	1.31	0.11	0.13	0.17	7757636	607465	1022855	1325318
B. Payment Systems								
I Financial Market Infrastructures (FMIs)	-	-	-	-	-	-	-	-
1 Credit Transfers - RTGS (1.1 to 1.2)	2700.16	230.99	262.29	268.15	170886670	14691625	19163587	17499363
1.1 Customer Transactions	2686.04	229.79	261.11	266.89	152406168	13127720	17161423	15571748
1.2 Interbank Transactions	14.12	1.20	1.17	1.26	18480503	1563905	2002163	1927615
II Retail								
2 Credit Transfers - Retail (2.1 to 2.6)	1486106.89	137068.03	183786.41	186538.41	67542859	5945126	6935632	7000487
2.1 AePS (Fund Transfers) @	3.92	0.36	0.31	0.31	261	24	17	18
2.2 APBS $	25888.17	2118.74	2451.41	2263.21	390743	42872	58705	52280
2.3 IMPS	60053.35	5087.92	4411.64	4442.23	6495652	566310	601549	606420
2.4 NACH Cr $	16227.27	948.05	1315.94	1304.72	1525104	127514	135695	145699
2.5 NEFT	72639.50	6882.78	8307.02	8567.93	39136014	3367322	3814966	3848033
2.6 UPI @	1311294.68	122030.18	167300.09	169960.01	19995086	1841084	2324700	2348037
2.6.1 of which USSD @	26.19	1.90	1.56	1.38	352	21	16	16
3 Debit Transfers and Direct Debits (3.1 to 3.3)	18249.53	1571.50	1905.47	1878.45	1687658	154405	198303	199535
3.1 BHIM Aadhaar Pay @	193.59	18.82	17.18	15.79	6112	619	547	486
3.2 NACH Dr $	16426.49	1440.08	1738.32	1715.83	1678769	153564	197549	198857
3.3 NETC (linked to bank account) @	1629.45	112.60	149.97	146.83	2777	222	207	193
4 Card Payments (4.1 to 4.2)	58469.79	4934.19	5608.59	5522.42	2423563	211931	228548	223090
4.1 Credit Cards (4.1.1 to 4.1.2)	35610.15	3289.52	4328.50	4305.72	1831134	166444	187949	184126
4.1.1 PoS based $	18614.08	1725.59	2240.03	2177.43	651911	58532	73048	69429
4.1.2 Others $	16996.08	1563.93	2088.46	2128.29	1179223	107912	114901	114697
4.2 Debit Cards (4.2.1 to 4.2.1)	22859.64	1644.68	1280.10	1216.69	592429	45487	40599	38963
4.2.1 PoS based $	16477.95	1193.18	964.50	910.91	393589	30383	27609	25999
4.2.2 Others $	6381.69	451.50	315.60	305.78	198840	15103	12990	12965
5 Prepaid Payment Instruments (5.1 to 5.2)	78775.40	7087.25	6377.99	6547.10	283048	25784	18992	19496
5.1 Wallets	63256.69	5766.67	4830.75	4875.14	234353	21259	14437	14700
5.2 Cards (5.2.1 to 5.2.2)	15518.71	1320.58	1547.24	1671.97	48695	4525	4556	4796
5.2.1 PoS based $	8429.87	690.67	684.93	701.18	11247	927	991	1000
5.2.2 Others $	7088.84	629.91	862.31	970.79	37447	3598	3565	3796
6 Paper-based Instruments (6.1 to 6.2)	6632.10	547.17	506.56	516.61	7212333	583653	587879	606756
6.1 CTS (NPCI Managed)	6632.10	547.17	506.56	516.61	7212333	583653	587879	606756
6.2 Others	0.00	–	–	–	–	–	–	–
Total - Retail Payments (2+3+4+5+6)	1648233.71	151208.15	198185.02	201003.00	79149461	6920899	7969354	8049363
Total Payments (1+2+3+4+5+6)	1650933.88	151439.14	198447.31	201271.14	250036131	21612523	27132941	25548726
Total Digital Payments (1+2+3+4+5)	1644301.78	150891.97	197940.75	200754.53	242823799	21028871	26545062	24941970

PART II - Payment Modes and Channels

System	Volume (Lakh)				Value (₹ Crore)			
	FY 2023-24	2024		2025	FY 2023-24	2024		2025
		Jan.	Dec.	Jan.		Jan.	Dec.	Jan.
	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	117854.93	156762.66	158779.34	30687088	2815296	3455800	3451690
1.1 Intra-bank $	83000.56	7654.37	9183.14	9234.68	5676805	524854	618347	607529
1.2 Inter-bank $	1169598.65	110200.56	147579.52	149544.66	25010283	2290441	2837453	2844161
2 Internet Payments (Netbanking / Internet Browser Based) @ (2.1 to 2.2)	45034.98	3837.71	4072.71	4167.05	102117736	9123990	12203095	11639721
2.1 Intra-bank @	12033.28	1028.04	1155.00	1212.87	53247042	4767036	6414756	6130804
2.2 Inter-bank @	33001.71	2809.67	2917.71	2954.18	48870694	4356954	5788339	5508917
B. ATMs								
3 Cash Withdrawal at ATMs $ (3.1 to 3.3)	66440.72	5306.01	4950.77	4910.07	3259388	260746	252471	251938
3.1 Using Credit Cards $	95.80	8.26	8.12	7.79	4648	404	429	412
3.2 Using Debit Cards $	66001.01	5272.19	4923.54	4883.53	3241538	259326	251161	250646
3.3 Using Pre-paid Cards $	343.90	25.56	19.11	18.75	13202	1016	881	879
4 Cash Withdrawal at PoS $ (4.1 to 4.2)	15.18	0.65	0.29	0.27	148	6	3	3
4.1 Using Debit Cards $	15.06	0.64	0.26	0.24	147	6	3	3
4.2 Using Pre-paid Cards $	0.12	0.02	0.03	0.03	1	0	0	0
5 Cash Withrawal at Micro ATMs @	11754.95	839.66	910.87	915.09	314003	22351	23195	23246
5.1 AePS @	11754.95	839.66	910.87	915.09	314003	22351	23195	23246

