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*The Crucial Role of Assurance Functions in Urban Co-operative Banks**

Swaminathan J.

Deputy Governor Shri Rao, Heads of Assurance functions from Urban Cooperative Banks, and my colleagues from the Reserve Bank of India. A very good morning to all of you.

The Reserve Bank of India has been engaging with its supervised entities regularly over matters of governance and effectiveness of assurance functions. We have had a series of engagements with the Boards of Directors of both commercial and cooperative Banks conveying the importance of strong corporate governance and remaining vigilant to ensure the continuing stability of the financial sector. We have also been meeting the heads of assurance functions, recognising the key role these functions play in ensuring the safety and soundness of the banks and promoting regulatory compliance. Today's conference is an extension of our efforts to engage with assurance functionaries.

Assurance functions namely, the risk management, internal audit and compliance functions play a very crucial role, as guardians ensuring the bank operates safely, ethically and within regulatory and legal boundaries. Assurance functionaries, by becoming effective gatekeepers, can give the required comfort to all stakeholders that the bank is on the right track, its systems are strong, its operations are reliable, and its risks are managed effectively. As conscience keepers of the bank, they are intended to detect and prevent any deviations or build-up of any potential risks, safeguard the reputation of the bank and help uphold the trust of its customers and other stakeholders.

In the ever-changing landscape of banking, new risks constantly emerge. While traditional risks like credit, market, and liquidity risks remain significant, we now face new challenges such as cybersecurity threats and operational disruptions.

The proliferation of digital technologies and the interconnected nature of financial systems have exposed banks to a myriad of cyber threats, ranging from data breaches to malicious ransomware attacks. The potential impact of a successful cyberattack on a bank's operations, reputation, and financial stability cannot be overstated, underscoring the critical importance of robust cybersecurity measures and proactive risk mitigation strategies.

Operational risk has also become increasingly complex and pervasive, fuelled by a variety of factors including technological advancements, outsourcing arrangements, and the associated dependencies. Disruptions to critical systems and processes, whether due to cyber incidents, natural disasters, frauds or human error, can have far-reaching consequences for banks, highlighting the need for enhanced operational resilience, backup and recovery testing as well as contingency planning.

The dynamics of traditional risks have also changed. For instance, one notable consequence of the digital revolution coupled with wider adoption of social media, is the acceleration of liquidity runs. What used to take days to unfold can now happen in mere hours, all thanks to the pervasive influence of the internet and social media. The incidents of March 2023 in the United States serve as a stark reminder of this reality. As you would recall, a name mix-up of the US bank with a major UCB in India, fuelled by social media misinformation, required a press clarification from the UCB, to quell the rumours.

With this dynamic environment, the focus of regulation and supervision is shifting towards activity based. Similar activities having similar risks need to have the same level of regulatory and supervisory

* Speech by Shri Swaminathan J, Deputy Governor, Reserve Bank of India - May 16, 2024 - at the Conference of Heads of Assurance of Urban Cooperative Banks held in Mumbai.

oversight, albeit with an element of proportionality to factor the scale and complexity of operations. Therefore, regulations for cooperative banks are becoming harmonised with that for commercial banks, but with certain calibrations wherever required. The expectations from UCBs, especially for corporate governance and effectiveness of assurance functions, are much higher now. As some of our recent enforcement actions would have demonstrated, there is now zero tolerance for poor corporate governance practices such as loans to directors or their relatives.

Expectations from Heads of Assurance

From cyber threats to regulatory changes, and from economic uncertainties to technological advancements, UCBs must adapt and stay vigilant, if they are desirous of retaining their relevance in this fast-changing world. This is where risk management, compliance and internal audit, come into play. They need to work hand in hand, identifying, assessing, and mitigating these risks, ensuring that their bank remains resilient and prepared for whatever challenges lie ahead. Therefore, as heads of assurance, you must ensure that you and your teams remain abreast of all the latest developments. This should be used to proactively update your systems and practices so that you remain ahead of the curve.

Risk Management

Risk management is at the heart of banking. Amidst all the complexities and advancements of finance, we should not forget the timeless wisdom of basic principles of banking such as diversification of risks and prudent liquidity management. Concentration risk whether it be in advances or in funding sources is something that we should be mindful of. Large exposures to a single counterparty or a group of counterparties turning bad can have detrimental consequences. Therefore, the frenzy of some of the UCBs to acquire large corporate exposures which are beyond their bite size, is to be strictly avoided and there is a need to closely monitor the existing ones.

It is essential to ensure that there are well documented Board approved policies for important aspects such as identification of target segments and business sectors, acceptable concentration levels, product specific guidelines such as borrower loan eligibility criteria, etc. Risk managers should try to see that these policies are in alignment with the risk that the bank can bear i.e. its risk tolerance. For instance, a loss-making bank with high NPAs should not be giving high risk loans and instead be focussing on recovery efforts.

The other aspect I would like to highlight is the meticulous monitoring of risk limits. Frequent breaches in risk limits, coupled with their non-ratification or their routine ratification, poses substantial dangers to the stability and integrity of financial institutions that extend beyond the immediate financial implications. If breaches become normalized or overlooked, employees may perceive risk limits as mere guidelines rather than non-negotiable boundaries, thereby compromising the institution's overall risk awareness. Therefore, it is imperative to address breaches systematically, conduct thorough investigations, hold staff accountable, and implement corrective measures to fortify the risk management practices.

Compliance

Next in line is the role of compliance. Compliance should adopt a forward-looking approach to anticipate and prevent non-compliant activities. Rather than reacting to issues after they arise, compliance should strive to identify and address potential compliance risks before they escalate. The compliance function should adopt a 'regulation-plus' approach, going beyond mere adherence to the letter of regulatory requirements and instead ensure that the spirit and intent of the regulation is also addressed.

Internal Audit

Once appropriate policies and strong internal controls are in place, it is for internal audit to independently verify compliance with the same. Very often we come across deficiencies in the scoping, coverage, and periodicity as well as issues in independence of the internal audit function. Proper scoping should ensure that risks are comprehensively covered. Further, high-risk areas may necessitate more frequent audits, while lower-risk areas may be subject to less frequent but regular assessments.

Good quality internal audit reports can provide valuable insights mitigating current risks and anticipating areas of potential risks by evaluating the risk management systems and control procedures prevailing in various areas of a bank's operations. It can also play an important role in preventing and detecting frauds.

Role of RBI

Onsite examinations by RBI are not intended to be fault finding missions and instead to provide an insight into the overall health of the bank. They often pick up issues missed by the internal assurance functions and external audit. We would also like you to give due attention to the Risk Assessment Report (RAR) observations and Risk Mitigation Plans (RMP) issued by the RBI. To ensure sustained compliance, it is important to address the root cause of the observations. Further, there should be no compromise on the agreed timelines for RMPs, and the bank should ensure that all RMP items and RAR observations are comprehensively addressed well before the start of the next inspection cycle. Pending compliance paragraphs is not a desirable situation and may be a reflection of the lack of due attention by the management as well as the Board. Such instances can also invite stern supervisory action.

Conclusion

One of the most important facets of effective assurance functions is independence. There are regulations already in place that provide for adequate stature, direct lines of reporting and preventing of dual hatting of assurance functionaries. I would urge you to ensure that these regulations are complied with and that you are not engaged in any role which compromises your independence.

Overall, I believe assurance functions, if they work effectively, can create an environment in the bank where adherence to laws, regulations, ethical standards, and internal policies is paramount, and where everyone is committed to doing the right thing. Effective assurance functions are indispensable in promoting trust, integrity, and compliance within the banking sector. By working collaboratively and proactively, we can navigate the challenges ahead and ensure the long-term success of our institutions.

I once again extend my sincere regards to all present and wish that going ahead in future we collectively embark on a journey of financial resilience drawing from the key ideas discussed here. I also look forward to listening from you.

*Embracing Meaningful Assurance for Sustainable Growth of the NBFC Sector**

Swaminathan J.

Deputy Governor Shri Rao, Heads of Assurance functions from Non-Banking Financial Companies, and my colleagues from the Reserve Bank of India. A very good morning to all of you.

The Reserve Bank of India has been engaging with its supervised entities regularly over matters of governance and assurance functions, conveying the importance of strong organisational governance and remaining vigilant to ensure the continued stability of the financial sector. Assurance functions namely, the risk management, compliance and internal audit, play a very crucial role, as guardians ensuring the regulated entity operates soundly, safely, ethically and within regulatory and legal boundaries. Today's conference for the heads of assurance functions is an extension of our efforts, recognising the critical role these functions play in ensuring the robustness and resilience of the financial entity itself as well as the overall financial system.

The role played by NBFCs in Indian financial sector has been rapidly growing and their share in the credit portfolio has significantly gone up, more so in the last three years. Just a decade ago, in 2013, the total credit extended by NBFCs represented approximately one-sixth of the magnitude of bank credit. However, this proportion has increased to one-fourth[1], indicating a notable acceleration in credit delivery by NBFCs compared to banks. Indeed, NBFCs have emerged as a preferred option for numerous underserved sectors, particularly small businesses and households, due to their ability to provide more feet on street and customer friendly credit solutions. Moreover, NBFCs have embraced technology in a big way to further expedite and streamline their reach and credit delivery process. But this has also brought certain systemic risk, complexity and interconnectedness, which is the reason as to why the Reserve Bank has of late been engaging with this sector more often than before.

Hence the theme of my speech today is going to be focussing on the need to ensure effectiveness of assurance functions for sustainable growth. As NBFCs expand in both size and complexity, they must bolster governance and assurance functions to maintain a constant vigil over potential risks and vulnerabilities. It is crucial to ensure that the rapid growth and adoption of technology do not happen by side stepping the importance of robust risk management practices.

I also would like to highlight here that the NBFCs operate in a dynamic and challenging environment, facing a multitude of risks that can impact their stability and operational resilience. Let me highlight just three of these which I believe deserve heightened attention.

Cybersecurity and Operational Risks

In today's digital age, cybersecurity threats represent a significant operational risk. The stark reality is that a cybercriminal needs to succeed only once, while organisations must always remain vigilant and resilient. One of the primary cybersecurity risks faced by NBFCs is the threat of data breaches and unauthorized access to sensitive information. There are also other forms of cyberattacks, including malware infections, phishing scams, and ransomware attacks. These attacks can disrupt operations, compromise systems and data integrity, and lead to financial extortion or loss of critical information. To mitigate cybersecurity risks, NBFCs must adopt a proactive and comprehensive approach to cybersecurity. This

* Speech by Shri Swaminathan J, Deputy Governor, Reserve Bank of India - May 15, 2024 - at the Conference of Heads of Assurance of Non-Banking Financial Companies (NBFCs) held in Mumbai.

[1] As at March 31, 2023.

includes implementing robust cybersecurity policies and procedures, conducting regular risk assessments and vulnerability scans. Deploying advanced security technology tools such as firewalls, encryption, and intrusion detection systems are non-negotiable. Further, providing cybersecurity training and awareness programs for employees, on an ongoing basis, should become a way of life. Risk management and Internal Audit functions have to urgently build on their skill sets so that they are able to assess periodically, the IT and Cyber security stance and preparedness of their entities.

Credit risks from rule-based credit models

Many NBFCs are increasingly turning to rule-based credit engines to accelerate the growth of their lending portfolios. While automation can enhance efficiency and scalability, NBFCs should not allow themselves to be blinded by these models. It is crucial to recognize that rule-based credit engines are only as effective as the data and criteria upon which they are built. Overreliance on historical data or algorithms may lead to oversights or inaccuracies in credit assessment, particularly in dynamic or evolving market conditions. Therefore, NBFCs must maintain a clear-eyed perspective on their capabilities and limitations, supplemented by continuous monitoring and validation of credit scoring models. It is incumbent upon the supervised entities to keep the rule engines and models calibrated from time to time taking into account real time learnings and emerging scenarios. It is also imperative to have these models validated periodically, either internally or externally, as the case may be, to ensure that the models stay relevant at all times. I would like to call upon the heads of Risk and Internal Audit here to pay special attention to this requirement.

I also would like the heads of risk function to pay attention to their business model that are being adopted for their continued viability and also periodically scan the portfolio mix to prevent any possible build up of risks such as concentration risk. There appears to be a fancy among most NBFCs to do more of the same thing, such as retail unsecured lending, top up loans or capital market funding. Over reliance on such products may bring grief at some point in time later. It is also observed that the risk limits that are fixed for certain category of products or segments, say like unsecured lending, in some entities, is way too high to be sustainable in the long run. I hope risk managers make a professional assessment of such risks that may be building up in their books.

Continuing on the effectiveness of risk functions, I would like to reiterate that it is imperative for your internal presentations to the Board to capture forward looking thoughts in risk management. The entities also need to invest in Early Warning Systems, Stress Testing capabilities, Vulnerability Assessments, Monitoring of Cyber Key Risk Indicators, targeted evaluations of compliance with KYC/AML norms and Transaction monitoring capabilities.

Liquidity Risks

One of the key risks is liquidity risks arising from concentration of funding sources and maturity mismatches. Reliance on a limited number of funding sources can amplify liquidity vulnerabilities, especially during periods of market stress or disruptions in funding channels. Moreover, maturity mismatches between assets and liabilities can exacerbate liquidity risk, making NBFCs susceptible to funding squeezes or rollover difficulties. Prudent liquidity management practices, including diversification of funding sources, maintaining adequate liquidity buffers, monitoring maturity profiles and putting contingency lines in place are essential to mitigate liquidity risks and ensure uninterrupted operations. Additionally, stress testing and scenario analysis can help NBFCs assess their resilience to adverse liquidity shocks and proactively manage liquidity risks.

This is an area, we observe, that the Internal Audit functions in most entities, have not measured upto the requirement of periodically auditing the assumptions and inputs that go into calculating various statutory ratios relating to liquidity risk management. We also observe that even in some large NBFCs, there is lack of capacity building in their mid office and back-office functions, which can seriously compromise the assessment and monitoring of the ALM and liquidity risk.

Inadequate attention and independence of assurance functions

Amidst the escalating complexity of risks, it is disconcerting to note that NBFCs have the lowest average number of compliance staff relative to their size compared to other sectors like commercial and cooperative banks. Despite regulatory measures aimed at ensuring the autonomy of these functions, it is disheartening to encounter instances where heads of assurance functions are given junior positions within the hierarchy or there is lack of direct access to the Board. Further, instances of dual-hatting with other roles is also observed. Such practices undermine the effectiveness and independence of assurance functions, potentially exposing NBFCs to heightened risks, thereby attracting enhanced regulatory scrutiny.

Independence of assurance functions is therefore sacrosanct, and there must be no compromise on this front. Clear delineation of responsibilities and a robust framework for independence are vital to preserving the credibility of your roles. It is imperative that NBFCs prioritize the strengthening of their governance structures, ensuring that heads of assurance functions are positioned appropriately within the organizational hierarchy and granted direct access to the Board. This will not only enhance the credibility and effectiveness of assurance functions but also bolster the overall risk management framework of NBFCs.

While we have had interactions with the Board Directors of Banks and NBFCs and shared these expectations, it is also necessary that as heads of assurance functions, each one of you conduct yourselves in a manner in which you don't diminish or compromise such independence.

Fair and transparent conduct towards customers

Customer protection is one of the core elements of policy making at RBI. Given the service-oriented nature of the financial services industry, safeguarding the interests of customers should rank foremost among the priorities of our regulated entities as well.

Transparency in pricing is essential to build trust and confidence amongst customers. Towards our ongoing commitment for principle-based regulations, RBI has given the liberty of benchmarking and pricing of loans to the Boards of NBFCs, but the Master Directions in this regard clearly state that rates beyond a certain level maybe seen to be excessive which can neither be sustained nor be considered as conforming to normal financial practice. Therefore, excessive rates will invite supervisory scrutiny.

During our onsite examinations last year, we identified instances of unfair practices in charging of interest by many entities. These include charging interest from the date of loan sanction or agreement execution rather than from actual disbursement of the loan, charging interest from the date of the cheque for loans disbursed through cheques, despite handing over the cheque to customers much later, and levying interest for the entire month instead of the period for which the loan was actually outstanding. Additionally, some NBFCs collected advance instalments but calculated interest based on the full loan amount.

Wherever such practices came to light, RBI has initiated action including directing these supervised entities to refund such excess charges. However, as heads of assurance functions, it is incumbent upon each of you to serve as custodians of conscience within your respective organizations and ensure that there are no such unfair practices prevalent in your entities which may be detrimental to your customers.

Importance of meaningful assurance

Assurance endeavours, especially internal audit and compliance should transcend mere box-ticking exercises and delve into addressing root causes of the issue. By going beyond surface-level checks, assurance functions can uncover the fundamental factors contributing to problems, allowing for more effective and sustainable solutions to be implemented. This proactive approach not only helps mitigate risks but also enhances organizational resilience and fosters a culture of continuous improvement.

We have also observed that there are some misguided or intelligent interpretation in the market to circumvent regulations, which poses a significant threat to the integrity of the financial system. When individuals or regulated entities start interpreting regulations to their advantage or for their gain, it undermines the effectiveness of regulatory frameworks and compromises the stability and fairness of the market. Such practices erode trust and confidence in the financial sector, potentially exposing consumers, investors and the broader economy to risks and vulnerabilities. RBI's supervision will review the substance of such transactions over their legal form. Should we encounter instances of such circumvention of regulations, we will not hesitate to initiate appropriate supervisory action, as has been demonstrated in some of our recent actions.

Conclusion

Before I conclude, I would like to highlight the importance of assurance functionaries keeping themselves abreast of all the latest developments. In the rapidly evolving landscape of finance and regulation, new challenges, risks, and opportunities emerge with incredible frequency, hence there is a need for continual upgradation of skill sets as well as constant vigil.

In conclusion, risk management, internal audit and compliance are necessary for ensuring sustainability of a financial institution's growth and to protect stakeholders' interest. If we scan the global history of financial collapses, it is evident that trust is more important in the world of finance than anywhere else. In the absence of diligent assurance functions that are implemented in "letter and spirit", the threat to breach of stakeholders' trust is very real and can eventually lead to the collapse of the financial institution itself.

In today's address, I have tried to cover the multifaceted nature of risks facing NBFCs, from cybersecurity threats to liquidity challenges and regulatory compliance issues. In the face of these complexities, it is imperative for NBFCs to adopt a holistic approach to assurance – an approach that transcends mere box-ticking exercises and delves into tackling the root causes. By embracing meaningful assurance practices, NBFCs can identify vulnerabilities, strengthen internal controls, and mitigate risks effectively, thus enhancing their operational resilience and safeguarding the interests of all stakeholders.

Thank you.

*Charting a Course to Prosperity: The Importance of Financial Literacy**

Swaminathan J.

Smt. Divyadarshini IAS, Managing Director, Tamil Nadu Corporation for Development of Women; Shri Shankar Narayan, CGM, NABARD, Chennai; Shri Vasimalai, Executive Director, Dhan foundation; Convenors of SLBC, Tamil Nadu and Puducherry; Smt. Uma Sankar, Regional Director, RBI, Chennai; senior bankers; Financial Literacy Counsellors; Associates and Coordinators of Centre for Financial Literacy; Financial Literacy Community Resource Persons; ladies and gentleman, I am happy to inaugurate the Conclave on Financial Literacy at Madurai today.

Madurai holds an important place in the history of Tamil Nadu. The city is famous for its rich heritage, and promotion of Tamil language through *"Sangams"*, thereby, the city is fondly referred as *"sangam valartha nagaram".*

The city was also graced by the presence of Saint Thiruvalluvar more than 2,000 years ago. In the context of today's conference, I would like to recall one of his famous couplets which succinctly explained the importance of financial planning for the kings and people.

"ஆகாறு அளவிட்டி தாயினுங் கேடில்லை போகாறு அகலாக் கடை", (Thirukural No. 478)

The Saint explains through his Kural that even though the income of a king may be small, it will not cause his ruin if his outflows are not larger than his income.

* Speech by Shri Swaminathan J, Deputy Governor, Reserve Bank of India - April 8, 2024 - at the Conclave on Financial Literacy, Madurai.

In fact, this sage advice is even more relevant in today's consumerist economy. A recent survey by the Mint newspaper[1] reveals that 50 per cent of Indian shoppers are choosing to consume now rather than focus on long-term financial planning. Therefore, there is a need to instil the idea of financial planning, budgeting, and saving amongst the people, especially youngsters, for ensuring financial discipline from an early age.

Financial literacy[2] calls for empowering people with the knowledge and understanding of various financial concepts so that they can make informed choices about their money and utilise financial services appropriately.

Indeed, financial literacy is central to supporting the developmental objectives of inclusive growth. By addressing the demand side of financial inclusion, financial literacy enables people to understand the benefits of formal financial products and regulated financial providers as well as to make suitable choices across savings, credit, insurance, pension and remittances.

Fortunately, the Indian economy today is the fastest growing amongst the major economies of the world. However, for this growth to be inclusive, it is imperative that we have a financial system that works for all. This objective stands at the heart of all the efforts being made by the RBI towards financial inclusion.

Enhancing financial literacy in India demands a multi-faceted approach involving collaboration between the government, financial institutions,

[1] https://www.livemint.com/industry/retail/young-indian-consumers-want-to-live-in-the-moment-says-survey-11700737755534.html

[2] Organisation for Economic Cooperation and Development has defined Financial Literacy as *'A combination of financial awareness, knowledge, skills, attitudes and behaviours necessary to make sound financial decisions and ultimately achieve individual financial well-being'.*

non-profit organizations, and the private sector. It requires targeted educational programs, awareness campaigns, and innovative solutions that cater to the diverse needs and preferences of different demographic groups.

Recognising this, India's National Strategy for Financial Education (NSFE) for the period 2020-2025 has been formulated as a forward-looking framework designed to meet these requirements. The '5 C' approach of the strategy emphasises:

i. the development of relevant **C**ontent in the curriculum in schools, colleges and training establishments,

ii. developing **C**apacity among intermediaries involved in providing financial services,

iii. leveraging the positive effect of **C**ommunity-led model for financial literacy,

iv. appropriate **C**ommunication strategy for financial literacy, and,

v. enhancing **C**ollaboration among various stakeholders.

The strategy aims to equip people from all walks of life with the knowledge and tools they need to navigate the complexities of the financial landscape.

On its part, the RBI has adopted several measures to enhance the channels for disseminating financial literacy. It has promoted various public awareness campaigns such as *RBI Kehta Hai* and continues to create and update financial literacy content on its website. Today, there is a substantial volume of literature available on the RBI website in 13 languages including English and Hindi to create awareness on financial education for stakeholders to download and use.

The National Strategy for Financial Education also emphasizes the importance of empowering the younger generation with essential money management skills. In keeping with this, RBI through the National Centre for Financial Education[3] been promoting financial literacy among students through various initiatives and programs such as integrating financial education in the school curriculum for classes VI to X. The National Financial Literacy Assessment Test of NCFE is globally one of the largest free annual financial literacy tests for school students[4].

Last year we conducted an All-India Quiz on Financial Literacy for students of Class VIII, IX and X of Government/Municipal Schools, in which more than one lakh students from nearly 52,000 schools participated. We are also planning for an All-India quiz for college students later this year as part of RBI's 90th year celebrations.

RBI has been observing Financial Literacy Week every year since 2016 with a view to disseminating financial education messages on various important and relevant themes to the public. This year, Financial Literacy Week was observed between February 26 and March 1, on the theme *viz. Make a Right Start, Become Financially Smart*, targeting students and young adults, with a view to driving home the message that the young generation needs to be equipped with financial literacy and financial planning skills at an early stage.

More than a decade ago, in June 2012, the RBI advised Lead Banks in districts to set up Financial

[3] The National Centre for Financial Education (NCFE) is a 'not for profit' Company jointly promoted by Reserve Bank of India, Securities and Exchange Board of India, Insurance Regulatory and Development Authority of India and Pension Fund Regulatory and Development Authority.

[4] Source: https://old.ncfe.org.in/NFLAT (Last accessed on April 6, 2024).

Literacy Centres. These Financial Literacy Centres are required to conduct financial literacy programs, workshops, and awareness campaigns to educate people about basic financial concepts, such as savings, budgeting, borrowing, and insurance, as well as more complex topics like investment strategies and retirement planning. I am happy to note that by December 31, 2023, Lead Banks had established more than 1,500 Financial Literacy Centres at district headquarters. The camps conducted by them have covered more than 30 lakh participants. In Tamil Nadu and Puducherry, the 77 Financial Literacy Centres have covered more than 1.45 lakh participants.

Apart from direct initiatives to promote awareness, the Reserve Bank also collaborates with other stakeholders to increase financial literacy. The Centres for Financial Literacy (CFL) project, initiated in 2017, is a shining example of this collaborative approach involving banks and NGOs with funding support from funds administered by NABARD and RBI. As on March 31, 2024, 2,406 CFLs have been operationalized covering blocks across the length and breadth of the country, 129 of which are in Tamil Nadu and Puducherry.

Despite good progress being made in these areas, there are still significant challenges and gaps that need to be addressed. In this context, I would like to highlight five focus areas.

Bridging the Digital Divide

As financial services increasingly move online, there is a risk of excluding those who lack access to digital technology or who are not familiar with how to use it. Bridging the digital divide is crucial for ensuring everyone can participate in the modern financial system.

By optimally using technology, we can unlock its transformative potential to advance financial inclusion. Recognizing that many individuals lack access to traditional banking services but may have access to mobile phones or other digital devices, opens a window to explore innovative digital solutions.

To bridge the digital divide, we need to have tailored digital literacy programs that cater to the specific needs and capabilities of different demographic groups. These programs can provide hands-on training on how to use digital financial services, navigate online platforms, and protect against cyber risks, thereby empowering individuals to fully participate in the digital economy.

Capacity Building

Secondly, adequate focus needs to be given to on-going capacity building of the counsellors engaged in financial literacy campaigns so that they are kept abreast of the latest and relevant information on financial products and customer protection.

The financial landscape is constantly evolving, hence it is crucial for counsellors to stay updated to be able to provide accurate and timely guidance. Organizing regular training programs and workshops can provide counsellors with opportunities to enhance their knowledge and skills. Leveraging technology, we can provide counsellors with access to online training modules, webinars, and digital resources.

Greater Collaboration

The third aspect I would like to highlight is the need for greater collaboration. There should be synchronization at the ground level between different stakeholders such as Lead District Manager, District

Development Manager, Block Level officials, NGOs, SHGs, BCs, Farmer's Clubs, Panchayats, village level functionaries etc. Banks running FLCs and NGOs operating CFLs need to ensure that as far as possible there is no gap in the availability of counsellors either at the FLCs or CFLs so that their activities can be conducted smoothly.

Being outcome and results oriented

Fourthly, I would like to emphasise that CFLs and FLCs should not be mere awareness hubs, but catalysts driving tangible transformation, for a substantive and enduring change. We must strive to gauge the efficacy of our efforts by quantifying outcomes such as the number of beneficiaries successfully integrated into formal financial systems as a direct result of participating in our financial awareness camps and programs.

Recognising the role of women

Lastly and most importantly, I would like to recognise the role of women in promoting financial literacy.

Women play a crucial role in budgeting within households, as they often manage day-to-day finances, make purchasing decisions, and ensure the financial well-being of their families. They are adept at effectively allocating resources to meet the diverse needs of their families. They often negotiate better with vendors and service providers to optimise the family's budget and maximize savings.

It is said that *'educate a man, you educate only one person. If you educate a woman, you educate a generation'.* When women are educated and financially literate, they often serve as the primary educators within their families. Therefore, please ensure that you have programmes designed to cater to financial literacy needs of women.

Conclusion

In conclusion, it is evident that financial literacy is not just a matter of individual empowerment but a critical component of inclusive growth and societal development. Hence, it is imperative that we continue to prioritize efforts to enhance financial literacy and foster financial inclusion.

The multi-faceted approach outlined in India's National Strategy for Financial Education provides a comprehensive framework for advancing our objectives. Through targeted initiatives and partnerships, we can equip people from all walks of life with the knowledge and tools they need to make informed financial decisions and achieve greater financial well-being.

As we celebrate our achievements, bridging the digital divide, ensuring ongoing capacity building for counsellors, promoting greater collaboration among stakeholders, and recognizing the crucial role of women in promoting financial literacy are areas that require continued attention and investment.

By embracing these challenges as opportunities for innovation and collaboration, we can unlock the transformative potential of financial literacy to create a more inclusive and resilient society. Together, let us work towards a future where everyone has the knowledge, skills, and opportunities to achieve their financial goals and aspirations. Thank you.

ARTICLES

*State of the Economy**

The outlook for the global economy is turning fragile as the descent of inflation is stalling, re-igniting risks to global financial stability. Capital flows have become volatile as nervous investors turn risk averse. There is a growing optimism that India is on the cusp of a long-awaited economic take-off. Recent indicators are pointing to a quickening of the momentum of aggregate demand. Non-food spending is being pushed up by the green shoots of rural spending recovery. A modest easing of headline inflation in the reading for April 2024 confirms the expectation that an uneven and lagged pace of alignment with the target is underway.

I. Introduction

Globally, a frisson of apprehension stirs the air. Even as succour is being drawn from the 'resilience' of global growth, the descent of inflation is stalling, re-igniting risks to global financial stability and growth itself. Alongside the looming spectres of unsustainable public debt and the fragmentation of global trade, the outlook for the global economy is turning fragile. In fact, the world is priming for more balanced growth - surveys of purchasing managers point to a cooling of activity in the United States (US) in the second quarter while the eurozone is gaining pace and the United Kingdom (UK) exited recession. Major emerging market economies (EMEs) also experienced output expansion. The narrowing of the growth divergence is being mostly driven by services even as export orders and suppliers' delivery time improved, but the persisting weakness in manufacturing remains a concern.

The rapid fall of inflation through 2023, which took the headline to or below target in about a third of economies worldwide by the first quarter of 2024, has slowed in terms of month-on-month (m-o-m) changes across advanced economies (AEs) and EMEs. Services inflation has exhibited stickiness at pre-pandemic levels, although core goods inflation has fallen steadily. Looking ahead, the ongoing disinflation may proceed more slowly than expected. The last mile is confronted with the last lags. The worry is what looks like noise may turn out to be the trend, leaving inflation closer to 3 per cent rather than the AEs' target of 2 per cent: "inflation is still too high, further progress in bringing it down is not assured, and the path forward is uncertain."[1]

Recent high frequency indicators are suggesting that a modest recovery in world trade volumes is holding on from early 2024, with services export orders strengthening alongside cross-border travel and air freight traffic. There is also a vigorous growth in e-commerce. Attacks on shipping in the Red Sea are resulting in trade flows being re-routed, with average daily container vessels between January and April being 51 per cent lower than in the last quarter of 2023. The Organization for Economic Cooperation and Development (OECD) estimates that re-routing has affected 9 per cent of world maritime trade and 18 per cent of long-haul ocean volumes, resulting in journey time for affected cargo between Europe and Asia rising by about 30 per cent. With drought in the Panama Canal having also impacted journey time, shipping costs have risen 60 per cent higher than their 2023 levels. The overall shipping and logistics environment remains challenging in which shipping

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[1] Jerome Powell, Chairman, US Federal Reserve, press May 1, 2024.

majors are focussing on efficiency and streamlined structures so as to reduce costs. Indicators of supply chain pressures have so far worsened only marginally; however, higher shipping costs will slow the pace of disinflation globally.

A potential debt crisis casts an ominous shadow over the global economic landscape. The International Monetary Fund's (IMF's) Global Debt Monitor reported total global debt (private plus public) to have risen to US$ 235 trillion, equivalent to 238 per cent of global GDP. There is grave concern that fiscal prudence may take a back seat in 2024 as more than half the world's population goes to elections. As interest rates remain elevated to fight stubborn inflation, debt servicing costs are spiralling. This can feed a vicious cycle of financial instability by straining government finances and household budgets, choking off credit and investment. Unsustainable debt levels can worsen sovereign ratings and constrain governments' ability to raise resources for productivity-enhancing public investments. Overleveraged corporations can face heightened bankruptcy risks. At the household level, precarious finances can portend drastic cuts in consumer spending amidst job losses and higher borrowing costs, thereby stifling aggregate demand. The debt crisis has already affected developing countries the most, accentuating their vulnerabilities. A full-blown debt crisis could reverse decades of progress on poverty alleviation, fighting disease, and taking forward development. The time to act against the gathering storm is now, beginning with reforming the international financial architecture, democratising finance, harmonising cross-border bankruptcy regimes and adequately funding multilateral safety nets.

In the emerging world, capital flows have turned volatile again as nervous investors turn risk averse. Nonetheless, confidence is holding up better in many emerging economies where growth has remained resilient as in India, Indonesia and Mexico. High frequency indicators of consumer spending have moderated a little recently and the growth of industrial production ex-China has remained soft. Asian emerging economies, particularly India and Indonesia, are expected to continue to experience broadly stable and rapid growth according to the OECD, while inflation should moderate further provided food prices remain insulated from extreme weather events. In Latin America, especially in Brazil and Mexico, growth is holding up well, supported by resilient labour markets, infrastructure investment and near-shoring of manufacturing. Inflation is likely to ease towards targets next year. The recent global sovereign debt roundtable meeting held on the sidelines of the IMF-World Bank spring meetings in mid-April offered a ray of hope for low- and middle-income countries overburdened with debt. In the past three years, the number of sovereign debt defaults in these countries has surged to 18, outstripping the total of the previous two decades. Spending on debt servicing is five times higher than a decade ago. According to the UNCTAD's update of April 2024, nine low- and middle-income countries fell into debt distress, with an additional 25 on the brink. In this context, the roundtable proposed setting a target of programme approvals within 2-3 months for future debt restructuring cases, including under the G20 common framework for debt treatment. The need for enhanced information flow was emphasised, and in this regard the multilateral institutions need to play a proactive role.

Global financial conditions have eased modestly. As market expectations and central bank guidance align, equity prices have strengthened amidst a receding of volatility, especially for tech-related stocks. Bond yields have been rising since early 2024 in response to expectations of a firmer future path of interest rates as early rate cut hopes recede, and also because of sensitivity to rising fiscal risks and liquidity tightness due to quantitative tightening. In contrast, corporate bond spreads have moderated across rating categories, despite an increase in the number of corporate bankruptcies in some parts of the world. The US dollar has appreciated in nominal effective terms, although some of this strengthening is reflecting the persisting weakness in the yen. Consequently, sizeable depreciations have pulled down emerging market currencies.

Heightened geopolitical tensions are exerting substantial upward pressures on key commodity prices, with crude oil and gold leading the surge. Base metal prices have seen a strong revival in 2024 after being beaten down in 2023. This could impede the decline of inflation from current levels and hence dampen early prospects of monetary policy easing. The recent upturn in commodity prices in the context of the moderating momentum of global growth reflects several factors at play besides geopolitical developments – tightening supply conditions; climate change; pick-up in infrastructure spending in China; and firming demand on the back of industrial activity and trade. While the World Bank commodity prices are projected to decline in 2024 and 2025 on subdued global growth, risks remain tilted to the upside, mainly due to conflict disrupting energy supplies and weather events.

Internationally there is a growing optimism that India is on the cusp of a long-awaited economic takeoff. While revising India's GDP growth upwards by close to 2 percentage points for 2023-24, the IMF's April 2024 World Economic Outlook (WEO) alludes to the robustness of growth expected in 2024 and 2025 as "reflecting continuing strength in domestic demand and a rising working-age population".[2] The OECD's May 2024 Economic Outlook points to strong momentum in India in recent monthly indicators and expects "strong investment and improving business confidence in India …to sustain real GDP growth".[3] There is considerable appreciation about the dramatic reduction in poverty. The World Bank estimates[4] that at the height of the pandemic in 2021, only 12.9 per cent of the population lived on US$ 2.15 a day – the global benchmark for extreme poverty. More recent estimates show that extreme deprivation, once considered synonymous with India, is set to become extinct.

There is worldwide focus on the transformation of the physical infrastructure, including highways, ports and airports. India's power sector has attained 100 per cent electrification and has been integrated in a single grid across the country. Daily power availability has increased to 20 hours in rural areas and 23.5 hours in urban areas. Aggregate technical and commercial losses have narrowed considerably. There has been a leap in renewable energy capacity creation, with India becoming the world's third largest renewable energy producer. It has attained world leadership in leveraging the digital public infrastructure for payment efficiency, financial inclusion and direct benefit transfers. Currently, India boasts the highest number of digital transactions, fuelled by a massive internet user base. Broadband connectivity has also seen a significant leap, reaching over 93 per cent of our villages. The Bharat Net project will connect all villages through high-speed internet. Digital platforms like the Open Network for Digital Commerce (ONDC) are empowering small businesses by providing a larger marketplace. India's digital public infrastructure –

[2] World Economic Outlook, IMF, April 2024.
[3] OECD Economic Outlook, May 2024.
[4] https://data.worldbank.org/country/india.

the India Stack – is boosting productivity, efficiency and generating employment, besides enabling better targeting of fiscal transfers.

Recent indicators are pointing to a quickening of the momentum of aggregate demand. In the personal consumption space, Nielsen IQ data indicate that a welcome pivot is underway that will boost this category of spending. For the first time in at least two years, rural demand for fast moving consumer goods (FMCG) has outpaced urban markets - in the quarter just gone by, FMCG volume growth of 6.5 per cent was driven by rural growth of 7.6 per cent relative to urban growth of 5.7 per cent on the back of robust demand for home and personal care products. The sequential easing of urban consumption growth is attributable to slowdown in volume growth of staples (rice; salt; atta), reflecting high inflation in these categories. On the other hand, non-food spending, including car and two-wheeler sales, is being pushed up by the green shoots of rural demand.

Turning to private investment, for listed private manufacturing companies, retained earnings remained the major source of funds during the second half of 2023-24. They were mainly used to build up fixed assets and non-current investments, indicating a pick-up in new capacity creation relative to the first half of the year. Results that have been declared by listed corporates so far indicate that they closed the financial year 2023-24 with the highest growth in quarterly revenues registered in January-March 2024 both year-on-year (y-o-y) and sequentially. On the other hand, operating profit growth moderated as rising expenditure – especially input costs for manufacturing firms and staff costs for information technology (IT) companies - shaved off the gains in earnings. Other income, reflecting income from dividends and treasury activities, declined on an annual basis, partly due to an unfavourable base effect. Overall, net profits declined y-o-y for listed non-financial companies for the first time after four consecutive quarters of robust growth. This suggests that gross value added (GVA) by manufacturing would have been muted in the fourth quarter of 2023-24 relative to preceding quarters, weighing in on overall GVA/GDP growth of the economy. Listed banking and financial sector companies, on the other hand, posted a robust quarterly performance in terms of both top-line and bottom-line growth, notwithstanding increase in provisioning costs and interest expenses. With net profits expanding by double digits owing to robust credit disbursal, GVA of the financial sector is likely to have expanded strongly in January-March 2024. These developments are discussed in greater detail in Section IV.

Private investment activity in India is being bolstered by the adaptability and resilience of mergers and acquisitions (M&A) amidst global challenges. Traditionally dominant sectors like financial services, technology, media and telecom are experiencing declines but large-scale consolidation and restructuring is driving up M&A activity.[5] Energy is clearly the sunrise sector for M&As on the back of transactions in renewables. Cross-border investments are the locomotive force, with inbound strategic private equity deals on a rising profile while outbound deals have fallen substantially.

Net exports reveal diverging patterns. The share of petroleum products has stagnated as also that of chemicals and marine products, while the share of gems and jewellery has halved and that of readymade garments has declined. Success stories are of engineering exports and cotton, including yarn and fabrics. Services exports have jumped significantly. According to the UNCTAD, India beat the world

[5] Hindu business line, April 22, 2024.

average in services exports in 2023. The biggest gain was in digitally traded services, followed by travel. Currently, India is the seventh largest exporter of services in the world and the second largest among developing countries. Business services have seen a ramp-up on the back of global capability centres. Although the share of software exports in the total has eased to about 46 per cent, global IT expenditures are expected to grow by 8 per cent in 2024 and IT exports from India may outpace global IT spending, led by the consulting segment.[6]

A modest easing of headline inflation in the reading for April 2024 confirmed our expectation that an uneven pace of alignment with the target is underway. The prices of vegetables, cereals, pulses, meat and fish in the food category may keep the headline elevated and closer to 5 per cent in the near-term, in line with projections set out in the April MPC resolution in spite of deflation in fuel prices and further softening of core inflation to a new historic low. While statistical base effects may help pulling down the headline inflation in July and August, it is expected that September may see a reversal. It is only in the second half of the year that a durable alignment with the target may re-commence and sustain till numbers closer to the target are sighted during the course of 2025-26.

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

[6] Gartner Forecasts Worldwide IT Spending to Grow 8 per cent in 2024 (Gartner, April 17, 2024).

II. Global Setting

The global activity is moderating amidst momentum of a halting decline in inflation, flattening of consumer confidence, and some easing of labor market conditions. Despite moderate easing, financial conditions remain tight, especially in housing and credit markets. In its Economic Outlook of May 2024, the OECD projected global growth at 3.1 per cent in 2024 (same as in 2023), before edging up to 3.2 per cent in 2025 on the support from stronger real income growth and lower policy interest rates. These projections place global growth lower than the pre-pandemic average (2013-2019) of 3.4 per cent (Table II.1).

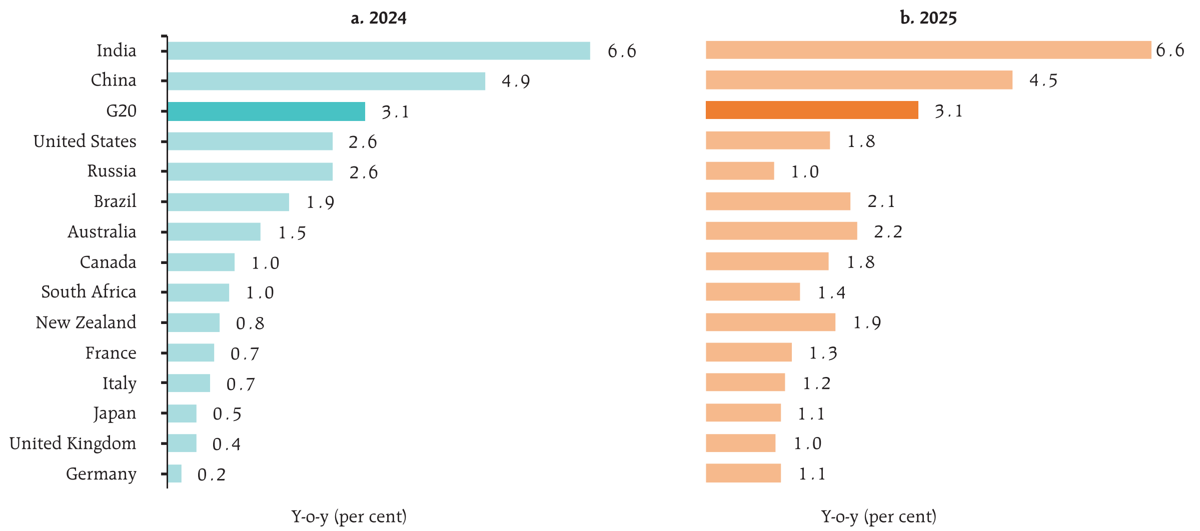
Table II.1: GDP Growth Projections - Select AEs and EMEs

(Per cent)

	2024		2025	
Month of Projection → / Region/Country ↓	May 2024	February 2024	May 2024	February 2024
World	3.1	2.9	3.2	3.0
AEs				
US	2.6	2.1	1.8	1.7
UK	0.4	0.7	1.0	1.2
Euro area	0.7	0.6	1.5	1.3
Japan	0.5	1.0	1.1	1.0
EMEs				
Brazil	1.9	1.8	2.1	2.0
Russia	2.6	1.8	1.0	1.0
India#	6.6	6.2	6.6	6.5
China	4.9	4.7	4.5	4.2
South Africa	1.0	1.0	1.4	1.2

Note: *: PPP weighted. #: Data is on a fiscal year basis.
Source: OECD.

Chart II.1: GDP Growth Projections



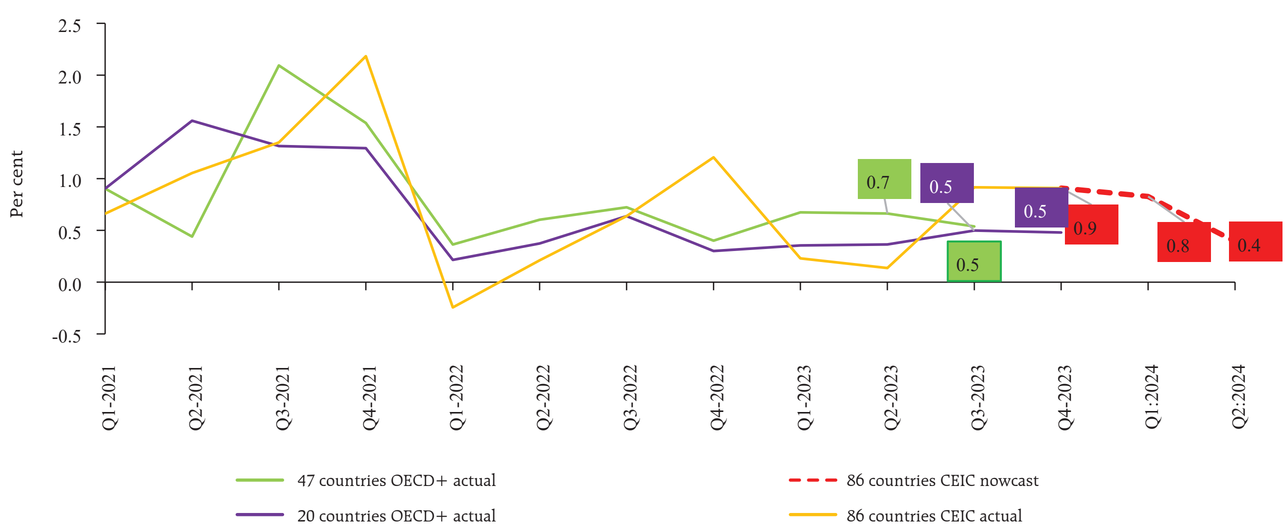
Source: OECD Economic Outlook, May 2024.

The outlook is levelling across economies, with Europe and most low-income economies gaining pace recently, while the US economy is moderating and many large EMEs are poised for a stronger performance. India is projected to remain the fastest growing major economy (Chart II.1).

Our nowcast for global GDP points to sustained growth momentum during Q1:2024 but some deceleration in Q2:2024 (Chart II.2).

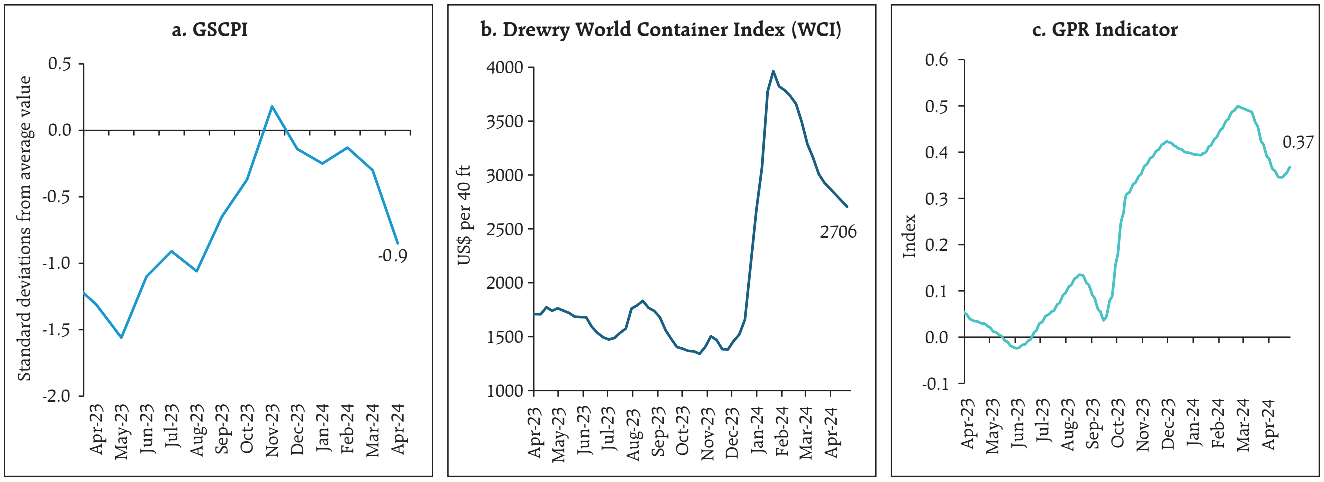
The global supply chain pressures index (GSCPI) and the container shipping costs have moderated since February 2024 (Chart II.3a and II.3b). The geopolitical risks (GPR) index has, however, edged up since mid-April 2024 due to rekindling of tensions between Iran and Israel (Chart II.3c). GPR continue to be a major risk to global growth (Box 1).

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



Sources: CEIC; OECD; and RBI staff estimates.

Chart II.3: Trends in Supply Chain Pressures and GPR



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

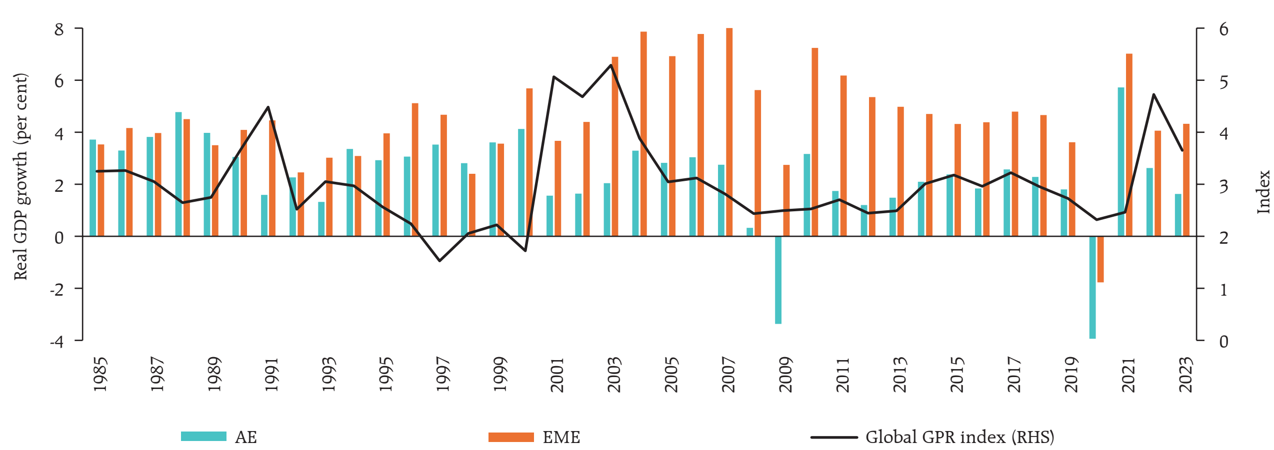
Sources: Federal Reserve Bank of New York; BlackRock Investment Institute, April 2024; and Bloomberg.

Box 1: Impact of Geopolitical Risks on Economic Growth: A Cross Country Analysis

Geopolitical tensions and supply chain disruptions have emerged as new challenges for global economy in the post-pandemic era (Das, 2024). Increased tensions are impacting trade flows and disrupting supply chains even in bystander countries. Sanctions and tariffs are leading to shortages of key resources such as oil and gas with spillovers to commodity prices and eventually economic output. The confluence of these factors may result in higher inflation, lower growth and significant welfare losses (Góes and Bekkers, 2022). Additionally, GPR can affect economic growth through the financial channel, increased uncertainty, higher risk premia and asset price surges (GFSR, 2023).

A monthly index of GPR counting the occurrence of words related to geopolitical tensions in leading international newspapers[7] shows multiple episodes of increase in GPR over the last three decades (Caldara and Iacoviello, 2022) [Chart B1].

Chart B1: GDP Growth *vs* Global GPR



Sources: World Economic Outlook (WEO); CEIC; and Authors' calculations. *(Contd...)*

[7] This measures frequency of articles in leading newspapers discussing geopolitical tensions.

Panel Regression Results (Fixed Effects)

Variables	(1)	(2)	(3)	(4)	(5)
	Real GDP growth	Real GDP growth	Real GDP growth	Real GDP growth	Real GDP growth
GPR Index	-0.736**	-0.746*	-0.593	-0.794**	-0.782**
	(0.341)	(0.440)	(0.362)	(0.368)	(0.373)
EMEs * GPR Index	-4.164*	-4.269**	-2.935**	-2.650**	-2.616**
	(2.142)	(2.077)	(1.412)	(1.232)	(1.245)
Control variables					
Private consumption (per cent of GDP)		Y	Y	Y	Y
Govt. consumption (per cent of GDP)			Y	Y	Y
Investment (per cent of GDP)				Y	Y
Trade of goods and services (per cent of GDP)					Y
constant	4.187***	3.893***	19.13***	25.09***	16.06***
	(0.454)	(0.610)	(3.555)	(3.719)	(3.542)
Observations	1,113	1,113	1,113	1,113	1,113
R-squared	0.424	0.490	0.512	0.538	0.538
Number of regions	42	42	42	42	42

Notes: 1. EMEs is a dummy variable which is coded as 1 for EMEs and 0 for AEs.
2. The results include time fixed effects.
3. The parenthesis include robust standard errors.
4. *, **, and *** denote statistical significance at the 10 per cent, 5 per cent, and 1 per cent levels, respectively.

Sources: CEIC; and Authors' calculations.

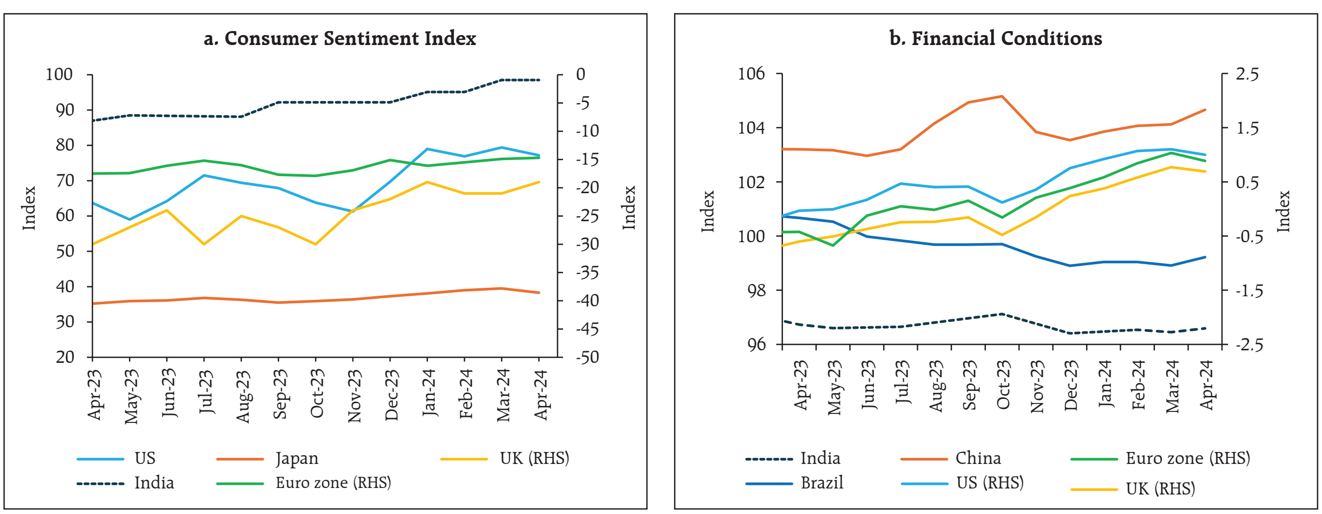
A panel data regression framework using data for 42 countries during 1996 to 2023 shows that GPR has a significant negative effect on real GDP growth. The significant inverse interaction between GPR and a dummy variable for EMEs in the results implies that EMEs face a larger drag on their growth from an increase in GPR.

References:

1. Caldara, D., and Iacoviello, M. (2022). Measuring Geopolitical Risk. *American Economic Review, 112 (4): 1194-1225.*
2. Das, S., (2024). Fundamental Shifts in the Global Economy: New Complexities, Challenges and Policy Options (Keynote Address). *59th SEACEN Governors' Conference, Mumbai.*
3. Goes, C., and Bekkers, E. (2022). The Impact of Geopolitical Conflicts on Trade, Growth, and Innovation. *World Trade Organization (WTO) Staff Working Paper.*
4. International Monetary Fund (2023). Geopolitics And Financial Fragmentation: Implications for Macro-Financial Stability. *Global Financial Stability Report (GFSR) [Chapter 3].*

Consumer sentiments ebbed across major economies in April 2024, reflecting increased economic uncertainty (Chart II.4a). Financial conditions in some regions, with hardening of government bond yields, and volatility in equity markets while it marginally eased in others (Chart II.4b).

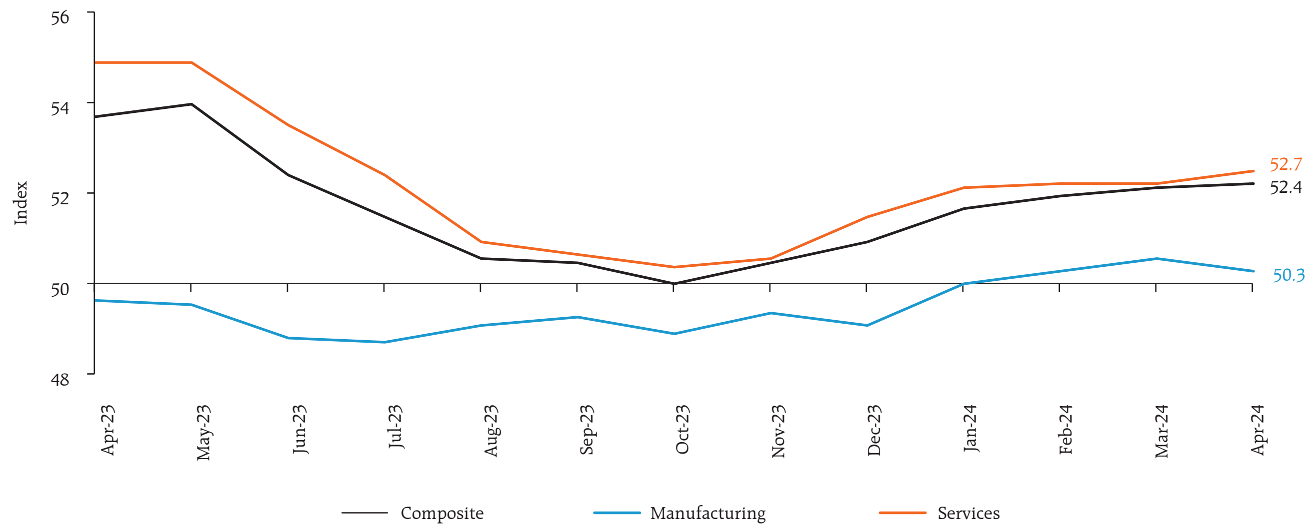
Chart II.4: Consumer Sentiment and Financial Conditions



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

Source: Bloomberg.

Chart II.5: Global PMI

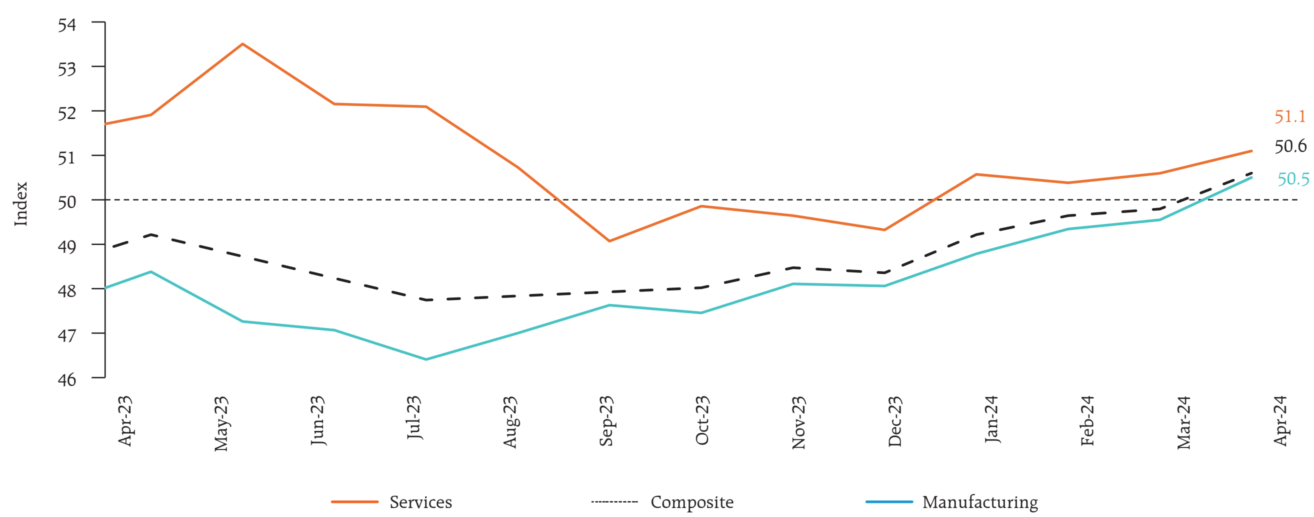


Note: A level of 50 corresponds to no change in activity and a reading above 50 denotes expansion and *vice versa*.
Source: S&P Global.

The global composite purchasing managers index (PMI) recorded a sequential uptick in April 2024 as faster increase in service sector output offset a mild slowdown in manufacturing production. The services PMI rose to a ten-month high, supported by increased intake of new business, reduced backlog of work and new export orders. The global manufacturing dipped marginally in April 2024; however, it remained in expansionary territory for the third consecutive month as output and new orders continued to grow (Chart II.5).

The global trade outlook continued to improve and the composite PMI for export orders maintained its uptrend in April 2024 (Chart II.6). Notably, the manufacturing export orders index returned to expansion for the first time since February 2022,

Chart II.6: Global PMI: Export Orders



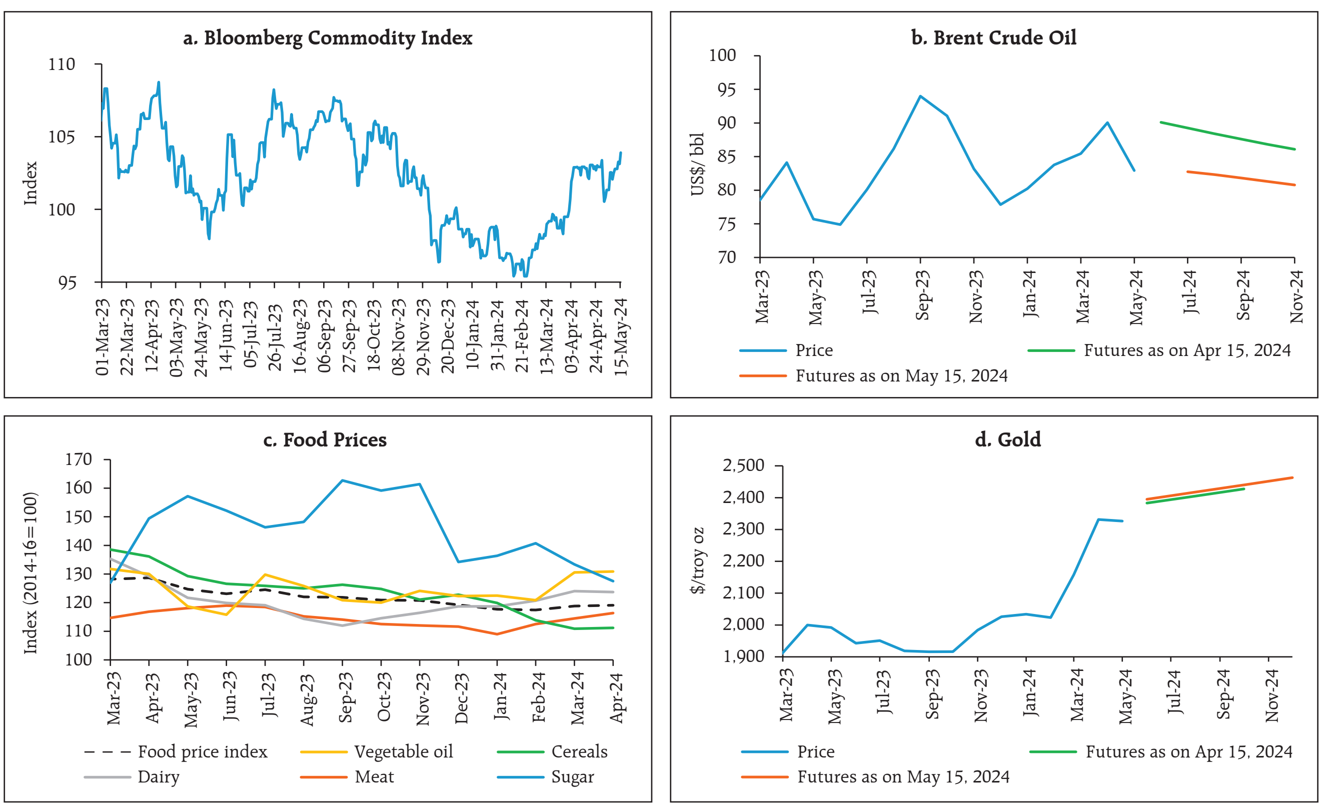
Note: A level of 50 corresponds to no change in activity and a reading above 50 denotes expansion and *vice versa*.
Source: S&P Global.

reaching a 26-month high in April. The services export orders index has remained in expansion since January 2024.

Global commodity prices increased further in April, driven by higher crude oil and metals prices. The Bloomberg commodity index increased by 2.2 per cent (m-o-m) [Chart II.7a]. Brent crude oil prices increased by 5.6 per cent in April, hovering at US$ 90 per barrel till mid-April but reversed trend thereafter (reaching US$ 81.3 per barrel as on May 15) as optimism surrounding a potential ceasefire in the Middle East contributed to a reduction in risk premium (Chart II.7b). A sharp rise in the US crude oil inventories also contributed to the recent pullback of prices. The Food and Agriculture Organization's (FAO's) food price index rose by 0.3 per cent (m-o-m) in April 2024, primarily driven by an increase in the prices of meat (1.6 per cent), which was partially offset by a fall in sugar prices (-4.4 per cent). The index, however, recorded a decline of 7.4 per cent (y-o-y), mainly due to an 18.3 per cent decline (y-oy) in cereals prices (Chart II.7c). Gold prices touched record highs in April, ending 8.3 per cent higher *vis-à-vis* March on concerns over a potential escalation in the Middle East region triggering safe haven demand (Chart II.7d). Easing of geopolitical tensions, however, led to a moderation in gold prices during early May 2024.

Headline inflation exhibited reticence in traversing the last mile of disinflation and remained above target in most economies. In the US, consumer price index (CPI) inflation eased to 3.4 per cent in April from 3.5 per cent in March, while the headline personal consumption expenditure (PCE) inflation increased to 2.7 per cent in March from 2.5 per cent in February. As per flash estimates, euro area inflation remained unchanged at 2.4 per cent in April. Japan's CPI inflation (excluding fresh food) eased marginally

Chart II.7: Commodity and Food Prices



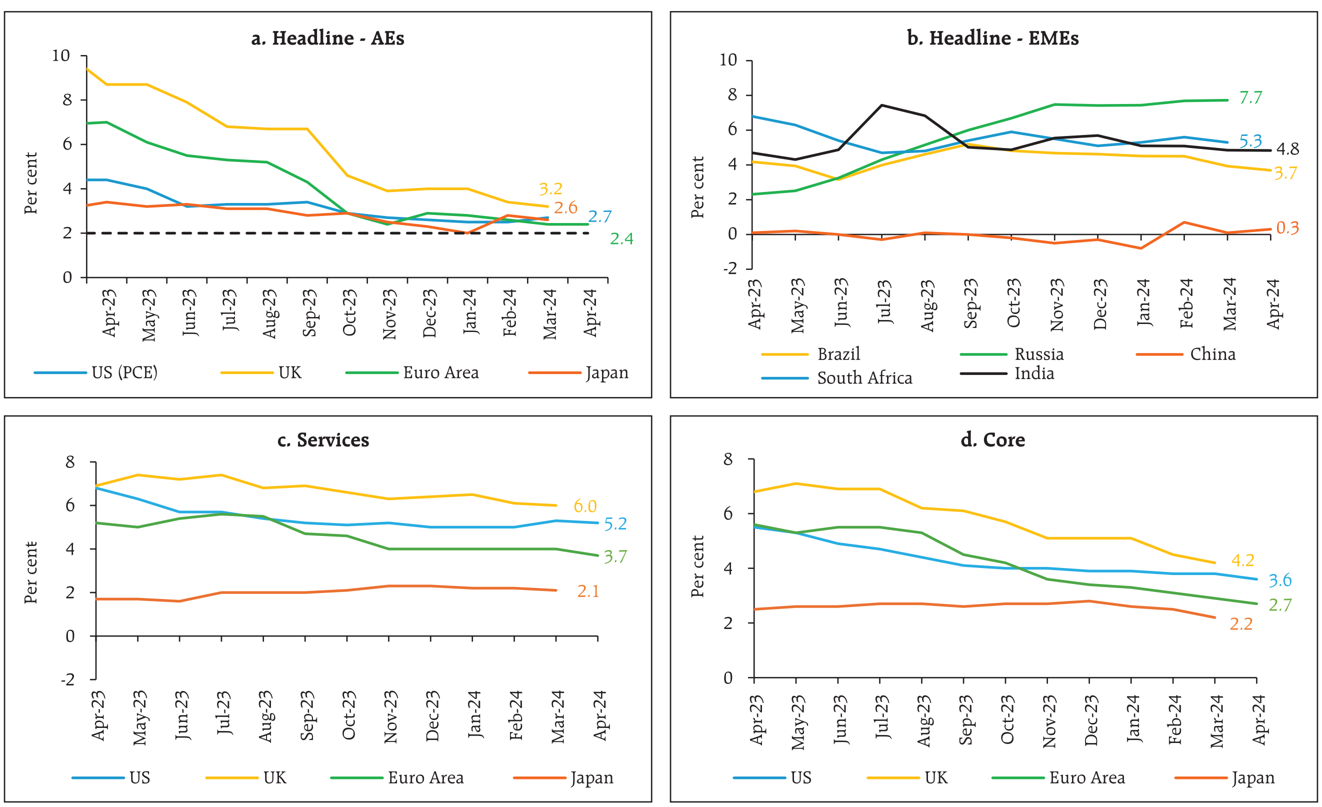
Sources: Bloomberg; World Bank Pink Sheet; and FAO.

to 2.6 per cent in March, while CPI inflation in the UK softened to 3.2 per cent (Chart II.8a). Among EMEs, inflation moderated in Brazil while it ticked up in China in April (Chart II.8b). Core and services inflation remained higher than headline inflation across major AEs (Chart II.8c and II.8d).

In April 2024, global equity markets retreated from the highs recorded in March. The Morgan Stanley Capital International (MSCI) world equity index decreased by 3.4 per cent as data on strong consumer demand and high PCE inflation in the US rekindled concerns about interest rates remaining higher for longer (Chart II.9a). Disappointing semiconductor earnings, and escalating GPR also contributed to the downturn. Equity markets, however, recovered in first half of May as geopolitical tensions in the Middle East de-escalated and the labour market and inflation in the US exhibited signs of easing. The US government securities (G-sec) yields – both 10-year and 2-year – hardened by over 40 basis points (bps) each in April as financial markets priced in fewer rate cuts by the US Fed in 2024. However, it reversed trend in early May, softening by over 30 bps each (Chart II.9b). In the currency markets, the US dollar index strengthened on the back of restrictive US monetary policy and trimmed probability of rate cuts by the Fed but recorded moderation in first half of May post the release of softer US inflation print and consumer spending data. The MSCI currency index for EMEs mirrored the greenback's movement in April, exacerbated by capital outflows, especially in the equity segment (Chart II.9c and II.9d).

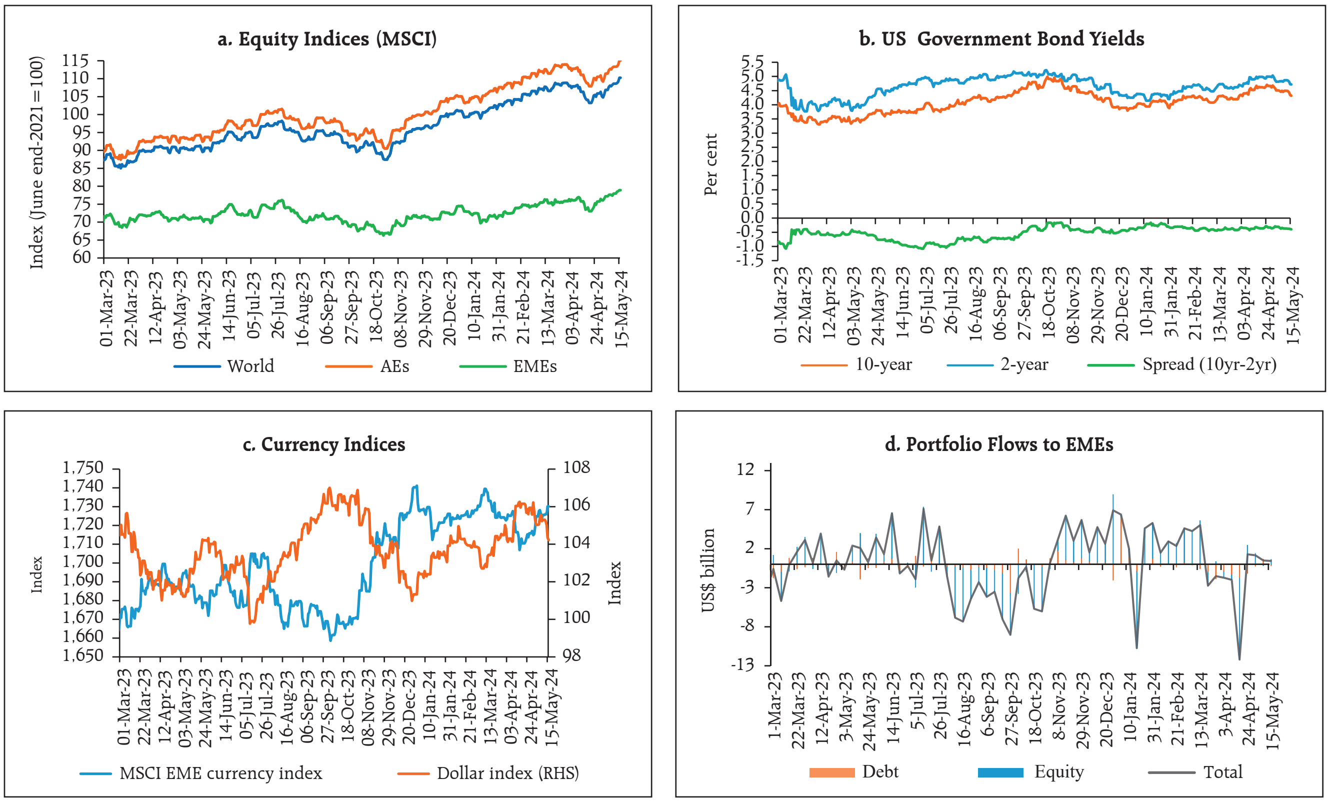
Major central banks, especially in AEs, retained their restrictive policy stance, holding their policy rates steady in their latest meetings. On the other hand, the Czech Republic and Sweden which lowered

Chart II.8: Inflation - AEs and EMEs



Sources: Bloomberg; and OECD.

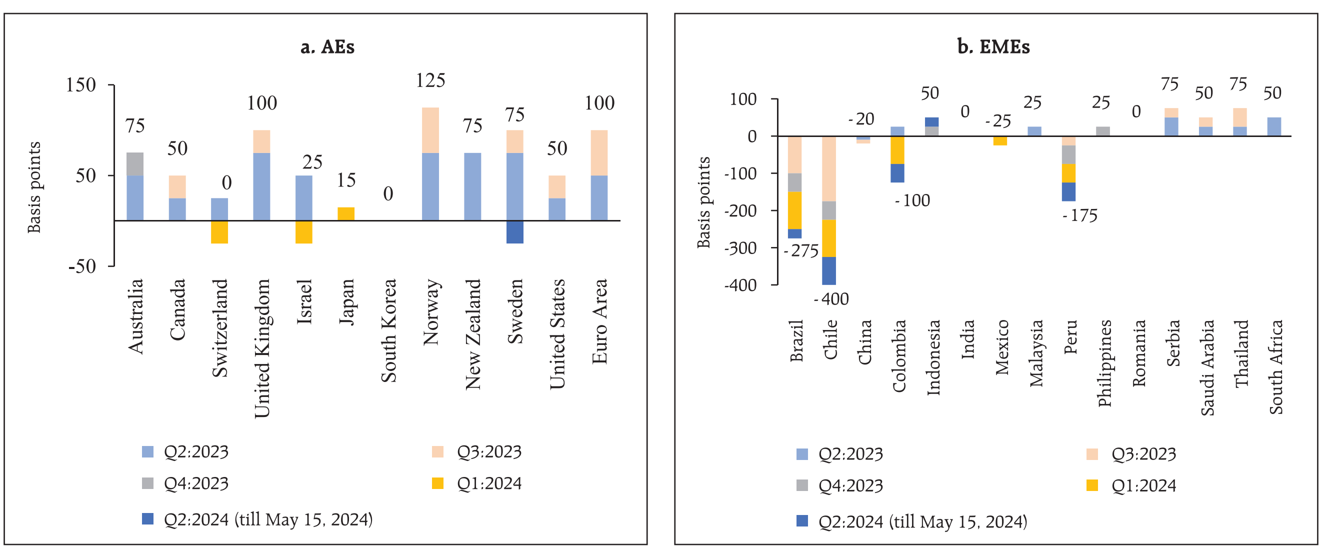
Chart II.9: Global Financial Markets



Sources: Bloomberg; and IIF.

their policy rates by 50 bps and 25 bps, respectively in their May meetings (Chart II.10a). Amongst EME central banks, Brazil and Peru reduced their policy rates by 25 bps each in their May meetings while Hungary and Columbia cut their benchmark rates by 50 bps each in their April meetings. Indonesia,

Chart II.10: Changes in Policy Rates



Source: Bloomberg.

however, hiked its policy rate by 25 bps in its April meeting after maintaining the rate steady in the previous five meetings (Chart II.10b).

III. Domestic Developments

The Indian economy has demonstrated marked resilience in the face of geopolitical headwinds imparting supply chain pressures (Chart III.1a). According to the economic activity index (EAI), activity rebounded in April and early estimates suggest that GDP growth for Q1:2024-25 is likely to remain close to 7.5 per cent (Chart III.1b and III.1c).

Aggregate Demand

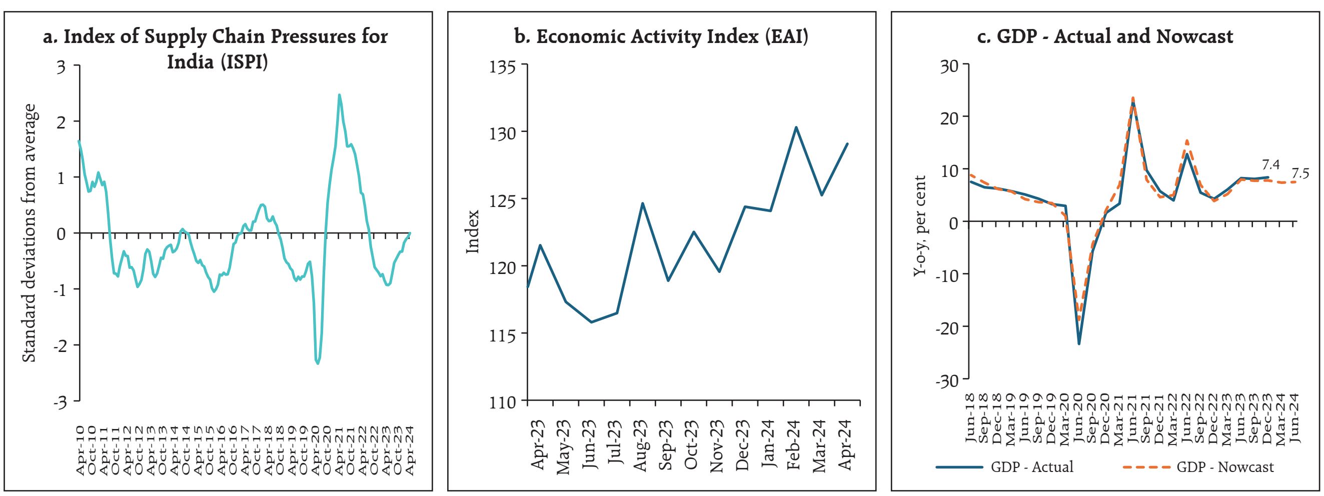
High frequency indicators point towards sustained momentum in domestic demand conditions in April 2024. E-way bills grew by 14.5 per cent (y-o-y) in April 2024, notwithstanding a sequential moderation from a record high of 10.4 crore in March 2024 (Chart III.2a). Toll collections increased by 8.6 per cent (y-o-y) in April 2024 (Chart III.2b).

Automobile sales increased by 25.4 per cent (y-o-y) in April 2024, led by a strong growth in two wheelers and three wheelers segment while passenger vehicles recorded the highest-ever monthly sales.[8] Domestic tractor sales exhibited signs of improvement in April 2024 (Chart III.3a and III.3b). Vehicle registrations recorded a sequential pick up in April 2024, driven by the non-transport vehicles segment (Chart III.3c). Average daily petroleum consumption increased by 6.1 per cent in April 2024, led by motor spirit (petrol) and aviation turbine fuel (ATF) [Chart III.3d].

According to the business survey conducted by the Retailers Association of India, retail sales growth (y-o-y) gained momentum in Q4:2023-24 from the previous quarter, driven by acceleration in sales growth of sports goods, food and grocery, apparel and clothing, footwear and quick service restaurants (Chart III.4).

The renewable electricity sector anticipates substantial project completions this fiscal year and the next.[9] Green power projects valued at approximately ₹700 billion are slated to be operational this year,

Chart III.1: Economic Activity and GDP Growth Nowcast

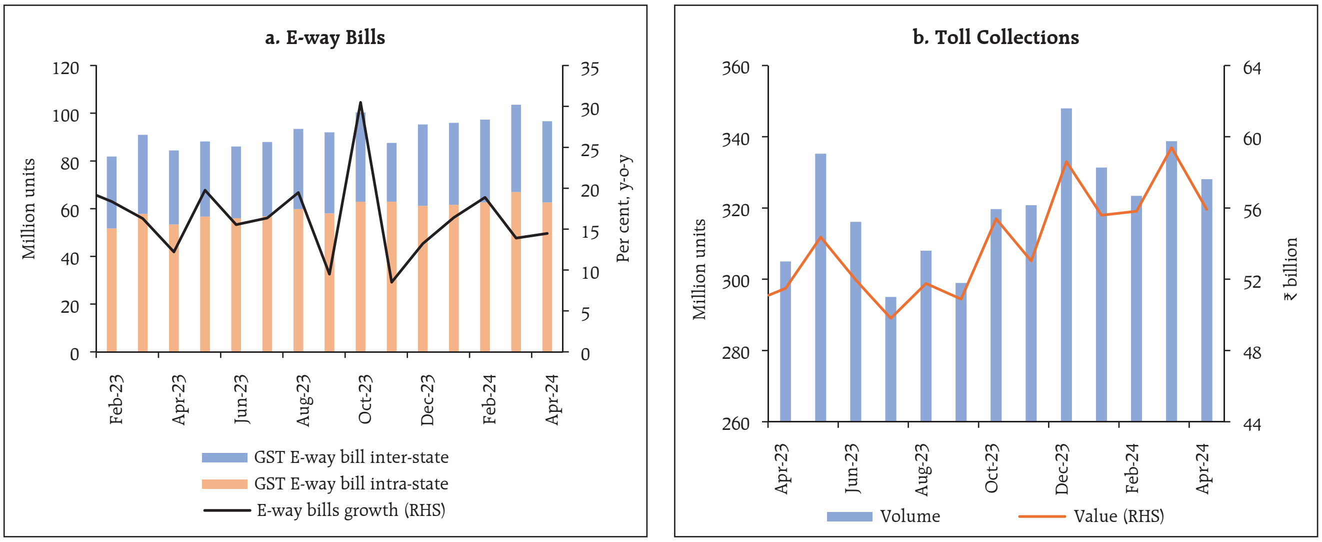


Note: The economic activity index (EAI) was constructed by extracting the common trend underlying twenty seven high frequency indicators of economic activity using a Dynamic Factor Model. EAI was scaled to 100 in February 2020 and 0 in April 2020, the worst affected month due to mobility restrictions.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

8 https://www.carandbike.com/news/auto-sales-april-2024-india-saw-25-growth-in-volume-driven-by-strong-twowheeler-sales-3213133

9 https://industryoutlook.cmie.com/kommon/bin/sr.php?kall=wshreport&nvdt=20240429162158756&nvpc=055000000000&nvtype=ANALYSIS+%26+OUTLOOK&icode=0101030110000000&ver=pf (Centre for Monitoring Indian Economy)

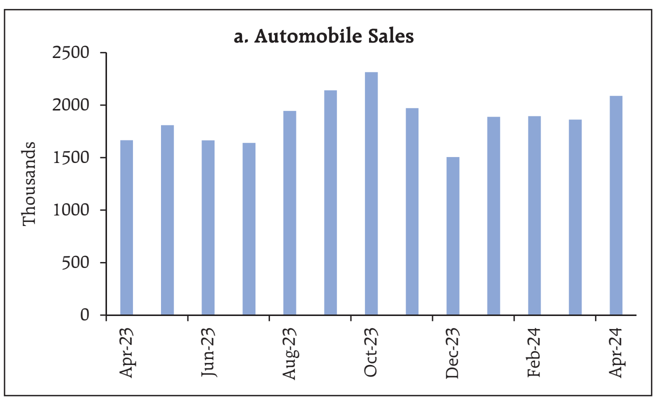
Chart III.2: E-way Bills and Toll Collections



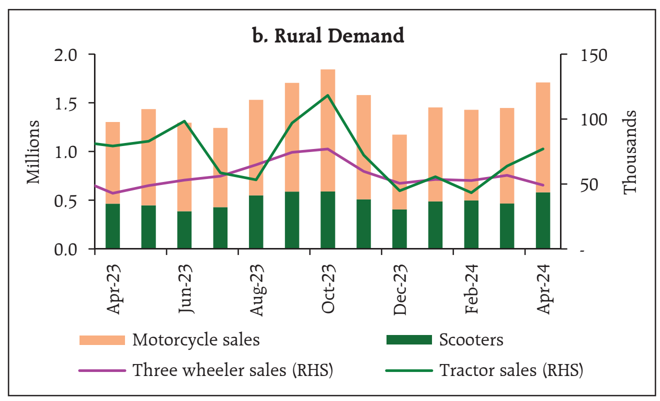
Sources: GSTN; and RBI.

marking the highest investment completion in any single year to date. Moreover, incremental project investments are projected to surge to ₹765.2 billion by 2025-26, propelled by the policy focus on enhancing India's dependence on eco-friendly energy sources.

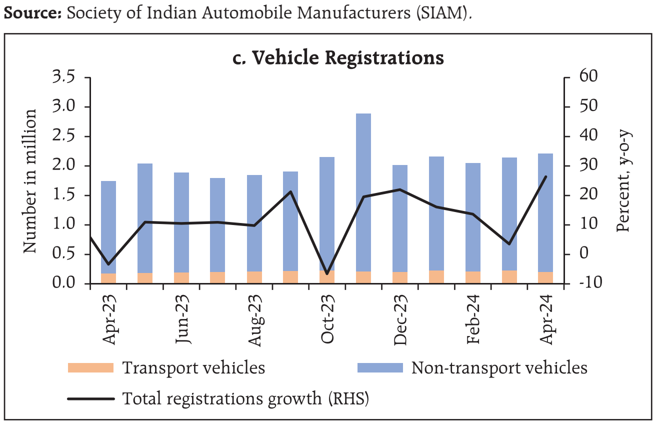
Chart III.3: Automobile Sector Indicators



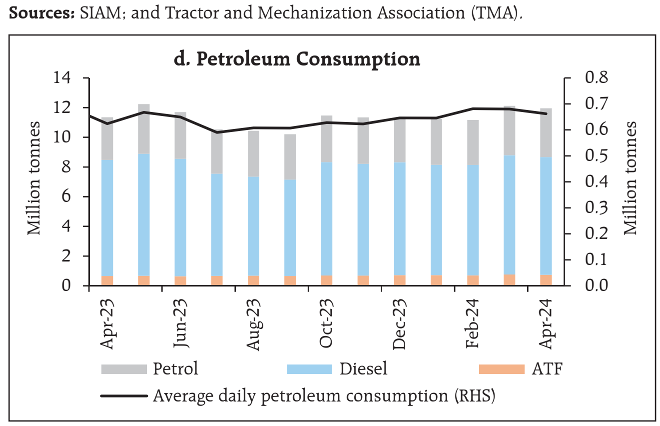
Source: Society of Indian Automobile Manufacturers (SIAM).



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

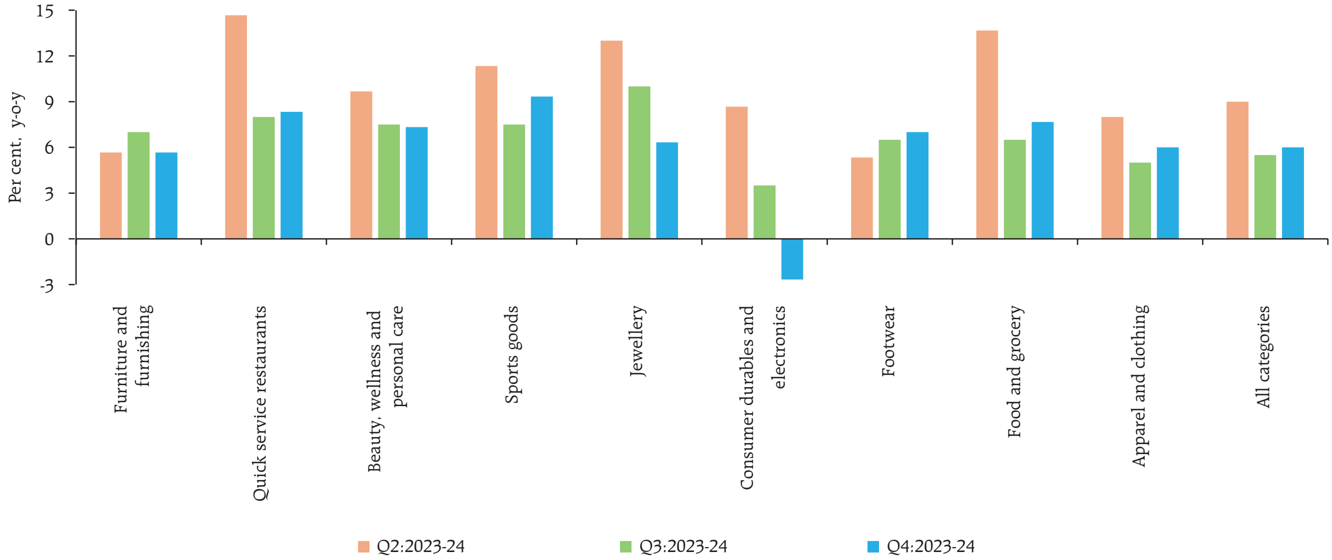


Source: Ministry of Road Transport and Highways.



Source: Petroleum Planning and Analysis Cell.