PART III - Payment Infrastructures (Lakh)

System	As on March 2024	2024		2025
		Jan.	Dec.	Jan.
	1	2	3	4
Payment System Infrastructures				
1 Number of Cards (1.1 to 1.2)	10667.22	10570.66	10990.04	10909.12
1.1 Credit Cards	1018.03	995.00	1080.56	1088.73
1.2 Debit Cards	9649.19	9575.66	9909.48	9820.39
2 Number of PPIs @ (2.1 to 2.2)	16743.63	17676.26	13269.07	13463.21
2.1 Wallets @	13381.80	14396.94	8904.25	8954.73
2.2 Cards @	3361.82	3279.33	4364.82	4508.48
3 Number of ATMs (3.1 to 3.2)	2.58	2.58	2.55	2.57
3.1 Bank owned ATMs $	2.23	2.24	2.19	2.21
3.2 White Label ATMs $	0.35	0.34	0.36	0.36
4 Number of Micro ATMs @	17.55	17.60	14.67	14.64
5 Number of PoS Terminals	89.03	85.93	100.01	103.53
6 Bharat QR @	62.50	60.04	63.83	64.43
7 UPI QR *	3434.93	3213.79	6334.39	6400.67

@: 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.
2. ECS (Debit and Credit) has been merged with NACH with effect from January 31, 2020.
3. 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.
4. 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 –
o Include transactions done through mobile apps of banks and UPI apps.
o 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		2023-24	2023	2024		
			Dec.	Oct.	Nov.	Dec.
		1	2	3	4	5
1 Small Savings	**Receipts**	**232460**	**16670**	**10981**	**9805**	**11133**
	Outstanding	**1865029**	**1789946**	**1962367**	**1971752**	**1982465**
1.1 Total Deposits	**Receipts**	**161344**	**12386**	**8792**	**7469**	**8734**
	Outstanding	**1298795**	**1247555**	**1379283**	**1386750**	**1395484**
1.1.1 Post Office Saving Bank Deposits	Receipts	17229	2279	1062	20	1090
	Outstanding	191692	213964	200889	200909	201999
1.1.2 Sukanya Samriddhi Yojna	Receipts	35174	2171	1787	1944	2244
	Outstanding	157611	104859	172819	174763	177007
1.1.3 National Saving Scheme, 1987	Receipts	0	0	0	0	0
	Outstanding	0	0	0	0	0
1.1.4 National Saving Scheme, 1992	Receipts	0	0	0	0	0
	Outstanding	0	0	0	0	0
1.1.5 Monthly Income Scheme	Receipts	26696	1713	1033	900	827
	Outstanding	269007	263383	280416	281316	282142
1.1.6 Senior Citizen Scheme 2004	Receipts	38167	2197	1699	1609	1531
	Outstanding	175472	169033	191465	193074	194605
1.1.7 Post Office Time Deposits	Receipts	25341	2429	2121	2109	2125
	Outstanding	305776	297989	326679	328786	330912
1.1.7.1 1 year Time Deposits	Outstanding	140423	135196	155580	157349	159174
1.1.7.2 2 year Time Deposits	Outstanding	11967	11265	13910	14093	14299
1.1.7.3 3 year Time Deposits	Outstanding	8932	8472	10033	10166	10308
1.1.7.4 5 year Time Deposits	Outstanding	144454	143056	147156	147178	147131
1.1.8 Post Office Recurring Deposits	Receipts	18713	1616	1238	1023	1025
	Outstanding	197134	196491	205221	206244	207269
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	8	-19	-149	-137	-108
	Outstanding	1754	1488	1440	1303	1195
1.1.11 PM Care for children	Receipts	16	0	1	1	0
	Outstanding	349	348	354	355	355
1.2 Saving Certificates	**Receipts**	**56069**	**3957**	**2080**	**2184**	**2226**
	Outstanding	**418021**	**407244**	**434502**	**436268**	**438074**
1.2.1 National Savings Certificate VIII issue	Receipts	16853	1213	637	524	430
	Outstanding	183905	177154	191667	192191	192621
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	0	0	0	0	0
	Outstanding	0	0	0	0	0
1.2.4 Kisan Vikas Patras - 2014	Receipts	20939	1568	783	932	1113
	Outstanding	220560	216509	226662	227594	228707
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	18277	1176	660	728	683
	Outstanding	18277	15064	23891	24620	25303
1.2.8 Other Certificates	Outstanding	-4721	-1483	-7718	-8137	-8557
1.3 Public Provident Fund	**Receipts**	**15047**	**327**	**109**	**152**	**173**
	Outstanding	**148213**	**135147**	**148582**	**148734**	**148907**