Chart III.4: Retail Sales Growth

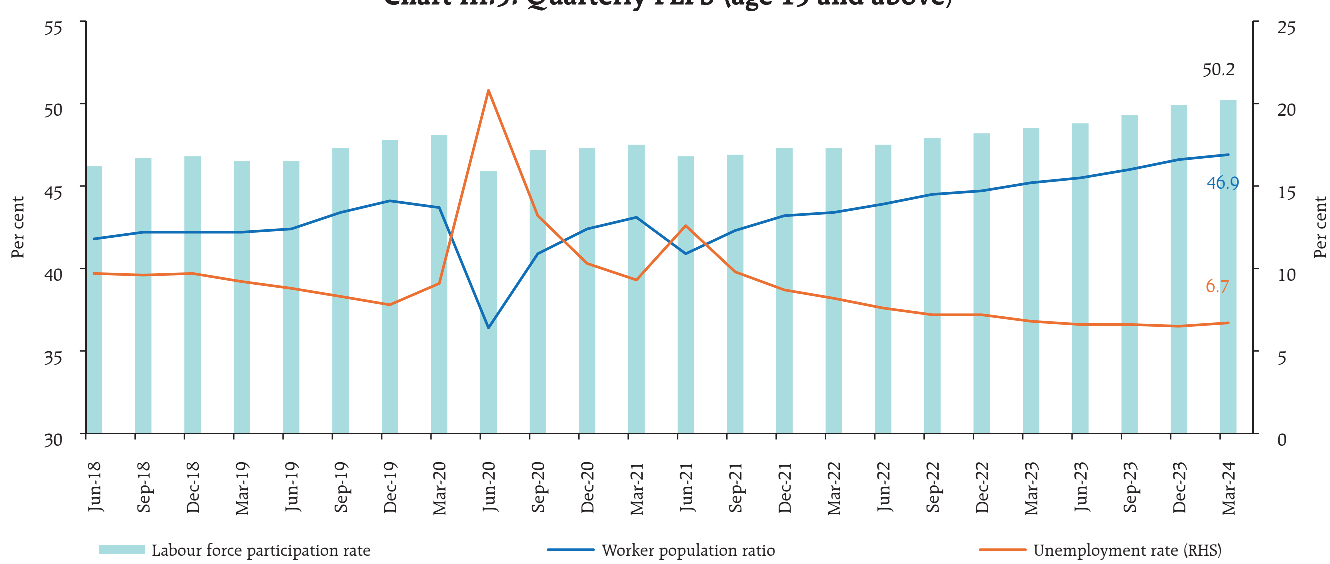


Sources: Retailers Association of India; and RBI staff estimates.

As per the Quarterly Urban Periodic Labour Force Survey (PLFS) released on May 15, 2024 the labour force participation rate (LFPR) and the worker population ratio (WPR) increased during Q4:2023-24 – the LFPR for persons aged 15 years and above increased to 50.2 per cent, the highest since the survey's inception (Chart III.5). The WPR increased to 46.9 per cent, up from 46.6 per cent in Q3, driven by higher female workers. The rise in employment was driven by self-employment, while the share of regular salaried and casual labour remained the same as in the preceding quarter. The unemployment rate (UR) was at 6.7 per cent as against 6.5 per cent in Q3.

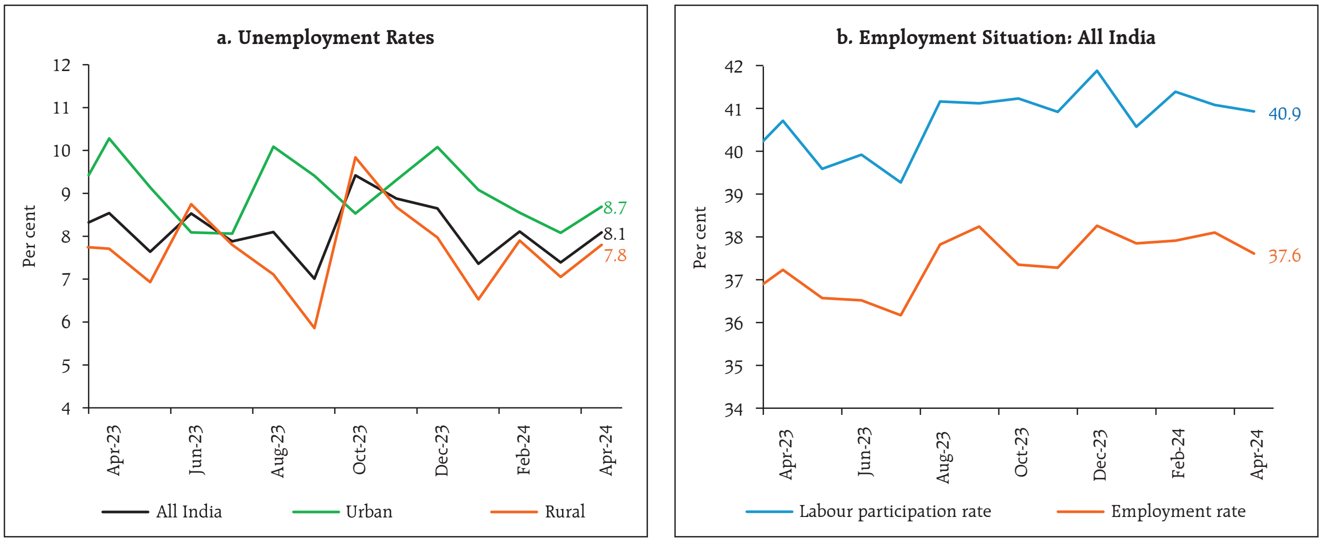
As per the data from the Centre for Monitoring of Indian Economy (CMIE), the all-India UR was at

Chart III.5: Quarterly PLFS (age 15 and above)



Source: MoS&PI.

Chart III.6: Labour Market Conditions



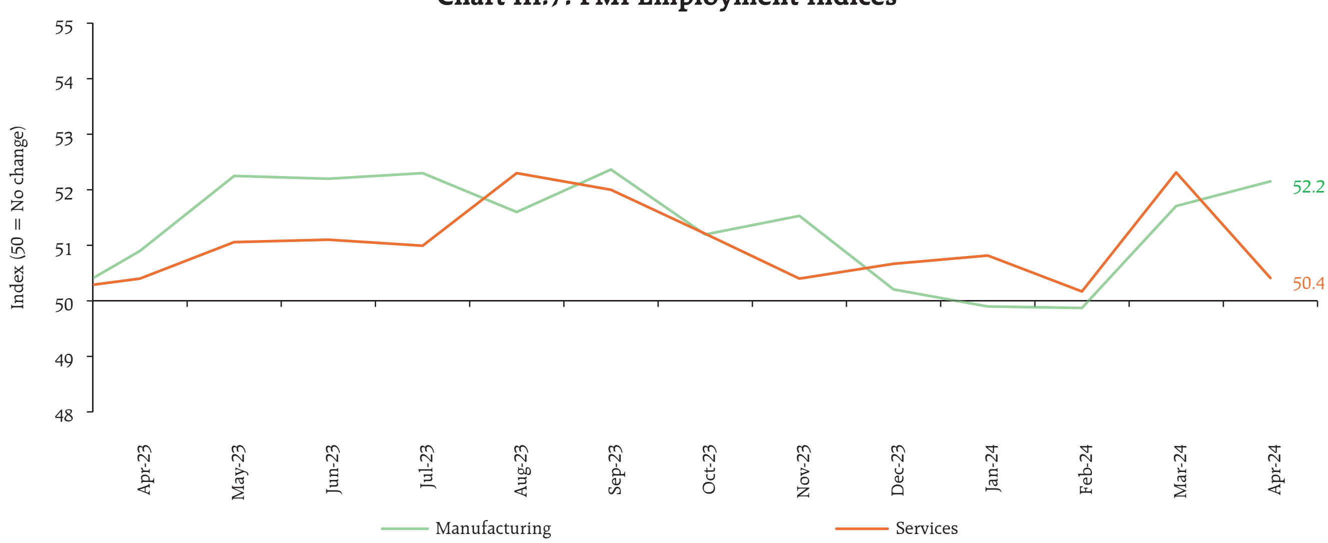
Source: CMIE.

8.1 per cent in April (Chart III.6a). The LFPR and employment rate (ER) fell marginally as compared to the previous month (Chart III.6b).

In April 2024, organised manufacturing employment recorded the fastest expansion in the last seven months, as captured by the PMI employment outlook. Services job creation continued to be in expansionary zone in April, *albeit* with a sequential moderation from a seven-month high recorded in March (Chart III.7).

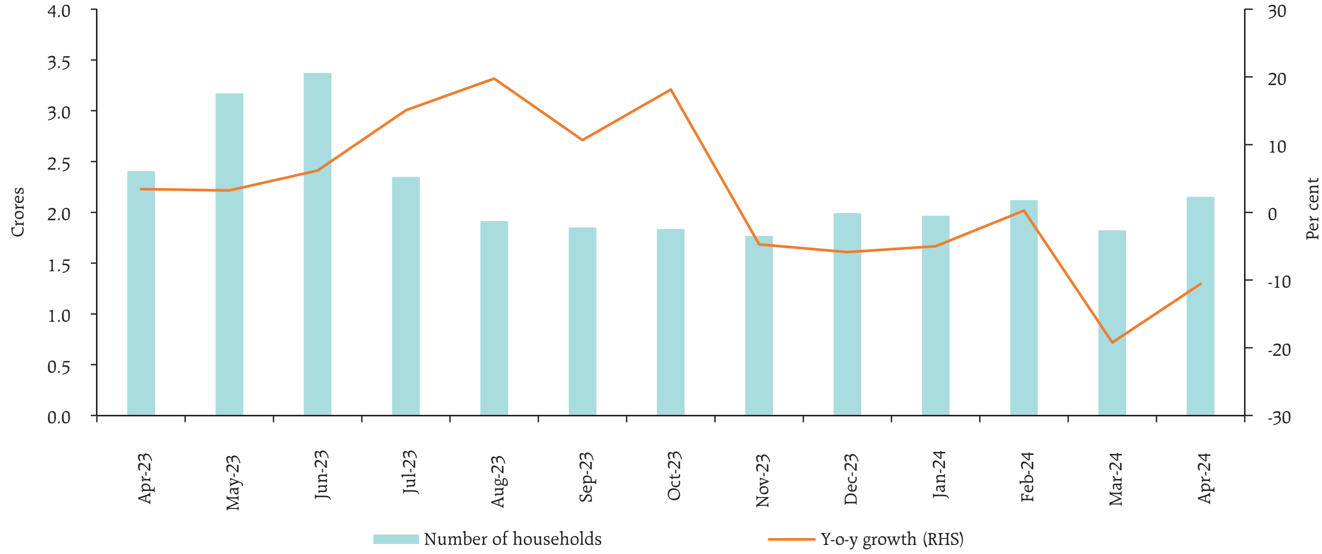
Household demand for work under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) witnessed an increase of 18.0 per cent

Chart III.7: PMI Employment Indices



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

Chart III.8: Demand for Work under MGNREGA



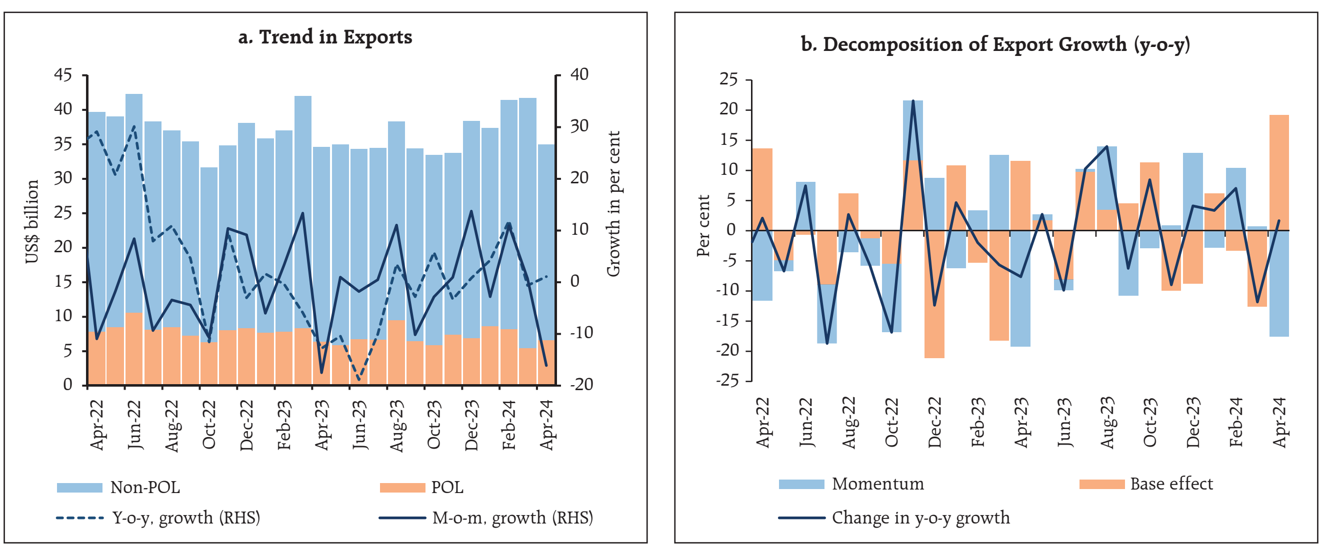
Source: Ministry of Rural Development.

(m-o-m) in April with the *rabi* harvesting season coming to an end in most parts of the country. MGNREGA employment, however, recorded a decline by 10.6 per cent on a y-o-y basis (Chart III.8).

India's merchandise exports at US$ 35.0 billion grew by 1.1 per cent (y-o-y) in April 2024, as a favourable base effect more than offset the negative momentum (Chart III.9).

Out of 30 major commodities, 13 commodities (accounting for 46.7 per cent of export basket) registered an expansion on y-o-y basis. Electronic goods, organic and inorganic chemicals, petroleum products, drugs and pharmaceuticals, and cotton yarn, fabrics, made-ups and handloom products supported export growth, while engineering goods, iron ore, gems and jewellery, marine products, and oil meals dragged down overall exports in April (Chart III.10).

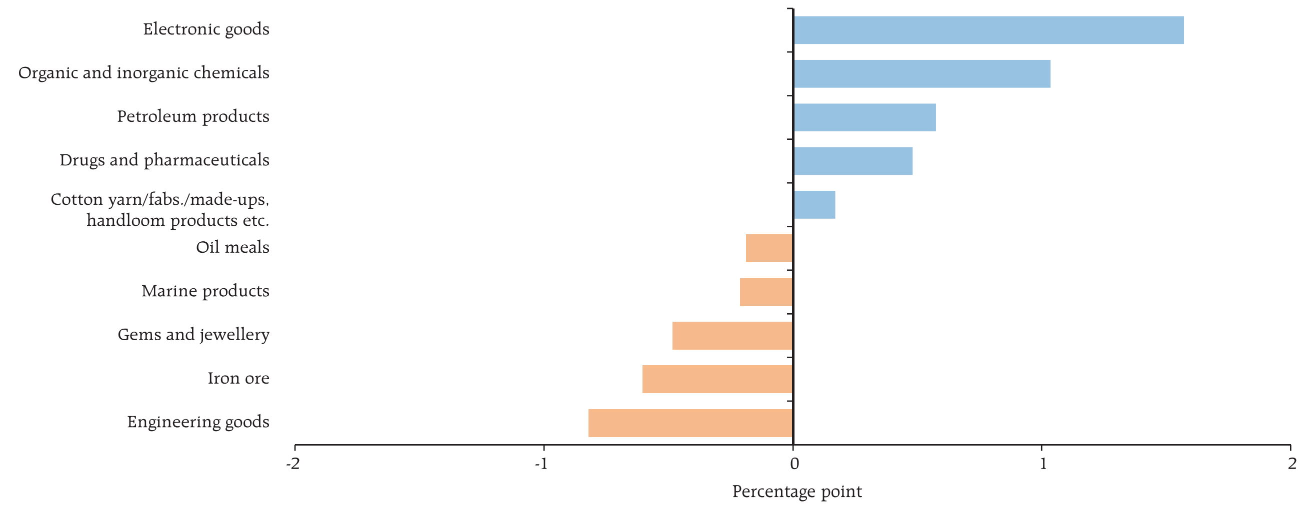
Chart III.9: India's Merchandise Exports



Sources: PIB; and DGCI&S.

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

Chart III.10: India's Merchandise Exports – Relative Contribution (April 2024 over April 2023)

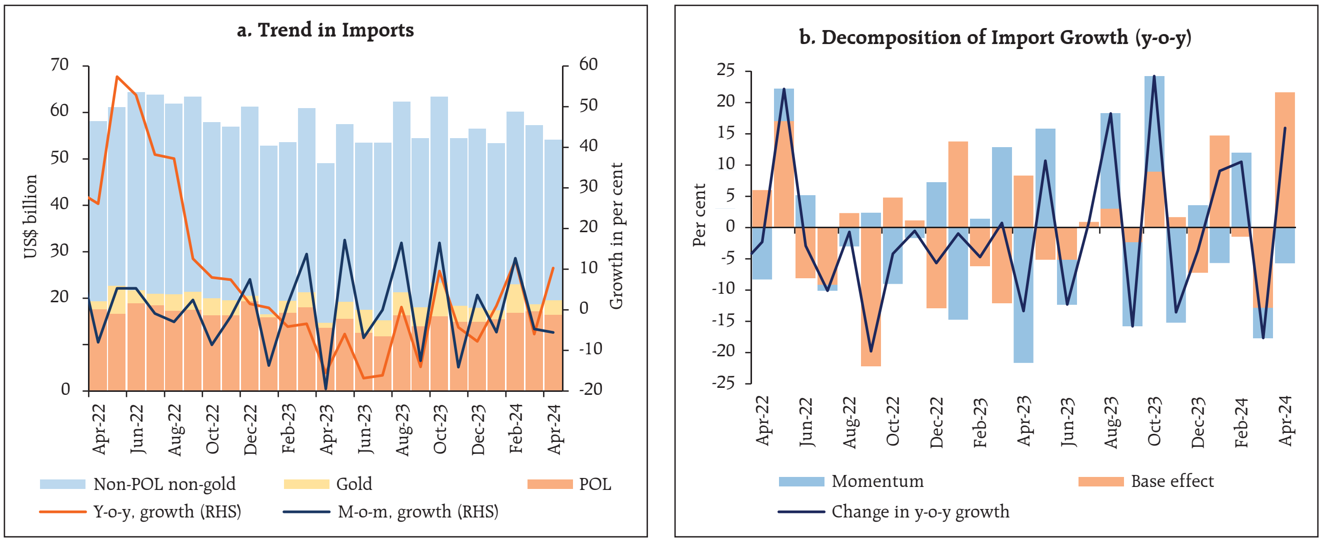


Sources: PIB; and RBI staff estimates.

Merchandise imports at US$ 54.1 billion expanded by 10.3 per cent (y-o-y) in the month as base effect more than offset negative momentum (Chart III.11). Among the 30 major commodities, 16 commodities (accounting for 58.7 per cent of import basket) registered growth on a y-o-y basis in April.

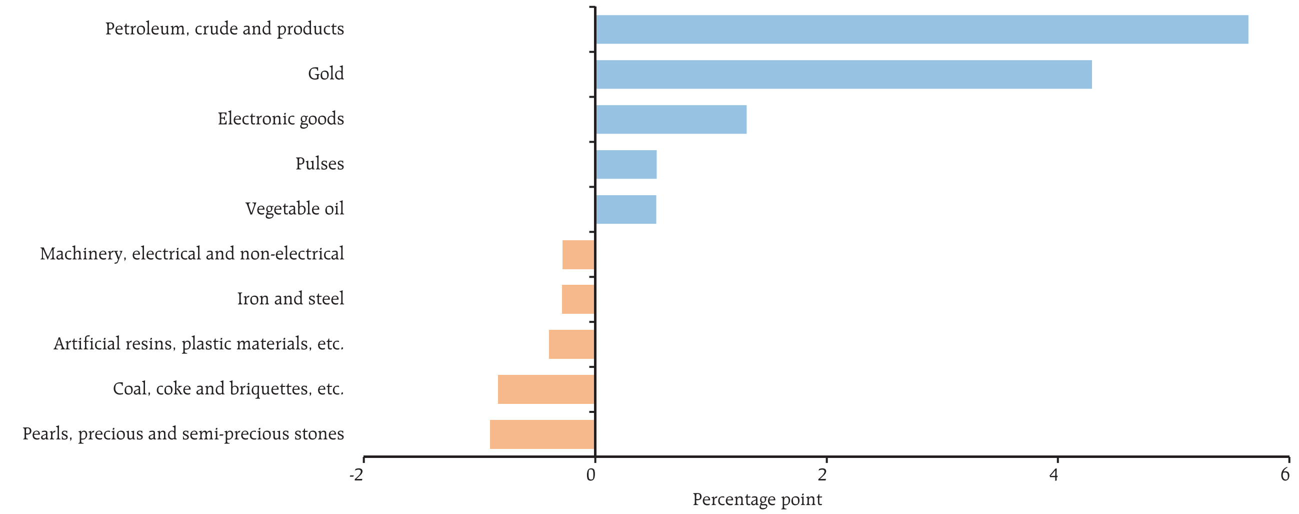
Petroleum crude and products, gold, electronic goods, pulses, and vegetable oil supported import growth, while pearls, precious and semi-precious stones, coal, artificial resins, plastic materials, iron and steel, and machinery were the main drags in April (Chart III.12).

Chart III.11: India's Merchandise Imports



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

Chart III.12: India's Merchandise Imports – Relative Contribution (April 2024 over April 2023)

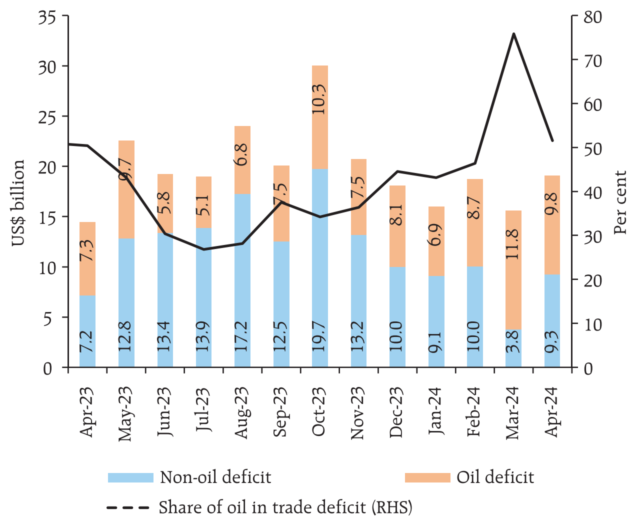


Sources: PIB; and RBI staff estimates.

The merchandise trade deficit widened to a 5-month high of US$ 19.1 billion in April 2024 as exports contracted more than imports on a sequential basis. The non-oil deficit widened to US$ 9.3 billion in April from US$ 3.8 billion in March. The share of the oil deficit in the overall merchandise trade deficit, however, declined to 51.5 per cent in April from 75.9 per cent a month ago (Chart III.13). Petroleum products were the largest source of the trade deficit in April, followed by electronic goods (Chart III.14).

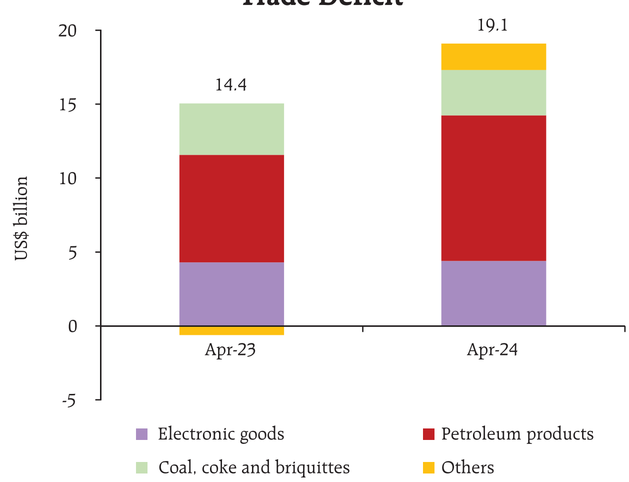
Services exports at US$ 30.0 billion fell by 1.3 per cent (y-o-y) in March 2024, reflecting a slowdown in business, software and transportation services. Services imports declined by 2.1 per cent (y-o-y) to US$ 16.6 billion, primarily led by a decline

Chart III.13: Decomposition of India's Merchandise Trade Deficit



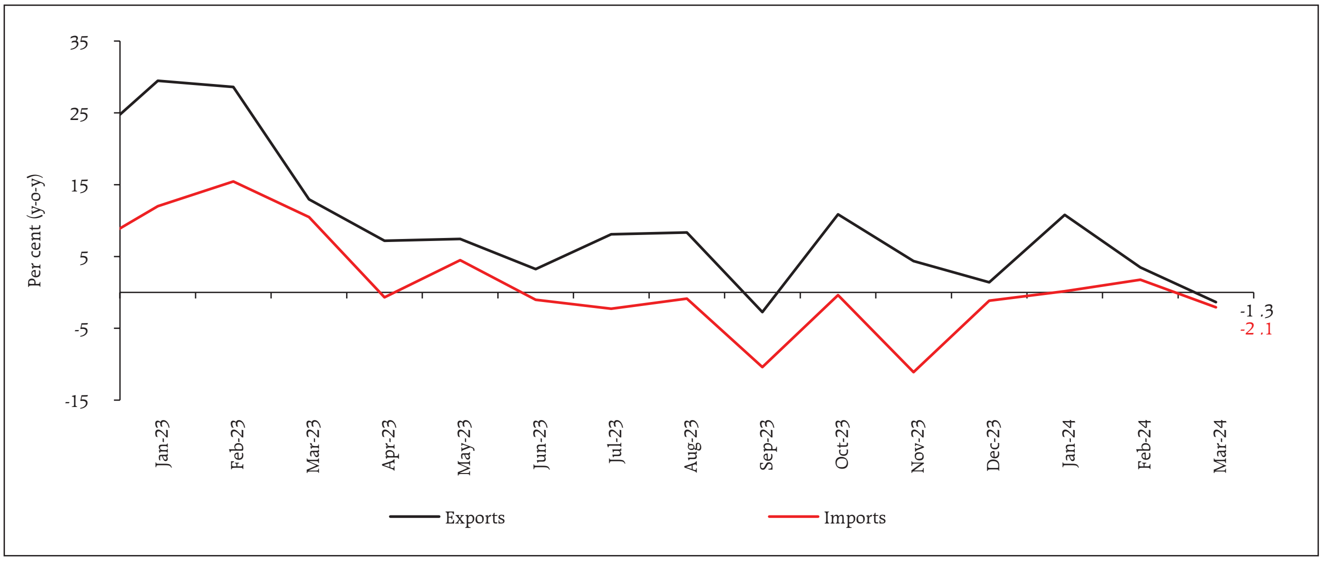
Sources: PIB; and DGCI&S.

Chart III.14: Commodity-wise Merchandise Trade Deficit



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

Chart III.15: Services Exports and Imports: Growth Rates



Source: RBI.

in transportation services (Chart III.15). As a result, net services exports earnings dropped by 0.4 per cent (y-o-y) to US$ 13.4 billion in March 2024. The outlook for India's software services, however, remains supportive, with global IT spending estimated to grow by 8 per cent to US$ 5.1 trillion in 2024.[10]

Goods and services tax (GST) collections (Centre *plus* States) in April 2024 recorded a y-o-y growth of 12.4 per cent, surpassing the ₹2 lakh crore mark for the first time (Chart III.16). April usually sees the highest GST collections for any financial year due to higher year-end economic activity.[11]

Chart III.16: Monthly GST Revenue

Source: PIB.

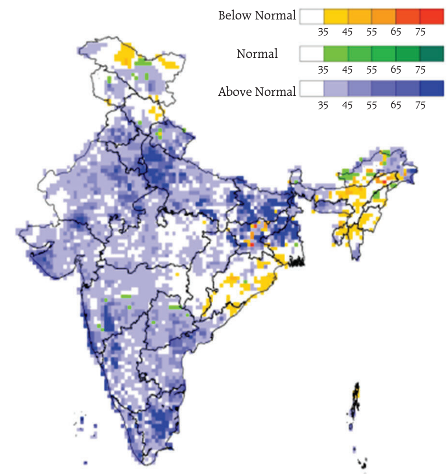
[10] Gartner Inc., April 17, 2024.

[11] April GST collections pertain to economic activity in March-the last month of the financial year.

Aggregate Supply

As per the Indian Meteorological Department's (IMD's) first long-range forecast for the south-west monsoon (SWM) season, rainfall during June-September 2024 is likely to be above normal this year[12] with most parts of the country experiencing above normal rainfall (Chart III.17). Additionally, as per IMD[13], the SWM is likely to set in over Kerala on May 31 as against the usual date of June 01. In its latest release dated May 13, 2024, the National Oceanic and Atmospheric Administration (NOAA) has forecasted a transition from *El Niño* to *El Niño*-Southern Oscillation (ENSO) neutral in June 2024 with *La Niña* developing by June-August 2024 (with 49 per cent probability) or July-September 2024 (with 69 per cent probability). This is usually associated with increased rainfall activity.

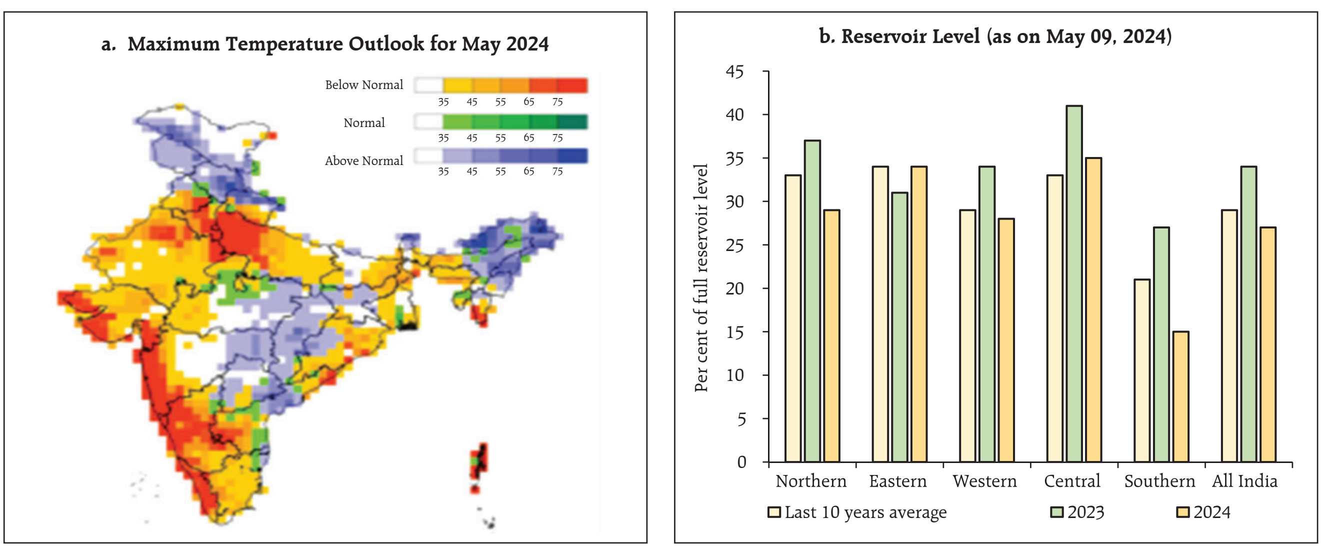
Chart III.17: IMD First Stage 2024 SWM Forecast



Note: Chart III.17 illustrates the most likely categories of rainfall and their probabilities. The model has no clear signal over the white-shaded areas of the country.
Source: IMD.

Low summer/pre-monsoon rainfall, higher than normal maximum temperatures and heatwave days in summer season[14], however, continue to remain as major risk factors (Chart III.18a). As on May 15, 2024, summer rainfall (March-May) remained 12 per cent below the long period average (LPA) as compared to 18 per cent higher than LPA a year ago. The water storage level in major reservoirs stood at 27 per cent of total reservoir capacity at the all-India level, which was 20.8 per cent lower than last year and 7.7 per cent lower than the decadal average (Chart III.18b).

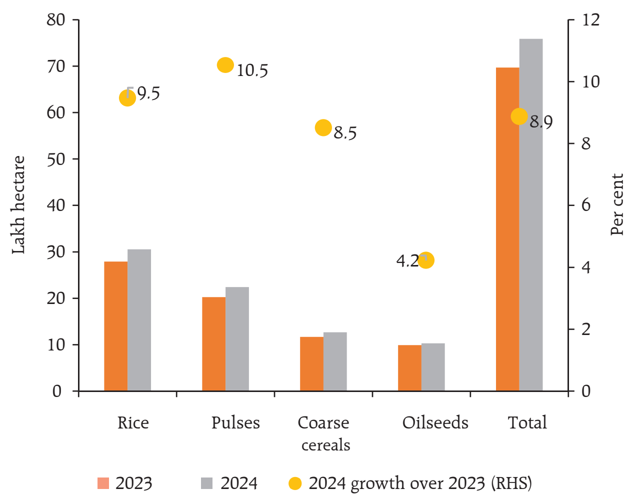
Chart III.18: Weather Condition and Water level



Note: Chart III.18a illustrates the most likely categories of temperature and their probabilities. The model has no clear signal over the white-shaded areas of the country.
Sources: Central Water Commission; and IMD.

[12] Rainfall is likely to be at 106 per cent of the long period average (LPA) with a model error of ±5 per cent, as per the forecast released on April 15, 2024.
[13] This is as per IMD's latest release on May 15, 2024. The forecast has a model error of ± 4 days.
[14] As per 'Monthly Temperature and Rainfall Outlook' released by IMD on May 1, 2024.

Chart III.19: Progress of Summer Sowing (as on May 10, 2024)



Source: Ministry of Agriculture and Farmers' Welfare.

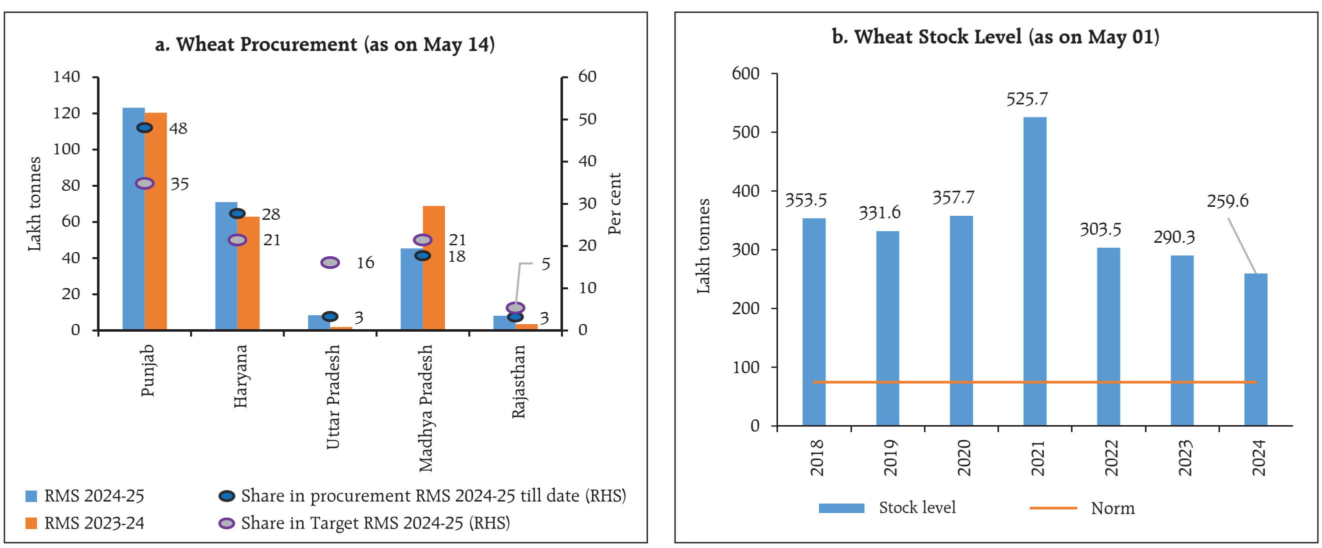
As of May 10, 2024 75.9 lakh hectares of the summer crop area[15] have been sown, registering an increase of 8.9 per cent over a year ago, with higher acreage under rice, pulses, coarse cereals and oilseeds (Chart III.19).

The cumulative procurement of wheat in the *rabi* marketing season (RMS) so far (till May 14, 2024) stood at 256.4 lakh tonnes, which was marginally lower than the corresponding period last year (Chart III.20a). To expedite the procurement, select state governments such as Rajasthan and Madhya Pradesh have relaxed procurement norms in the last week of April.

As on May 01, wheat stock stood at 259.6 lakh tonnes which was well above the quarterly buffer norm (Apr-Jun 2024) (Chart III.20b). The cumulative procurement of rice in the *kharif* marketing season so far (October 01, 2023 – May 14, 2024) stood at 482.8 lakh tonnes. As of May 01, 2024, the public stock of rice stood at 508.9 lakh tonnes (3.7 times the buffer norm).

Despite a sequential moderation, the headline PMI for manufacturing remained in expansionary territory in April 2024, buoyed by new orders and output (Chart III.21a). The PMI for services also continued to expand, *albeit* at a slower pace,

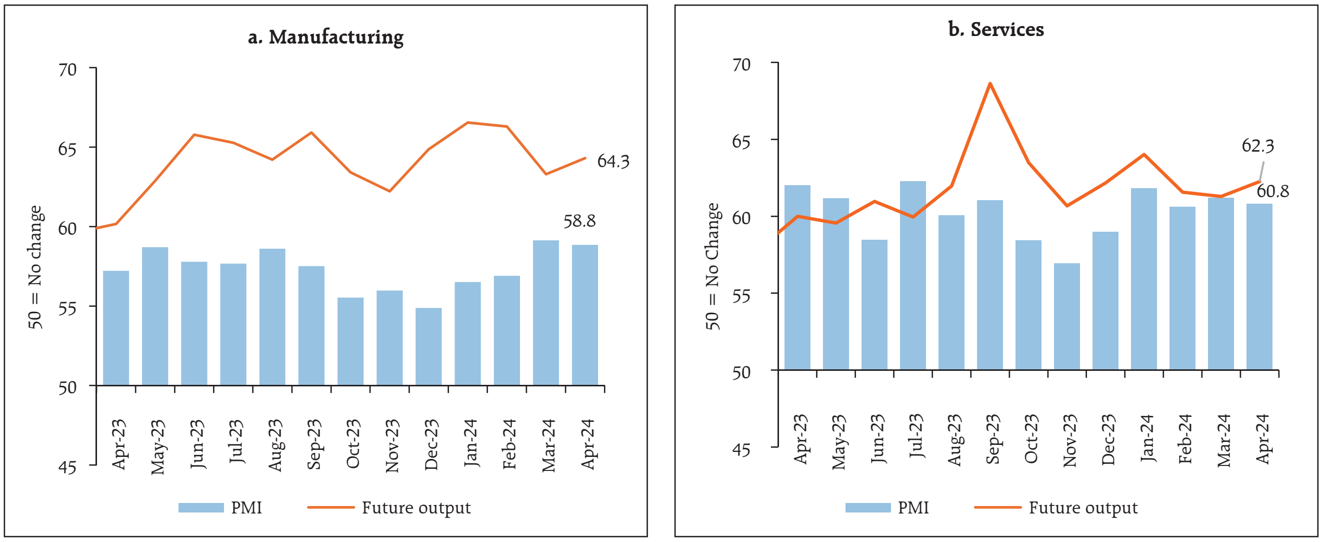
Chart III.20: Wheat Public Procurement and Stock Position



Sources: Food corporation of India; and RBI staff estimates.

15 The summer season accounts for around 5 per cent of total food grain production (2022-23) with relatively higher share under few crops *viz.* moong (50.3 per cent), bajra (9.5 per cent), urad (8.7 per cent), rice (7.5 per cent) and maize (7.1 per cent).

Chart III.21: Purchasing Managers' Index (PMI)



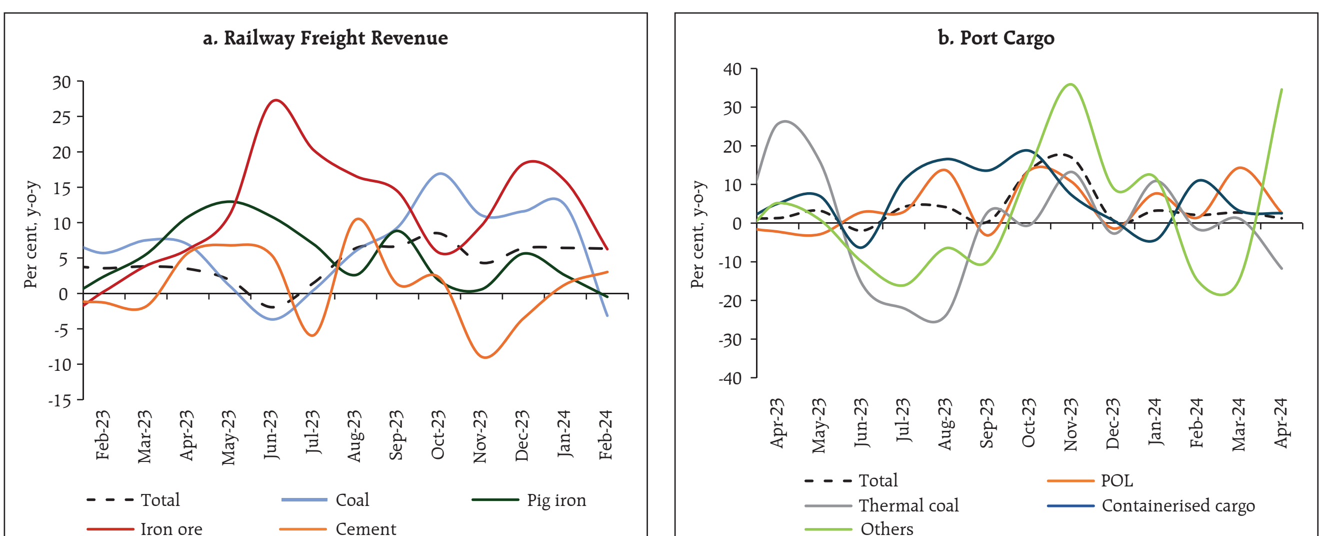
Note: A level of 50 corresponds to no change in activity and a reading above 50 denotes expansion and vice versa.
Source: S&P Global.

driven by growth in new business and output (Chart III.21b).

Indicators of freight transport exhibited a mixed picture. Railway freight revenue recorded a growth of 6.3 per cent (y-o-y) in February 2024, supported by growth in freight movement of cement (Chart III.22a). Cargo traffic at major ports increased by 1.3 per cent in April 2024, led by coking coal and other miscellaneous cargo (Chart III.22b).

Construction sector indicators recorded near double-digit growth as steel consumption increased

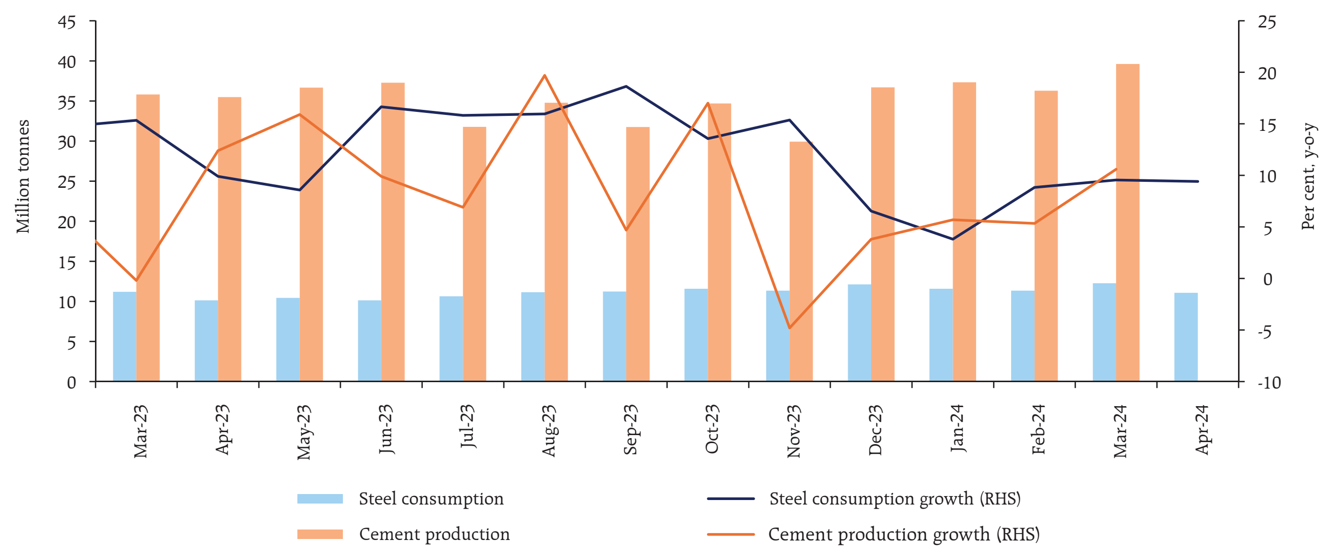
Chart III.22: Railway Traffic and Port Cargo



Source: Rail Drishti.

Source: Indian Ports Association.

Chart III.23: Steel Consumption and Cement Production



Source: Rail Drishti.

by 9.4 per cent in April 2024 and cement production increased by 10.6 per cent in March 2024 (Chart III.23).

Available high frequency indicators for the services sector reflect resilience in economic activity in April 2024 (Table III.1).

Table III.1: Growth (y-o-y, per cent)

Sector	Indicator	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24
Urban demand	Passenger Vehicles Sales	2.9	11.6	3.1	17.3	4.3	3.2	13.9	5.7	8.9	1.2
Rural demand	Two Wheeler Sales	-7.2	0.6	0.8	20.1	31.3	16.0	26.2	30.0	15.3	30.8
	Three Wheeler Sales	78.9	68.8	47.0	42.1	30.8	30.6	9.5	4.6	4.3	14.5
	Tractor Sales	6.1	1.1	-14.7	-4.3	6.4	-19.8	-15.3	-33.0	-23.1	-3.0
Trade, hotels, transport, communication	Commercial Vehicles Sales		6.9			3.2			-3.8		
	Railway Freight Traffic	1.5	6.4	6.7	8.5	4.3	6.4	6.4	6.3		
	Port Cargo Traffic	4.3	4.4	0.3	13.8	16.9	0.6	3.2	-1.4	2.7	1.3
	Domestic Air Cargo Traffic*	-4.1	6.0	-4.5	10.6	9.0	8.7	10.0	7.6	8.7	-10.1
	International Air Cargo Traffic*	1.0	7.4	2.7	15.0	4.9	12.2	19.3	25.7	22.5	20.7
	Domestic Air Passenger Traffic *	26.3	23.6	19.3	10.7	8.7	8.1	5.0	2.2	4.7	3.3
	International Air Passenger Traffic *	23.6	21.5	19.6	17.5	19.8	18.1	17.0	15.2	15.0	15.0
	GST E-way Bills (Total)	16.4	19.5	9.5	30.5	8.5	13.2	16.4	18.9	13.9	14.5
	GST E-way Bills (Intra State)	20.8	22.6	12.4	30.0	22.7	14.2	17.9	21.1	15.8	17.3
	GST E-way Bills (Inter State)	9.1	14.4	4.9	31.2	-16.2	11.4	13.8	15.0	10.7	9.6
	Hotel occupancy rate@	60.9	60.9	61.0	62.5	63.0	70.0	66.6	72.5	64.4	
	Average revenue per room	14.2	13.9	18.3	14.8	15.9	12.8	11.0	4.1	6.7	
	Tourist Arrivals	13.6	22.6	17.5	19.8	16.8	7.8	10.4	11.8		
Construction	Steel Consumption	15.8	16.0	18.6	13.6	15.4	6.5	3.8	8.8	9.6	9.4
	Cement Production	6.9	19.7	4.7	17.0	-4.8	3.8	5.7	5.3	10.6	
PMI Index#	Services	62.3	60.1	61.0	58.4	56.9	59.0	61.8	60.6	61.2	60.8

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

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

Sources: CMIE; CEIC; IHS Markit; SIAM; Airports Authority of India; and Joint Plant Committee.

Inflation

Headline inflation, as measured by y-o-y changes in the all-India CPI[16], moderated to 4.8 per cent in April 2024 from 4.9 per cent in March as a positive momentum of 48 bps was more than offset by a favourable base effect of 51 bps (Chart III.24). Among the major groups, the momentum was positive at around 65 bps and 55 bps for food and core groups (*i.e.*, excluding food and fuel) respectively, while the fuel group recorded negative momentum of around 100 bps.

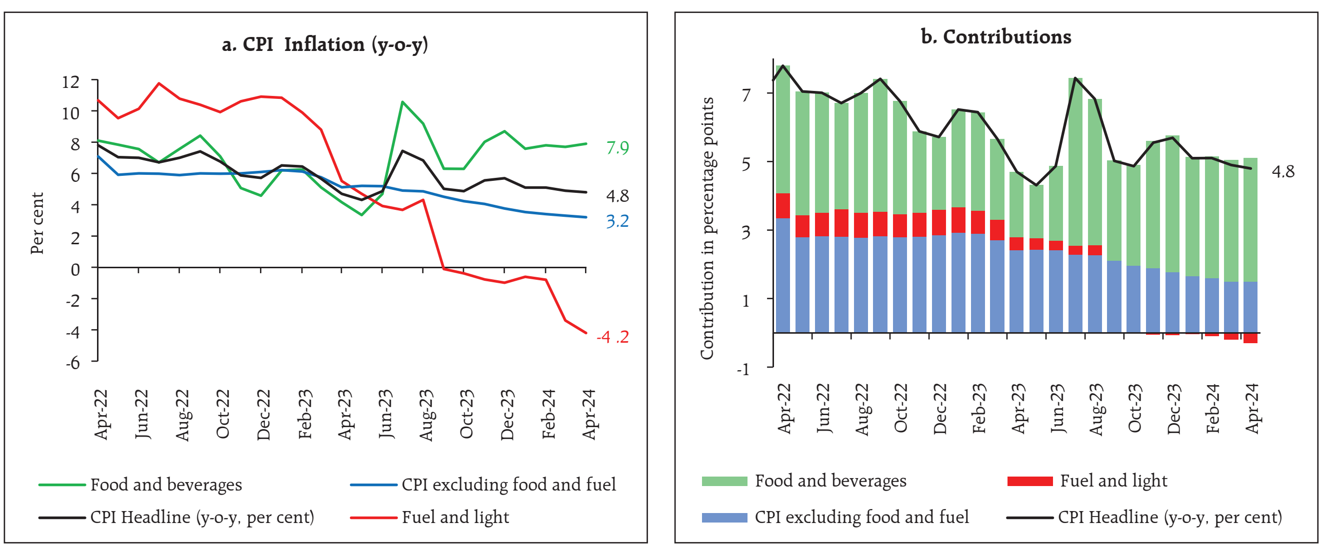
Food inflation (y-o-y) edged up to 7.9 per cent in April from 7.7 per cent in March. In terms of sub-groups, inflation firmed up in cereals, meat and fish and fruits while eggs, milk, vegetables, pulses, sugar, spices, non-alcoholic beverages and prepared meals registered a moderation in inflation (Chart III.25). Edible oils remained in deflation, *albeit* at a slower rate.

Fuel and light prices deflation deepened to around (-) 4.2 per cent in April from (-) 3.4 per cent in March, mainly on account of sharper deflation in LPG prices on a y-o-y basis. Electricity prices, however, recorded a y-o-y inflation of 10.2 per cent in April 2024.

Core inflation eased further to 3.2 per cent (y-o-y) in April from 3.3 per cent in March, the lowest in the current CPI (2012=100) series. The moderation was mostly broad-based as inflation in pan, tobacco and intoxicants, clothing and footwear, transport and communication, recreation and amusement, and education softened, whereas personal care and effects inflation registered a pick-up (Chart III.26). Inflation in housing, household goods and services, and health prices remained steady.

In terms of regional distribution, rural inflation stood at 5.43 per cent, higher than urban inflation

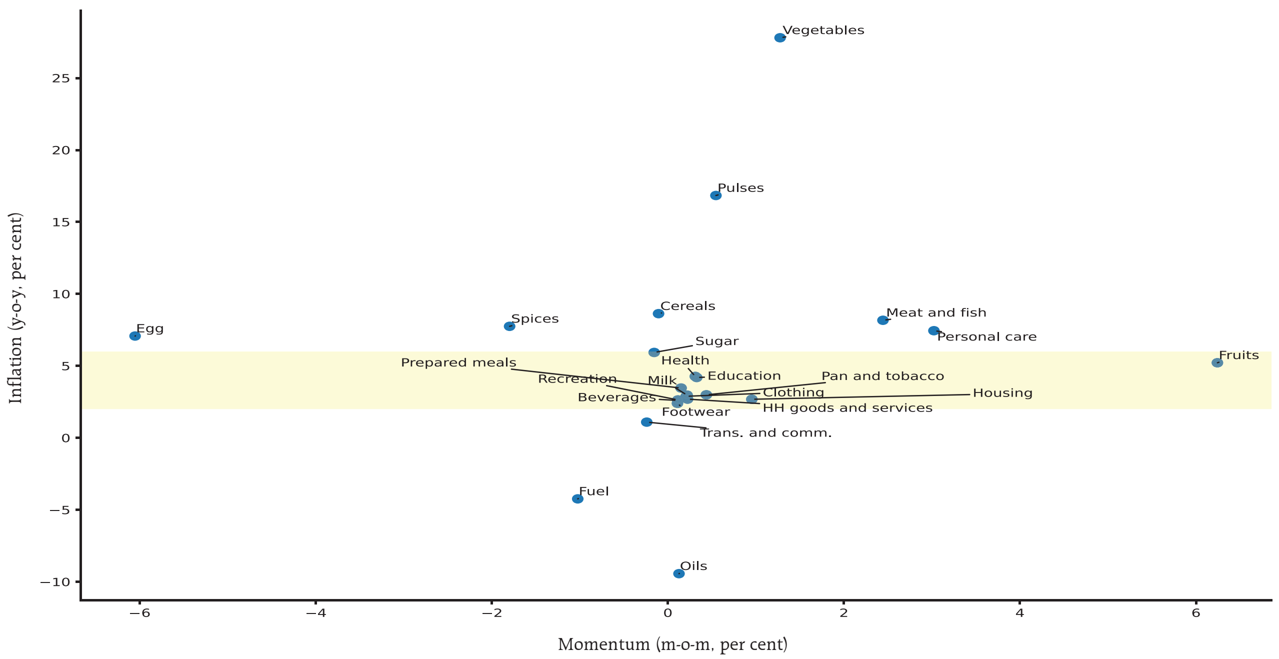
Chart III.24: Trends and Drivers of CPI Inflation



Sources: NSO; and RBI staff estimates.

[16] As per the provisional data released by the National Statistical Office (NSO) on May 13, 2024.

Chart III.25: Annual Inflation (y-o-y) and Momentum (m-o-m) across Sub-groups

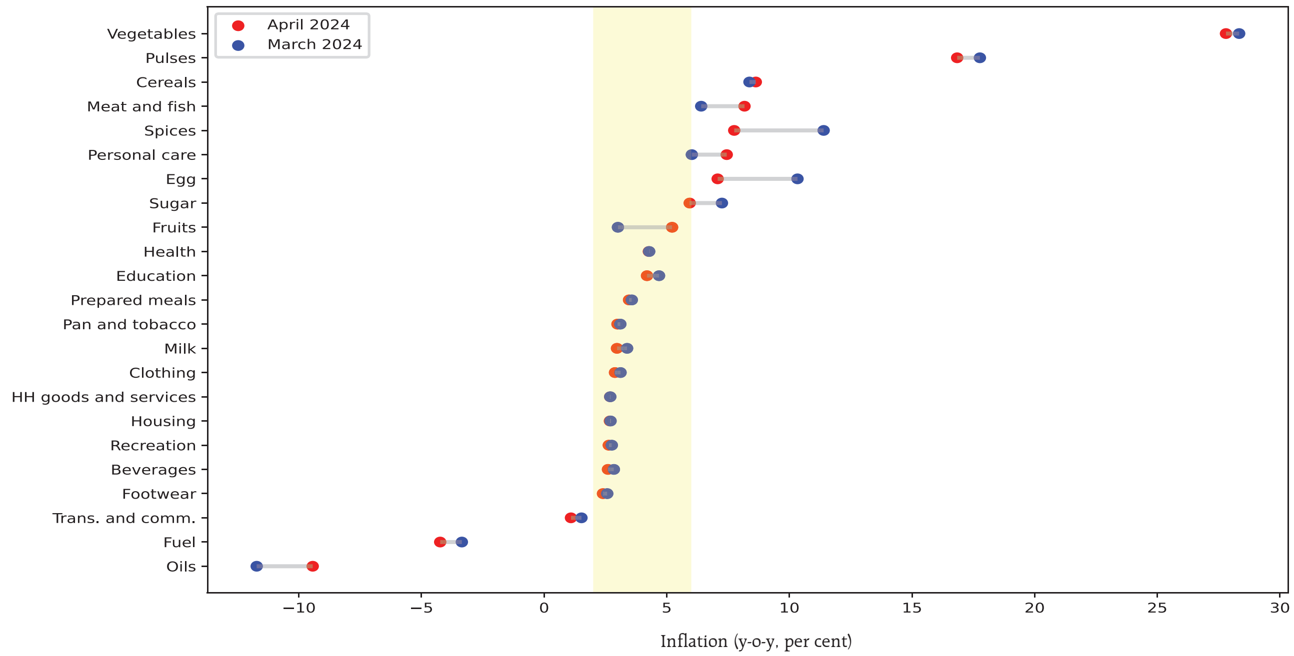


Sources: NSO; and RBI staff estimates

(4.11 per cent) in April 2024. Majority of the states experienced inflation less than 6 per cent (Chart III.27).

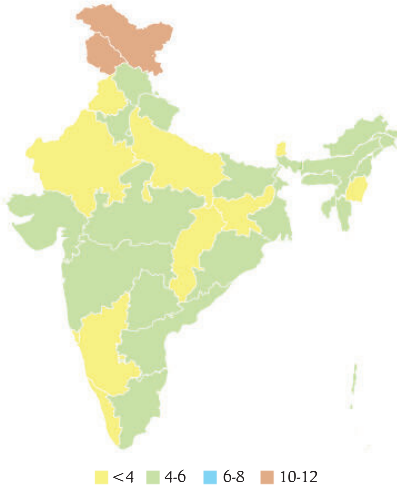
High frequency food price data for May so far (up to 13[th]) show that cereal prices declined, mainly driven by wheat. Pulses prices registered a broad-

Chart III.26: Annual Inflation across Sub-groups (April 2024 *versus* March 2024)



Sources: NSO; and RBI staff estimates

Chart III.27: Spatial Distribution of Inflation April 2024 (CPI-Combined, y-o-y, per cent)



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

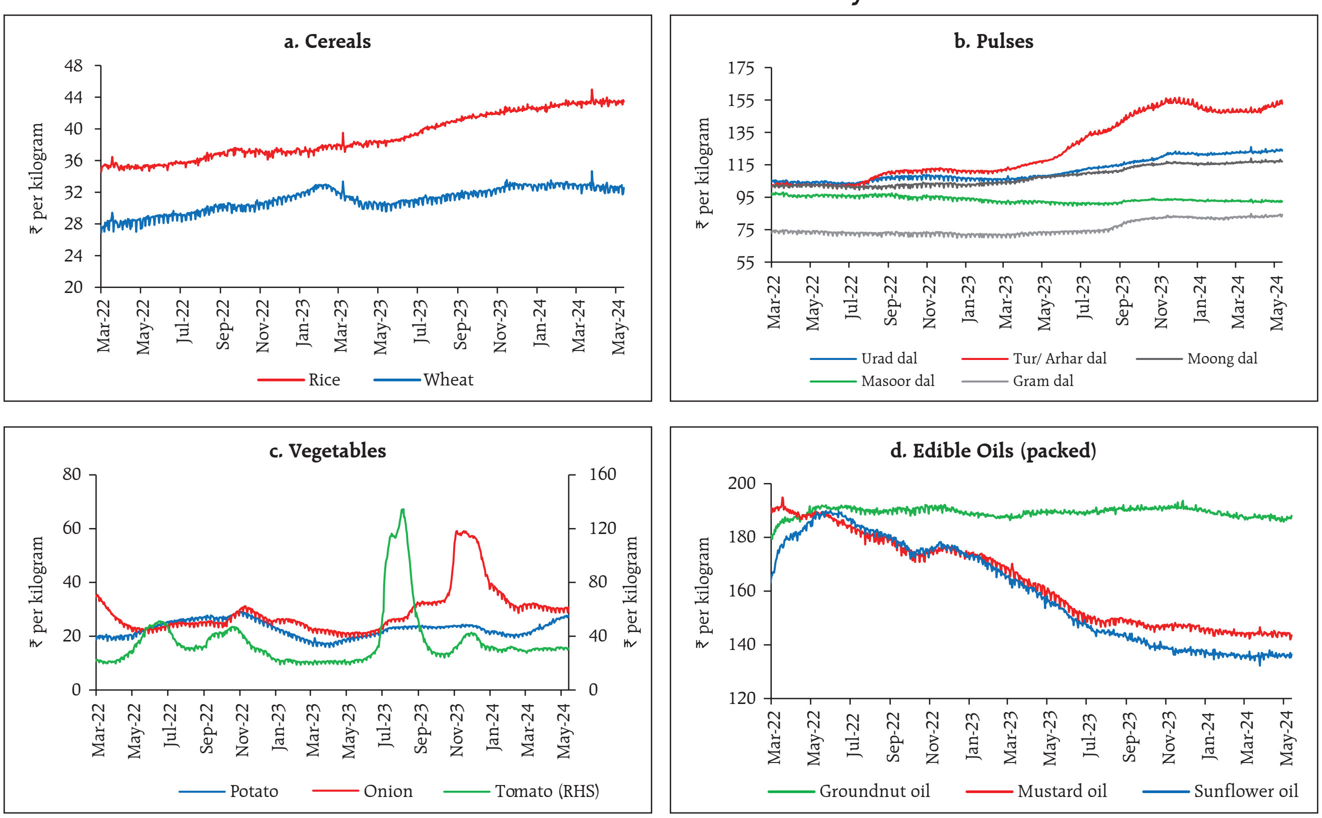
based increase, while edible oil prices softened. Amongst key vegetables, onion prices have dropped further in May so far. Potato and tomato prices continue to rise (Chart III.28).

As price pressures in the case of onions abated, the government shifted onion exports from 'prohibited' to 'free' category on May 03, with 40 per cent export duty and with a minimum export price (*MEP*) condition of $550 per metric tonne (MT). To ensure adequate supply of pulses, the government has extended duty-free imports of yellow peas till October 31, 2024. *Desi chana* (Bengal gram) has been exempted from import duty till March 2025.

Retail selling prices of petrol and diesel in the four major metros have remained steady in May so far (up to 13th). Kerosene and LPG prices were also unchanged (Table III.2).

The PMIs for April 2024 indicate that input costs as well as output prices recorded a faster rate of

Chart III.28: DCA Essential Commodity Prices



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

Table III.2: Petroleum Products Prices

Item	Unit	Domestic Prices			Month-over-month (per cent)	
		May-23	Apr-24	May-24^	Apr-24	May-24^
Petrol	₹/litre	102.92	100.91	100.91	0.0	0.0
Diesel	₹/litre	92.72	90.72	90.72	0.0	0.0
Kerosene (subsidised)	₹/litre	47.55	49.57	49.57	0.0	0.0
LPG (non-subsidised)	₹/cylinder	1113.25	813.25	813.25	0.0	0.0

^: For the period May 1-13, 2024.

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

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

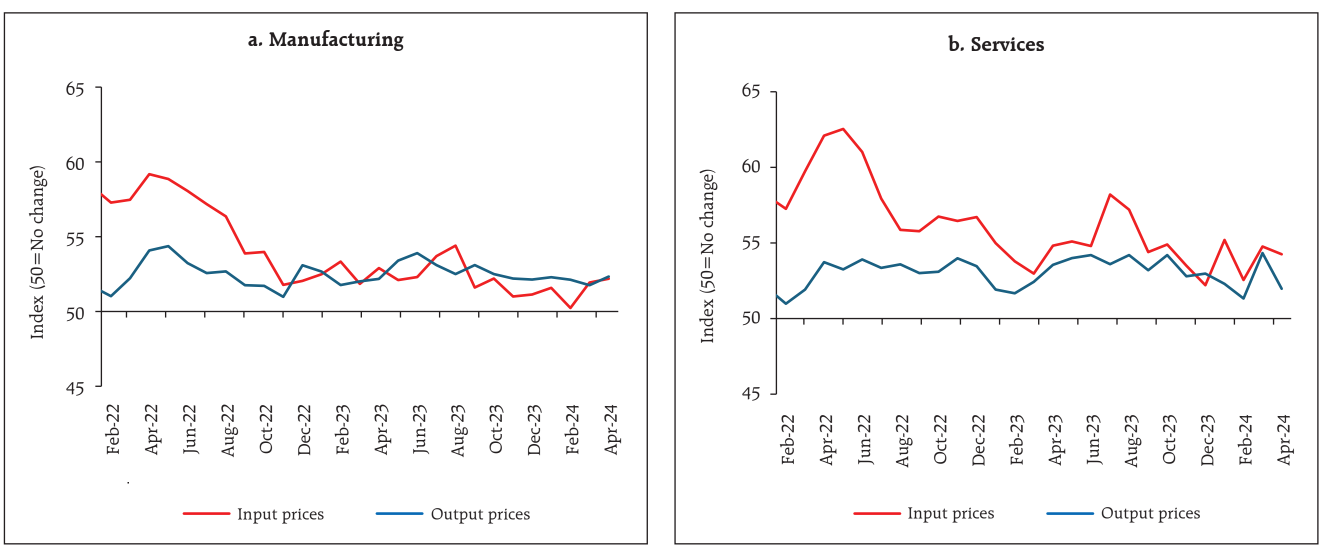
expansion in the manufacturing sector (Chart III.29). In the services sector, the rate of expansion for both input and selling prices moderated.

IV. Financial Conditions

Build-up of government cash balances because of advance tax payments and goods and services tax (GST) related outflows led to pressure on system liquidity since April 20, 2024. In response, the average daily net injection under the liquidity adjustment facility (LAF) [including marginal standing facility (MSF)] stood at ₹0.80 lakh crore during April 16 to May 15, 2024 as against average daily net absorption of ₹0.20 lakh crore during March 16 - April 15, 2024 (Chart IV.1). During April 16 to May 15, 2024 the Reserve Bank injected liquidity into the banking system through two main and nine fine-tuning variable rate repo (VRR) operations, cumulatively amounting to ₹6.3 lakh crore. The demand for funds was robust as reflected in the high bid-cover ratios for both main and fine-tuning VRR auctions.

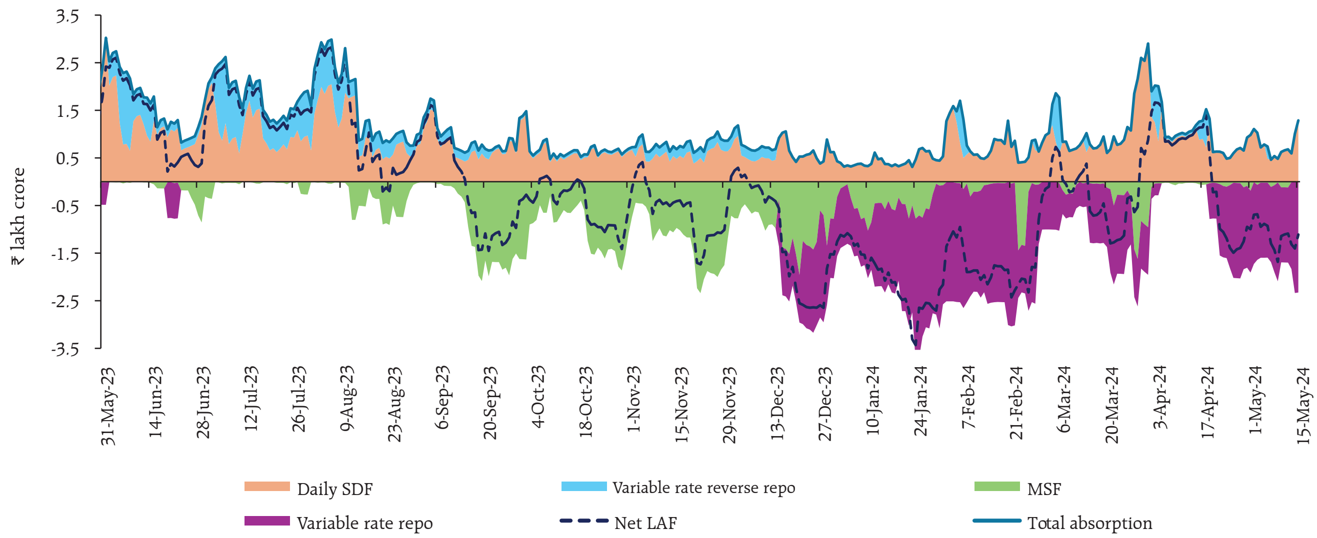
Of the average total absorption at ₹0.80 lakh crore during the second fortnight of April through May 15, 2024, placement of funds under the standing deposit facility (SDF) amounted to ₹0.74 lakh crore, down from ₹1.18 lakh crore during March 16 to April 15, 2024. The remaining amount of ₹0.06 lakh crore was absorbed through variable rate reverse repo (VRRR) operations conducted during April 16 to May 15, 2024. During this period, the Reserve Bank received a cumulative total offer of ₹1.63 lakh crore as against the total notified amount of ₹1.75 lakh crore.

Chart III.29: PMI: Input and Output Prices



Source: S&P Global.

Chart IV.1: Liquidity Operations

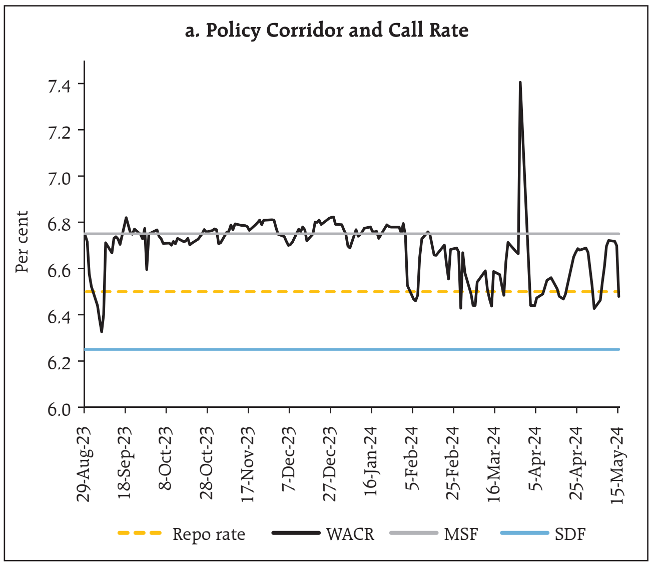


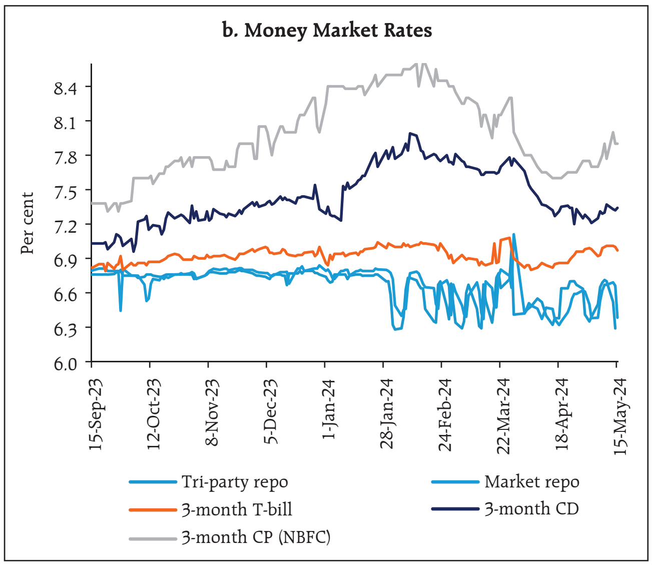
Source: RBI.

In the overnight money market, the weighted average call rate (WACR) remained within the LAF corridor and averaged 6.60 per cent during April 16 to May 15, 2024, the same as during March 16 - April 15, 2024 (Chart IV.2a). Rates in the collateralised segment – the triparty and market repo rates – moved in tandem with the WACR. On an average basis, the triparty repo and the market repo rate traded 5 bps and 2 bps, respectively, above the policy repo rate during April 16 to May 15, 2024 (Chart IV.2b).

Across the term money market segment, yields on certificates of deposit (CDs) and commercial paper (CP) for non-banking financial companies (NBFCs) eased, however, that on 3-month treasury bills (T-bills) hardened marginally (Chart IV.2b). The average risk premia in the money market (3-month

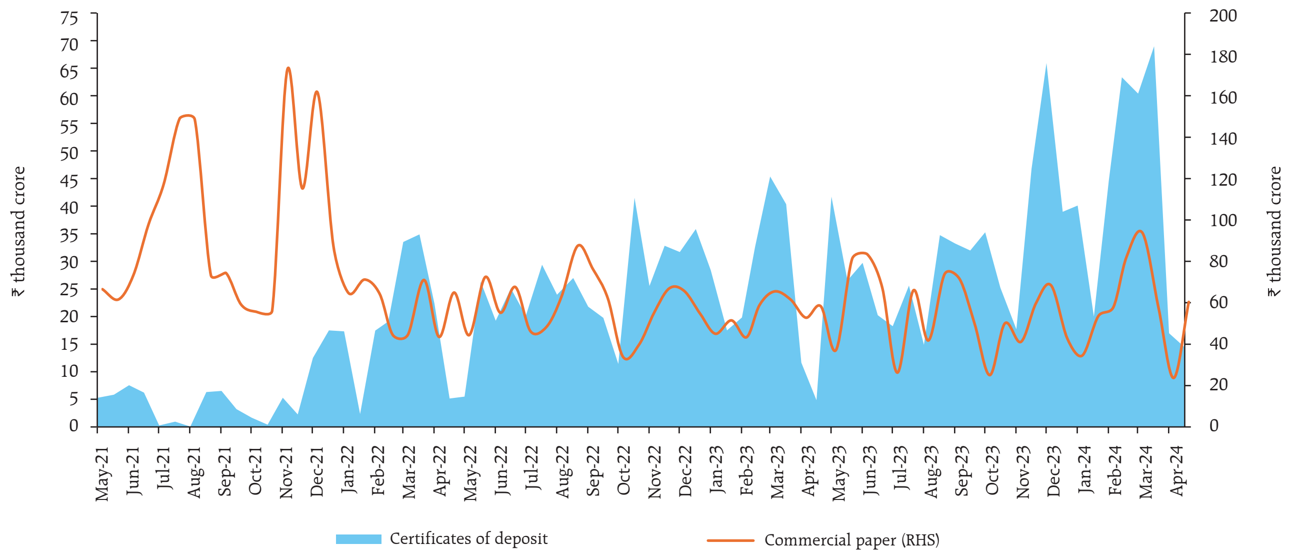
Chart IV.2: Policy Corridor and Money Market Rates





Sources: RBI; CCIL; and Bloomberg.

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



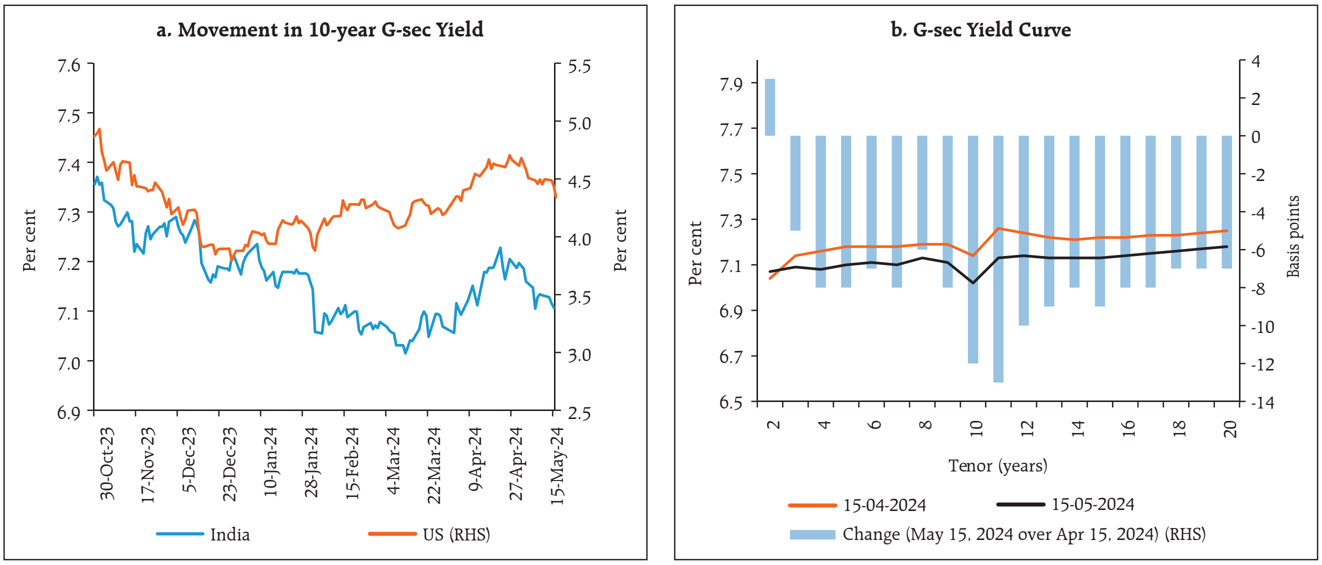
Source: RBI.

CP *minus* 91-day T-bill) reduced to 79 bps during April 16 – May 15, 2024 from 103 bps during March 16 - April 15, 2024.

In the primary market, fund mobilisation through issuances of CDs at ₹0.46 lakh crore during 2024-25 (up to May 3) was higher than ₹0.27 lakh crore in the corresponding period of the previous year in response to sustained demand for credit (Chart IV.3). On the other hand, issuances of CP at ₹0.84 lakh crore during 2024-25 (up to April 30) were lower than ₹1.11 lakh crore in the corresponding period of the previous year.

The yield on the 10-year Indian benchmark government security (G-sec) closed at 7.08 per cent on May 15, 2024, softening from 7.18 per cent on April 15 (Chart IV.4a). Indian sovereign bonds

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



Sources: Bloomberg; CCIL; and RBI staff estimates.

remained resilient and insulated from the volatility in global markets during this period due to declining government borrowings, increasing demand due to global bond index inclusion and a stable rupee. The yield curve shifted downwards, with relatively sharper decrease in yields across the mid to the long end of the curve across the term structure (Chart IV.4b). On May 3, 2024 the Government of India announced the buyback of its securities through auction for an aggregate amount of ₹40,000 crore. The Reserve Bank accepted offers to buy g-sec aggregating ₹0.10 lakh crore against bids received worth ₹0.53 lakh crore (1.33 times the notified amount of ₹0.40 lakh crore) at the auction conducted on May 9, 2024.

Corporate bond yields and risk premia exhibited mixed movements across diverse maturity profiles and the rating spectrum during April 16 to May 14, 2024 (Table IV.1). Overall, corporate bond issuances during 2023-24 at ₹8.6 lakh crore were higher than ₹7.5 lakh crore during the same period of the previous year. Growing demand from long-term domestic investors and foreign players has facilitated raising of larger funds at affordable rates in the debt market by corporates and banks.

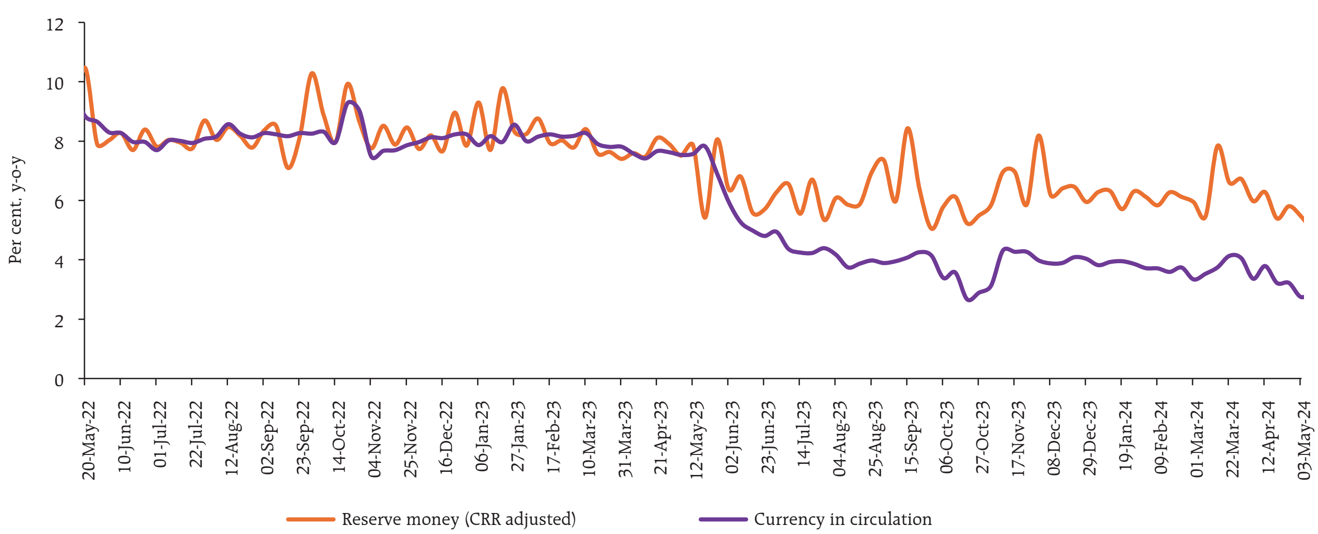
Table IV.1: Financial Markets - Rates and Spread

Instrument	Interest Rates (per cent)			Spread (bps) (Over Corresponding Risk-free Rate)		
	Mar 16, 2024 – Apr 15, 2024	Apr 16, 2024 – May 14, 2024	Variation	Mar 16, 2024 – Apr 15, 2024	Apr 16, 2024 – May 14, 2024	Variation
1	2	3	(4 = 3-2)	5	6	(7 = 6-5)
Corporate Bonds						
(i) AAA (1-year)	7.90	7.83	-7	74	66	-8
(ii) AAA (3-year)	7.88	8.01	13	67	72	5
(iii) AAA (5-year)	7.75	7.92	17	52	62	10
(iv) AA (3-year)	8.47	8.61	14	126	132	6
(v) BBB- (3-year)	12.08	12.19	11	488	490	2

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

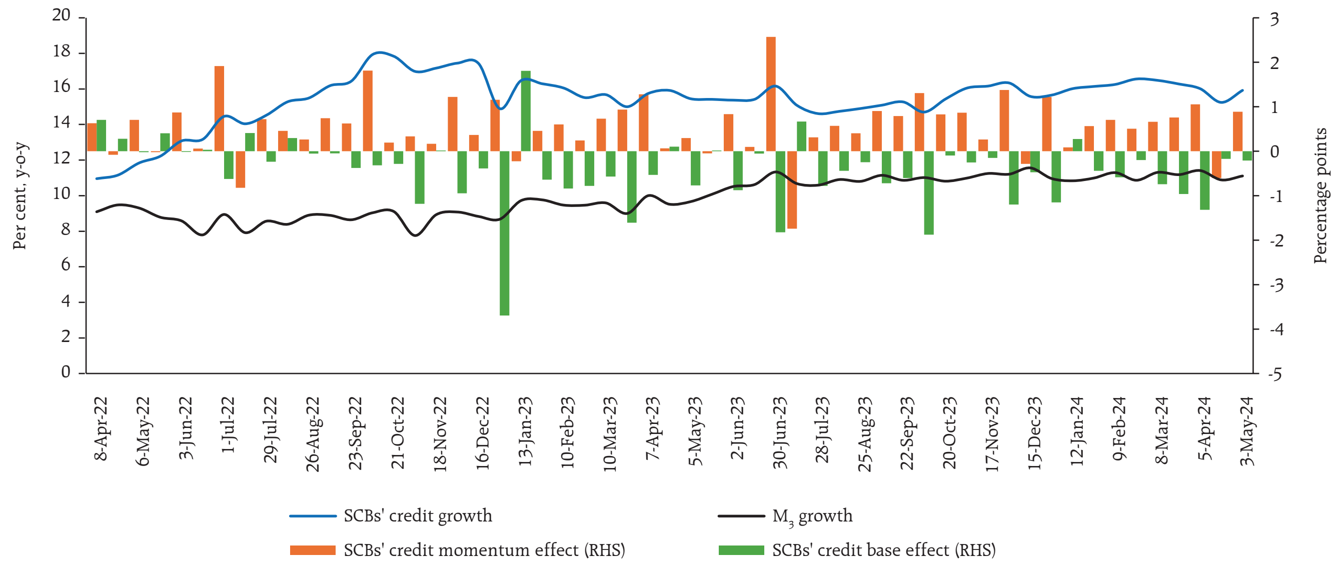
Reserve money (RM), excluding the first-round impact of change in the cash reserve ratio (CRR), recorded a growth of 5.0 per cent (y-o-y) as on May 10, 2024 (7.9 per cent a year ago) [Chart IV.5]. The growth in currency in circulation (CiC), the largest component of RM, decelerated to 2.9 per cent from 7.6 per cent a year ago, reflecting the withdrawal of

Chart IV.5: Reserve Money and Currency in Circulation



Source: RBI.

Chart IV.6: M_3 Growth and Credit Growth of SCBs - Base and Momentum Effect



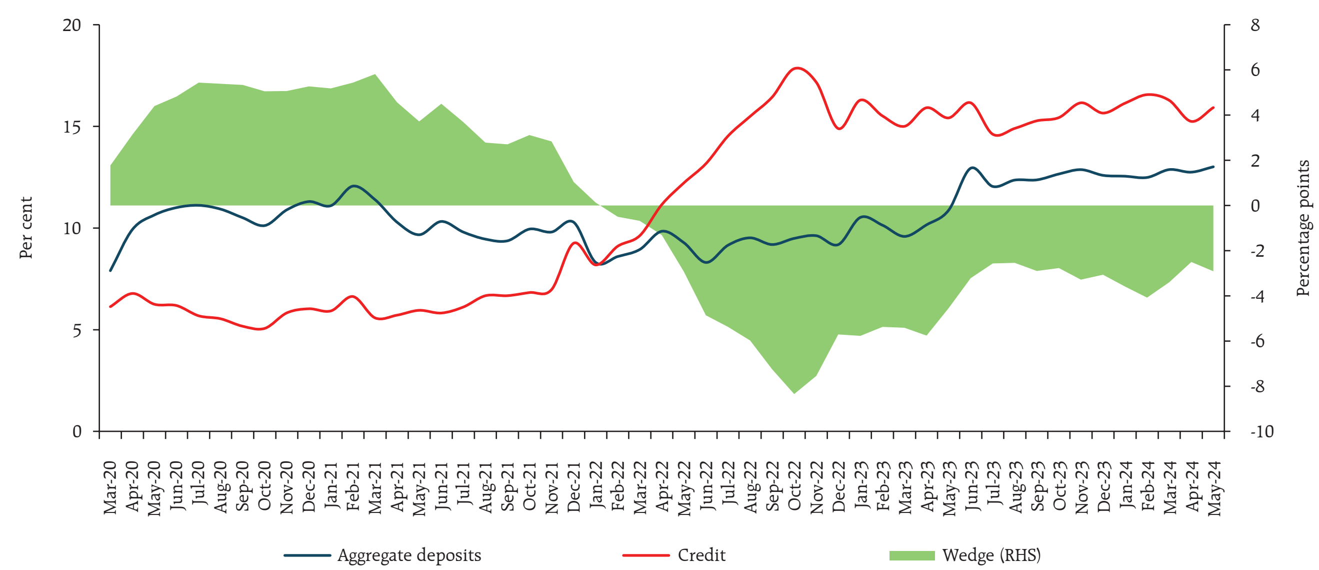
Source: RBI.

₹2000 banknotes[17] – 97.8 per cent of them has been returned to the banking system, mostly in the form of deposits (as on May 19, 2024).

Money supply (M_3) rose by 11.1 per cent (y-o-y) as on May 3, 2024 (9.7 per cent a year ago).[18] Aggregate deposits with banks, the largest component of M_3, increased by 12.4 per cent (10.0 per cent a year ago). Scheduled commercial banks' (SCBs') credit growth stood at 15.9 per cent as on May 3, 2024 (15.4 per cent a year ago) [Chart IV.6].

SCBs' deposit growth (excluding the impact of the merger) remained in double digits in April 2024 (Chart IV.7).

Chart IV.7: SCBs' Aggregate Deposits and Credit Growth - Wedge

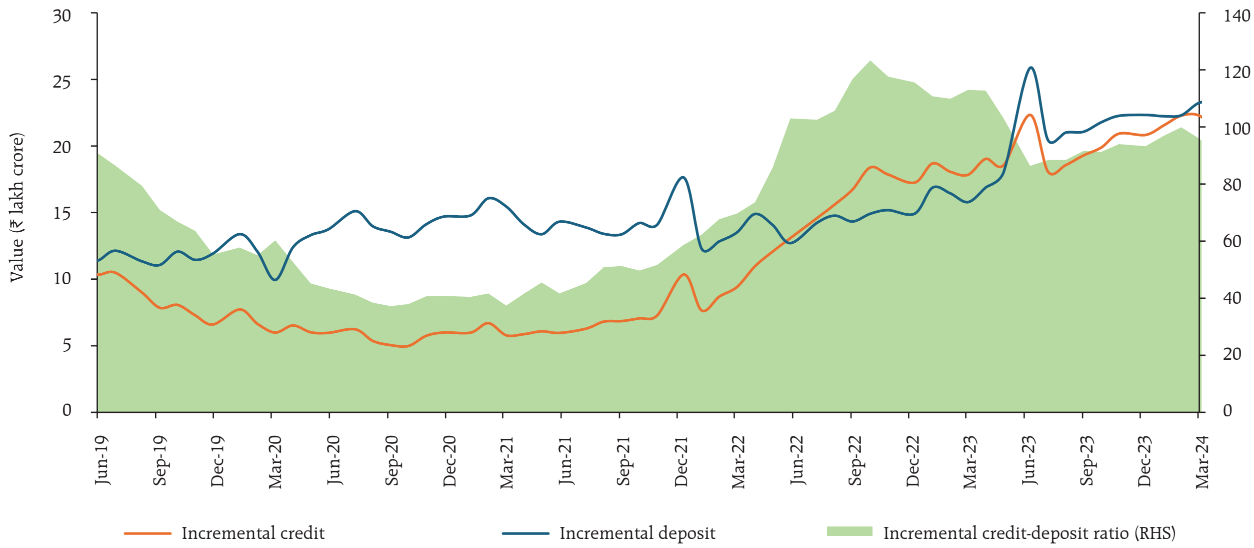


Source: RBI.

17 Announced on May 19, 2023.

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

Chart IV.8: Incremental Credit-Deposit Ratio



Source: RBI.

As on April 19, 2024 the system level incremental credit-deposit ratio stood at 90.7 per cent (Chart IV.8). With the statutory requirements for CRR and statutory liquidity ratio (SLR) at 4.5 per cent and 18 per cent, respectively, around 77 per cent of deposits were available with the banking system for credit expansion as on April 19, 2024.