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			
	Dec.	Mar.	Jun.	Sep.	Dec.
	1	2	3	4	5
(A) Total (in ₹. Crore)	**10538792**	**10740389**	**10946860**	**11271589**	**11422728**
1 Commercial Banks	37.55	37.66	37.52	37.55	37.98
2 Co-operative Banks	1.49	1.47	1.42	1.35	1.36
3 Non-Bank PDs	0.67	0.66	0.70	0.77	0.65
4 Insurance Companies	26.16	25.98	26.11	25.95	26.14
5 Mutual Funds	3.03	2.90	2.87	3.14	3.11
6 Provident Funds	4.57	4.47	4.41	4.25	4.25
7 Pension Funds	4.44	4.52	4.74	4.86	5.05
8 Financial Institutions	0.55	0.55	0.57	0.63	0.64
9 Corporates	1.33	1.35	1.44	1.60	1.45
10 Foreign Portfolio Investors	1.92	2.34	2.34	2.80	2.81
11 RBI	12.54	12.31	11.92	11.16	10.55
12 Others	5.74	5.79	5.97	5.92	6.01
12.1 State Governments	2.07	2.04	2.13	2.19	2.21

State Governments Securities					
Category	2023	2024			
	Dec.	Mar.	Jun.	Sep.	Dec.
	1	2	3	4	5
(B) Total (in ₹. Crore)	**5338587**	**5646219**	**5727482**	**5909490**	**6055711**
1 Commercial Banks	33.90	34.14	33.85	34.39	35.11
2 Co-operative Banks	3.53	3.39	3.38	3.29	3.22
3 Non-Bank PDs	0.63	0.60	0.59	0.60	0.53
4 Insurance Companies	26.64	26.14	25.85	25.56	25.16
5 Mutual Funds	2.00	2.09	2.08	1.93	1.89
6 Provident Funds	22.00	22.35	22.94	23.02	22.90
7 Pension Funds	4.56	4.76	4.87	4.87	4.82
8 Financial Institutions	1.63	1.59	1.58	1.57	1.58
9 Corporates	2.03	2.02	2.03	1.95	1.97
10 Foreign Portfolio Investors	0.03	0.07	0.05	0.04	0.03
11 RBI	0.66	0.63	0.62	0.60	0.58
12 Others	2.37	2.20	2.17	2.18	2.19
12.1 State Governments	0.27	0.25	0.26	0.26	0.26

Treasury Bills					
Category	2023	2024			
	Dec.	Mar.	Jun.	Sep.	Dec.
	1	2	3	4	5
(C) Total (in ₹. Crore)	**849151**	**871662**	**858193**	**747242**	**760045**
1 Commercial Banks	57.18	58.53	47.79	44.74	40.45
2 Co-operative Banks	1.28	1.67	1.49	1.58	1.22
3 Non-Bank PDs	1.70	1.66	2.69	2.28	1.41
4 Insurance Companies	5.50	5.06	5.78	5.26	4.73
5 Mutual Funds	11.21	11.89	14.50	15.06	15.41
6 Provident Funds	0.08	0.15	0.60	0.26	0.04
7 Pension Funds	0.00	0.01	0.00	0.00	0.00
8 Financial Institutions	5.34	7.16	6.56	6.36	6.77
9 Corporates	4.58	4.50	4.79	4.66	4.56
10 Foreign Portfolio Investors	0.07	0.01	0.20	0.15	0.12
11 RBI	0.00	0.00	0.00	0.00	0.00
12 Others	13.06	9.36	15.59	19.65	25.29
12.1 State Governments	9.26	5.88	11.55	14.95	20.11

Note:
The table format is revised since monthly Bulletin for the month of June 2023.
Central Government Dated Securities include special securities and Sovereign Gold Bonds.
State Government Securities include special bonds issued under Ujwal DISCOM Assurance Yojana (UDAY).
Bank PDs are clubbed under Commercial Banks.
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	2019-20	2020-21	2021-22	2022-23	2023-24 RE	2024-25 BE
	1	2	3	4	5	6
1 Total Disbursements	**5410887**	**6353359**	**7098451**	**7880522**	**9110725**	**9800798**
1.1 Developmental	3074492	3823423	4189146	4701611	5514584	5862996
1.1.1 Revenue	2446605	3150221	3255207	3574503	3965270	4195108
1.1.2 Capital	588233	550358	861777	1042159	1453849	1526993
1.1.3 Loans	39654	122844	72163	84949	95464	140895
1.2 Non-Developmental	2253027	2442941	2810388	3069896	3467270	3800321
1.2.1 Revenue	2109629	2271637	2602750	2895864	3266628	3537378
1.2.1.1 Interest Payments	955801	1060602	1226672	1377807	1562660	1711972
1.2.2 Capital	141457	169155	175519	171131	196073	259346
1.2.3 Loans	1941	2148	32119	2902	4569	3597
1.3 Others	83368	86995	98916	109015	128871	137481
2 Total Receipts	**5734166**	**6397162**	**7156342**	**7855370**	**9054999**	**9650488**
2.1 Revenue Receipts	3851563	3688030	4823821	5447913	6379349	7209647
2.1.1 Tax Receipts	3231582	3193390	4160414	4809044	5456913	6142276
2.1.1.1 Taxes on commodities and services	2012578	2076013	2626553	2865550	3248450	3631569
2.1.1.2 Taxes on Income and Property	1216203	1114805	1530636	1939550	2204462	2506181
2.1.1.3 Taxes of Union Territories (Without Legislature)	2800	2572	3225	3943	4001	4526
2.1.2 Non-Tax Receipts	619981	494640	663407	638870	922436	1067371
2.1.2.1 Interest Receipts	31137	33448	35250	42975	49552	57273
2.2 Non-debt Capital Receipts	110094	64994	44077	62716	86733	118239
2.2.1 Recovery of Loans & Advances	59515	16951	27665	15970	55895	45125
2.2.2 Disinvestment proceeds	50578	48044	16412	46746	30839	73114
3 Gross Fiscal Deficit [1 - (2.1 + 2.2)]	**1449230**	**2600335**	**2230553**	**2369892**	**2644642**	**2472912**
3A Sources of Financing: Institution-wise						
3A.1 Domestic Financing	1440548	2530155	2194406	2332768	2619811	2456959
3A.1.1 Net Bank Credit to Government	571872	890012	627255	687904	346483	...
3A.1.1.1 Net RBI Credit to Government	190241	107493	350911	529	-257913	...
3A.1.2 Non-Bank Credit to Government	868676	1640143	1567151	1644864	2273328	...
3A.2 External Financing	8682	70180	36147	37124	24832	15952
3B Sources of Financing: Instrument-wise						
3B.1 Domestic Financing	1440548	2530155	2194406	2332768	2619811	2456959
3B.1.1 Market Borrowings (net)	971378	1696012	1213169	1651076	1962969	1983757
3B.1.2 Small Savings (net)	209232	458801	526693	358764	434151	447511
3B.1.3 State Provident Funds (net)	38280	41273	28100	13880	21386	19857
3B.1.4 Reserve Funds	10411	4545	42153	68803	52385	-33653
3B.1.5 Deposits and Advances	-14227	25682	42203	51989	35819	-10138
3B.1.6 Cash Balances	-323279	-43802	-57891	25152	55726	150310
3B.1.7 Others	548753	347643	399980	163104	57374	-100684
3B.2 External Financing	8682	70180	36147	37124	24832	15952
4 Total Disbursements as per cent of GDP	*26.9*	*32.0*	*30.1*	*29.2*	*30.8*	*30.0*
5 Total Receipts as per cent of GDP	*28.5*	*32.2*	*30.3*	*29.1*	*30.7*	*29.6*
6 Revenue Receipts as per cent of GDP	*19.2*	*18.6*	*20.4*	*20.2*	*21.6*	*22.1*
7 Tax Receipts as per cent of GDP	*16.1*	*16.1*	*17.6*	*17.8*	*18.5*	*18.8*
8 Gross Fiscal Deficit as per cent of GDP	*7.2*	*13.1*	*9.5*	*8.8*	*9.0*	*7.6*