In response to the 250 bps change in the policy repo rate since May 2022, the external benchmark-based lending rate (EBLR) increased by a similar magnitude. The 1-year median marginal cost of funds-based lending rate (MCLR) increased by 166 bps during May 2022 to April 2024. Consequently, the weighted average lending rate (WALR) on fresh and outstanding rupee loans increased by 186 bps and 113 bps, respectively, during May 2022 to March 2024. In the case of deposits, the weighted average domestic term deposit rates (WADTDRs) on fresh and outstanding deposits increased by 259 bps and 185 bps, respectively, during the same period (Table IV.2).

Transmission across bank groups indicates that the increase in deposit and lending rates was higher in the case of public sector banks (PSBs), except for outstanding loans, during May 2022 to March 2024

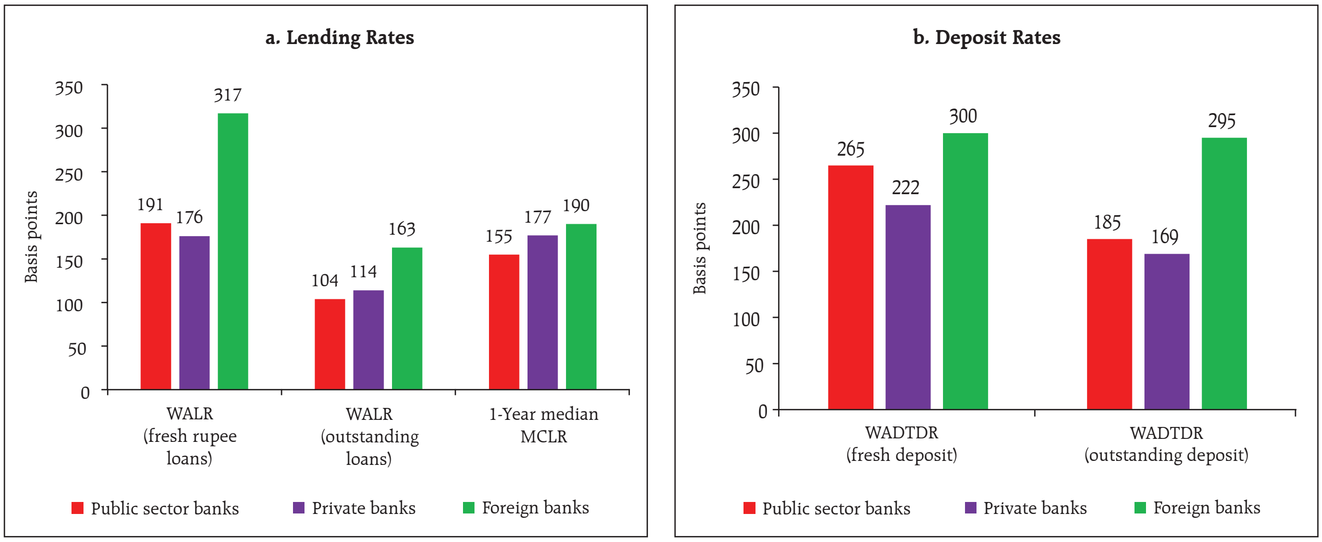
Table IV.2: Transmission to Banks' Deposit and Lending Rates

(Variation in bps)

Period	Repo Rate (bps)	Term Deposit Rates		Lending Rates			
		WADTDR - Fresh Deposits	WADTDR- Outstanding Deposits	EBLR	1-Yr. MCLR (Median)	WALR- Fresh Rupee Loans	WALR- Outstanding Rupee Loans
Easing Period Feb 2019 to Mar 2022	-250	-259	-188	-250	-155	-232	-150
Tightening Period May 2022 to Mar 2024	250	259	185	250*	166*	186	113

Note: Data on EBLR pertain to 32 domestic banks.
*: Data on EBLR and MCLR pertain to April 2024.
WALR: Weighted Average Lending Rate. **WADTDR**: Weighted Average Domestic Term Deposit Rate;
MCLR: Marginal Cost of Funds-based Lending Rate; **EBLR**: External Benchmark based Lending Rate.
Source: RBI.

Chart IV.9: Transmission across Bank-groups (May 2022 to March 2024)

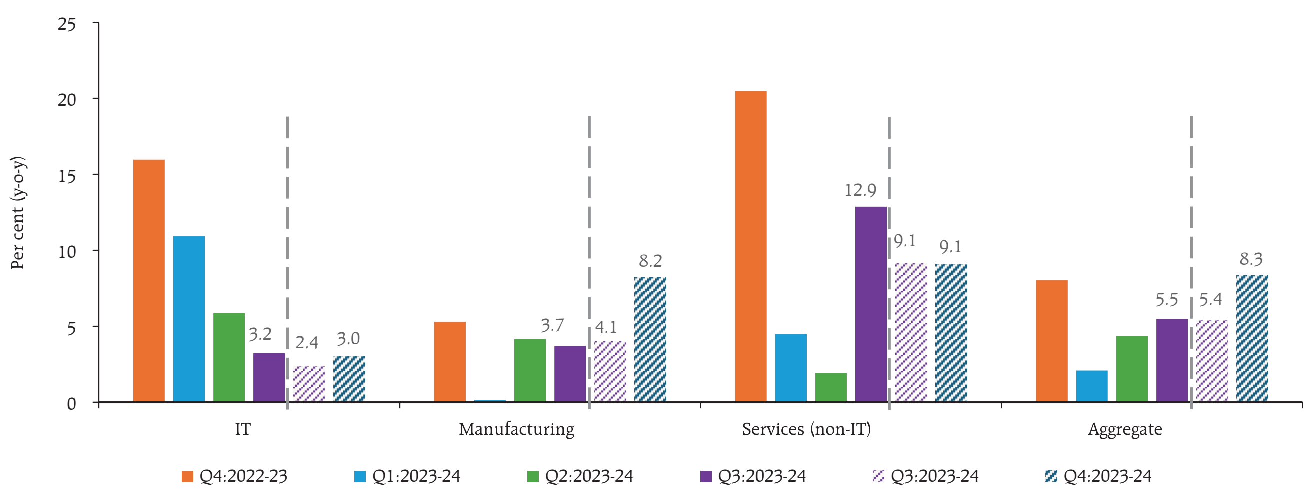


Source: RBI.

(Chart IV.9). The lending rates of PSBs remained lower than those of private banks, while their deposit rates were higher.

During Q4:2023-24, listed non-government non-financial (NGNF) companies exhibited a modest pick-up in top-line growth. Sales growth of listed NGNF companies improved to 8.3 per cent (y-o-y) during Q4:2023-24 from the previous quarter, mainly driven by the manufacturing sector.[19] The performance of information technology (IT) companies remained subdued during Q4 primarily on account of weakness in banking, financial services and insurance sector, and discretionary spending (Chart IV.10). In line with revenues, operating profit margin moderated

Chart IV.10: Sales Growth



Note: Results are based on 596 listed private non-financial companies for Q4:2023-24. The shaded bar indicated the growth of common companies in Q3:2023-24 and Q4:2023-24.
Sources: Capitaline; and RBI staff estimates.

[19] Based on a sample of 596 companies constituting 60.0 per cent of the total market capitalisation of listed non-government non-financial companies.

Table IV.3: Profit Margin

Sector	No. of Companies	Operating Profit Margin (per cent)			Net Profit Margin (per cent)		
		Q4: 2022-23	Q3: 2023-24	Q4: 2023-24	Q4: 2022-23	Q3: 2023-24	Q4: 2023-24
IT	59	23.1	24.2	23.5	17.7	18.9	20.0
Manufacturing	369	14.3	15.2	14.9	11.8	10.8	9.1
Services (non-IT)	119	28.7	29.0	29.8	7.8	8.6	10.0
Aggregate	596	16.8	17.9	17.4	12.6	11.8	11.0

Sources: Capitaline; and RBI staff estimates.

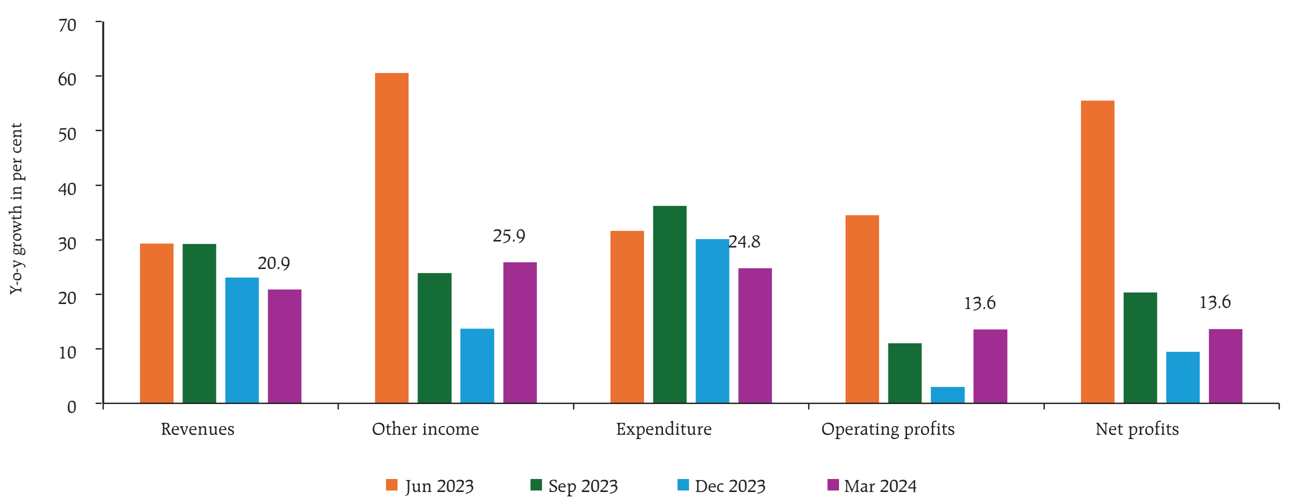
in Q4 (Table IV.3). Staff cost of IT companies rose modestly, despite reduction in their headcounts, with the top five IT companies reducing their global headcount by 11,432 during Q4.

Manufacturing companies registered 8.2 per cent growth in sales in Q4:2023-24 (4.1 per cent in Q3). Sales growth of early reporting non-IT services companies stood at 9.1 per cent during Q4:2023-24 (Chart IV.10).

In the case of listed banking and financial sector companies[20], revenues, which primarily include the interest income in case of banks, registered strong double-digit growth (Chart IV.11). Other income, which includes income from fees, commissions, profit, and loss from investments also exhibited strong growth for banking and financial sector companies, reflecting the impact of gains from a specific sale transaction undertaken by a private sector bank. Growth in expenditure outpaced growth in revenues amidst an increase in interest expenses; however, growth in operating profit exhibited a sequential improvement. Furthermore, net profit growth remained in double digits during the quarter.

Domestic equity market registered gains in the fourth week of April 2024, tracking positive global cues, strong domestic macroeconomic data releases,

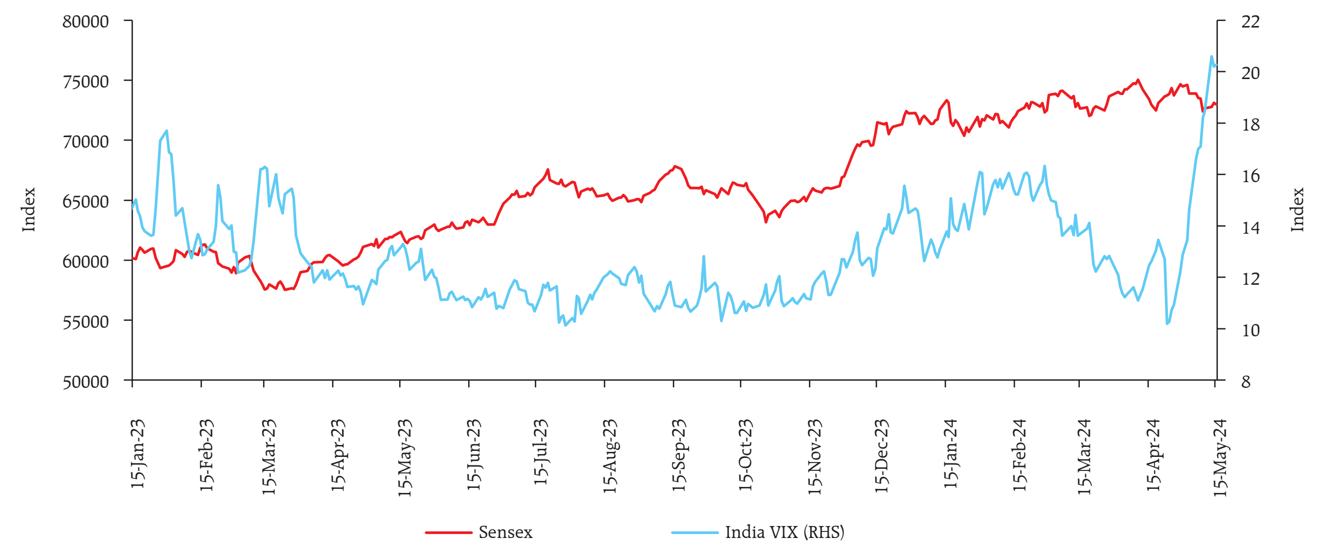
Chart IV.11: Performance of Listed Financial Companies



Note: Includes the historical standalone figures of HDFC Limited, which was merged with HDFC Bank in July 2023.
Sources: CMIE Prowess; and RBI staff estimates.

20 Based on a sample of 155 companies constituting around 74 per cent of the total market capitalisation of listed banking and financial sector companies.

Chart IV.12: Movement in Indian Equity Market

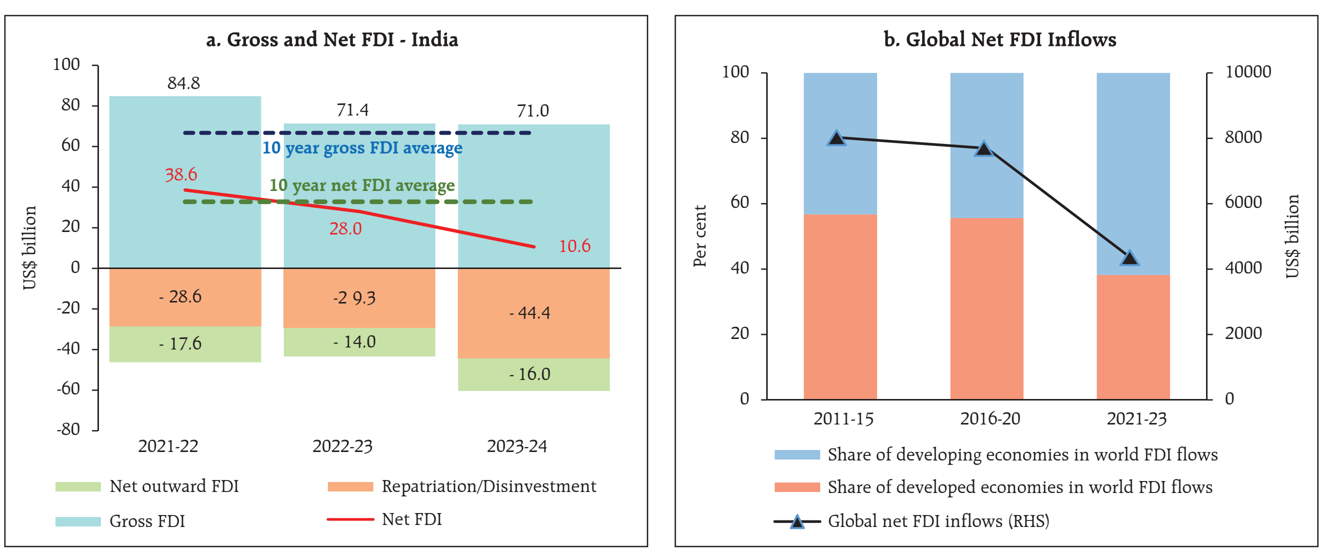


Source: Bloomberg.

and resilient Q4:2023-24 corporate earnings results. Equity prices registered some correction thereafter amidst FPI sell-offs, before exhibiting some recovery on positive global cues and further easing of domestic CPI inflation. The benchmark BSE Sensex closed at 72,987 on May 15, 2024, with the equity market recording sharp swings in volatility, as measured by India VIX[21] in the past one month (Chart IV.12). In April 2024, there was also a mega mobilisation of ₹18,000 crore through follow-on-public offer (FPO) by a telecom company.

Gross inward foreign direct investment (FDI) almost remained stable at US$ 71.0 billion during 2023-24 (US$ 71.4 billion a year ago) [Chart IV.13a].

Chart IV.13: Foreign Direct Investment Flows



Sources: RBI; and UNCTAD.

[21] India VIX is a volatility index based on the NIFTY Index option prices.

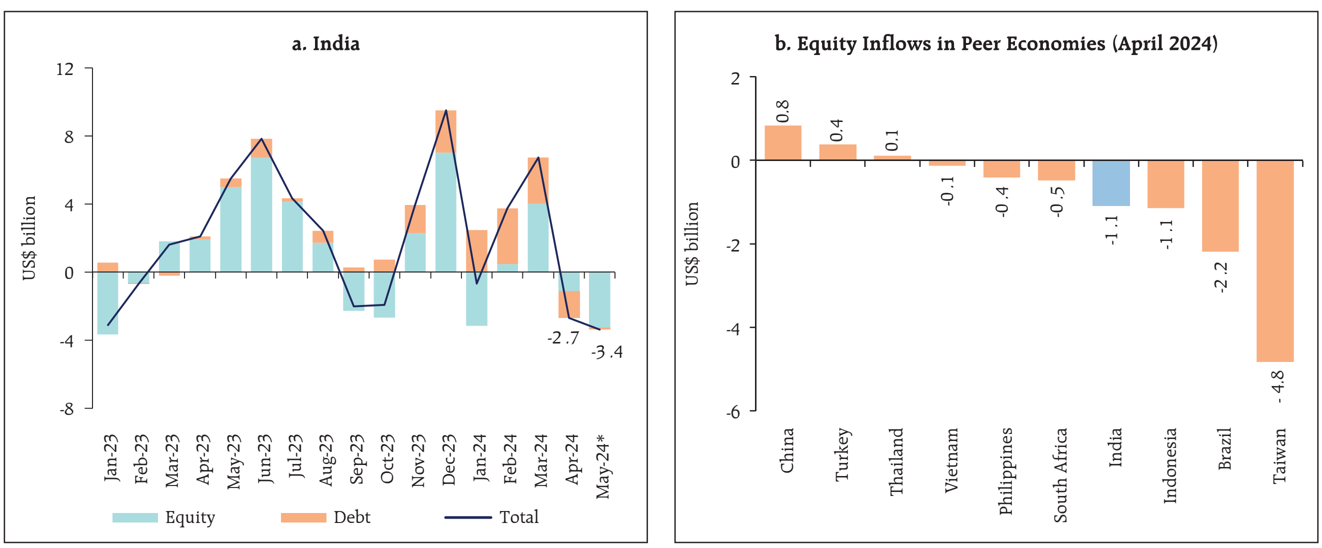
More than 60 per cent of the FDI equity flows were directed towards manufacturing, electricity and other energy, computer services, financial services and, retail and wholesale trade. Singapore, Mauritius, the US, the Netherlands, Japan and the UAE contributed to more than 80 per cent of the flows. Net FDI declined to US$ 10.6 billion during 2023-24 from US$ 28.0 billion a year ago, mainly reflecting higher repatriation.

Global FDI flows have been impacted by higher borrowing costs, deepening geo-fragmentation and rising protectionism in recent years. Nonetheless, India is among the top 10 economies expected to experience high FDI momentum in 2024, as per fDi Intelligence[22]. Since the onset of the COVID-19 pandemic, there has been a structural change in global investment patterns, shifting FDI flows from developed economies towards developing economies (Chart IV.13b). have also risen to play a significant part as sources for global capital. The share of global FDI capital expenditure originating from G20-EMs in 2023 rose to 14.9 per cent as compared with 8.2 per cent in 2003.[23] During 2023, Indian companies announced over 550 greenfield FDI projects abroad, the highest in any year before.

In April 2024, foreign portfolio investors (FPIs) turned net sellers in Indian capital markets after two months amidst uncertain global cues over widening geopolitical tensions, rising commodity prices and surging US bond yields. Net FPI outflows were to the tune of US$ 2.7 billion in April 2024, with outflows recorded in both equity and debt segments (Chart IV.14a). Indian equities registered net outflows of US$ 1.1 billion in April 2024, in line with comparable emerging market peers (Chart IV.14b). Sector-wise, information technology (IT) and financial services registered the highest outflows, while telecommunications and power attracted the largest equity inflows during April 2024. Net FPI outflows in May 2024 (up to 14th) amounted to US$ 3.4 billion.

Non-resident deposits registered higher accretions to the tune of US$ 14.7 billion during 2023-24 than US$ 9.0 billion a year ago, with

Chart IV.14: Net Portfolio Investments



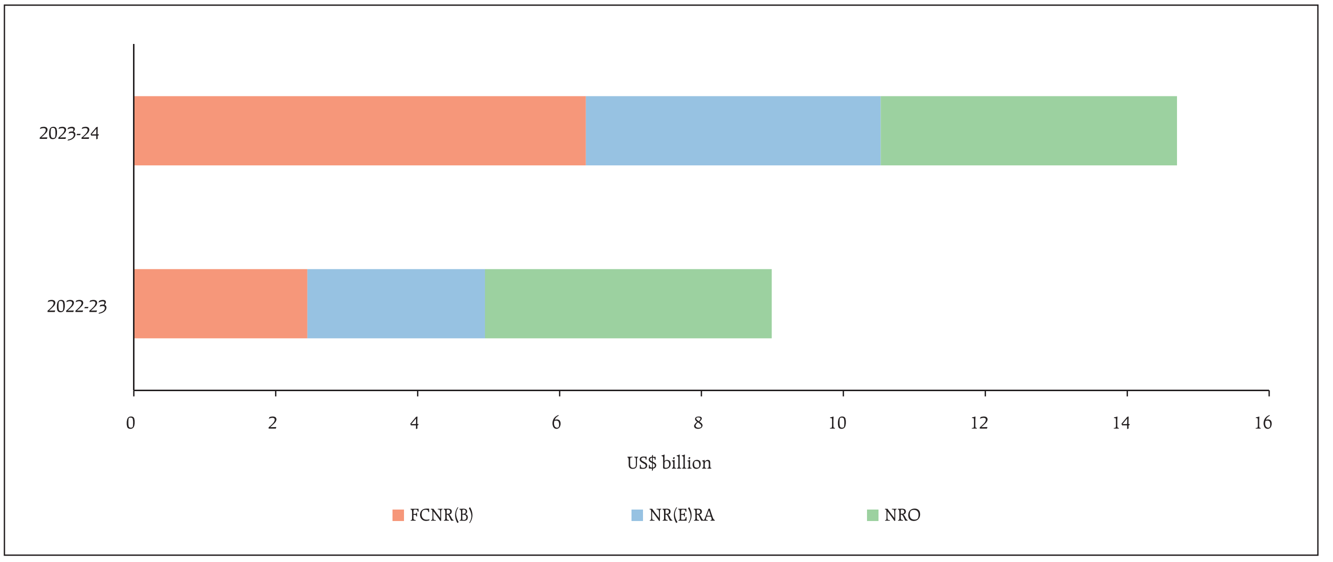
Notes: 1. Debt includes investments under the voluntary retention route and hybrid instruments.
2. *: Data up to May 14, 2024.

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

22 A specialist division from the Financial Times that provides a comprehensive offering of services related to foreign direct investment.

23 According to a report by fDi Intelligence.

Chart IV.15: Flows Under Non-Resident Deposit Accounts



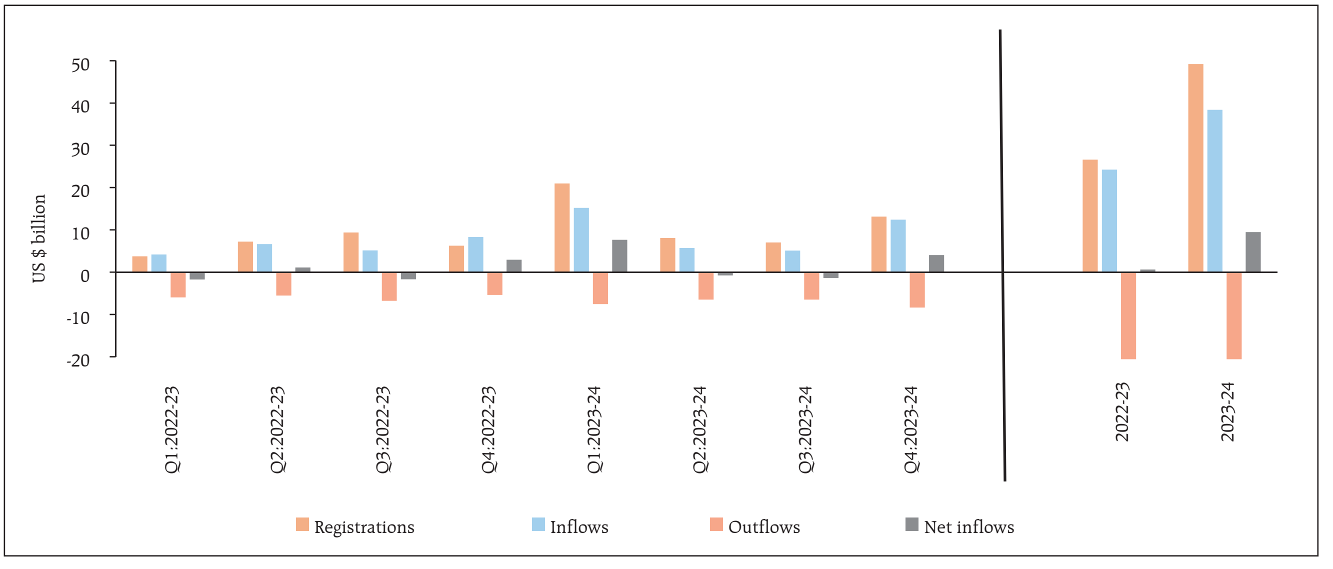
Source: RBI.

net accretions to all accounts namely, Foreign Currency Non-Resident [FCNR(B)] accounts, Non-Resident (External) Rupee Accounts [NR(E)RA] and Non-Resident Ordinary (NRO) accounts (Chart IV.15).

During Q4:2023-24, external commercial borrowings (ECBs) registrations amounted to US$ 13.1 billion, 87 per cent higher than the previous quarter. With ECB inflows outpacing outflows, net inflows resumed after two quarters. Cumulatively during 2023-24, registrations (at US$ 49.2 billion), disbursements (at US$ 38.4 billion) as well as net inflows (at US$ 9.5 billion) under ECBs were substantially higher than the levels recorded in 2022-23 (Chart IV.16).

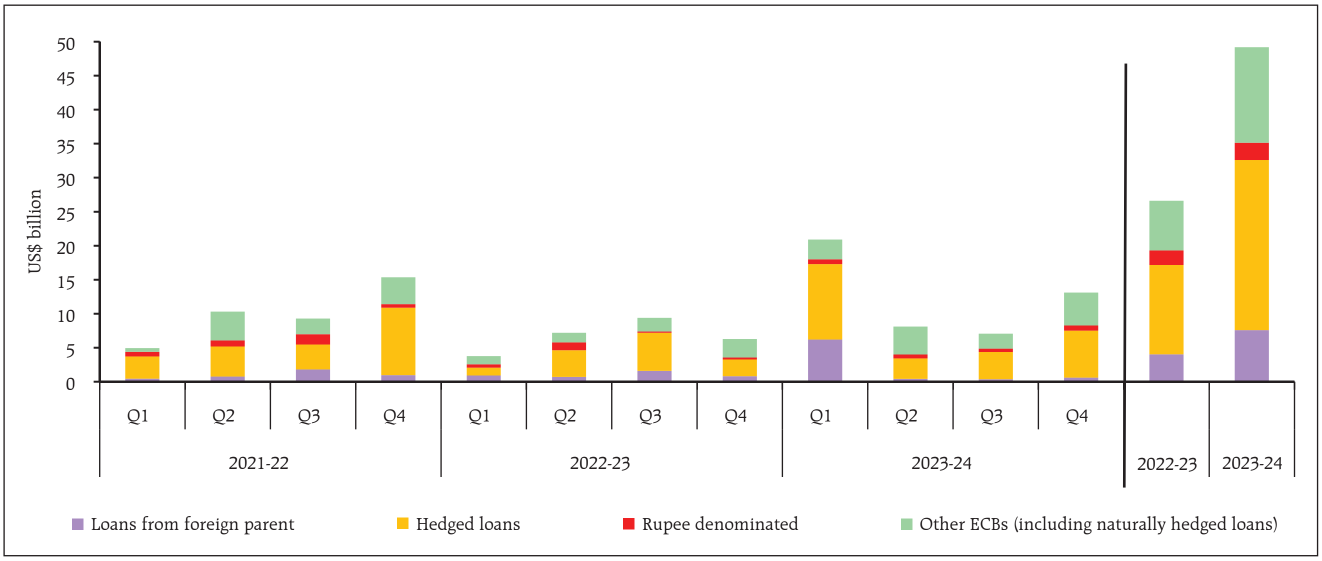
More than 70 per cent of ECBs raised during

Chart IV.16: ECBs - Registrations and Flows



Source: RBI.

Chart IV.17: ECB Agreements - Hedging Position



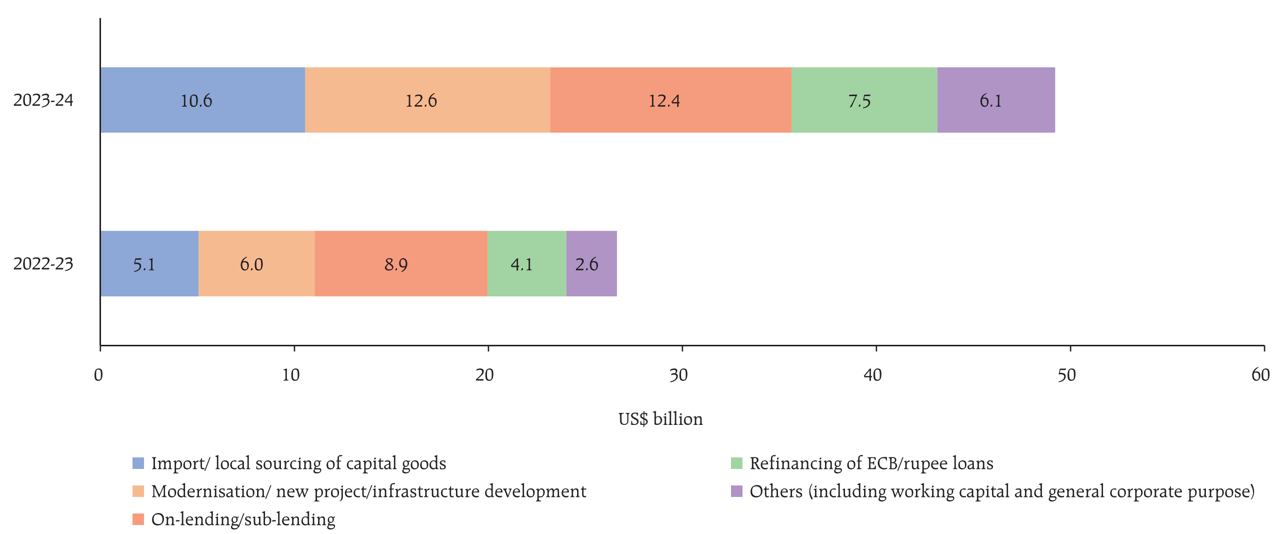
Source: RBI.

2023-24 were effectively hedged in terms of explicit hedging, rupee denominated loans or loans from foreign parents, limiting the impact of external shocks (Chart IV.17).

Even though the end use of ECBs was broad based during 2023-24, funds raised for sourcing of capital goods, modernisation projects and development of infrastructure witnessed the largest increases. This augurs well for the overall capacity augmentation in the economy and is reflective of private sector investment demand (Chart IV.18).

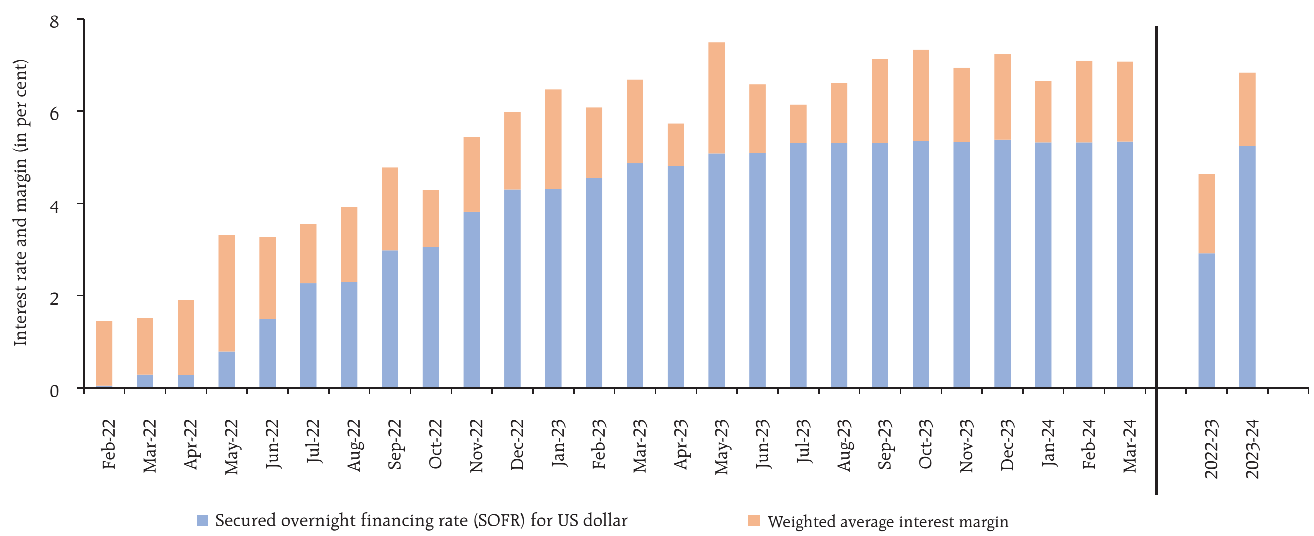
The overall cost of ECB loans increased during 2023-24, primarily due to elevated global benchmark interest rates (such as the secured overnight financing rate (SOFR)), reflecting higher global interest rates. The other component of the overall

Chart IV.18: End-use of the Registered ECBs



Source: Form ECB, RBI.

Chart IV.19: Overall Cost of ECBs



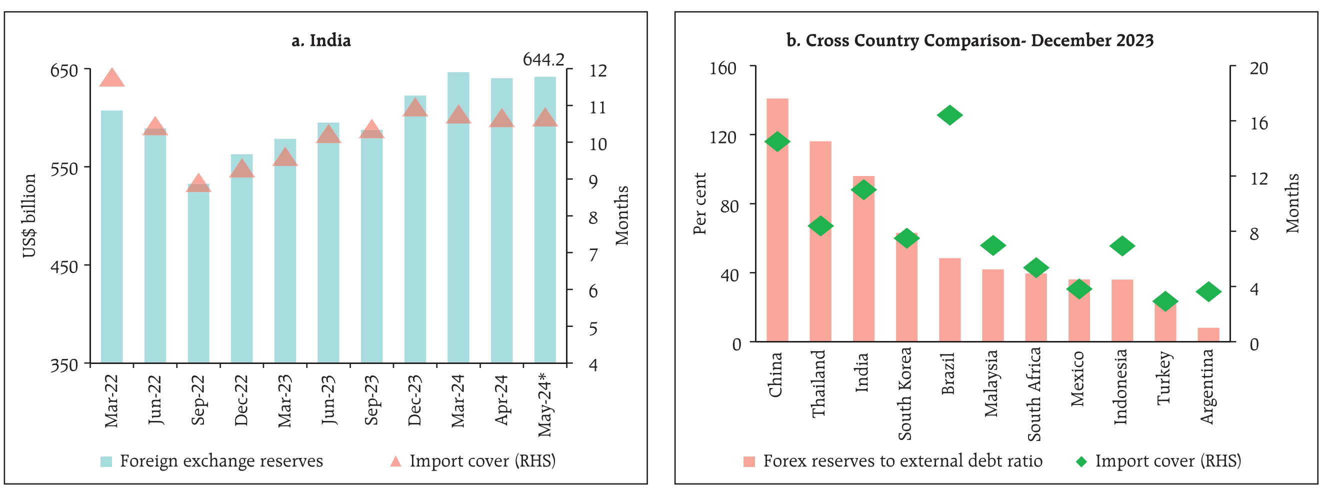
Sources: Form ECB; and RBI staff estimates.

cost – the weighted average margin reflecting the risk premium – moderated to 159 bps during April – March 2024 from 172 bps a year ago and an average of 181 bps during 2021-22 (Chart IV.19).

India's foreign exchange reserves increased by US$ 21.7 billion during the calendar year 2024 so far (as on May 10, 2024), the highest expansion among major foreign exchange reserves holding countries. Foreign exchange reserves at US$ 644.2 billion stood equivalent of more than 10 months of imports projected for 2024-25 and more than 99 per cent of total external debt outstanding at end-December 2023 (Chart IV.20).

The Indian rupee (INR) depreciated by 0.5 per

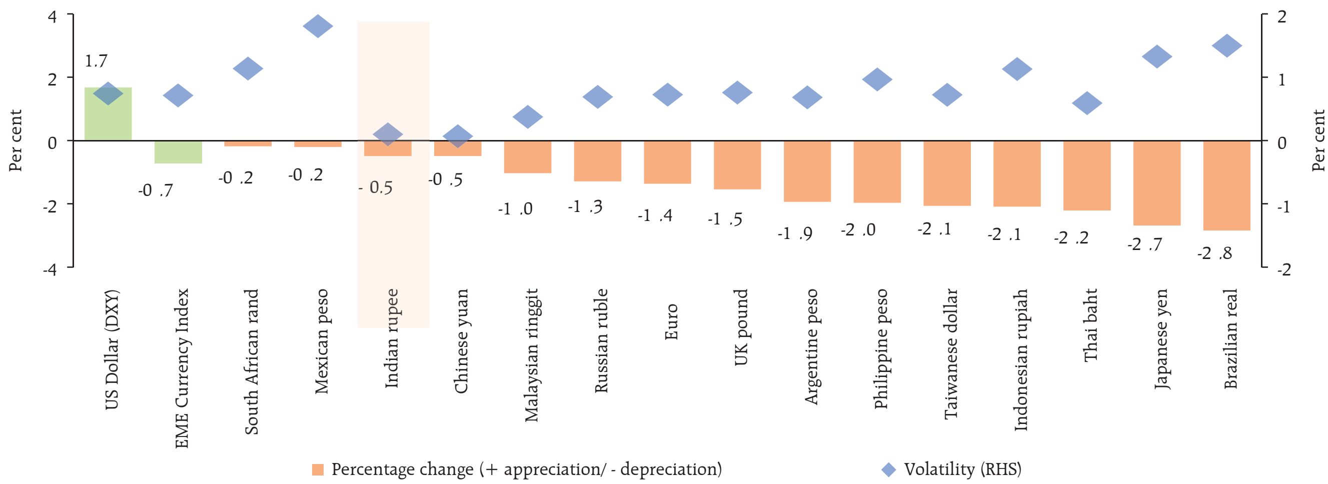
Chart IV.20: Foreign Exchange Reserves



Notes: 1. *: Data for May 10, 2024.
2. Import cover of India for March, April, and May 2024 is based on imports projected for 2024-25.
3. Data for forex reserves to external debt ratio for Turkey corresponds to end-September 2023, while all other figures are for end-December 2023.

Sources: RBI; IMF; CEIC; and respective central bank websites.

Chart IV.21: Movements of the Indian Rupee and Major Currencies against the US Dollar (April 2024 over March 2024)

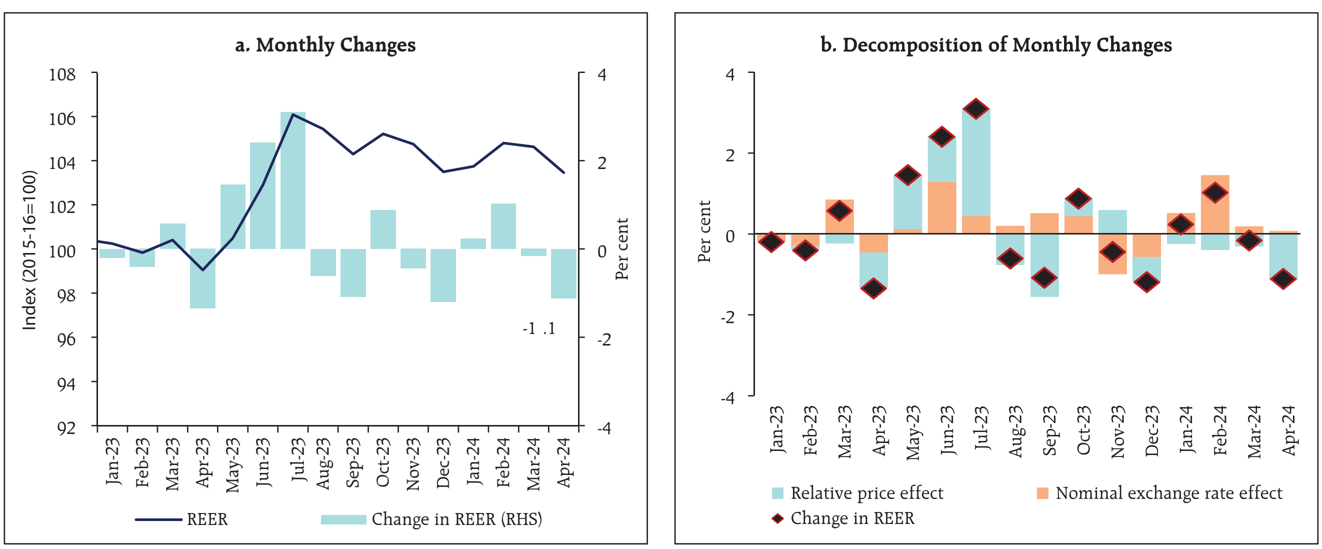


Note: US dollar (DXY) measures the movements of the US dollar against a basket of major currencies (Euro, Japanese yen, British pound, Canadian dollar, Swedish krona, Swiss franc).
Sources: FBIL; Thomson Reuters; and RBI staff estimates.

cent (m-o-m) *vis-à-vis* the US dollar in April 2024 as most EMEs registered pressures from strengthening of the US dollar amidst heightened geopolitical tensions and waning rate cut expectations. The INR remained one of the least volatile among major currencies during the month (Chart IV.21).

In terms of the 40-currency real effective exchange rate (REER), the INR depreciated by 1.1 per cent (m-o-m) in April 2024 as negative relative price differentials more than offset the appreciation of the INR in nominal effective terms (Chart IV.22).

Chart IV.22: Movements in the 40-Currency REER



Source: RBI.

Payment Systems

Digital transactions continued to expand (y-o-y) in April 2024, primarily led by the retail segment, including the Unified Payments Interface (UPI), the National Automated Clearing House (NACH) and the Bharat Bill Payment System (BBPS) [Table IV.4]. Real Time Gross Settlement (RTGS) transactions showed accelerated growth (y-o-y) while the pace of growth of Immediate Payment Service (IMPS) and National Electronic Toll Collection (NETC) moderated in April 2024 in both volume and value terms. The growth in UPI transactions remained robust, reflecting increasing digital adoption across the country on the back of growing range of account types that UPI supports — including prepaid payment instruments (PPIs), wallets, savings accounts, overdraft accounts, RuPay credit card accounts and bank credit lines. To expand the adoption and usage of UPI, the Reserve Bank held a meeting[24] with various stakeholders on May 8, 2024 covering issues pertaining to UPI infrastructure upscaling, challenges faced by the UPI ecosystem along with possible solutions and measures to incorporate potential users into the digital payments ecosystem.

The BBPS documented the highest value and volume of transactions during April 2024, partly buoyed by the participation of non-bank payment aggregators (PAs) in the system as operating units from April 1, 2024. Furthermore, the NPCI Bharat BillPay Limited (NBBL), a wholly owned subsidiary of the NPCI in collaboration with the State Bank of India (SBI), onboarded the SBI National Common Mobility Card[25] (NCMC) on its Bharat BillPay platform for the convenience of travellers.

NPCI's wholly owned subsidiary – NPCI International Payments Ltd. (NIPL) – signed an agreement[26] with the Bank of Namibia (BoN) to support them in developing an instant payment system like UPI. This initiative aims to strengthen Namibia's financial infrastructure and foster inclusive economic growth. Additionally, India and Ghana have committed to working swiftly to operationalise UPI on Ghana's Interbank Payment and Settlement Systems (GHIPSS) in less than six months.[27] In its resolve towards customer centricity and ensuring transparency in the credit intermediation process, the Reserve Bank issued a draft circular on the regulatory framework for aggregation of loan products by lending service

Table IV.4: Growth in Select Payment Systems

(y-o-y in per cent)

Payment System Indicators	Transaction Volume				Transaction Value			
	Mar-23	Mar-24	Apr-23	**Apr-24**	Mar-23	Mar-24	Apr-23	**Apr-24**
RTGS	7.8	12.3	3.2	**16.9**	11.5	12.4	7.0	**21.5**
NEFT	26.8	45.2	29.1	**45.9**	7.4	15.2	10.5	**13.4**
UPI	60.0	55.3	58.7	**50.1**	46.3	40.8	43.9	**38.8**
IMPS	1.0	16.8	5.1	**11.0**	18.2	16.2	17.2	**13.7**
NACH	29.8	22.8	-3.7	**50.5**	35.1	15.8	18.4	**23.7**
NETC	13.3	10.6	14.9	**7.6**	23.7	17.2	22.1	**8.6**
BBPS	56.5	25.4	33.5	**45.1**	61.6	82.8	51.2	**107.5**

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

24 RBI Press Release. May 8, 2024
25 NPCI Circular. April 18, 2024.
26 NPCI Circular. May 2, 2024.
27 PIB Press Release. May 6, 2024.

providers (LSPs) – 'Digital Lending: Transparency in Aggregation of Loan Products from Multiple Lenders'[28] – inviting comments and feedback from various stakeholders. Additionally, a set of guidelines in the form of frequently asked questions (FAQs)[29] on Default Loss Guarantee in Digital Lending were issued by the Reserve Bank.

Conclusion

In this milieu, recent developments in the global economy sharpen the dilemma for monetary policy authorities. In the face of lack of progress in bringing down inflation to its target, high interest rates "may need more time to do their job".[30] Confidence is low on an inertial easing of the momentum of inflation, given that it has stalled in spite of past aggressive tightening. Moreover, structural changes in the form of rising immigration to advanced economies, the muscular use of industrial policy, fiscal laxity and rewiring of supply chains as globalisation fragments are whole new dimensions to the conduct of monetary policy. Increasingly, national security and resilience are prioritised ahead of efficiency and cost effectiveness. The IMF has reported no less than 2500 industrial policy actions worldwide in 2023, of which more than two-thirds were trade distorting as they discriminated against foreign commercial interests.[31] Clearly, the monetary policy dilemma calls for strategic signalling rather than a cacophony of communication.

Yet, sustaining a restrictive stance might be rendered difficult by economic activity and consumer sentiment slowing, with fewer jobs being added than a month or two ago – price pressures have acutely affected "the fundamentals of life"[32]. Hence, rate increases to squelch the uptick in inflation are regarded as unlikely. Although hopes that the economy is on a glidepath to a soft landing are now more tempered than before, monetary policy authorities are reluctant to give up on a Goldilocks scenario that avoids a crash landing. Fearing the folly of haste, they will likely want to stay patient and high for longer than current forecasts. Markets draw hope from expectations of an eventual slowing in housing, insurance and medical costs causing a faster core disinflation. Inflation developments will likely not derail the rate cutting cycle, only delay it. Policy divergence may once again rent both sides of the Atlantic apart.

As the start of monetary policy easing moves out into the horizon, emerging market central banks face the pressure of weakening currencies, pass-through to prices of imported goods and services and higher inflation. Accordingly, surprise rate increases, coordinated communication and foreign exchange market interventions are being resorted to when monetary policy tightness is increasingly viewed as hobbling the pace of economic recovery. Higher borrowing costs are curbing domestic demand and posing a threat in countries with high levels of household debt. Sharp drops in the yen, yuan and won have complicated the outlook even further, prompting both verbal and forex sale defences including to protect the acceleration of exports in the past three months. Increasingly, market expectations converge to the view that these central banks will not cut rates ahead of the US Fed in spite of high real interest rates. They state that they will not be 'Fed-dependent', but they will face practical limits on how far they can diverge from the Fed. Consequently, the rate easing cycle may turn out to be shallower than initially anticipated. Meanwhile, the heightened global uncertainty is sending emerging market central banks on a spree of gold buying, adding 290 tonnes in the first quarter of 2024 and accounting for a quarter of overall global gold demand. Amidst geopolitical developments and a slowing global economy, these central banks are signalling that living in challenging times calls for strategic diversification.

[28] RBI Press Release. April 26, 2024.

[29] RBI FAQs. April 26, 2024.

[30] https://www.ft.com/content/d1221cb9-9e5a-4512-9fef-4cc744a307fc

[31] https://www.imf.org/en/Blogs/Articles/2024/04/12/industrial-policy-is-back-but-the-bar-to-get-it-right-is-high

[32] Financial Times (2024, May 2). Jay Powell's dilemma: the US economy is too strong to cut rates.

Decentralised Finance: Implications for Financial System

*by Srijashree Sardar, Dipak R. Chaudhari and Sangeeta Das^*

Decentralised finance (DeFi) seeks to disintermediate the traditional financial system. However, developments such as the FTX crypto exchange collapse, decline in Binance and episodes of instability in stablecoins have created trust deficit in the entire crypto system. Against this backdrop, the article assesses DeFi and its interlinkages with the traditional financial system. Our empirical analysis indicates that DeFi returns, and its volatility are mainly driven by speculative motive.

Introduction

The current monetary system has evolved through years of experience wherein the monetary and sovereign authorities are responsible for the management of currency issuance, overseeing and development of the payment systems and instilling trust in its citizens. However, post GFC and particularly in the aftermath of the COVID pandemic, a new class – cryptocurrency – emerged which posed challenges to the traditional monetary system. Although the crypto promoters drive on the decentralised 'notion', the concentration of power has been seen with the "whales" – persons or entities that hold a large amount of cryptocurrency, enough so that their transactions alone can affect the currency's market. Cryptocurrency value is prone to huge gyrations. *Luna*, a stablecoin whose value is supposed to be pegged to the US$ fell to near zero in just few days during May 2022. Bitcoin, the major cryptocurrency, saw its value plummeting from US$ 67,550 on November 9, 2021 to US$ 19,010 on June 19, 2022 within a span of six months and crypto lender Voyager, which had more than one lakh creditors and asset value in the range of US$ 1 billion to US$ 10 billion filed for bankruptcy. The FTX crypto exchange collapse on November 11, 2022 and rapid decline in Binance, the world's largest crypto exchange in the first quarter of 2023 spooked the entire cryptocurrency ecosystem. These developments pose regulatory challenges to authorities and policymakers due to their vulnerability and linkages with the traditional financial system.

The recent fast paced increase in technology driven finance companies has led to a manifold expansion of the virtual mode in the financial system. According to the latest Bank for International Settlements Survey (CPMI, 2023) , digital payments logged record growth in 2021, and emerging economies are ahead of advanced economies in the digital payment adoption. Traditional finance met the first challenger in the form of Bitcoin in 2008, which effectively was the first usage of the blockchain technology for cryptocurrency. Thereafter, the cryptocurrency network has increased to over 10,000 cryptocurrencies globally with market capitalisation value of US$2.5 trillion, excluding stablecoins in November 2021 (Azar *et al.*, 2022). The crypto market size was US$ 1.2 trillion on April 30, 2023 (Coinmarketcap, 2023). Apart from cryptocurrencies such as Bitcoin, Ethereum, Litecoin and Ripple, stablecoins and non-fungible tokens (NFT) are part of the blockchain ecosystem. Various claims are made on the valuation of the crypto market. According to the Financial Stability Board (2022), the crypto assets markets comprise 1 per cent of the total global financial assets. Although the number is not very large, considering its rapid expansion, it could impact traditional finance going forward. In that, the recent resurgence of decentralised finance (DeFi) provides a major challenge to the regulators worldwide.

Defi refers to crypto assets where all financial transactions are performed on a computer network without any central intermediary. DeFi ecosystem

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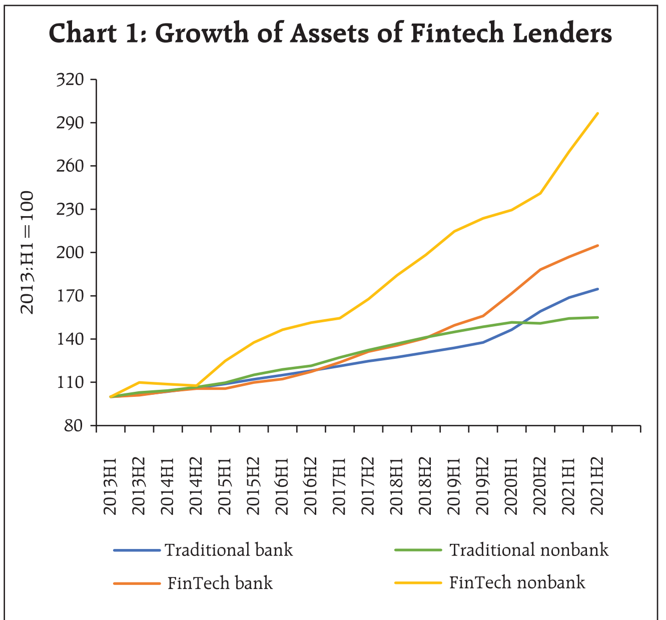
consists of protocols, applications, smart contracts and total value locked (TVL). Ethereum is one of the main blockchain networks on which DeFi protocols and applications (dApps) are built. The other major DeFi blockchains are Binance smart chain (BSC), Solana, Polkadot, Avalanche, Ripple and Cronos. Although it is claimed that DeFi can complement the traditional financial activities in the form of faster fund transfers and innovation, the associated risks far outweigh the purported benefits. Most of the instruments are speculative in nature and offer arbitrage across multiple crypto assets. Higher exposure to the liquidity and market risk may lead to investor runs (BIS, 2020). Furthermore, recent episodes of crypto exchange malpractices and the declining trust in stablecoins could impact investors' confidence and adversely impact the exposed entities in the financial system. Research in this area is limited due to several reasons – to begin with the difficulty in estimating and understanding the crypto asset price, its underlying and relationship with other asset classes. In addition, an assessment of cryptocurrencies' exposure and interlinkages with the traditional finances in terms of quantity is mostly survey based, wherein methods, sample size and selection differ. Lastly, the regulatory and accounting framework on the crypto assets is still in the nascent stage, resulting in a credibility issue on the existing private datasets. On January 11, 2024, US securities regulator allowed bitcoin exchange traded funds with cautionary advice to investors to be careful with the risks it poses.

Against this background, this article explores the crypto ecosystem, its main features *vis-à-vis* traditional finances, particularly the DeFi, and its interlinkages with the financial systems. The rest of the article is divided into five sections. Section 2 provides stylised facts related to the crypto ecosystem; Section 3 analyses its linkages with the traditional financial system. Section 4 discusses the data and methodology for empirical analysis while Section 5 lays out the results with concluding remarks in Section 6.

II. Stylised Facts

There is a frenetic race for innovation in fintech and start-up space. As a result, we are exposed to completely new and ever evolving innovative instruments. As per the IMF's Global Financial Stability Report (GFSR) April 2022, technology driven segment has been growing much faster than traditional way of businesses (Chart 1).

In the volatile crypto environment, stablecoins which are pegged to a numeraire like fiat currency or gold have also been marked by volatility and collapses. Stablecoins aim to maintain a fixed face value against fiat currencies, mainly the US dollar. They are supposed to provide a tool to the investors and traders to retain the value of the digital assets without leaving the crypto ecosystem. However, all stablecoins are not backed by fiat currency or any commodity such as a gold; they are constructed through complex algorithm based smart contracts such as Terra US$. The algorithmically backed stablecoins are designed to maintain price stability by adjusting the supply of tokens to match demand, thereby affecting the quantity of tokens held by any given user while maintaining its value/market share.



Source: GFSR, April 2022.

Though majority of DeFi protocols and dApps are built on Ethereum blockchain, the DeFi market capitalisation consists of multiple protocols and independent cryptos such as Uniswap, Aave *etc.* To understand the size of the market, the TVL, which refers to the total value of cryptos that are locked/staked, is calculated by adding up the total value of digital assets locked on a specific DeFi platform or dApp. These assets can include cryptocurrencies, stablecoins, or other tokens that are being used as collateral for loans or provide the platform with liquidity. TVL and top-ten contributing protocols are given in Table 1.

Volume and price dynamics of Ethereum (ETH), the prominent representative of the DeFi, on which the majority of DeFi protocols and applications are built on, is shown in Chart 2. Technical analysts and traders expect that price changes are positively correlated with volume. But in the case of cryptocurrency, due to its inherent volatility and unpredictability, this trend does not hold.

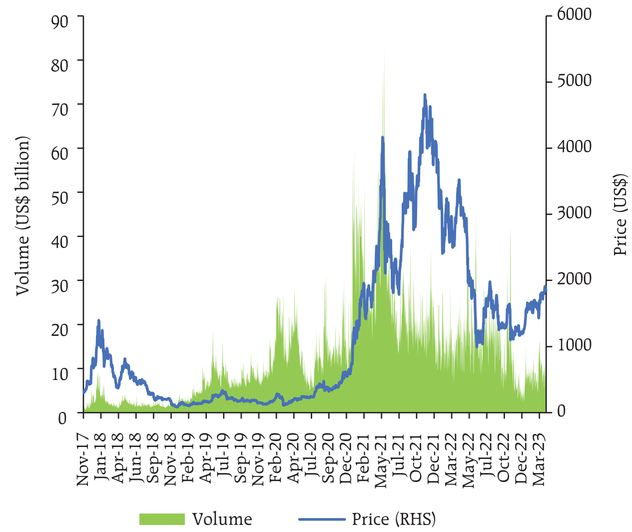
In the overall cryptocurrency market, Bitcoin had dominant share of 87 per cent in Q4:2016. However, during the pandemic many cryptocurrencies emerged and the share of Bitcoin declined to 38 per cent in Q3:2022 (Statista, 2024). Ether from Ethereum platform gained a huge chunk of market share at the expense of Bitcoin. Another important metric to watch out is the underlying of the cryptos as in most cases, it is another cryptocurrency or algorithm (Table 2).

Table 1: Total Value Locked as on May 7, 2024

Rank	Protocol	US$ billion
1	EigenLayer	15.34
2	AAVE V3	8.65
3	JustLend	6.26
4	MakerDAO	5.67
5	Uniswap V3	3.28
6	Zircuit Staking	3.27
7	Spark	2.39
8	Uniswap V2	2.25
9	Curve DEX	1.91
10	AAVE V2	1.85
	Others	42.56
	Total	**93.43**

Source: Defillama.

Chart 2: Ethereum Price and Volume



Source: Bloomberg.

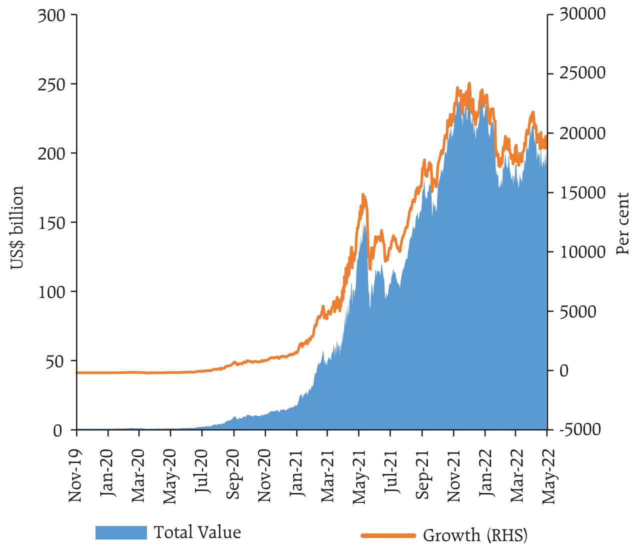
Recent growth of DeFi can be attributed to several factors, including the rise of dApps and the availability of decentralized exchanges (DEXs). In DeFi protocols, lending experienced rapid growth, going from zero to more than $50 billion in TVL in less than two years (Cornelli *et al.*,2024). Although, the DeFi market continues to evolve, it declined from its peak during Covid period in 2021 (Chart 3).

Table 2: Underlying of Cryptocurrencies

Underlying	Crypto
Pegged to fiat currency	Stablecoins such as Tether, Binance USD and USD Coin
Pegged to metal	Pax Gold and Kinesis Gold pegged to gold
Algorithm based stablecoins pegged to dollar (keep its value by adjusting supply of another underlying digital asset)	Terra USD
Cryptocurrency linked to another cryptocurrency	Luna (linked to Terra)

Source: Authors' compilation.

Chart 3: DeFi Market



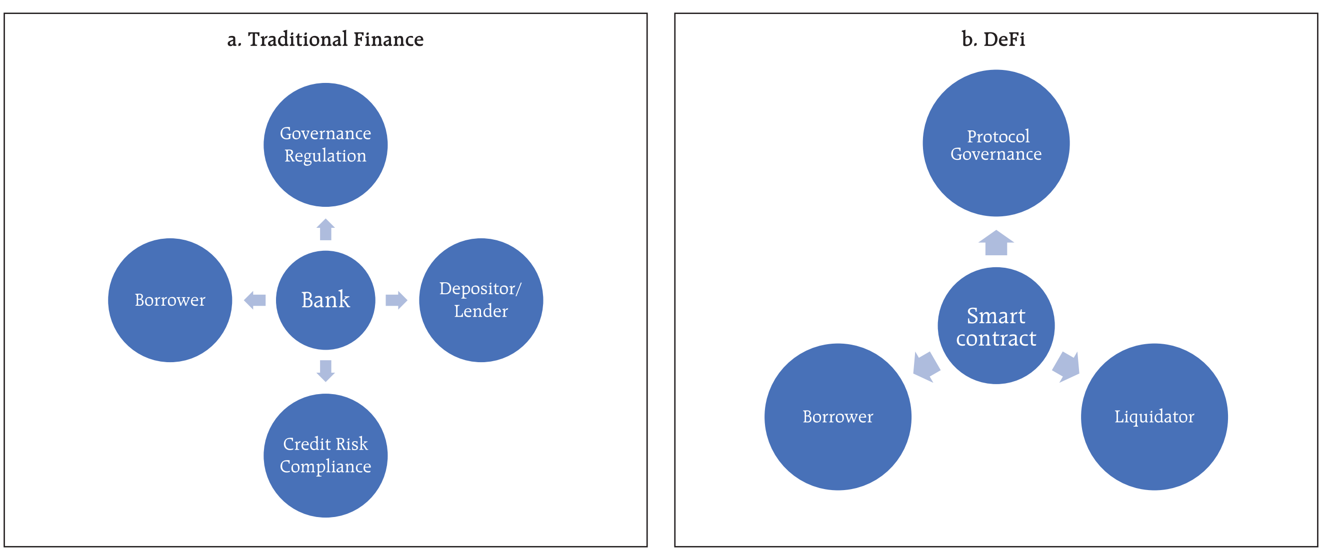
Source: Defillama.

DeFi differs from the traditional finances in that it removes all the layers of intermediaries, thereby doing away with the high costs associated with the legacy system and these benefits are transferred to the end-user (Harvey *et al.*, 2021). DeFi provides financial services without centralised intermediaries, by operating through automated protocols on blockchains. The DeFi ecosystem revolves around two elements: (i) novel protocols for trading, lending, and investing; and (ii) stablecoins, which are crypto assets that facilitate fund transfers and aim to maintain a fixed face value *vis-à-vis* fiat currencies, mainly the US dollar.

The key difference between DeFi and other distributed ledger technology (DLT) based centralised cryptos (CeFi) lies in whether the financial service is automated *via* smart contracts on a blockchain or is provided by centralised intermediaries. While DeFi records all the contractual and transaction details on the blockchain (*i.e.*, on-chain), CeFi (Centralised Finance) relies on the private records of intermediaries, such as centralised exchanges and other platforms (*i.e.*, off-chain). DeFi aims to provide financial services without using centralised entities. It also provides users with much greater anonymity than transactions in CeFi or traditional finance (Aramonte *et al.*, 2021). Chart 4 represents the flowchart of work algorithm for Traditional Finance and DeFi while Table 3 provides synoptic view on differences between the DeFi and traditional finances.

The DeFi space remains heavily reliant on the Ethereum blockchain (which has struggled to scale

Chart 4: Traditional Finance and DeFi



Source: Authors' calculation.

Table 3: Financial System - Crypto based *versus* Traditional

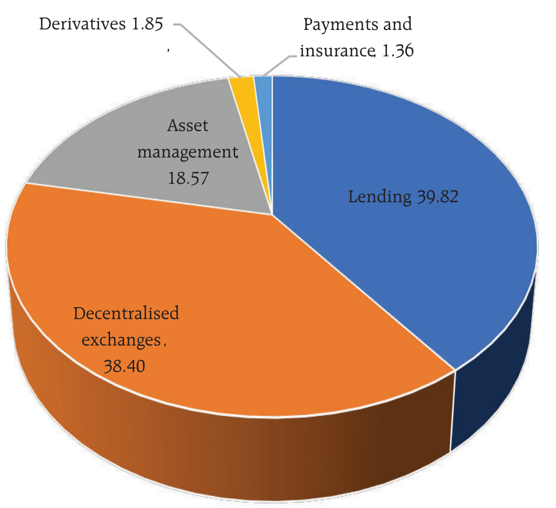
	Crypto based Financial System		Traditional Financial Services
	Decentralised Finance (DeFi)	Centralised Finance (CeFi)	
Access	World Wide Web; permissionless and anonymised	Crypto centralised exchanges (Binance, Coinbase)	Branch office; compulsory KYC and anti-money laundering
Operation	Automated by smart contract	As per rules and regulations imposed by regulatory bodies	Mostly manual
Instruments	Crypto assets, including stablecoins		Fiat-currency
Record-keeping	Distributed ledger (verified by multiple network participants) (*i.e.*, on-chain)	With centralised exchanges; No public verifiability (less transparent) (*i.e.*, off-chain)	Centralised ledger (verified by a single trustworthy entity that operates the platform)
Decision-making	Voting by users who own governing stakes; more transparent as the codes can be shared and verified by public.	Done by centralised intermediaries	Governed by Top Management (such as the Bank executive board)
Risk-taking	Distributed to users	Implicit on central counterparty	Concentrated in a single trustworthy entity (Bank)

Source: GFSR, April 2022; and BIS Quarterly Review, December 2021.

up to onboard mass users). However, once Ethereum transitions to ETH 2.0 using the 'Proof of Stake'[1] consensus mechanism, the number of users it can onboard be potentially without limitation. Moreover, other contenders are further building out the space, such as Compound, and Maker DAO, propelling DeFi to more and more users. DeFi is built on blockchain technology, and all transactions are run by smart contracts, which are basically programs, or pieces of code, stored on the blockchain and are only enacted when certain preconditions are met. The DeFi market is dominated by decentralised exchanges and lending applications (Chart 5).

DeFi claims to offer higher efficiency and investment opportunities as it has the potential to exhibit cost-efficient financial intermediation. However, comparing costs and prices between DeFi and traditional financial institutions is complex, as the two operate in different ecosystems. DeFi poses market, liquidity, and cyber risks against a backdrop of legal uncertainties. A fall in any of the crypto assets such as stablecoin or cryptocurrency has ripple effects on the other assets such as NFTs, Metaverse tokens *etc.* Therefore, regulatory authorities are taking various steps to restrain crypto investment such as ban in China. On March 10, 2022, US Department of Labour released a press note cautioning pension funds to avoid investing in crypto related assets and planned an investigation in the existing investment done in the cryptos. In India, cryptos are subject to tax liability of 1 per cent tax deducted at source (TDS) and 30 per cent capital gains tax along with applicability of anti-money laundering law and advertising standards.

Chart 5: DeFi Market



Source: Defillama; as on May 4, 2022.

[1] Proof of stake is a crypto locking process to get the reward; the bigger the size of their stake, the higher are the chances to be selected as the validator to forge the next block (Arslanian, 2022).

III. Crypto Linkages and Risk to Traditional Financial System

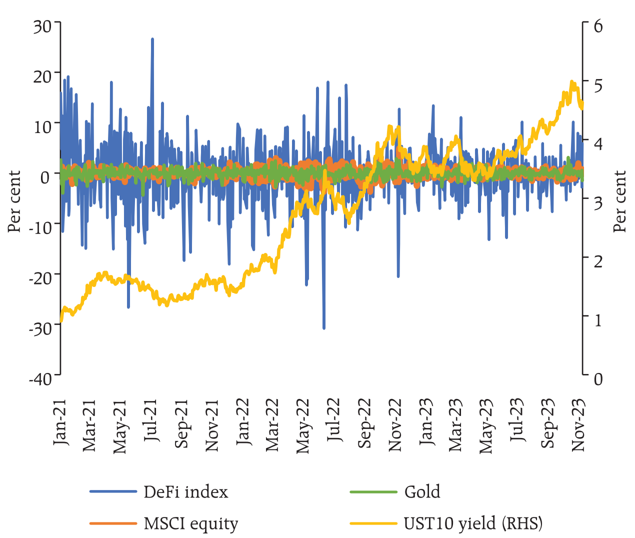
Crypto linkages with the existing financial system are in the form of banking and financial sector exposure, and liquidity exposure. The biggest risk of the cryptos to traditional finance is price volatility. If we compare the returns on the various asset classes, the returns on the DeFi are the most volatile (Chart 6). Furthermore, there is a close correlation between Ethereum market capitalisation and market volatility (Chart 7). The market cap has exponentially increased post Covid period and moved in line with the volatility in the market, which indicates that the speculative motive could be the basis for the ETH expansion.

Traditional financial system could be exposed to the crypto assets through multiple channels. To begin with, the deposit channel: banks hold deposits from the companies offering various crypto assets such as stablecoins and NFT. As per the Basel III Monitoring Report (September 2022), based on a survey finding, banks' exposure to crypto assets was 0.14 per cent of the claims on the reporting banks which include deposits liabilities and assets including off balance sheet items. The exposure is in the form of crypto holding and lending to investors, corporations or financial institutions including crypto exchanges, *etc.* In addition, banks are involved in clearing crypto asset derivatives and futures, undertaking initial coin offerings, and issuing securities with crypto assets. Furthermore, banks are involved in insurance and other services such as custody and wallets.

Due to the borderless feature of crypto assets, spillover by liquidity linkages across countries is considered as a major threat from the crypto ecosystem. Sudden valuation losses experienced in the various crypto assets also pose a major challenge for policymakers. In this scenario, small banks could be more susceptible.

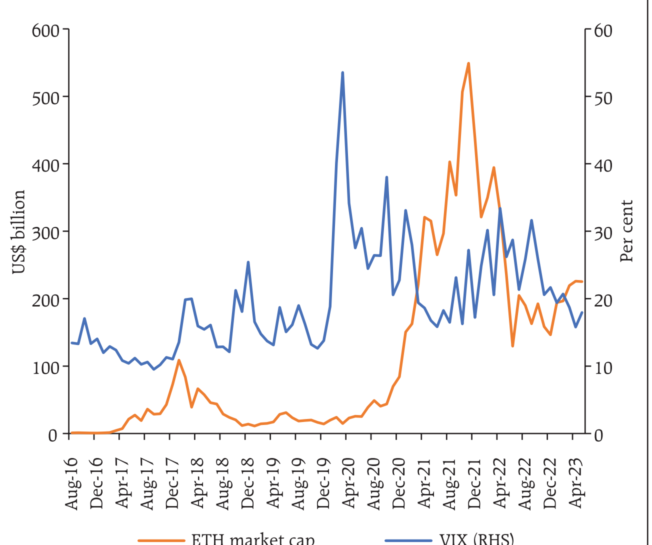
According to Bank for International Settlements (BIS, 2022) the smart contract employed by DeFi uses liquidity pools to transfer digital assets without any human intervention, as opposed to the traditional financial system where the orders are placed by matching buyers and sellers and seek consent for each transaction. In this manner, the DeFi environment poses a potential challenge to the existing financial structure. Central banks need to understand their impact on existing payments, transactions, and inter-

Chart 6: Volatility in Return on Assets



Source: Authors' calculation.

Chart 7: Volatility and ETH Market Cap



Source: fred.stlouisfed.org; and statista.com.

Table 4: Linkages between Crypto and Traditional Financial Systems

Cryptoasset Markets	Interlinkages	Traditional Financial System
Underlying Assets		***Underlying Assets***
Backed and mostly unbacked crypto assets Stablecoins backed by assets	Investors may have been exposed to both sets of assets leading to contagion.	Predominantly real economy assets
Activities		***Activities***
Trading Lending	Investors can borrow in one system and invest proceeds in other.	Trading Lending
Asset Management Payments Insurance	Activity could migrate from traditional system to cryptoassets markets and *vice versa.*	Asset Management Payments Insurance
Key Services Provider		***Key Services Provider***
Decentralised Finance Unregulated centralised exchanges Cryptoasset operators Wallet providers	Traditional providers may move into cryptoassets markets and *vice versa.*	Banks Insurers Financial Market Infrastructure Asset managers and investment firms

Source: CoinMarketCap; Financial Stability Board; and authors' compilation.

linkages with other financial institutions and for the overall financial stability. The linkages between crypto and traditional financial systems are shown in Table 4.

The borderless crypto ecosystem has the potential to spread to any country in the world with minimum IT infrastructure requirement. The volatility in terms of coefficient of variation in DeFi return is higher at 5.7 than 1.9 in the VIX returns, which suggests the motive of investing in DeFi as a speculative investment (a "gamble") rather than a means of payment for real economic transactions (Auer *et. al.*, 2022). The episodes of price volatility in the cryptos have so far been contained in a limited manner. But considering that most of the crypto related activity is mainly carried out of existing regulatory purview, it is difficult to gauge its impact. Furthermore, many crypto trading platforms such as Coinbase are listed on the stock exchanges and hedge funds are also actively involved in allocating more funds to crypto related assets (FSB, 2022).

Most of the financial institutions have direct exposure to the crypto system, although the overall exposure to the total asset under management is estimated to be low (Table 5). According to Blockdata, 55 per cent of the biggest global institutions by assets are directly exposed to crypto assets or blockchain and some of these are systemically important global

Table 5: Exposure to Crypto and Blockchain by Major Financial Institutions

Sr. No.	Financial Institution	Asset under Management	Funding exposure to Crypto and Blockchain	No of Investments
		(US$ billion)	(US$ million)	
1.	Standard Chartered	879	380	6
2.	BNY Mellon	470	321	5
3.	Citi bank	2260	279	14
4.	UBS	1126	266	5
5.	BNP Paribas	3081	236	9
6.	Morgan Stanley	1116	234	3
7.	JP Morgan Chase & Co.	3386	206	8
8.	Goldman Sachs	1163	204	8
9.	Barclays	1842	196	22
10.	MUFG, Japan	3408	185	6
11.	ING	1147	170	6
12.	BBVA, Spain	796	167	5
13.	Nomura	432	146	5

Note: Data is as of August 2021.
Source: Blockdata (https://www.blockdata.tech/blog/general/banks-investing-blockchain-companies).

banks. The financial risk may increase if the exposure continues to grow. Accordingly, policies targeting fintech and traditional financial firms proportionally are the need of the hour (GFSR, April 2022).

IV. Data and Methodology

DeFi claims to substitute the traditional financial system in a decentralised, open, unregulated and autonomous way, through applications mainly based on the Ethereum blockchain network. In this context, this study primarily focuses on the volatility factors of DeFi returns along with traditional asset classes returns. The Financial Stability Board (FSB) notes that the application of DeFi technology may reduce the financial instability risks associated with traditional financial institutions (FSB, 2022). Furthermore, Carter and Jeng (2021) explore whether DeFi's promise of interoperability could help promote innovation and build a vibrant financial ecosystem.

Since the nexus of financial crises, volatility factor and the resulting systemic risk has been the continuous concern in the past, this study explores if and how strongly these features are prevalent in the rapidly expanding DeFi universe. The objective of this paper is to analyse the volatility of returns in DeFi market and its relationship with different segments of the traditional financial market. Investment activities in the crypto market are strongly positively correlated with the bitcoin returns (Aiello *et. al.*, 2023). Therefore, the choice of proxy variables is an important issue that needs to be taken into consideration. Keeping in view the fact that most of the investment in the global financial market is usually diversified in nature, we limit our choice to the selection of appropriate indices, rather than considering individual assets in a particular asset class. We consider five different asset classes and volatility indices - cryptocurrency market (Bloomberg Galaxy Crypto Index[2]), equity market (MSCI World Index), expectations in stock market (CBOE VIX), treasury bond market (MOVE Index) and exchange rate market (DXY Index) - to evaluate the effectiveness of decentralised finance (Bloomberg Galaxy DEFI Index[3]).

The VIX index is computed from a panel of options prices and is a 'risk-neutral' implied volatility measure of the stock market. Similarly, MOVE index measures expected short term volatility in the US bond market. The indices referred for investors' sentiments are a gauge of perceived volatility in equity and bond markets, in both directions. It is expected that the DeFi returns volatility would be positively related with the volatility indices. Gold and bank fixed deposits have been dropped considering their safe haven and risk-free status respectively.

The data set spans a time period of over two and half years of daily frequency, as the DEFI index is available only from December 31, 2020. For this purpose, we obtain daily closing prices of all the indices from Bloomberg, and calculate the log return of indices by taking the natural log difference observations of two comparable periods by using the following formula:

$$I_{i,t} = 100 \times (lnS_{i,t} - lnS_{i,t-1}) \qquad ...(1)$$

Where i represents each asset class, lnS_t is today's index value and lnS_{t-1} is previous day's index value, "ln" indicates log form. The results of some descriptive statistics about the variables and their relation (in tabular and graphical form) are given in the annex (Table 1A, 2A and Chart 1.1).

The test results for the breakpoint unit root test are reported in annex Table 3A. The motive for applying the breakpoint unit root test rather than the traditional Augmented Dickey Fuller (ADF) test for unit root is that the breakpoint unit root test can

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2 In the index the weight of cryptocurrency is based on market capitalisation with Bitcoin and Ethereum constitutes 35 per cent weight each as on March 2022. Other cryptocurrencies are Cardano, Solana, Avalanche, Polkadot, etc, (https://assets.bbhub.io/professional/sites/10/BGCI-Factsheet-Mar-22.pdf).

3 The index is a market cap-weighted DeFi protocols and apps that use smart contracts on blockchains to offer financial services such as lending, market-making and insurance without a central financial intermediary. In the index Uniswap (UNI) has highest weight of 40 per cent (https://assets.bbhub.io/professional/sites/10/DEFI-Factsheet_Dec_20211.pdf).

address the problem of structural breaks in the series. The test indicates that all the variables are stationary at level using both constant and trend.

The impact of spillovers in returns of the six asset classes proxies, *i.e.*, decentralised finance (DEFI Index), the Bloomberg Global Crypto Index (BGCI), Global Equity (MSCI World Index), volatility sentiments in stock market (CBOE VIX) and bond market (MOVE Index), exchange rate market (DXY Index) have been used. Here, one dummy variable FTX has been considered (the value '1' from November 11, 2022 onwards; otherwise '0') for the market downturn due to the downfall of largest global cryptocurrency exchanges, *viz.*, FTX. FTX's bankruptcy, and its spat with Binance, not only triggered a huge sell-off in the market but also reduced liquidity from the crypto market.

An Exponential General Autoregressive Conditional Heteroskedastic (EGARCH) model has been used to capture asymmetry and leverage with appropriate restrictions imposed on the model's parameters. Generally, asymmetry arises when the positive and negative shocks of the same indicator have an unequal impact on volatility returns. On the other hand, leverage is a special case of asymmetry and is related to increased volatility due to negative shocks to returns and a decline in volatility due to positive shocks to returns (McAleer and Hafner, 2014).

As per the EGARCH (1, 1) framework proposed by Nelson (1991), we estimate the following DEFI Index volatility equation for the study:

$$DeFi_t = \beta_0 + \beta_1 DeFi_{t-1} + \beta_2 BGCI_t + \beta_3 DXY_t + \beta_4 VIX + \beta_5 MSCI\ Equity_t + \beta_6 MOVE\ Index_t + \beta_7 FTX_t + \varepsilon_t \quad ...(2)$$

The above equation is a mean equation. It indicates that average return on the DEFI index at time 't' ($DeFi_t$) is dependent on its own lag, overall cryptocurrency index (BGCI), exchange rate DXY Index, MSCI World Index, CBOE volatility Index (VIX), Treasury market MOVE Index, FTX dummy and the error term (ε_t). Further, the ε_t is dependent on some lagged information (Ω_{-1}) and is assumed to be normally distributed with zero mean and its variance (h_t).

$$\varepsilon_t \,|\Omega_{-1} \sim N(0,h_t) \quad ...(3)$$

Here, the variance equation for EGARCH model can be written as:

$$\log(h_t) = C + \alpha_1 \log(h_{t-1}) + \alpha_2 (\varepsilon_{t-1}/\sqrt{h_{t-1}}) + \alpha_3 [\frac{|\varepsilon_{t-1}|}{\sqrt{h_{t-1}}} - \sqrt{\frac{2}{\pi}}] + \gamma_1 |\alpha_3 BGCI_t + \alpha_4 DXY_t + \alpha_5 VIX_t + \alpha_6 MSCI\ Equity_t + \alpha_7 Move\ Index_t| \quad ...(4)$$

This model differs from the GARCH variance structure because of the log of the conditional variance. This implies that the leverage effect is exponential, rather than quadratic and the forecast of conditional variances would definitely be non-negative. The presence of leverage effect can be tested by $\alpha_2 < 0$. The impact is asymmetry if $\alpha_2 \neq 0$.

V. Results

The following estimation result indicates the significance of all five asset classes and FTX dummy on DeFi returns (Table 6).

The EGARCH estimation result indicates that all variables except DXY and VIX have statistically significant coefficients in the mean equation while all the three coefficients of ARCH, GARCH and leverage effects as well as the coefficients of our study variables except BGCI are significant in the variance equation. In the mean equation, BGCI (cryptocurrency market) has positive and significant association with DeFi in the mean equation reflecting the greater integration between these two markets but has no significant impact in the variance equation. The DXY and VIX coefficients are not significant in the

Table 6: EGARCH (1,1) Estimation Results

Variable	Coefficient	Std. Error	z-Statistic	Probability
Dependent variable: *DeFi*				
Mean Equation				
DeFi (-1)	-0.045***	0.015	-2.939	0.003
BGCI	1.110***	0.019	59.272	0.000
DXY	0.279	0.184	1.513	0.130
VIX	0.009	0.019	0.465	0.642
MSCI Equity	0.270*	0.144	1.870	0.062
MOVE Index	-0.030*	0.017	-1.729	0.084
FTX	-0.275**	0.116	-2.375	0.018
Variance Equation				
C	1.741***	0.193	9.041	0.000
ARCH{1}	0.406***	0.072	5.679	0.000
LEVERAGE {1}	0.103**	0.047	2.187	0.029
GARCH{1}	0.130*	0.077	1.690	0.091
BGCI	0.009	0.009	0.941	0.347
DXY	0.353***	0.119	2.955	0.003
VIX	0.054***	0.010	5.645	0.000
MSCI_Equity	0.607***	0.082	7.408	0.000
MOVE_Index	0.051***	0.010	4.848	0.000

Residual Diagnostics			
Akaike info criterion	-4.825	Adjusted R-squared	0.709
Durbin-Watson stat	1.86	Log-likelihood	-1715
Q2 (36)	26.35 (0.88)	ARCH-LM	0.107 (0.744)

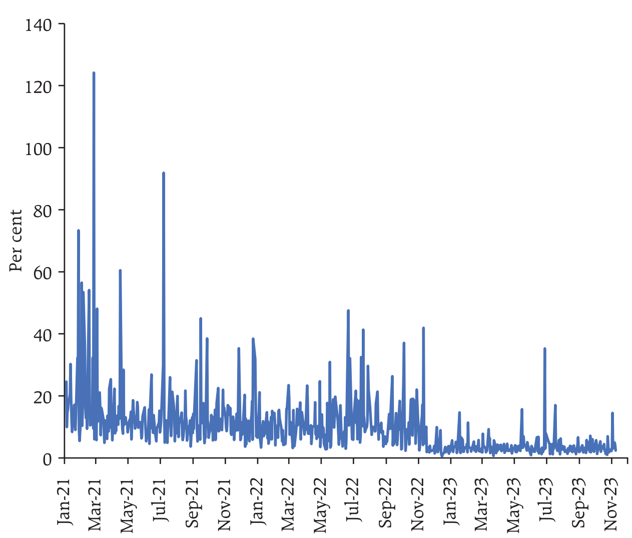
Note: ***, **, and * indicate significance level at 1 per cent, 5 per cent and 10 per cent, respectively.

mean equation but have positive influence on DeFi market in the variance equation which can be seen as evidence of increasing volatility in DeFi with respect to the volatility of foreign exchange market and stock market. The coefficients of MSCI World Index returns are positive and significant in both the mean and variance equations, which illustrates that global equity market has significant co-movement with decentralised finance. Likewise, as for the liquidity purpose, MOVE index (US treasury market) volatility is positively correlated with DeFi market volatility in the variance equation. Further, the FTX dummy is highly significant on the DeFi returns and negative shock since the entire cryptocurrency market has turned red hot and traditional finance became stronger.

In the variance equation, GARCH and ARCH coefficients are positive as expected, but the leverage coefficient is also positive, contrary to a priori expectations. Negative leverage indicates that high negative returns are followed by higher volatility than the positive ones, that is, the large unanticipated downward shocks increase the variance. However, it does not have to be the case in each market and in all times (Black 1976; Figlewski and Wang, 2000; Herbert *et al.*, 2019). Since we are covering the crisis period (COVID), there may be some anomalies for which the leverage coefficient is positive but highly significant. This implies the downward movement of DeFi returns is followed by higher volatility than upward movement of the same magnitude.

Conditional Variance: The graph below depicts GARCH conditional volatility of Bloomberg Galaxy DeFi Index return. The volatility in the conditional variance graph depicts a declining trend as we move from the initial phase of the pandemic towards the post pandemic period *i.e.*, from 2020 to 2022, but again increased in the period of Fed's monetary policy rate hikes and FTX contagion (Chart 8).

Chart 8: GARCH Conditional Variance



Source: Authors' calculation.

VI. Conclusion

Distributed Ledger Technology and smart contracts promise innovation in the form of DeFi, which could lower transaction cost and improve accessibility. However, purely technological aspects have limitations and in financial facets they do not match with the vision and framework of traditional finance. So far, the experience shows that the vulnerabilities of DeFi outweigh the benefits advocated for DeFi. From the empirical analysis, we observed that DeFi price volatility and volatility in the financial market asset classes are positively correlated. Our findings suggest that the interest in cryptocurrencies is driven by speculative motive rather than a means of payment for real economic transactions. The findings are in accordance with a survey by UK FCA that majority of investors (38 per cent) investing in cryptoassets taking it as a 'gamble to make or lose money' indicating the risk seeking behaviour (FCA, 2021). As the crypto ecosystem lacks accountability and stability and is marked by regulatory ambiguity, retail investors need to be more cautious.

Some cryptos may be backed by underlying; however, if the underlying itself is another unstable digital asset with no transparency and central bank back up, the crypto system is prone to crisis without safeguards. "The term cryptocurrency, private cryptocurrency is a fashionable way of describing what is otherwise 100 per cent speculative activity" (Das, 2023). The borderless, volatile DeFi needs global regulation; however, to regulate first there should be clarity of the risky asset (IMF, 2023). The recent collapse of FTX and Binance exposed the limitations of the country specific rules/bans and grave risks they entail. As DeFi continues to evolve and mature, and its interaction with the traditional financial system grows, its utility against risks demands further analysis.

References:

Aiello, D., Baker, S. R., Balyuk, T., Di Maggio, M., Johnson, M. J., & Kotter, J. D. (2023). *Who Invests in Crypto? Wealth, Financial Constraints, and Risk Attitudes* (No. w31856). National Bureau of Economic Research.

Aramonte, S., Huang, W., & Schrimpf, A. (2021). DeFi Risks and the Decentralisation Illusion. *BIS Quarterly Review, 21.*

Arslanian, H. (2022). Decentralised Finance (DeFi). *The Book of Crypto: The Complete Guide to Understanding Bitcoin, Cryptocurrencies and Digital Assets* (pp. 291-313). Cham: Springer International Publishing.

Auer, R., Cornelli, G., Doerr, S., Frost, J., & Gambacorta, L. (2022). *Crypto Trading and Bitcoin Prices: Evidence from a New Database of Retail Adoption* (No. 1049). Bank for International Settlements.

Azar, P. D., Baughman, G., Carapella, F., Gerszten, J., Lubis, A., Perez-Sangimino, J. P., ... & Rappoport W, D. E. (2022). The Financial Stability Implications of Digital Assets. *FRB of New York Staff Report*, (1034).

BIS. (2022). Annual Economic Report 2022. https://www.bis.org/publ/arpdf/ar2022e.htm

Black F. (1976). Studies of Stock Price Volatility Changes. *Proceedings of the 1976 Meeting of the Business and Economic Statistics Section, 177-181.*

Carter, N., & Jeng, L. (2021). DeFi protocol risks: The paradox of DeFi. *Regtech, suptech and beyond: innovation and technology in financial services" riskbooks–forthcoming Q, 3.*

Coinmarketcap, (2023). https://coinmarketcap.com/

Cornelli, G., Gambacorta, L., Garratt, R., & Reghezza, A. (2024). *Why DeFi lending? Evidence from Aave* V2 (No. 1183). Bank for International Settlements.

Das, S. (2023). "G20 for a Better Global Economic Order during India's Presidency" speech delivered at 17th K P Hormis Commemorative Lecture https://www.rbi.org.in/Scripts/BS_SpeechesView.aspx?Id=1356

Defillama, https://defillama.com/, 2022.

FCA (2021). Research Note: Cryptoasset consumer research. https://www.fca.org.uk/publications/research/research-note-cryptoasset-consumer-research-2021.

Figlewski, Stephen & Wang, Xiaozu (2000). Is the 'Leverage Effect' a Leverage Effect? *SSRN 256109* https://ssrn.com/abstract=256109.

Financial Stability Board (2022). Assessment of Risks to Financial Stability from Crypto-assets. https://www. fsb. org/wp-content/uploads/P160222. Pdf.

Global Financial Stability Report, April 2022: Shockwaves from the War in Ukraine Test the Financial System's Resilience. (2022). https://www.imf.org/en/Publications/GFSR/Issues/2022/04/19/global-financial-stability-report-april-2022

Harvey, Campbell R., Ashwin Ramachandran, & Joey Santoro. (2021). *DeFi and the Future of Finance.* John Wiley & Sons.

Herbert, W. E., Ugwuanyi, G. O., & Nwaocha, E. I. (2019). Volatility Clustering, Leverage Effects and Risk-Return Trade-Off in the Nigerian Stock Market. *Journal of Finance and Economics.* 2019, 7(1), 1-13.

IMF (2023). https://www.imf.org/en/News/Podcasts/All-Podcasts/2023/11/09/shaktikanta-das-gov-talks

McAleer, M., & Hafner, C. M. (2014). A one-line derivation of EGARCH. *Econometrics*, 2(2), 92-97.