… : 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 2024-25 is from Union Budget 2024-25.
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 January-2025					
		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	6184.49	31	1653.54	26	1025.05	5
2	Arunachal Pradesh	-	-	-	-	-	-
3	Assam	-	-	-	-	-	-
4	Bihar	-	-	-	-	-	-
5	Chhattisgarh	-	-	-	-	-	-
6	Goa	-	-	-	-	-	-
7	Gujarat	-	-	-	-	-	-
8	Haryana	473.94	8	-	-	-	-
9	Himachal Pradesh	-	-	386.28	25	164.97	6
10	Jammu & Kashmir UT	-	-	-	-	-	-
11	Jharkhand	-	-	-	-	-	-
12	Karnataka	-	-	-	-	-	-
13	Kerala	1590.49	31	1554.61	29	1645.12	10
14	Madhya Pradesh	-	-	-	-	-	-
15	Maharashtra	-	-	-	-	-	-
16	Manipur	84.61	21	168.80	11	280.07	3
17	Meghalaya	453.99	9	-	-	-	-
18	Mizoram	56.39	7	-	-	-	-
19	Nagaland	308.00	9	-	-	-	-
20	Odisha	-	-	-	-	-	-
21	Puducherry	-	-	-	-	-	-
22	Punjab	4317.04	31	1165.95	10	199.92	2
23	Rajasthan	2317.76	11	-	-	-	-
24	Tamil Nadu	-	-	-	-	-	-
25	Telangana	4703.70	31	1697.94	25	723.84	8
26	Tripura	-	-	-	-	-	-
27	Uttar Pradesh	-	-	-	-	-	-
28	Uttarakhand	1285.81	27	832.80	7	354.10	6
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 January 2025			
		Consolidated Sinking Fund (CSF)	Guarantee Redemption Fund (GRF)	Government Securities	Auction Treasury Bills (ATBs)
	1	2	3	4	5
1	Andhra Pradesh	11543	1139	0	0
2	Arunachal Pradesh	2743	7	0	4600
3	Assam	9183	90	0	0
4	Bihar	12492	-	0	19000
5	Chhattisgarh	7791	489	0	9495
6	Goa	1050	456	0	0
7	Gujarat	15328	664	0	2000
8	Haryana	2331	1695	0	0
9	Himachal Pradesh	-	-	0	0
10	Jammu & Kashmir UT	19	18	0	0
11	Jharkhand	2406	-	0	830
12	Karnataka	20254	750	0	29709
13	Kerala	3110	-	0	0
14	Madhya Pradesh	-	1274	0	0
15	Maharashtra	71768	1740	0	0
16	Manipur	69	140	0	0
17	Meghalaya	1274	108	0	0
18	Mizoram	458	63	0	0
19	Nagaland	1888	46	0	0
20	Odisha	18171	2046	117	13488
21	Puducherry	578	-	0	1500
22	Punjab	9143	0	0	0
23	Rajasthan	1780	-	0	7700
24	Tamil Nadu	3439	-	0	3616
25	Telangana	7880	1726	0	0
26	Tripura	1220	27	0	0
27	Uttarakhand	5006	210	0	0
28	Uttar Pradesh	10696	415	0	30000
29	West Bengal	13810	1029	0	1500
	Total	**235431**	**14134**	**117**	**123437**

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	
						November		December		January			
		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	4000	2000	4237	3237	5000	4000	63237	44155
2	Arunachal Pradesh	559	389	902	672	400	400	395	315	-	-	795	569
3	Assam	17100	16105	18500	16000	-	-500	1800	1100	1000	1000	12050	9400
4	Bihar	36800	27467	47612	29910	6000	3000	6000	3500	8000	5000	40000	24422
5	Chhattisgarh	2000	-2287	32000	26213	-	-	-	-	-	-700	6500	2300
6	Goa	1350	500	2550	1560	200	100	-	-	-	-	1050	250
7	Gujarat	43000	28300	30500	11947	3000	1000	4500	2000	7000	2700	20500	5700
8	Haryana	45158	28638	47500	28364	4000	3500	2000	1150	6000	3400	33000	23270
9	Himachal Pradesh	14000	11941	8072	5856	500	300	1000	900	-	-300	6700	4450
10	Jammu & Kashmir UT	8473	5969	16337	13904	400	400	1600	1600	920	720	12670	11130
11	Jharkhand	4000	-155	1000	-2505	-	-	-	-750	-	-2700	-	-3450
12	Karnataka	36000	26000	81000	63003	4000	1500	16000	13500	16025	13025	59025	42525
13	Kerala	30839	15620	42438	26638	2249	1249	2755	2455	4000	2500	36002	22302
14	Madhya Pradesh	40158	26849	38500	26264	5000	4250	5000	4250	5000	4000	35000	26900
15	Maharashtra	72000	42815	110000	79738	-	-2700	-	-3100	18000	15600	85000	57300
16	Manipur	1422	1147	1426	1076	-	-	200	200	-	-100	1000	640
17	Meghalaya	1753	1356	1364	912	-	-	635	535	-	-100	1882	1194
18	Mizoram	1315	1129	901	641	80	60	140	40	119	119	930	700
19	Nagaland	1854	1199	2551	2016	-	-150	250	250	-	-	550	200
20	Odisha	0	-7500	0	-4658	1000	1000	-	-	1000	500	2000	-
21	Puducherry	1200	698	1100	475	-	-100	350	350	-	-300	900	200
22	Punjab	45500	33660	42386	29517	387	387	2500	2200	3900	2500	36830	30676
23	Rajasthan	46057	30110	73624	49718	4265	3015	4800	3800	5000	3000	57565	39483
24	Sikkim	1414	1320	1916	1701	-	-	-	-	-	-	1000	870
25	Tamil Nadu	87000	65722	113001	75970	9025	5400	11000	10000	10000	7000	88025	60175
26	Telangana	40150	30922	49618	39385	1000	200	3500	2500	6209	4609	46709	36591
27	Tripura	0	-645	0	-550	-	-	-	-	-	-	-	-
28	Uttar Pradesh	55612	41797	97650	85335	6000	3500	12000	8422	5000	3000	26000	10713
29	Uttarakhand	3200	1450	6300	3800	500	500	1000	-	1000	350	4400	2750
30	West Bengal	63000	42500	69910	48910	3000	1000	7000	5000	8500	5500	46500	28400
	Grand Total	758392	518829	1007058	717140	55006	29311	88662	63454	111673	74323	725820	483815

- : 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	2021-22				
	Q1	Q2	Q3	Q4	Annual
Net Financial Assets (I-II)	**3,42,813**	**3,30,490**	**4,85,203**	**5,54,816**	**17,13,322**
Per cent of GDP	***6.6***	***5.9***	***7.7***	***8.5***	***7.3***
I. Financial Assets	**3,63,395**	**5,25,419**	**8,16,484**	**9,07,366**	**26,12,664**
Per cent of GDP	***7.0***	***9.3***	***13.0***	***13.9***	***11.1***
of which:					
1.Total Deposits (a)+(b)	**(81,064)**	**2,04,486**	**4,28,035**	**2,83,634**	**8,35,091**
(a) Bank Deposits	**(1,06,429)**	**1,97,105**	**4,22,393**	**2,70,025**	**7,83,094**
i. Commercial Banks	(1,07,941)	1,95,442	4,18,267	2,62,326	7,68,094
ii. Co-operative Banks	1,512	1,663	4,126	7,699	15,000
(b) Non-Bank Deposits	**25,365**	**7,380**	**5,642**	**13,610**	**51,997**
of which:					
Other Financial Institutions (i+ii)	**17,555**	**(435)**	**(2,178)**	**5,770**	**20,712**
i. Non-Banking Financial Companies	5,578	(1,371)	73	4,021	8,302
ii. Housing Finance Companies	11,977	936	(2,252)	1,748	12,410
2. Life Insurance Funds	**1,15,539**	**1,28,277**	**1,04,076**	**1,38,998**	**4,86,889**
3. Provident and Pension Funds (including PPF)	**1,24,971**	**1,12,810**	**95,493**	**2,18,719**	**5,51,993**
4. Currency	**1,28,660**	**(68,631)**	**62,793**	**1,46,845**	**2,69,667**
5. Investments	**24,884**	**82,260**	**69,715**	**50,926**	**2,27,785**
of which:					
(a) Mutual Funds	14,573	63,151	37,912	44,964	1,60,600
(b) Equity	4,502	13,218	27,808	3,084	48,613
6. Small Savings (excluding PPF)	**50,405**	**66,218**	**56,372**	**68,243**	**2,41,238**
II. Financial Liabilities	**20,583**	**1,94,929**	**3,31,281**	**3,52,550**	**8,99,343**
Per cent of GDP	***0.4***	***3.5***	***5.3***	***5.4***	***3.8***
Loans (Borrowings) from					
1. Financial Corporations (a+b)	**20,479**	**1,94,825**	**3,31,178**	**3,52,446**	**8,98,928**
(a) Banking Sector	**21,428**	**1,38,720**	**2,67,955**	**2,74,181**	**7,02,284**
of which:					
i. Commercial Banks	26,979	1,40,269	2,65,271	3,37,010	7,69,529
(b) Other Financial Institutions	**(949)**	**56,105**	**63,223**	**78,266**	**1,96,644**
i. Non-Banking Financial Companies	(8,708)	30,151	32,177	40,003	93,623
ii. Housing Finance Companies	7,132	24,404	29,495	37,436	98,467
iii. Insurance Corporations	627	1,550	1,551	827	4,554
2. Non-Financial Corporations (Private Corporate Business)	**34**	**34**	**34**	**34**	**135**
3. General Government	**70**	**70**	**70**	**70**	**279**

No. 50 (a): Flow of Financial Assets and Liabilities of Households - Instrument-wise (Contd.)