Nelson, D. B. (1991). Conditional Heteroscedasticity in Asset Returns: A New Approach, *Econometrica: Journal of the Econometric Society*, 59(2), 347-370.

Statista. (2024). https://www.statista.com/statistics/730782/cryptocurrencies-market-capitalization/

Annex

Table 1A: Descriptive Statistics of Variables

	DEFI_INDEX	BGCI	DXY	VIX	MSCI_EQUITY	MOVE_INDEX
Mean	-0.05	0.05	0.02	-0.05	0.01	0.15
Median	-0.02	0.08	0.03	-0.93	0.03	0.13
Maximum	26.63	19.83	1.64	48.02	4.93	21.46
Minimum	-30.85	-25.78	-2.14	-22.04	-3.73	-18.45
Std. Dev.	5.95	4.53	0.46	7.36	0.98	5.03
Skewness	-0.28	-0.59	-0.34	1.01	-0.06	0.33
Kurtosis	6.00	6.61	4.42	7.50	4.61	4.65
Jarque-Bera	279.31	431.79	73.85	730.66	78.37	94.15
Probability	0.00	0.00	0.00	0.00	0.00	0.00

Table 2A: Correlation Analysis

	DEFI	BGCI	DXY	VIX	MSCI-Equity	MOVE
DEFI	1					
	-					
BGCI	0.84	1				
	(0.00)	-				
DXY	-0.20	-0.23	1			
	(0.00)	(0.00)	-			
VIX	-0.27	-0.30	0.24	1		
	(0.00)	(0.00)	(0.00)	-		
MSCI-Equity	0.38	0.41	-0.49	-0.70	1	
	(0.00)	(0.00)	(0.00)	(0.00)	-	
MOVE	-0.15	-0.11	0.29	0.37	-0.32	1
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	-

Note: Figures in parentheses indicate probability value at 5 per cent significance level.

Chart 1.1: Plots of Dependent and Independent Variables Returns

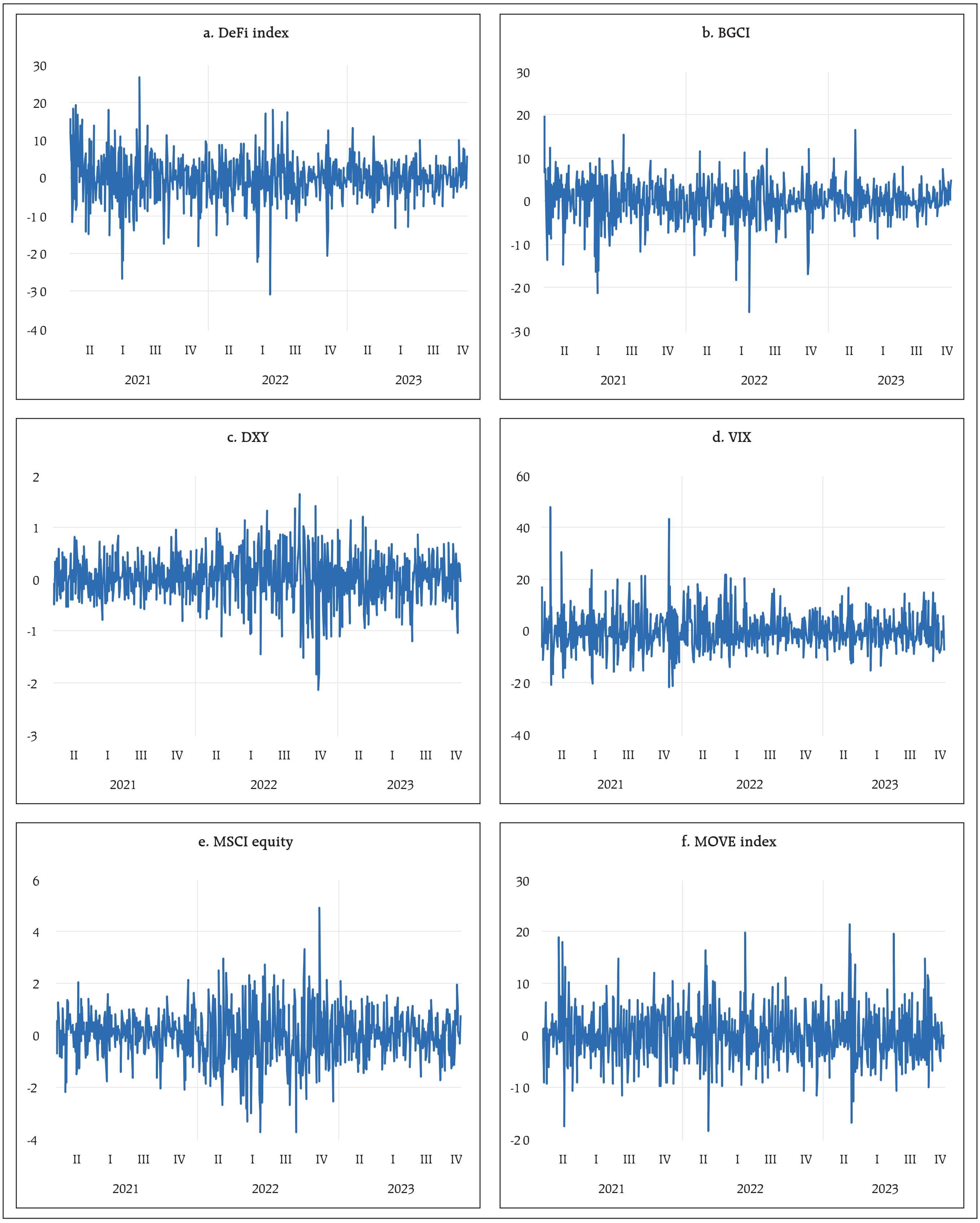


Table 3A: Unit Root Test - ADF Breakpoint Test with Trend and Intercept

Variable	t-statistic	Probability
DeFi	-29.411*	0.000
BGCI	-24.843*	0.000
MSCI Equity	-22.082*	0.001
VIX	-26.902*	0.002
MOVE Index	-24.106*	0.004
DXY	-21.023*	0.000

Note: * indicates significance level at 1 per cent.

Table 4A: Multicollinearity Test - Variance Inflation Factors (VIF)

Variable	Coefficient of Variation	VIF
DeFi	0.000	1.33
BGCI	0.000	1.41
DXY	0.034	1.47
VIX	0.000	2.22
MSCI_EQUITY	0.021	2.41
MOVE_INDEX	0.000	1.39
FTX	0.013	1.17

Note: No evidence for multicollinearity since VIF for all the covariates are much less than the value 10.

Currency Swaps of the Reserve Bank of India: Role in the GFSN and Fostering International Financial Cooperation

*by Ajesh Palayi^*

The central bank currency swaps have played a crucial role in the global financial system since the Global Financial Crisis, particularly through bilateral and regional financing arrangements. Through the SAARC Currency Swap Framework and the BRICS Contingent Reserve Arrangement, the RBI plays a key role in the GFSN. During the COVID-19 pandemic, the Reserve Bank's swap support under the SAARC Currency Swap Framework rose significantly. Considering the healthy forex reserve position of India, central bank currency swaps have the potential to foster India's external financial cooperation further.

I. Introduction

Financial and economic cooperation has been an integral part of the relations among the countries. The economic relations among countries have over time expanded from trading activities to a wide spectrum of financial activities such as investment, developmental assistance like aid and grants, credit and remittances. The globalisation in the later part of the 20th century has further reshaped economic engagements among countries. Various financial crisis episodes, *viz.*, Asian Financial crisis 1997-98 and Global Financial Crisis 2008 and the need to mitigate their adverse consequences and spillovers have deepened financial and economic cooperation amongst countries, particularly at the regional level (Henning, 2011).

In the realm of financial and economic cooperation, the Global Financial Safety Net (GFSN) holds a key position. The GFSN is an umbrella term for a set of institutional arrangements and mechanisms that provide precautionary support against a crisis and extend liquidity support during a crisis while encouraging adoption of robust macroeconomic policies. The GFSN has mainly four layers: countries' own reserves at the national level, swap arrangements among central banks at the bilateral level, pooling of financial resources among the countries at the regional level, which are referred as Regional Financing Arrangements (RFAs) and the International Monetary Fund (IMF) at its core, providing a global financial backstop. Central bank currency swap arrangements are one of the key elements of the GFSN, acting mainly through bilateral swaps and RFAs[1]. Of the total US$ 18 trillion resource of the GFSN, currency swap arrangements account for approximately US$ 2,817 billion. The swap arrangements include the SAARC[2] Currency Swap Framework and the BRICS[3] Contingent Reserve Arrangement (CRA) with contributions of US$ 2.0 billion and US$ 100 billion, respectively (Table 1).

Central bank swap lines help to address foreign currency funding issues particularly during the time of liquidity stress and BoP crisis. While central banks could provide local currency to the domestic financial institutions to address any stress emanating from local currency liquidity, central bank's ability to extend support by providing foreign currency is constrained by the forex reserves they hold. In this

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1 Even though the IMF loans are also technically in the nature of currency swaps, the IMF treats these as one directional.

2 The South Asian Association of Regional Cooperation (SAARC) is an organization among Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka with the larger aim of promoting the development and progress of all countries in the region.

3 Grouping of Brazil, Russia, India, China and South Africa

Table 1: A Snapshot of Major Central Bank Currency Swap Arrangements

Sl No.	Swap lines/arrangements	Value US$ billion	Number
	Bilateral Swap Arrangements*		
1	Reserve currency issuers @	713	15
2	Federal Reserve (other)	450	9
3	People's Bank of China	1,042	34
4	Bank of Japan	224	6
5	SAARC Swap Framework	2	3
6	Other	46	10
	RFAs#		
1	CMIM	240	-
2	BRICS CRA	100	-
	Total	**2817**	

Data as at end August 2020

@: Value is estimated based on historical usage of the swap lines (unlimited) between the US Federal Reserve, European Central Bank, Bank of Japan, Bank of England, Bank of Canada and Swiss National Bank

***Source:** Reserve Bank of Australia's calculations

#Source: ASEAN+3 Macroeconomic Research Office (AMRO) and BRICS CRA Treaty

context, it is important for central banks to have access to forex swap lines with other central banks, who are willing to offer swap lines.

The Global Financial Crisis (GFC) provided an impetus to financial cooperation through central bank swap lines. The US Federal Reserve extended US dollar swap lines to select central banks during the GFC to address enhanced pressures in short term dollar funding markets. These swap lines were instrumental for managing liquidity disruptions (Goldberg *et al.*, 2010). During the COVID-19 pandemic, the US Federal Reserve provided liquidity to nine central banks[4] through central bank swap lines. Six central banks including the US Federal Reserve[5] announced a coordinated action to further enhance the provision of US dollar liquidity. Post the GFC, China has entered into bilateral swap arrangements with 32 counter parties with a view to promoting trade and fostering internationalisation of Chinese Yuan (CNY) (Central Bank Currency Swap Tracker). The ASEAN+3 countries established Chiang Mai Initiative Multilateralisation (CMIM) in 2010 as a multilateral currency swap mechanism to provide a backstop line of funding for member countries[6]. Similarly, the BRICS countries established the CRA in 2015 as a multilateral currency swap mechanism to support BRICS countries during a crisis[7]. Post the GFC, India launched the SAARC Currency Swap Framework in 2012 to support macroeconomic and financial stability in the SAARC region and promote economic cooperation among SAARC countries. Many central bank swap arrangements have evolved into permanent institutionalised swap mechanisms today (Mingqi Xu, 2016). Some of these swap arrangements are also a part of countries' larger goal of achieving internationalisation of their currencies.

Against the above backdrop, this article makes an attempt to cover various currency swap arrangements of the Reserve Bank of India (RBI) with other central banks and the supportive role played by these swap arrangements. Accordingly, the rest of the article has been divided into five sections. Section II presents the concept and objectives of currency swap arrangements. Sections III and IV cover the SAARC Currency Swap Framework and the BRICS CRA, respectively. Section V discusses the role of swap lines to foster international financial relations, with concluding remarks in Section VI.

II. Currency Swap Facility: Concept and Objectives

Currency swap transaction shall mean a transaction between the requesting central bank and a providing central bank by which the requesting

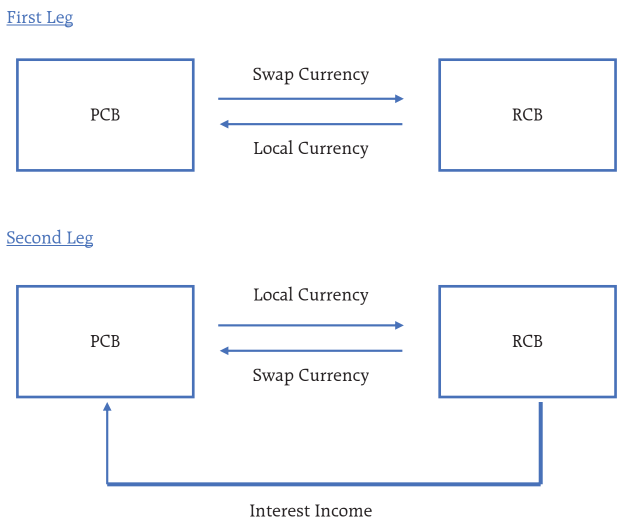
4 Central banks of Australia, Brazil, Korea, Mexico, Singapore, Sweden, Denmark, Norway and New Zealand.

5 The Bank of England, the Swiss National Bank, the European Central Bank, the Bank of Canada and the Bank of Japan

6 Chiang Mai Initiative (CMI) started after the Asian Financial Crisis in 1997-1998 was a bilateral swap mechanism.

7 CRA treaty was signed in July 2014

Chart 1: Transactions under Currency Swap



PCB= Providing Central Bank; RCB=Requesting Central Bank

central bank purchases US dollars or any other foreign currency (swap currency) from the providing central bank in exchange for the requesting central bank's currency (local currency) and repurchases on a later date the local currency in exchange for swap currency. The exchange rate of the spot leg transaction shall also be applied to the forward leg transaction. The swap recipient central bank can lend the swapped currency to its domestic banks and financial institutions, on its own terms, conditions and risks (Chart 1).

The swap mechanism would help to maintain financial stability during a crisis by providing a backstop line of funding for forex liquidity requirements or to address short-term balance of payments stress. The swap lines of US Fed Reserve to select countries during the GFC and the COVID-19 pandemic played a crucial role in ensuring adequate US dollar liquidity and reducing financial instability risks (Perks *et al.*, 2021).

Swaps are usually extended for an initial period of three or six months or one year followed by rollovers (renewals) as per agreed terms. After a full round of drawal including the rollover period, providing countries generally stipulate a standard waiting period before the next drawal with a view to avoiding repeated recourse to the facility. One noteworthy feature of currency swap is that the exchange rate between swap currency and local currency is fixed at the value date of drawal and would remain same for both the spot and forward transaction.

Pricing of swap mechanism is an important aspect. Usually, interest of swap drawal is benchmarked to a financial benchmark like London Inter-Bank Offered Rate (LIBOR)[8], Secured Overnight Financing Rate (SOFR), Euro short-term rate (ESTR) etc., depending on the currency of the swap drawal. A spread is added to this benchmark to cover multiple risks involved including the default risk. Quantum and duration of the swap, sovereign credit rating of the recipient country, past records of repayments of swap and other external obligations, probability of default, operating charges and geopolitical considerations are the major factors considered while the providing party decides on the spread. The benchmark is usually reset at the time of rollover of the swap. Swap mechanisms normally have provisions of penal interest rate if there is an occurrence of default.

Swap mechanism has some risks associated with it. Credit risk is inherently high with the currency swap as most of the times, swap support is extended to countries to tide over a crisis/difficult situation. If the recipient central bank defaults, the providing party is left with collateral in the form of the currency of the recipient country. In the circumstance of a default, the currency of recipient country is likely to lose its value relative to the exchange rate at which the swap was executed. It would result in losses for the providing party. On account of this, providing party central banks, whenever they enter into swap with countries who have highly volatile currencies, include the provision of a periodic revaluation of the local currency during the swap transaction period.

8 Before the phasing out of LIBOR.

Another concern is how the providing party would utilise the collateral in the form of the currency of the recipient country, when default occurs. Generally, procedures set out below are followed for resolving such a default situation:

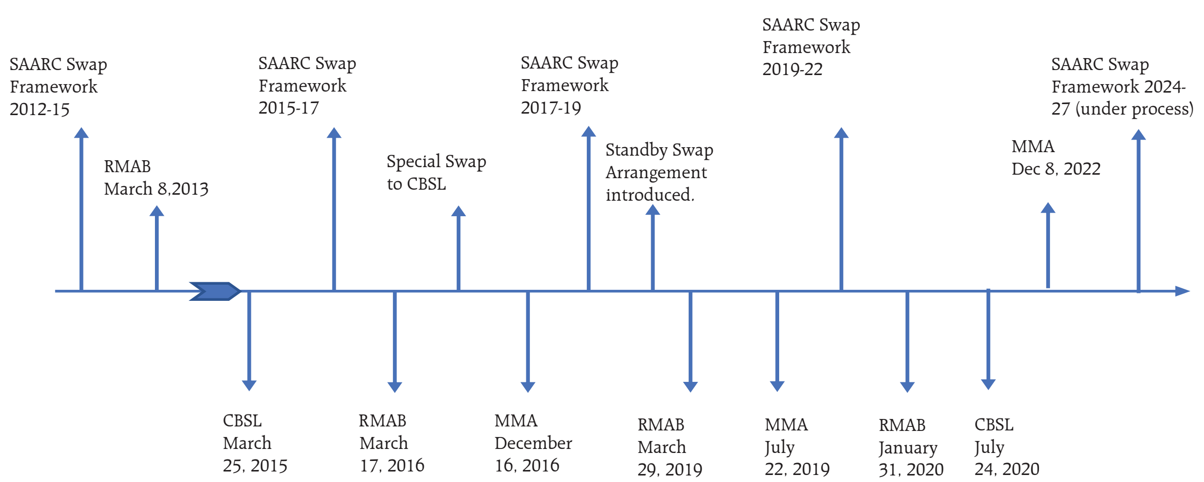
- Both the countries agree for a restructuring plan either by rescheduling debt repayments or/ and countries may agree for a cut in outstanding obligation and other waivers.
- Providing central bank may direct the requesting central bank to invest the local currency in the interest bearing, marketable sovereign debt of the requesting country. The providing party would be able to earn interest rate through such a mechanism.
- The providing country may use local currency balances for bilateral trade settlement with the requesting country. This balance could be used to finance the imports of the providing country from the recipient country.
- Providing country may use the balances for strategic foreign investments for the settlement of outstanding dues.

III. SAARC Currency Swap Framework

The SAARC countries decided to set up a currency swap mechanism to meet the short-term forex liquidity requirement of SAARC countries and accordingly, the Framework on Currency Swap Arrangement for SAARC countries came into effect in November 2012. The SAARC Currency Swap Arrangement helps to provide a back-stop line of funding to address short-term forex liquidity needs or balance of payment needs. Under the Framework, the RBI would offer swaps of varying sizes to each SAARC member countries, within the overall corpus of US$ two billion. The Framework allows the countries to draw swaps in US Dollar, Euro or INR. The Framework is updated in regular intervals. Currently, *the Framework on Currency Swap Arrangement for SAARC countries 2019-22* is in place[9]. The RBI has initiated work on finalising the *SAARC Currency Swap Framework 2024-27.* The evolution of the Framework and various agreements signed under the Framework are given in Chart 2.

SAARC Currency Swap Framework has a provision of 'Standby Swap Arrangement' which was added to

Chart 2: SAARC Currency Swap Frameworks and the Bilateral Agreements Signed

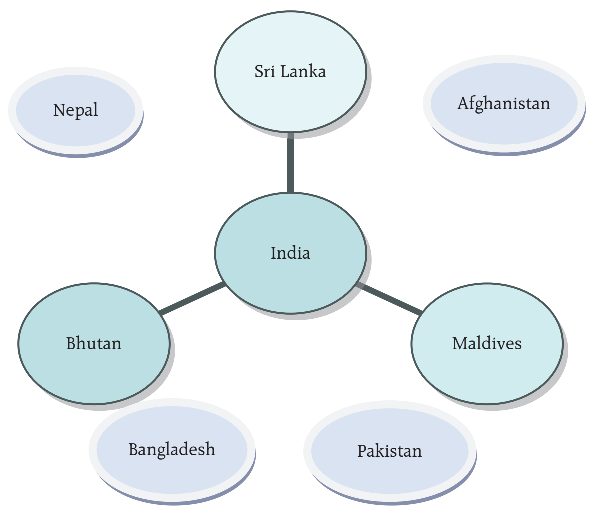


RMAB refers to the Royal Monetary Authority of Bhutan CBSL refers to the Central Bank of Sri Lanka MMA refer to the Maldives Monetary Authority

Source: RBI

[9] whose validity has been extended beyond 2022.

Chart 3: SAARC countries who availed the swap



Source: RBI

the Framework through an amendment in 2018. The Standby Swap Arrangement empowers the Finance Minister, Government of India, to approve additional swap requests from member countries (beyond their eligible limits) aggregating up to US$ 400 million. The Framework stipulates a waiting period between two consecutive drawals, requirement of an IMF staff level agreement for availing second rollover and information sharing as means of cooperation between bilateral/multilateral swap arrangements and the IMF.

Since the inception of the Framework, Bhutan, Sri Lanka and Maldives availed the swap facility multiple times. Afghanistan, Bangladesh, Nepal and Pakistan, however, never availed the facility (Chart 3).

Table 3: Swap Support during COVID-19 Pandemic (2020-22 *vis-a-vis* 2017-19) (US$ Million)

Countries	2020-2022 (pandemic time) *	2017-2019 (pre-pandemic)
Bhutan	800	500
Maldives	400	200
Sri Lanka	800	400
Total	2000	1100

Source: RBI, * till end 2022.

The Reserve Bank provided an aggregate swap support of US$ 6.1 billion under the SAARC Currency Swap Framework since its establishment in 2012. Out of these, the share of Sri Lanka is 62 per cent (US$ 3.8 billion), Bhutan is 26 per cent (US$ 1.6 billion) and Maldives is 12 per cent (US$ 0.7 billion) (Table 2).

During the COVID-19 pandemic (2020-22), the Reserve Bank provided swap support aggregating US$ 2.0 billion to Bhutan, Maldives and Sri Lanka in comparison to the swap support of US$ 1.1 billion during the preceding three years 2017-19, providing a significant help to these member countries to manage their external sector pressures (Table 3).

IV. BRICS Contingent Reserve Arrangement (CRA)

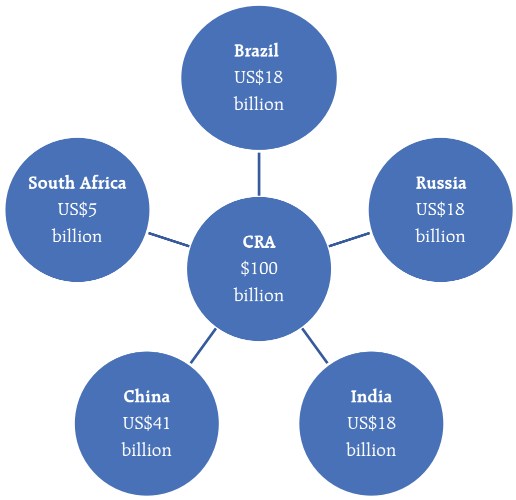
The BRICS CRA is a major flagship initiative under the economic and financial cooperation track of the BRICS. The CRA is a mechanism wherein the BRICS countries have established a self-managed contingent reserve pool to help to address short term balance of payments crises by providing mutual swap support. The BRICS countries have committed to a total resource of US$ 100 billion under the CRA with individual commitments as given in Chart 4.

Table 2: Total swap support under SAARC Currency Swap Framework (US$ Million)

Countries	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Bhutan	---	100	100	100	300	200	200	400	200	1600
Maldives	---	---	100	---	100	150	250		100	700
Sri Lanka*	1500 (1100+400)	1100 (700+400)	400	---	---	400	---	400		3800
Total	1500	1200	600	100	400	750	450	800	300	6100

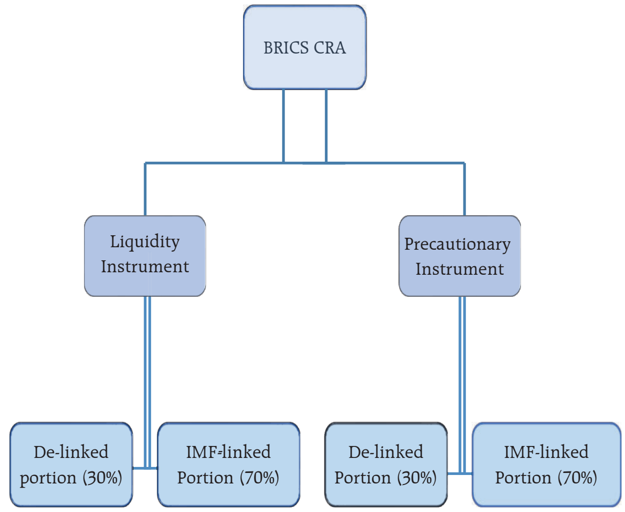
Source: RBI; *It includes support of US$ 1100 Million and US$ 700 million extended during 2015-16 outside the SAARC Currency Swap Framework.

Chart 4: Individual Commitments under the CRA



Source: BRICS CRA Treaty

Chart 5: Structure of the CRA



Source: BRICS CRA Treaty

The CRA has mainly two instruments, liquidity and precautionary. A liquidity instrument would provide immediate liquidity support in response to balance of payments pressures. A precautionary instrument is a commitment to provide support in view of potential balance of payments stress. Both these instruments have De-linked and IMF-linked portion. Under the De-linked portion, countries have access equal to 30 per cent of the maximum access for each Party. Under the IMF-linked portion, countries have access to remaining 70 per cent of the maximum access (Chart 5).

The multiplier values for determining access amount from commitment amount vary with highest multiplier value for South Africa (2) and lowest for China (0.5). Brazil, Russia and India have multiplier value of one (1). The country wise access amount is presented in Table 4.

Table 4: Country wise Access under the CRA

	Commitment (US$ billion)	Multiplier	Total Access (US$ billion)	Access limit with De-linked Arrangement (US$ billion)
Brazil	18.0	1.0	18.0	5.4
Russia	18.0	1.0	18.0	5.4
China	41.0	0.5	20.5	6.15
India	18.0	1.0	18.0	5.4
South Africa	5.0	2.0	10.0	3.0
Total	**100.0**			

Source: BRICS CRA Treaty

The maturity, number of renewals and total support period under the CRA vary depending on the type of instrument. It also varies between De-linked and IMF-linked portion, with a minimum duration of the swap support of six months and maximum of three years (Table 5).

Table 5: Maturity and Tenor under Instruments

Instruments	Portion	Tenure / Maturity	Number of renewal	Supporting period
Precautionary Instrument	De-linked access	6 months	3	2 years
	De-linked Drawing	6 months	-	6 months
	IMF-linked access	1 year	2	3 years
	IMF-linked Drawing	1 year	-	1 year
Liquidity Instrument	De-linked Drawing	6 months	3	2 years
	IMF-linked Drawing	1 year	2	3 years

Source: BRICS CRA Treaty

Table 6: Features of BRICS CRA

No.	Feature	Explanation
1	**Governance**	A Governing Coucil (GC) is constituted under the CRA, which is responsible for high level and strategic decisions. The Standing Committee (SC) is responsible to make decisions on executive level and operational issues.
2	**Encashment**	It would enable a providing country to withdraw from the swap support after it was extended to a requesting party. The providing party can request encashment if is justified by its balance of payments and forex reserve position or by an event of force majeure, such as a war or natural disaster.
3	**Opt-Out**	It would allow any party to opt out from providing a support under an instrument.
4	**Novation**	Requesting party, at the time of default, would agree to a novation of its outstanding obligations which may include issuing of marketable debt securities that would not be subject to the requesting party's jurisdiction.

Source: BRICS CRA Treaty

Other major features of the CRA are briefly mentioned in Table 6.

The CRA SC decided in December 2017 to conduct test runs in order to maintain operational readiness and credibility of the CRA. Accordingly, BRICS central banks, so far, successfully conducted the six test runs, involving various complications and scenarios (Table 7).

As a swap mechanism, BRICS CRA has a lot of commonalities with the CMIM and the SAARC Currency Swap Framework. There are also some key differences among them in their design, structure and operations (Table 8).

In addition to the SAARC Swap Framework and the CRA, the Reserve Bank signed a currency swap arrangement, for an amount of up to US$ 75 billion, with the Bank of Japan.

V. Fostering International Financial Cooperation

The central bank swap lines help to deepen the financial cooperation between/among countries. Central bank swaps are agreements between sovereign nations executed through their central banks with the consent and approval of the respective Governments. A Guarantee from the Sovereign Government of the requesting party, covering the entire swap amount is generally a prerequisite for signing the swap agreement. The Government of the requesting country also need to certify that they would not impose any payment restrictions which would adversely affect central banks' repayment of

Table 7: Various elements tested under the CRA

CRA Test Run	Coordinator	Requesting Party	Elements Tested
2018	South African Reserve Bank	Brazil Central Bank	➢ De-linked portion of the Liquidity Instrument
2019	Brazil Central Bank	Bank of Russia	➢ De-linked portion of the Precautionary Instrument ➢ Encashment
2020	Bank of Russia	RBI	➢ De-linked portion of the Precautionary Instrument ➢ Prepayment
2021	RBI	People Bank of China	➢ IMF-linked portion of the Liquidity Instrument ➢ Opt-out ➢ Delay in Repayment
2022	People Bank of China	South African Reserve Bank	➢ IMF-linked portion of the Liquidity Instrument ➢ Payment in Alternative Currencies
2023	South African Reserve Bank	Brazil Central Bank	➢ De-linked portion of liquidity instrument ➢ payments in alternative currencies ➢ two opt-out requests

Source: RBI

Table 8: A comparison of BRICS CRA with the CMIM and the SAARC Swap Framework

Sl. No	BRICS CRA	CMIM	SAARC Swap Framework
1.	A multilateral currency swap mechanism in which swap commitment is shared by all BRICS countries.	A multilateral currency swap mechanism among ASEAN *plus* 3 countries, in which swap commitment is shared by all member countries.	A bilateral swap mechanism with a common framework applicable for all SAARC countries, and swap commitment is entirely borne by India.
2.	India could be both the providing party as well as the requesting party under the CRA.	Any ASEAN *plus* 3 countries could be both the providing party as well as the requesting party	India is the only providing party, other willing SAARC countries are requesting parties.
3.	Total corpus is US$ 100 billion	Total corpus is US$ 240 billion	Total corpus is US$ 2 billion
4.	Swap drawals are available in US$ only.	Swap drawals are available in US$, CNY and other local currencies of ASEAN *plus* three countries.	Swap drawals are available in US$, Euro and INR
5.	Precautionary instrument provision is available to meet a future crisis.	Precautionary instrument provision is available to meet a future crisis.	No precautionary instrument available

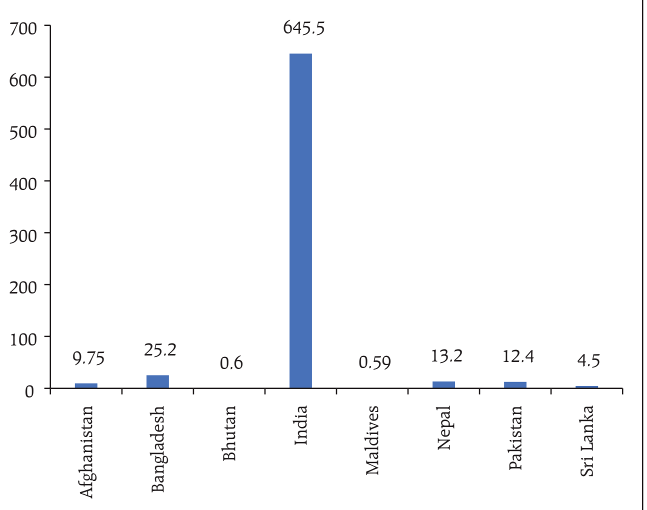
Sources: RBI, AMRO and CRA Treaty.

outstanding obligation of the swap. By extending a direct financial support to a country during a crisis time, the swap mechanism provides for a robust channel of financial cooperation.

There are many occasions that India provided swap support to SAARC countries beyond their eligible limits and duration under the SAARC Currency Swap Framework, to meet additional requirements of these countries to manage contingent situations. The Reserve Bank extended two special currency swap facilities to the CBSL, which were outside the SAARC Currency Swap Framework, with a support of US$ 1100 Million and US$ 700 Million in July 2015 and March 2016, respectively. These special swap supports are provided for short-term liquidity management in the context of India's strong bilateral relations and economic ties with Sri Lanka. The provision of Standby Swap Arrangement has been invoked multiple times to support the request for additional swap support by countries. The comfort of healthy forex reserves helped India to extend these swap supports (Chart 6).

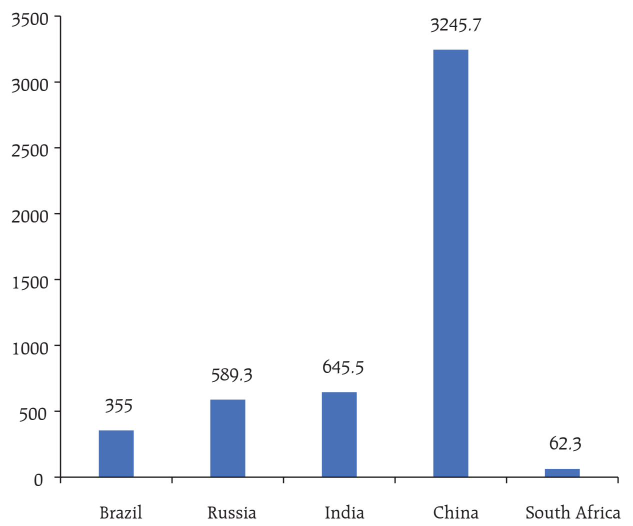
BRICS countries' contribution to the CRA is reflective of their forex reserve position (Chart 7). Even though swap has never been availed under the CRA so far, various engagements under the CRA helped to intensify the cooperation among BRICS central banks. As part of BRICS CRA, BRICS Central Banks developed a System of Exchange of Macro-Economic Information (SEMI) during India's BRICS Chair in 2016 which is a template of sixty macroeconomic indicators covering real, fiscal and external sectors, capital market and financial soundness. In 2020, under the Russian Chair, BRICS central banks produced an annual edition of the BRICS Economic Bulletin as part of the CRA, with the theme 'COVID-19 pandemic'. The Bulletin

Chart 6: Forex Reserves of SAARC Countries (US$ Billion)



Sources: Central Bank Websites; Data for end Feb/March 2024; for Bhutan data for end December 2023 and for Afghanistan, data for end 2020

Chart 7: Forex Reserves of BRICS (US$ Billion)



Sources: Central Bank Websites; Data for end March 2024

provided an overview of the situation in the BRICS economies, accumulated risks, policy measures undertaken to mitigate the impact of the COVID-19 crisis, future outlook and new areas of co-operation. The BRICS Economic Bulletin 2021 focussed on the theme 'navigating the ongoing pandemic: the BRICS experience of resilience and recovery'. In 2022, under China's BRICS Chair, BRICS central banks continued with the annual exercise of BRICS Economic Bulletin. The first BRICS Collaborative Study conducted in 2021 on the topic 'COVID-19: headwinds and tailwinds for balance of payments of BRICS' examined the impact of the pandemic on current account balance as well as capital flows in the BRICS economies.

The conduct of multiple CRA test runs by simulating crisis situations has deepened engagements among BRICS central banks. The CRA Technical Group examines various technical issues involved in the CRA and takes measures to address these issues. More importantly, CRA GC, a body of the Finance Ministers and the Central Bank Governors of the BRICS countries, meets at least once in a year and make strategic decisions regarding the CRA. Similarly, the CRA SC, at the level of Deputy Governors of BRICS central banks, makes decisions on any operational issues regarding the CRA. These multiple levels of exchanges through the CRA have intensified the relation among BRICS central banks.

The India-Japan Swap Arrangement reflects long-standing relation between India and Japan which has helped to deepen the financial engagements between these two countries.

India's forex reserves have increased significantly in recent years. When India constituted the SAARC Swap Framework in 2012, India's forex reserves were around $300 billion, whereas it is more than twice today. This has provided India comfort and leverage to extend more swap support to the countries.

Currently, the Reserve Bank provides various concessions to INR swap drawals under the SAARC Swap Framework, with a view to incentivising the drawal of swaps in INR, in terms of shorter waiting period between two consecutive drawals and waiver of conditionalities for availing second swap rollover.

VI. Conclusion

Central bank currency swaps are an integral part of the GFSN architecture. The swap lines at bilateral and regional level have provided more options to the countries to meet their contingent forex liquidity requirements. The swap arrangements played a vital role during the pandemic to support countries to manage their external sector pressures. Going forward, collaboration among various pillars of the GFSN including the IMF and the RFAs needs to be encouraged to make the GFSN system more robust and dynamic. Supported by healthy level of forex reserves, central bank currency swaps have higher potential to strengthen and deepen India's external financial cooperation.

References

Ball, M., Clarke, A., and Noone, C. (2020). The Global Financial Safety Net and Australia. Reserve Bank of Australia Bulletin, September.

Central Bank Currency Swaps Tracker, https://www.cfr.org/article/central-bank-currency-swaps-tracker

Goldberg, L ., Kennedy, C., and Miu, J. (2010). Central Bank Dollar Swap Lines And Overseas Dollar Funding Costs. *NBER Working Paper* 15763.

Henning, C.R. (2011). Economic Crises and Institutions for Regional Economic Cooperation. Asian Development Bank.

International Monetary Fund. (2017). Discussion Paper on 'The Treatment of Currency Swaps Between Central Banks'.

Mingqi, Xu. (2016). Central Bank Currency Swaps and Their Implications to the International Financial Reform. *China Quarterly of International Strategic Studies*, Vol. 2, No. 1, 135–152.

Perks, M., Rao, Y., Shin J., and Tokuoka, K. (2021). Evolution of Bilateral Swap Lines. *International Monetary Fund Working Paper* 21/210.

Consumer Confidence in India: A Regional Perspective

*by Sourajyoti Sardar, Aditya Mishra, Manu Swarnkar, and Tushar B. Das^*

The article explores regional variations in consumer confidence in India, analysing households' sentiment across various survey parameters. The survey results indicate that sentiments vary across regions, with one region more optimistic about the current situation and another about the future. The analysis suggests that regional price pressures, income, and employment conditions shape the overall economic perspective, with this relationship becoming more pronounced during the pandemic.

I. Introduction

Consumer confidence surveys attempt at gauging household sector's opinion on the overall economic conditions and the health of the economy from the perspective of consumers. The socioeconomic status of individuals plays a significant role in shaping their macroeconomic expectations and perceptions (Das, 2017). Variations in socioeconomic conditions among individuals can lead to significant differences in their outlook (Mankiw *et al.*, 2003; Souleles, 2004; Puri and Robinson, 2007; Dominitz and Manski, 2007). In a vast country like India, regional differences can further contribute to this heterogeneity due to differences in their socioeconomic characteristics.

Regional differences can arise from variations in per capita income, health and education standards, industrialisation levels, employment opportunities, infrastructure, and savings and consumption behaviour of households, among other factors. There is a strong correlation between consumer confidence and economic activity (Kilic and Cankaya, 2016). Consumer confidence data contain valuable lead information about economic conditions (Kumar *et al.*, 2019). However, economic activity alone does not provide a comprehensive understanding of the factors influencing consumer confidence. Furthermore, local business cycles may not align perfectly with national cycles (Owyang *et al.*, 2004), and consumer confidence can respond differently to changes in employment and consumption depending on geographic location (Guo, 2016).

Ohlan (2012) found that the Southern region of India tends to have more balanced socioeconomic development compared to the Central and Northern regions, highlighting the importance of considering regional variations. The southern and western parts of India demonstrate higher degrees of industrialisation, evident in a larger concentration of factories despite having a lower proportion of the overall population (Chart B1 in Annex B). Additionally, these regions have a higher proportion of urban dwellers and significantly higher incomes. For instance, Karnataka, Kerala, and Tamil Nadu alone have a combined gross state domestic product (GSDP) higher than 13 eastern states, including the Northeast, as well as states like West Bengal, Odisha, Bihar, Jharkhand, and Andaman and Nicobar Islands[1]. Furthermore, the average regional consumer price indices (CPI-U) compiled using state-wise weights for urban areas also exhibit varying rates of inflation.

This article employs qualitative information from the Consumer Confidence Survey (CCS) conducted by the Reserve Bank of India (RBI) to analyse regional variations in consumer sentiments in India.

^ The authors are from the Department of Statistics and Information Management, Reserve Bank of India. The authors are thankful to Shri Ravi Shankar for his guidance in preparing this article. Comments received from the editorial board are gratefully acknowledged. The consumer confidence survey results used in this paper reflect the respondents' views, which are not necessarily shared by the Reserve Bank. The views are personal views of the author(s) and do not represent the views of the Reserve Bank of India.

[1] Handbook of Statistics on Indian States – 2022-23 (https://www.rbi.org.in/scripts/publications.aspx).

Introducing the newly designed "Regional Sentiment Indicator" (RSI), this study utilises qualitative data analysis methods, including coherence analysis and ordered logistic regression, to investigate variations in survey responses across different regions. Section II of this article offers an overview of both the data and the techniques employed in the study. The subsequent sections of the paper provide an overview of the regional variations in sentiments across various survey indicators (Section III), analyse the relationship between survey responses in different regions (Section IV), and study the regional patterns in the perception and outlook of the general economic situation (Section V). This section sheds further light on variations in sentiments among different occupation and income categories. Finally, the article concludes with the major findings and policy implications of the study (Section VI).

II. Data and Methodology

The CCS gathers information on households' current perceptions compared to a year ago, along with their expectations for the year ahead on key macroeconomic indicators like the general economic condition, employment scenario, price level of the economy, as well as individual households' income and spending. Respondents express their sentiments on these parameters on a three-point scale. Using these data, RBI compiles two consumer confidence indices: The Current Situation Index (CSI)[2] and the Future Expectation Index (FEI). The respondent-level data of CCS, available in RBI's Database on Indian Economy[3], have been used for this article. Detailed survey description is provided in Annex A.

Since March 2021, the consumer confidence survey has been conducted in 19 cities. However, to ensure a longer time series, 13 common cities are considered for this study. These cities are divided into 4 regions, *viz.*, north (Delhi, Jaipur, and Lucknow), south (Bengaluru, Hyderabad, Chennai, and Thiruvananthapuram), east (Kolkata, Guwahati, and Patna) and west (Mumbai, Ahmedabad, and Bhopal) and have been surveyed since September 2017. The study covers 34 rounds beginning from September 2017.

Responses of survey parameters are solicited on a three-point scale (*viz.*, improved/ will improve, worsened/ will worsen and remained/ will remain same). The survey results are usually converted into a single quantitative number using the 'Net-Response' which is defined as the percentage of the respondents reporting a negative sentiment for a parameter subtracted from the percentage reporting a positive sentiment for that parameter. Net Responses can range from -100 to +100 (see Annex A for details).

To analyse regional variations, net responses for each parameter are calculated for all four regions across the 34 survey rounds. The paper introduced a novel metric, specifically the 'Regional Sentiments Indicator' (RSI), to analyse these regional variations. The RSI, expressed as a percentage, shows how many times the net response of a region scores better (in terms of optimism or less pessimism) than the all-India average for a specific parameter (*e.g.*, income situation, employment condition) within a given time frame (a set of survey rounds). The RSI scale ranges from 0 to 100, with 0 representing the most pessimistic or least optimistic scenario, and 100 signifying the most optimistic or least pessimistic scenario. The concept is extended to the CSI and FEI indices in order to measure how many times the regional CSI/FEI scores better than the all-India CSI/FEI within a specific time frame, which is also expressed as a percentage.

[2] CSI and FEI are compiled on the basis of net responses on the economic situation, income, spending, employment and the price level for the current period (as compared with one year ago) and a year ahead, respectively. CSI and FEI = 100 + Average of Net Responses of the above parameters.

[3] Link for the RBI's database: https://dbie.rbi.org.in/DBIE/dbie.rbi?site=unitLevelData.

The RSI is derived as given below:

$$NR_{i,j,t} = \frac{1}{n_{ijt}}(\sum R^{+} - \sum R^{-}) \times 100 \quad (1)$$

$$\Delta NR_{i,j,t} = NR_{i,j,t} - \overline{NR_{i,t}} \quad (2)$$

$$I(\Delta NR_{i,j,t}) = \begin{cases} 1, if\ \Delta NR_{i,j,t} > 0 \\ 0, otherwise \end{cases} \quad (3)$$

$$RSI_{i,j} = \frac{\sum_{t=1}^{N} I(\Delta NR_{i,j,t})}{N} * 100 \quad (4)$$

where,

$NR_{i,j,t}$ = Net response of parameter i for round no.t of j^{th} region

$\overline{NRi_{,t}}$ = Net responses of i^{th} parameter for round no.t at all India level

R^{+} = Positive response of i^{th} parameter for j^{th} region at time t

R^{-} = Negative response of i^{th} parameter for j^{th} region at time t

n_{ijt} = Total no.of respondents of parameter i in j^{th} region for round no.t

$\Delta NR_{i,j,t}$ = Difference of net response of parameter i in j^{th} region for round no.t from all India net response ($\overline{NR_t}$) of i^{th} parameter

$I(\Delta NR_{i,j,t})$ = Indicator function of net response

$RSI_{i,j}$ = Regional Sentiments Indicator for j^{th} region of parameter i

N = Total number of survey rounds

Next, we analyse the relationship between various parameters, using 'coherence coefficient', a statistic commonly used to assess similarity. The coherence coefficient is computed as the percentage of identical responses for two variables out of the total number of responses in a specific survey round, thereby indicating alignment between the two parameters.