(Amount in ₹ Crore)

Item	2022-23				
	Q1	Q2	Q3	Q4	Annual
Net Financial Assets (I-II)	**2,89,980**	**2,99,395**	**2,96,132**	**4,54,240**	**13,39,748**
Per cent of GDP	***4.5***	***4.6***	***4.3***	***6.4***	***5.0***
I. Financial Assets	**5,79,958**	**6,34,471**	**7,50,245**	**9,71,526**	**29,36,200**
Per cent of GDP	***8.9***	***9.8***	***10.9***	***13.6***	***10.9***
of which:					
1.Total Deposits (a)+(b)	**1,85,429**	**3,17,361**	**2,80,233**	**3,25,853**	**11,08,876**
(a) Bank Deposits	**1,63,172**	**2,99,533**	**2,56,400**	**3,07,867**	**10,26,971**
i. Commercial Banks	1,58,613	3,00,565	2,48,460	2,84,968	9,92,606
ii. Co-operative Banks	4,559	(1,032)	7,940	22,899	34,365
(b) Non-Bank Deposits	**22,257**	**17,829**	**23,833**	**17,986**	**81,905**
of which:					
Other Financial Institutions (i+ii)	**6,505**	**2,077**	**8,082**	**2,234**	**18,897**
i. Non-Banking Financial Companies	4,231	3,267	3,247	3,946	14,690
ii. Housing Finance Companies	2,274	(1,191)	4,835	(1,712)	4,207
2. Life Insurance Funds	**73,298**	**1,51,677**	**1,67,522**	**1,56,613**	**5,49,109**
3. Provident and Pension Funds (including PPF)	**1,48,915**	**1,20,367**	**1,38,584**	**2,18,709**	**6,26,575**
4. Currency	**66,439**	**(54,579)**	**76,760**	**1,48,990**	**2,37,610**
5. Investments	**51,503**	**48,530**	**49,779**	**64,151**	**2,13,962**
of which:					
(a) Mutual Funds	35,443	44,484	40,206	58,955	1,79,088
(b) Equity	13,561	1,378	6,434	1,665	23,038
6. Small Savings (excluding PPF)	**54,375**	**51,115**	**37,368**	**57,211**	**2,00,068**
II. Financial Liabilities	**2,89,978**	**3,35,076**	**4,54,113**	**5,17,285**	**15,96,452**
Per cent of GDP	***4.5***	***5.2***	***6.6***	***7.3***	***5.9***
Loans (Borrowings) from					
1. Financial Corporations (a+b)	**2,89,781**	**3,34,880**	**4,53,917**	**5,17,089**	**15,95,667**
(a) Banking Sector	**2,34,235**	**2,63,450**	**3,70,783**	**3,83,845**	**12,52,313**
of which:					
i. Commercial Banks	2,30,284	2,61,265	3,68,305	3,31,293	11,91,146
(b) Other Financial Institutions	**55,546**	**71,429**	**83,134**	**1,33,244**	**3,43,354**
i. Non-Banking Financial Companies	30,532	36,650	55,792	94,565	2,17,539
ii. Housing Finance Companies	22,337	33,031	24,903	36,746	1,17,017
iii. Insurance Corporations	2,678	1,748	2,439	1,933	8,798
2. Non-Financial Corporations (Private Corporate Business)	**34**	**34**	**34**	**34**	**135**
3. General Government	**163**	**163**	**163**	**163**	**650**

No. 50 (a): Flow of Financial Assets and Liabilities of Households - Instrument-wise (Concld.)

(Amount in ₹ Crore)

Item	2023-24				
	Q1	Q2	Q3	Q4	Annual
Net Financial Assets (I-II)	**3,53,093**	**2,89,675**	**2,98,111**	**6,11,366**	**15,52,245**
Per cent of GDP	***5.0***	***4.1***	***3.9***	***7.8***	***5.3***
I. Financial Assets	**6,74,763**	**8,15,842**	**8,08,779**	**11,32,130**	**34,31,514**
Per cent of GDP	***9.6***	***11.5***	***10.7***	***14.5***	***11.6***
of which:					
1.Total Deposits (a)+(b)	**2,68,925**	**4,12,388**	**2,99,372**	**4,10,559**	**13,91,244**
(a) Bank Deposits	**2,55,249**	**5,06,208**	**2,79,872**	**3,94,573**	**14,35,902**
i. Commercial Banks	2,46,079	5,06,700	2,82,537	3,87,313	14,22,629
ii. Co-operative Banks	9,170	(492)	(2,665)	7,260	13,273
(b) Non-Bank Deposits	**13,676**	**(93,820)**	**19,499**	**15,986**	**(44,658)**
of which:					
Other Financial Institutions (i+ii)	**(485)**	**(1,07,982)**	**5,338**	**1,825**	**(1,01,305)**
i. Non-Banking Financial Companies	6,119	4,782	4,896	1,943	17,740
ii. Housing Finance Companies	(6,605)	(1,12,764)	442	(118)	(1,19,045)
2. Life Insurance Funds	**1,58,358**	**1,41,413**	**1,61,192**	**1,30,036**	**5,90,999**
3. Provident and Pension Funds (including PPF)	**1,63,508**	**1,48,178**	**1,53,255**	**2,53,719**	**7,18,661**
4. Currency	**(48,636)**	**(36,701)**	**56,719**	**1,46,644**	**1,18,026**
5. Investments	**41,409**	**73,060**	**79,633**	**1,08,732**	**3,02,834**
of which:					
(a) Mutual Funds	32,086	55,769	60,135	90,973	2,38,962
(b) Equity	3,757	7,146	9,941	8,236	29,080
6. Small Savings (excluding PPF)	**91,198**	**77,504**	**58,607**	**82,441**	**3,09,751**
II. Financial Liabilities	**3,21,670**	**5,26,167**	**5,10,667**	**5,20,764**	**18,79,269**
Per cent of GDP	***4.6***	***7.4***	***6.7***	***6.7***	***6.4***
Loans (Borrowings) from					
1. Financial Corporations (a+b)	**3,21,520**	**5,26,016**	**5,10,516**	**5,20,613**	**18,78,666**
(a) Banking Sector	**2,13,606**	**8,68,874**	**4,02,647**	**3,92,330**	**18,77,458**
of which:					
i. Commercial Banks	2,08,027	8,75,654	3,89,898	3,82,558	18,56,136
(b) Other Financial Institutions	**1,07,914**	**(3,42,858)**	**1,07,869**	**1,28,283**	**1,208**
i. Non-Banking Financial Companies	81,449	59,684	85,032	1,00,836	3,27,001
ii. Housing Finance Companies	23,784	(4,04,294)	21,233	25,853	(3,33,424)
iii. Insurance Corporations	2,681	1,753	1,604	1,594	7,631
2. Non-Financial Corporations (Private Corporate Business)	**34**	**35**	**35**	**35**	**138**
3. General Government	**116**	**116**	**116**	**116**	**465**

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 2023-24 and revised estimates for 2021-22 and 2022-23.
3. The preliminary estimates for 2023-24 will undergo revision with the release of first revised estimates of national income, consumption expenditure, savings, and capital formation, 2023-24 by the National Statistical Office (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-2021	Sep-2021	Dec-2021	Mar-2022
Financial Assets (a+b+c+d+e+f+g+h)	**2,33,27,377**	**2,39,99,280**	**2,47,08,474**	**2,54,40,650**
Per cent of GDP	**110.4**	**108.9**	**108.2**	**107.8**
(a) Bank Deposits (i+ii)	**1,07,90,832**	**1,09,87,937**	**1,14,10,330**	**1,16,80,355**
i. Commercial Banks	99,53,044	1,01,48,486	1,05,66,753	1,08,29,079
ii. Co-operative Banks	8,37,788	8,39,451	8,43,577	8,51,276
(b) Non-Bank Deposits				
of which:				
Other Financial Institutions	**2,06,509**	**2,06,074**	**2,03,896**	**2,09,665**
i. Non-Banking Financial Companies	67,840	66,469	66,542	70,564
ii. Housing Finance Companies	1,38,669	1,39,605	1,37,353	1,39,102
(c) Life Insurance Funds	**49,29,725**	**51,42,279**	**52,13,527**	**53,57,350**
(d) Currency	**27,42,897**	**26,74,266**	**27,37,059**	**28,83,904**
(e) Mutual funds	**18,55,000**	**20,64,364**	**21,26,112**	**21,52,141**
(f) Public Provident Fund (PPF)	**7,57,398**	**7,62,264**	**7,67,287**	**8,34,148**
(g) Pension Funds	**6,16,517**	**6,67,379**	**6,99,173**	**7,36,592**
(h) Small Savings (excluding PPF)	**14,28,499**	**14,94,717**	**15,51,089**	**15,86,496**
Financial Liabilities (a+b)	**77,43,630**	**79,38,456**	**82,69,633**	**86,22,079**
Per cent of GDP	**36.6**	**36.0**	**36.2**	**36.5**
Loans/Borrowings				
(a) Banking Sector	**61,80,377**	**63,19,097**	**65,87,052**	**68,61,233**
of which:				
i. Commercial Banks	56,47,239	57,87,508	60,52,779	63,89,789
ii. Co-operative Banks	5,31,728	5,30,164	5,32,833	4,69,989
(b) Other Financial Institutions	**15,63,253**	**16,19,358**	**16,82,581**	**17,60,847**
of which:				
i. Non-Banking Financial Companies	7,36,312	7,66,463	7,98,641	8,38,643
ii. Housing Finance Companies	7,21,510	7,45,914	7,75,408	8,12,845
iii. Insurance Corporations	1,05,431	1,06,981	1,08,532	1,09,359

No. 50 (b): Stocks of Financial Assets and Liabilities of Households- Select Indicators (Contd.)

(Amount in ₹ Crore)

Item	Jun-2022	Sep-2022	Dec-2022	Mar-2023
Financial Assets (a+b+c+d+e+f+g+h)	**2,56,21,348**	**2,64,23,992**	**2,71,87,716**	**2,78,44,981**
Per cent of GDP	**102.8**	**102.6**	**103.2**	**103.3**
(a) Bank Deposits (i+ii)	**1,18,43,527**	**1,21,43,060**	**1,23,99,459**	**1,27,07,326**
i. Commercial Banks	1,09,87,692	1,12,88,257	1,15,36,717	1,18,21,685
ii. Co-operative Banks	8,55,835	8,54,803	8,62,742	8,85,641
(b) Non-Bank Deposits				
of which:				
Other Financial Institutions	**2,16,170**	**2,18,247**	**2,26,328**	**2,28,562**
i. Non-Banking Financial Companies	74,794	78,061	81,308	85,254
ii. Housing Finance Companies	1,41,376	1,40,185	1,45,020	1,43,308
(c) Life Insurance Funds	**53,25,967**	**55,59,682**	**57,86,593**	**57,95,431**
(d) Currency	**29,50,343**	**28,95,764**	**29,72,524**	**31,21,514**
(e) Mutual funds	**20,48,097**	**22,60,210**	**23,55,316**	**23,67,793**
(f) Public Provident Fund (PPF)	**8,51,913**	**8,58,591**	**8,64,731**	**9,39,449**
(g) Pension Funds	**7,44,459**	**7,96,454**	**8,53,412**	**8,98,343**
(h) Small Savings (excluding PPF)	**16,40,871**	**16,91,985**	**17,29,353**	**17,86,563**
Financial Liabilities (a+b)	**89,11,861**	**92,46,741**	**97,00,657**	**1,02,17,746**
Per cent of GDP	**35.8**	**35.9**	**36.8**	**37.9**
Loans/Borrowings				
(a) Banking Sector	**70,95,468**	**73,58,918**	**77,29,701**	**81,13,546**
of which:				
i. Commercial Banks	66,20,073	68,81,338	72,49,643	75,80,936
ii. Co-operative Banks	4,73,897	4,76,025	4,78,487	5,30,915
(b) Other Financial Institutions	**18,16,393**	**18,87,823**	**19,70,956**	**21,04,201**
of which:				
i. Non-Banking Financial Companies	8,69,175	9,05,825	9,61,617	10,56,182
ii. Housing Finance Companies	8,35,181	8,68,213	8,93,116	9,29,862
iii. Insurance Corporations	1,12,037	1,13,785	1,16,223	1,18,157

No. 50 (b): Stocks of Financial Assets and Liabilities of Households- Select Indicators (Concld.)

(Amount in ₹ Crore)

Item	Jun-2023	Sep-2023	Dec-2023	Mar-2024
Financial Assets (a+b+c+d+e+f+g+h)	**2,87,56,851**	**2,96,44,299**	**3,07,47,010**	**3,19,86,847**
Per cent of GDP	**104.6**	**105.4**	**106.6**	**108.3**
(a) Bank Deposits (i+ii)	**1,29,62,575**	**1,34,68,783**	**1,37,48,656**	**1,41,43,228**
i. Commercial Banks	1,20,67,764	1,25,74,464	1,28,57,001	1,32,44,314
ii. Co-operative Banks	8,94,811	8,94,319	8,91,655	8,98,914
(b) Non-Bank Deposits				
of which:				
Other Financial Institutions	**2,28,077**	**1,20,095**	**1,25,432**	**1,27,257**
i. Non-Banking Financial Companies	91,373	96,156	1,01,051	1,02,994
ii. Housing Finance Companies	1,36,703	23,939	24,381	24,263
(c) Life Insurance Funds	**60,64,437**	**62,55,801**	**65,53,726**	**67,69,272**
(d) Currency	**30,72,878**	**30,36,177**	**30,92,896**	**32,39,540**
(e) Mutual funds	**26,26,046**	**28,29,859**	**31,56,299**	**33,87,208**
(f) Public Provident Fund (PPF)	**9,55,061**	**9,60,344**	**9,64,852**	**10,51,376**
(g) Pension Funds	**9,70,016**	**10,17,975**	**10,91,276**	**11,72,651**
(h) Small Savings (excluding PPF)	**18,77,761**	**19,55,265**	**20,13,873**	**20,96,314**
Financial Liabilities (a+b)	**1,05,39,266**	**1,10,65,282**	**1,15,75,799**	**1,20,96,412**
Per cent of GDP	**38.3**	**39.3**	**40.2**	**41.0**
Loans/Borrowings				
(a) Banking Sector	**83,27,152**	**91,96,026**	**95,98,673**	**99,91,003**
of which:				
i. Commercial Banks	77,88,962	86,64,616	90,54,514	94,37,072
ii. Co-operative Banks	5,36,409	5,29,528	5,42,241	5,51,852
(b) Other Financial Institutions	**22,12,114**	**18,69,256**	**19,77,126**	**21,05,409**
of which:				
i. Non-Banking Financial Companies	11,37,631	11,97,315	12,82,347	13,83,183
ii. Housing Finance Companies	9,53,646	5,49,352	5,70,585	5,96,438
iii. Insurance Corporations	1,20,837	1,22,590	1,24,194	1,25,788

Note : 1. Data as ratios to GDP have been calculated based on the Provisional Estimates of National Income 2023-24, released by NSO on May 31, 2024.
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 2022-23 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 monthly Bulletin for the month of June 2023.

Central Government Dated Securities include special securities and Sovereign Gold Bonds.

State Government Securities include special bonds issued under Ujwal DISCOM Assurance Yojana (UDAY).

Bank PDs are clubbed under Commercial Banks.

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 2023-24	Issued as Supplement to RBI Bulletin January, 2025	
9. Annual Report 2023-24	Issued as Supplement to RBI Bulletin June, 2024	
10. Financial Stability Report, December 2024	Issued as Supplement to RBI Bulletin January, 2025	
11. Monetary Policy Report - October 2024	Included in RBI Bulletin October 2024	
12. Report on Municipal Finances - November 2024	₹300 per copy (over the counter) ₹350 per copy (inclusive of postal charges)	US$ 16 per copy (inclusive of air mail courier charges)
13. 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.

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