To understand the factors that condition the respondents' views on the general economic situation, we employ ordered logistic regression. The dependent variable (views on the general economic situation) is ordered in three categories: "improved/ will improve" (coded as 1), "remained the same/ will remain the same" (coded as 2), and "worsened/ will worsen" (coded as 3). We investigate this variable separately for two different time horizons, representing perceptions and expectations. We include region (North, South, East, and West), annual income (categorised as less than ₹1 lakh, ₹1 lakh to ₹3 lakhs, ₹3 lakhs to ₹5 lakhs, and more than ₹5 lakhs), and occupation (Daily Workers, Employed, Self Employed/Business, Homemakers, Retired/ Pensioners, and Others) as explanatory variables. We present region-wise predicted probabilities for respondents' perceptions and expectations regarding the general economic situation during three distinct periods: pre-pandemic, pandemic, and post-pandemic.

To interpret the outcomes of the parameter estimates, we use odds ratios.[4] An odds ratio greater than 1 implies increasing odds of being in a higher category with a unit increase in the predictor, whereas an odds ratio less than 1 implies decreasing odds of being in a higher category with a unit increase in the predictor. The three-point outcomes of respondents' views on the general economic situation are categorised as follows: [1 - 'Optimistic'], [2 - 'Neutral'], and [3 - 'Pessimistic'].

The COVID-19 pandemic had a profound impact on both the global and domestic economic conditions. Evidence suggests that it affected Indian households differently during its various phases (Sardar *et al.*, 2023). To capture regional divergence during normal economic cycles and economic turmoil caused by the

[4] While probabilities are represented as proportions or percentages, calculated by dividing the occurrences of an event by the total number of observations, odds are the ratio of the probability of one event to the probability of an alternative event, thus indicating whether the odds for a particular event are more or less likely in a given scenario compared to another.

pandemic, we divide the study period, starting from September 2017, into three distinct time periods: pre-pandemic (up to March 2020), pandemic (May 2020 to January 2022), and post-pandemic (March 2022 onwards). The period after the Omicron wave in January 2022 is considered the post-pandemic period.

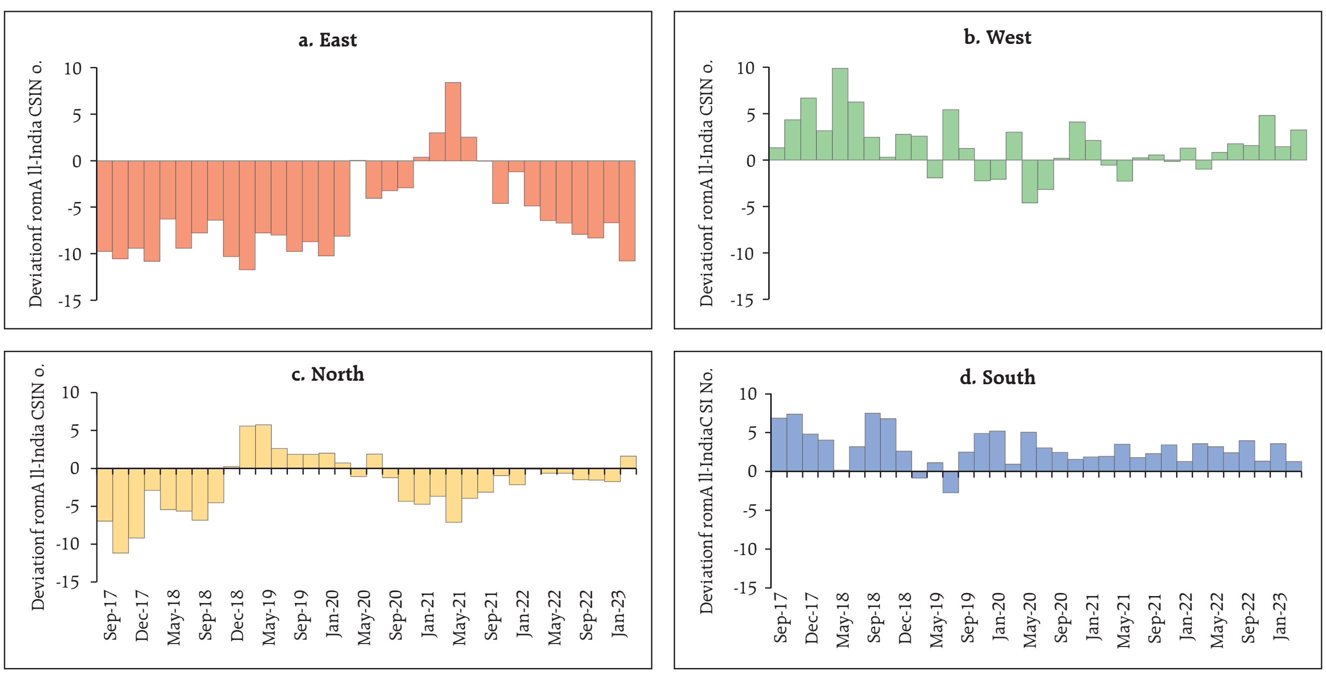
III. Regional Variation in Consumer Confidence

III.1 *Regional Variation in Overall Confidence*

Consumer confidence[5] mirrors the regional variation in income inequality, price dynamics, industrialisation, urbanisation *etc.*, alluded to in Section I. Based on the CSI, the current consumer confidence levels in the south and west regions were less pessimistic than the all-India average for 94 per cent and 74 per cent of the time, respectively. In the western region, most of the survey rounds with lower regional CSI than the all-India CSI occurred during the pandemic period from May 2020 to January 2022. Conversely, the CSI for the northern region remained below the all-India CSI for 15 consecutive rounds, starting from September 2020. In the case of northern region, consumer confidence stood better than the all-India average in less than 30 per cent of all the survey rounds. Meanwhile, consumer confidence in the eastern region was lower than the all-India CSI for 85 per cent of the survey rounds (Table 1, Chart 1, and Chart C1 in Annex C).

On the contrary, although consumers in the southern region consistently showed optimism in their current perception (in terms of CSI) compared to those in all other regions, their outlook (measured

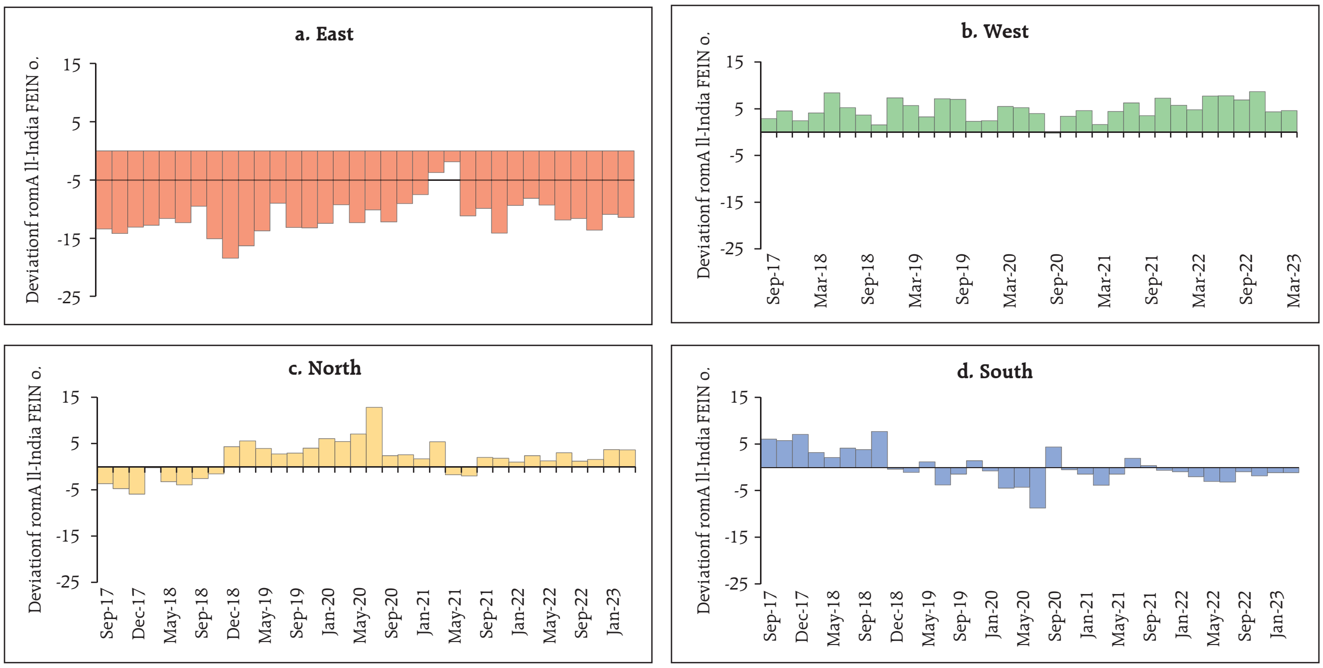
Chart 1: Deviation of Current Regional Sentiment from All-India Average



Note: Deviations are based on current perception as compared to a year ago and calculated as 'Regional CSI - All-India CSI'.
Sources: CCS; and Authors' calculations.

5 The consumer confidence for the current period is defined in terms of current situation index (CSI), whereas future expectations index (FEI) exhibits the consumer confidence for one-year ahead from now. The net responses for each of the survey parameters and the corresponding CSI and FEI numbers are calculated at all-India level and terms as national average time to time. The all-India CSI and FEI numbers along with the net responses are published bi-monthly on the RBI website.
(https://www.rbi.org.in/Scripts/BimonthlyPublications.aspx?head=Consumer%20Confidence%20Survey%20-%20Bi-monthly).

Chart 2: Deviation of Future Regional Sentiment from All-India Average



Note: Deviations are based on future expectations for the year ahead and calculated as 'Regional FEI - All-India FEI'.
Sources: CCS; and Authors' calculations.

by FEI) did not match their current perceptions regarding economic indicators. Only for 37 per cent of the times, their outlook was more optimistic than the national average. Similarly, there is a contrast in the northern region, where respondents were more optimistic about the future but usually downbeat about their current situation. Regarding the year-ahead outlook, the sentiment in the western region was better than the all-India average for 97 per cent of the survey period. Conversely, the FEI for the east region remained lower than the all-India FEI for all the 34 rounds (Table 1, Chart 2, and Chart C2 in Annex C).

III.2 Regional Variation Among Survey Parameters

Generally, the results obtained from summarising the indices align with the majority of regional-level parameters, although some differences arise regarding their levels of optimism or pessimism. The summary indices are created by taking the average of net responses from five key parameters and as such the direction of movement (whether it's towards optimism or pessimism) in these summary indices may not be fully reflected in each individual parameter.

In the northern region, despite muted sentiments regarding current employment and income, it retained the highest level of optimism regarding the overall economic situation. A higher proportion of households in this region expressed less pessimism about price levels compared to the national average. It appears that households' views on the current general economic state are mainly shaped by perceptions of pricing rather than employment circumstances or household income. Since the onset of the pandemic, while consumers' sentiments on other parameters remained mostly below the all-India average for the northern region, their sentiment on price levels remained mostly above the all-India average, despite some decline. Their perspective on inflation also tended to be less pessimistic than the national average most of the time. In contrast to their current views, households in the northern region are optimistic about the upcoming year, showing improved sentiment regarding future income and employment (Table 1, Chart C1 to C18 in Annex C).

In contrast, the southern region exhibits a lower RSI value for the current period's general economic situation, standing at 56. This appears to be on account of a higher percentage of households perceiving increased prices in essential expenses in the southern region compared to the national average. However, Southern households displayed significant optimism about present employment and income conditions, yielding the highest RSI among all regions. Additionally, the positive outlook on income prompted increased non-essential spending during the current period, partially offsetting price pressures. Conversely, although future income projections suggest restrained non-essential expenditures in the upcoming year, less pessimism regarding prices has led to decreased spending on essential items (Table 1, Chart C1 to C18 in Annex C).

The western region tends to be less pessimistic in its assessment of the general economic situation, on account of favourable survey responses on employment conditions, income scenarios, and price levels across most survey rounds. The RSI for the current period's general economic situation in the western region is 71, the second highest among the regions. Households in the west are the most optimistic about the economic outlook, with the RSI for the future general economic situation reaching 97. Similar to the northern region, the lower price pressure in the western region results in reduced essential spending (Table 1, Chart C1 to C18 in Annex C).

Table 1: Regional Sentiment Indicator

(in per cent)

Parameters	Period	Region			
		North	South	East	West
General Economic Situation	Current Period as compared to one year ago	88	56	3	71
Employment Scenario		6	100	3	88
Price Levels		88	18	0	76
Inflation		85	56	24	12
Household Income		3	94	38	79
Overall Spending		18	76	100	12
Essential Spending		6	82	100	15
Non-Essential Spending		56	71	50	29
Current Situation Index		29	94	15	74
General Economic Situation	One year ahead from now	79	68	0	97
Employment Scenario		41	85	0	94
Price Levels		74	41	18	56
Inflation		97	53	18	9
Household Income		41	41	3	94
Overall Spending		74	6	71	76
Essential Spending		74	15	82	71
Non-Essential Spending		62	21	32	79
Future Expectations Index		71	38	0	97

Sources: CCS; and Authors' calculations.

IV. Assessing Regional Variation Among Households' Sentiment Using Coherence Analysis

This section focuses on coherence analysis, exploring the connections among diverse economic factors such as the general economic situation, employment scenario, income, spending, and price levels, and their distinct impacts across regions. Through a thorough investigation, this section attempts to examine the relationships between these variables, especially during pre-pandemic, pandemic, and post-pandemic periods, unveiling valuable trends and regional drivers (Table D1 in Annex D). The key discoveries from this analysis are outlined below.

a) Strong coherence exists between the general economic situation and employment scenario across all regions, especially during the pandemic, with the northern and eastern regions showing peak coherence.

b) The relationship between the sentiment on households' own income and their view of the overall employment situation, although relatively high during the pandemic, has returned to pre-pandemic levels for all regions, with the strongest link observed in the northern region.

c) Alignment of sentiment between price levels and general economic situation surged during the pandemic, remaining high thereafter, notably in the eastern region, impacting consumer perceptions.

d) Essential expenditures primarily drive overall spending, showing high coherence with price levels across regions, indicating price inelasticity. Non-essential spending, however, is more price elastic, showing less alignment with price levels.

e) During the pandemic, coherence between price levels and non-essential spending deteriorated across regions, persisting post-pandemic. Overall spending is less correlated with non-essential spending compared to essential spending, a trend continuing post-pandemic.

f) Divergence in spending patterns, notably in the eastern region, indicates increased essential spending due to price pressure, coupled with decreased non-essential spending, driven by heightened pessimism regarding employment and income during and post-pandemic periods.

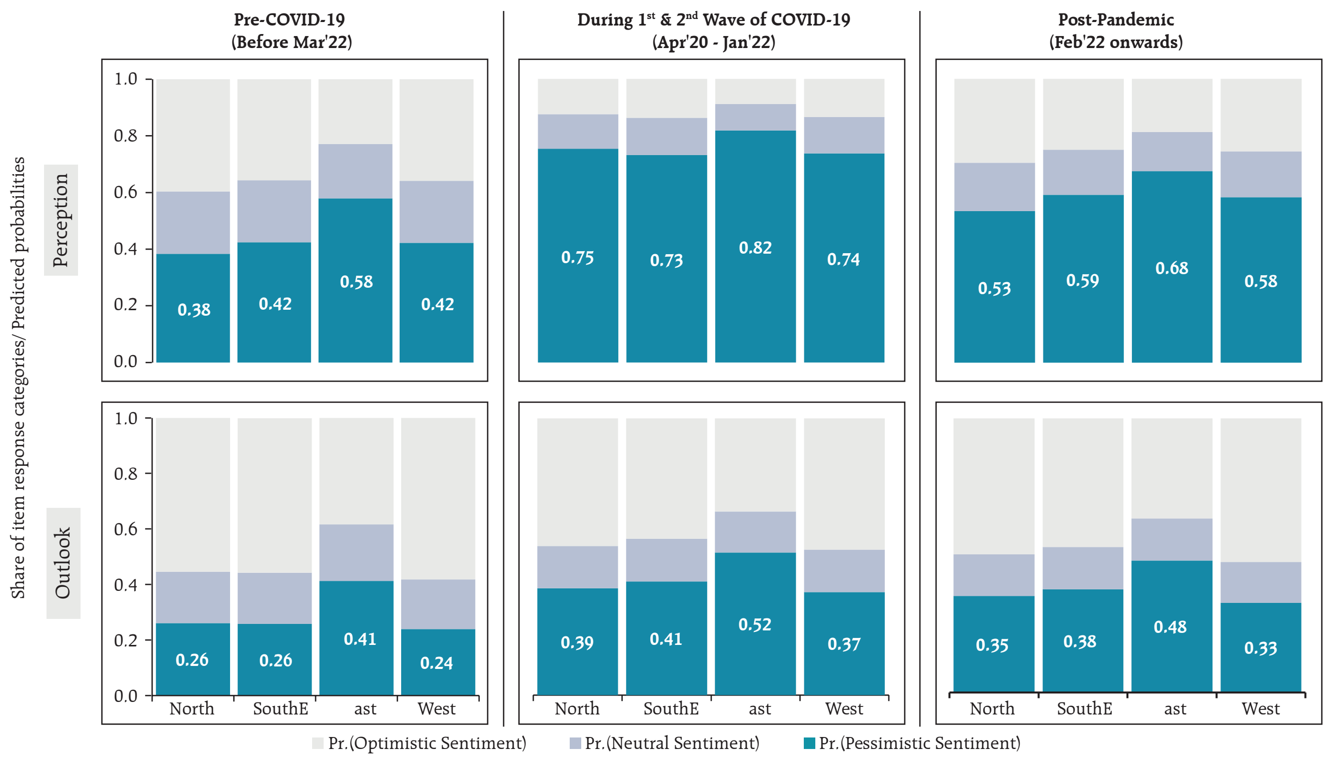
V. How Different Groups Perceive General Economic Situation in Each Region?

This section analyses consumers' sentiments regarding the general economic situation, which constitutes one of the five survey parameters across three distinct time periods. To explore this aspect, we employ ordinal logistic regression to determine if the regional distribution significantly influences perceptions and outlook concerning the general economic situation – a key variable of interest. Additionally, we incorporate income and occupation categories as explanatory variables. We use computed odds ratios from regression to provide a comparative assessment of the level of pessimism within a particular "group" – for instance, households residing in the east region – concerning the general economic situation, in relation to the other groups.

The predicted probabilities derived from the logistic regression indicate that, for all three time periods, the eastern region reported higher pessimism regarding the general economic situation compared to other regions (Chart 3).

When considering the households' current perceptions, during the pre-pandemic period, the odds of being pessimistic were 0.48 times lower for households in the north, 0.55 times lower for households in the south and the west, in comparison to households in the east region (Table 2). However, as the pandemic unfolded, these odds ratios increased

Chart 3: Region-wise Predicted Response Probabilities



Sources: CCS; and Authors' calculations.

towards the reference region (*i.e.*, east). The southern regions exhibited the least pessimism among the surveyed regions. This trend persisted throughout the post-pandemic period.

On the other hand, when analysing households' outlook across the survey parameters, the predicted probabilities indicated a generally positive sentiment, with optimism prevailing. However, during the pandemic, optimism declined significantly but remained higher than pre-pandemic levels. The odds of being pessimistic about the economic outlook were 0.53 times lower for households in the north, 0.50 times lower for households in the south, and 0.46 times lower for households in the west compared to those in the eastern region during the pre-pandemic period (Table 2). Similar to the current perception findings, the odds ratios for all regions increased during the pandemic and remained relatively stable thereafter. Throughout the study period, households in the western region displayed the lowest level of pessimism regarding the economic outlook.

Sentiments based on income and occupation categories showed remarkable similarities across regions, indicating consistent consumer behaviour among respective classes throughout the regions. As household income increased, the level of optimism also improved, although all income classes experienced a decline in sentiment during the pandemic, and the sentiments have not yet fully returned to pre-pandemic levels. Notably, in the post-pandemic period, the gap between sentiments among different income classes widened, with higher-income groups displaying less pessimism compared to lower-income groups. A similar pattern emerged in the one-year-ahead outlook, with higher-income groups being significantly less likely to express pessimism after the

Table 2: Odds of Negative Sentiments for General Economic Situation

	Pre-COVID-19 (Before Mar-2020)		COVID-19 Period (Apr 2020 - Jan 2022)		Post-pandemic (Feb 2022 onwards)	
	Odd Ratio (95% CI*)	p-value	Odd Ratio (95% CI*)	p-value	Odd Ratio (95% CI*)	p-value
Dependent Variable: Current Perception on General Economic Situation						
Independent Variables						
Region						
East	Reference		Reference		Reference	
North	0.481 (0.461, 0.501)	0.000	0.706 (0.662, 0.753)	0.0000	0.610 (0.570, 0.653)	0.000
South	0.546 (0.526, 0.567)	0.000	0.609 (0.573, 0.648)	0.0000	0.740 (0.693, 0.790)	0.000
West	0.551 (0.529, 0.573)	0.000	0.624 (0.586, 0.665)	0.0000	0.701 (0.656, 0.750)	0.000
Dependent Variable: 1-Year Ahead Expectations on General Economic Situation						
Independent Variables						
Region						
East	Reference		Reference		Reference	
North	0.527 (0.506, 0.549)	0.000	0.613 (0.583, 0.645)	0.000	0.633 (0.595, 0.674)	0.000
South	0.504 (0.485, 0.523)	0.000	0.659 (0.628, 0.692)	0.000	0.686 (0.646, 0.729)	0.000
West	0.462 (0.444, 0.481)	0.000	0.564 (0.536, 0.592)	0.000	0.547 (0.514, 0.582)	0.000

Note: * Indicates confidence interval.
Sources: CCS; and Authors' calculations.

pandemic, compared to earlier (Table E1 and E2 in Annex E).

When examining sentiments by occupation categories concerning the current general economic situation, retired individuals were the least optimistic before the pandemic, followed by the self-employed. However, during the pandemic when containment measures were in place to control infections, the self-employed category became the least optimistic, with daily workers ranking second. After the Omicron wave of COVID in January 2022, and with the easing of restrictions, the self-employed category exhibited the fastest recovery in current perceptions. Nevertheless, daily workers continued to be among the most pessimistic occupation categories, alongside retired individuals.

VI. Conclusion

This article analysed the regional variations in consumer confidence and related survey parameters, indicating the impact of regional differences in income inequality, price dynamics, industrialisation, and urbanisation. The south and west regions demonstrate relatively higher consumer confidence levels than the all-India average, while the northern region exhibits intermittent optimism. The coherence analysis highlights the strong influence of price levels on consumers' perceptions of the general economic situation, especially in the eastern region. The relationship between households' sentiment on their own income and their view on overall employment scenario, although relatively high during the pandemic, has returned to pre-pandemic levels for all regions, with the strongest link observed in the northern region. The study also reveals that overall spending is primarily driven by essential expenditures, which are mostly price inelastic, while non-essential spending shows less alignment with price levels. The higher income groups displayed more optimism post-pandemic.

References:

Celik, S., Aslanoglu, E. and Uzun, S. (2010). Determinants of Consumer Confidence in Emerging Economies: A Panel Cointegration Analysis. *Topics in Middle Eastern and North African Economies, 12.*

Das, A., Lahiri, K., and Zhao, Y. (2017). Asymmetries in Indian Inflation Expectations. In *Workshop on "Forecasting Issues in Developing Economies". IMF, Washington DC.*

Dominitz, J., and Manski, C. F. (2007). Expected equity returns and portfolio choice: Evidence from the Health and Retirement Study. *Journal of the European Economic Association*, 5(2-3), 369-379.

Fernandez, R., Immervoll, H., Pacifico, D., Browne, J., Neumann, D., and Thévenot, C. (2018). Faces of Joblessness in Spain: A People-centred perspective on employment barriers and policies.

Guo, J. (2016). Regional Differences in Consumer Confidence, Consumption, and Employment: 2001-2014. Yale University.

Kilic, E. and Cankaya, S. (2016). Consumer confidence and economic activity: a factor augmented VAR approach. *Applied Economics*, 48:32, 3062-3080.

Kumar, N., Singh, D.P. and Mishra, A. (2019). Efficacy of the Consumer Confidence Survey in Forecasting Macro-Economic Conditions. *RBI Bulletin*, Vol. 73(12).

Mankiw, N. G., Reis, R., and Wolfers, J. (2003). Disagreement about inflation expectations. *NBER macroeconomics annual, 18*, 209-248.

Ohlan, R. (2013). Pattern of regional disparities in socio-economic development in India: District level analysis. *Social Indicators Research, 114*, 841-873.

Owyang, M. T., Piger, J., and Wall, H. J. (2005). Business cycle phases in US states. *Review of Economics and Statistics, 87*(4), 604-616.

Puri, M., and Robinson, D. T. (2007). Optimism and economic choice. *Journal of financial economics, 86*(1), 71-99.

Sardar, S., Sanyal, A., and Das, T.B. (2023). Did COVID-19 Affect Households Differently? Understanding Heterogeneity in Consumer Confidence. *RBI Working Paper* Series No. 06, 06/2023.

Souleles, N. S. (2004). Expectations, heterogeneous forecast errors, and consumption: Micro evidence from the Michigan consumer sentiment surveys. *Journal of Money, Credit and Banking*, 39-72.

Annex-A: Survey Description

I. Survey Coverage and Questionnaire

Since its inception in June 2010, the survey coverage has been gradually expanded and currently, since March 2021, it is conducted in 19 cities, *viz.*, Ahmedabad, Bengaluru, Bhopal, Bhubaneswar, Chandigarh, Chennai, Delhi, Guwahati, Hyderabad, Jammu, Jaipur, Kolkata, Lucknow, Mumbai, Nagpur, Patna, Raipur, Ranchi and Thiruvananthapuram. In each survey round, around 6,100 households are sampled, using a hybrid two stage sampling design. At the first stage in a city, the polling booths are selected by systematic random sampling, arranging all polling booths as per their constituencies. In the second stage, 15 respondents are selected from each selected polling booth area, following the right-hand rule.

The households are asked about their current perception and one-year ahead outlook on five major parameters *viz.*, general economic situation, employment scenario, price level, household's income and spending. In addition, the survey also elicits responses on rate of price change and households' own essential and non-essential spending. The responses are recorded on a three-point scale (*i.e.*, improve/ will improve, worsened/ will worsen and remained/ will remain same).

II. Consumer confidence indices

The survey responses are summarised using "net response", which is defined as the percentage of respondents reporting a decrease (negative), subtracted from the percentage reporting an increase (positive). Net Responses can take values from –100 to +100.

To summarise the consumers' confidence on various parameters, two consumer confidence indices are formulated, *viz.*, the Current Situation Index (CSI), which reflects consumer confidence for the current period as compared to one year ago, and the Future Expectations Index (FEI), reflecting the outlook for one year ahead. The indices are calculated as follows:

Overall Index = 100 + Average (Net Response of selected parameters)

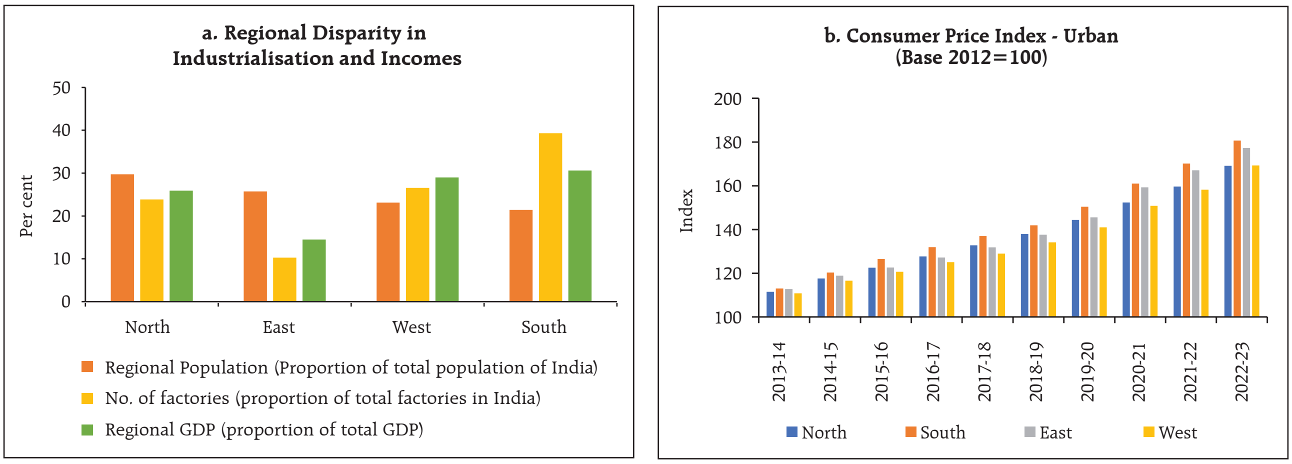
where,

Net Response = Positive sentiments (per cent) – Negative sentiments (per cent)

The CSI and FEI summarise the current perception and one-year ahead outlook, respectively, on five major parameters, *viz.*, economic conditions, employment, price level, income and spending. The CSI and the FEI can take values between 0 to 200. An index value below 100 indicates pessimism, whereas that above 100 signals optimism.

Annex-B: Regional Variation

Chart B1: Regional Variation in terms of Industrialization, Incomes, and Price Movements*



Note: *Based on 20 major states, *viz.*, Andhra Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, NCT of Delhi, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand, and West Bengal, have been used for this analysis.

Sources: Census of India, 2011, Annual Survey of Industries; 2019-20, Economic Survey, 2022-23; Ministry of Statistics and Programme Implementation (MoSPI); and Authors' calculations.

Annex-C: Regional Consumer Confidence

Chart C1: Current Situation Index (CSI)

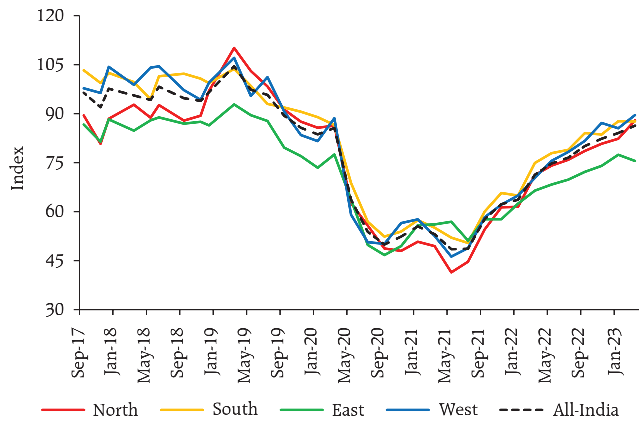


Chart C2: Future Expectations Index (FEI)

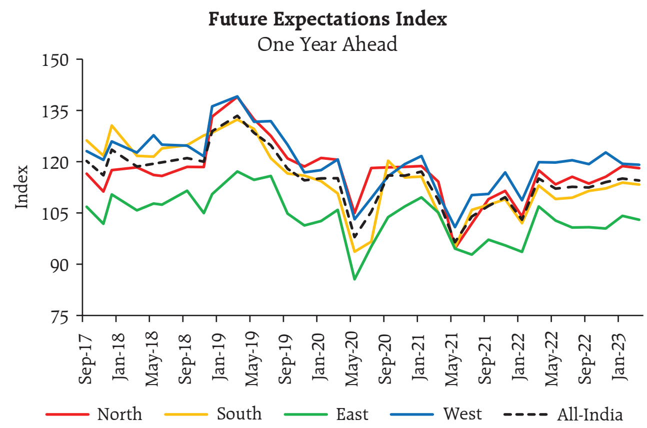


Chart C3: Perception of General Economic Situation as Compared to a Year Ago

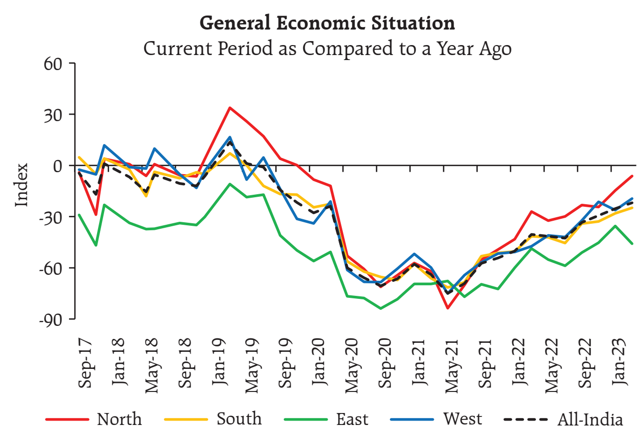


Chart C4: Expectation for General Economic Situation for One Year Ahead

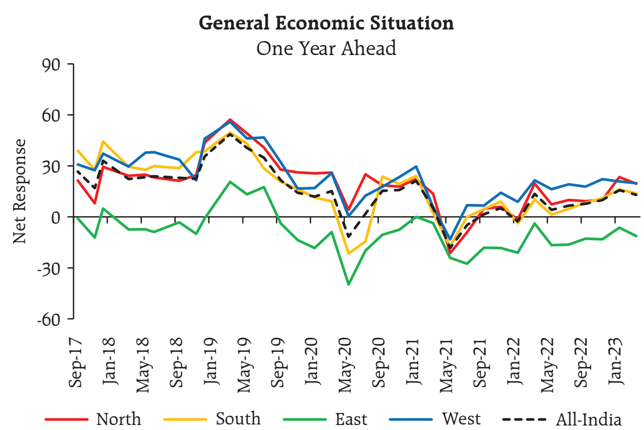


Chart C5: Perception of Employment Scenario as Compared to a Year Ago

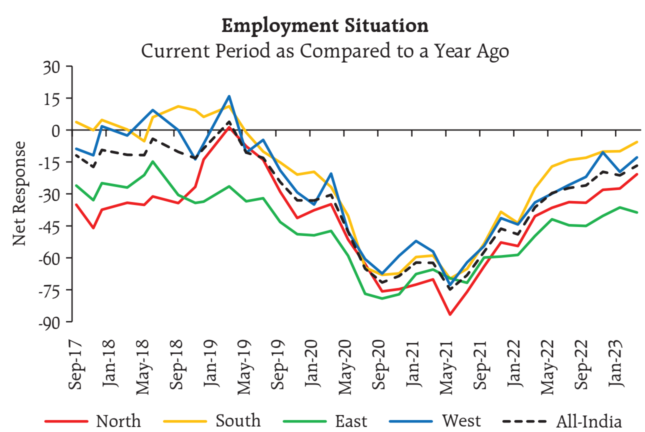
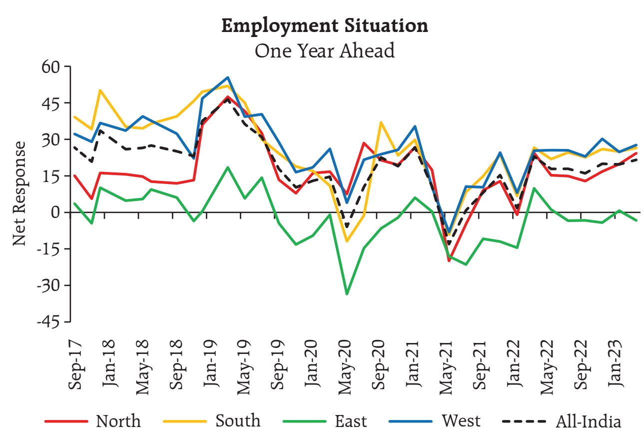


Chart C6: Expectation for Employment Scenario for One Year Ahead



Annex-C: Regional Consumer Confidence (*Contd.*)

Chart C7: Perception of Price Levels as Compared to a Year Ago

Price Levels
Current Period as Compared to a Year Ago

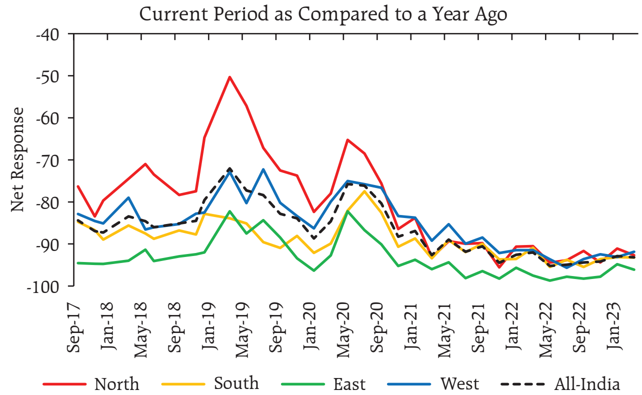


Chart C8: Expectation for Price Levels for One Year Ahead

Price Levels
One Year Ahead

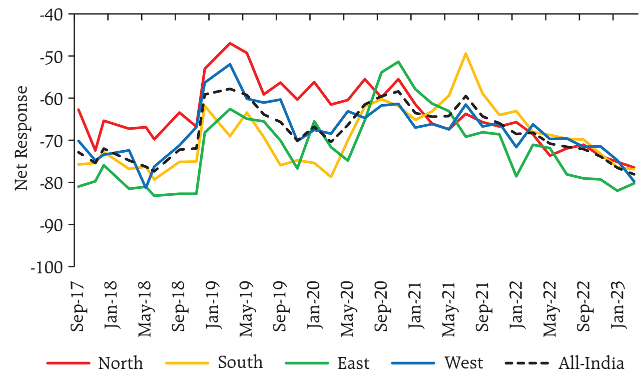


Chart C9: Perception of Rate of Price Change as Compared to a Year Ago

Inflation
Current Period as Compared to a Year Ago

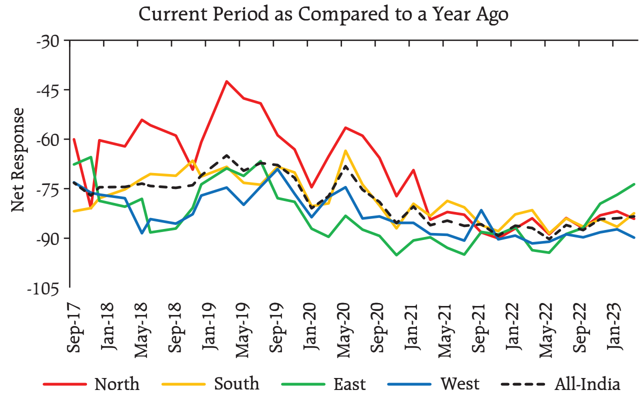


Chart C10: Expectation for Rate of Price Change for One Year Ahead

Inflation
One Year Ahead

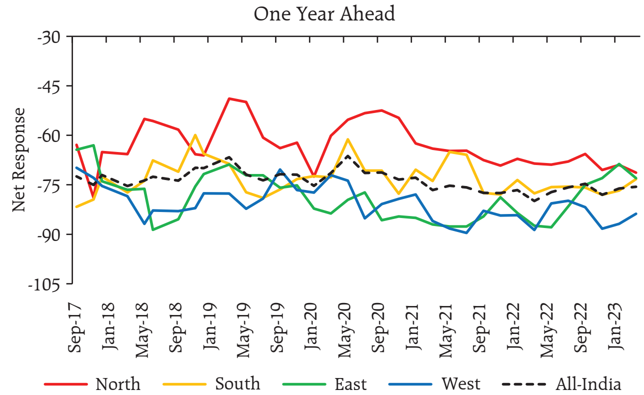


Chart C11: Perception of Household Income as Compared to a Year Ago

Household Income
Current Period as Compared to a Year Ago

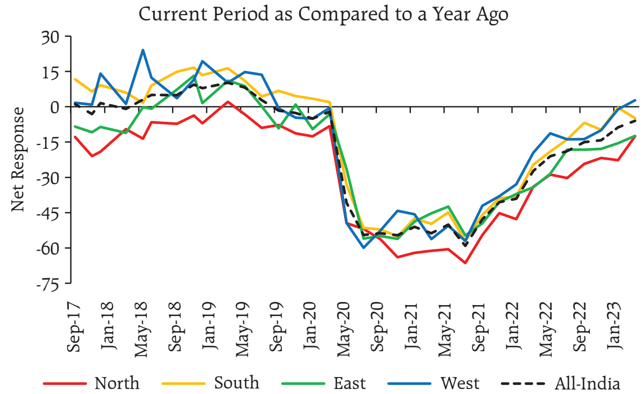
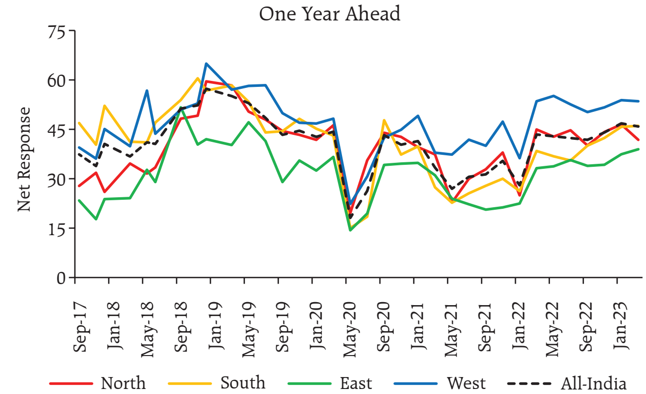


Chart C12: Expectation for Household Income for One Year Ahead

Household Income
One Year Ahead



Annex-C: Regional Consumer Confidence (*Concld.*)

Chart C13: Perception of Overall Spending as Compared to a Year Ago

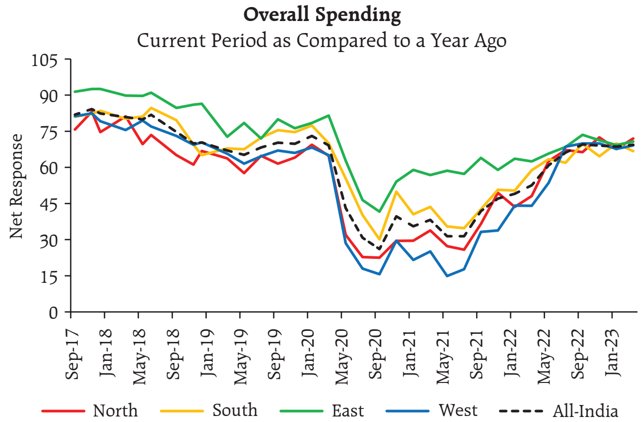


Chart C14: Expectation for Overall Spending for One Year Ahead

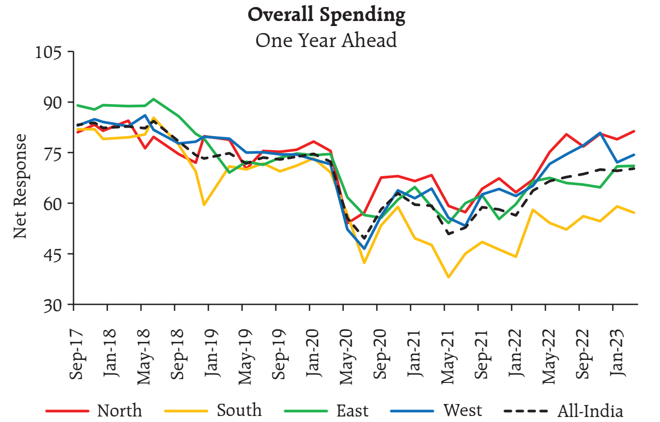


Chart C15: Perception of Essential Spending as Compared to a Year Ago

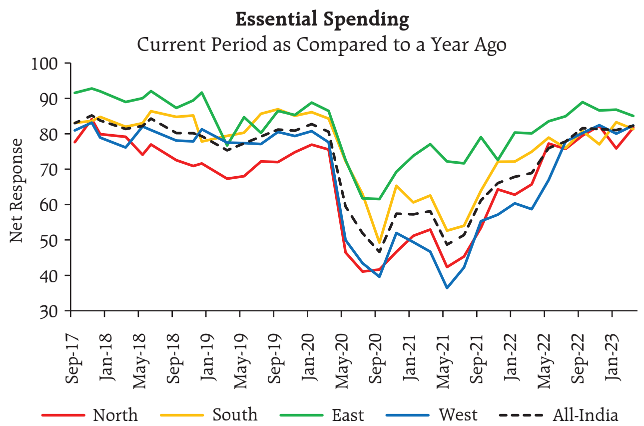


Chart C16: Expectation for Essential Spending for One Year Ahead

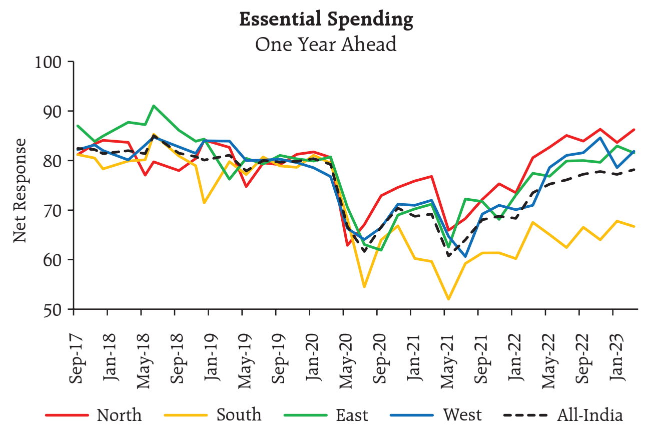


Chart C17: Perception of Non-essential Spending as Compared to a Year Ago

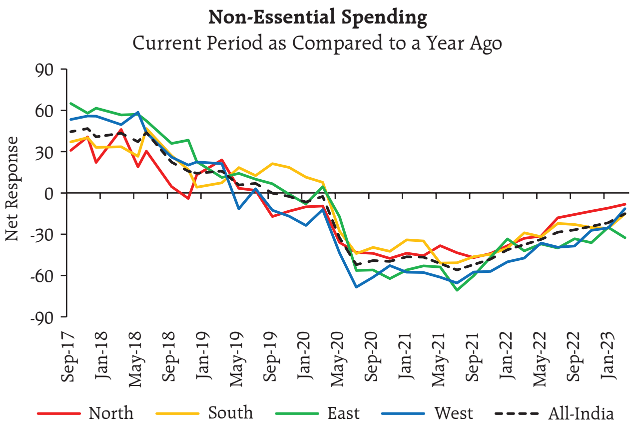
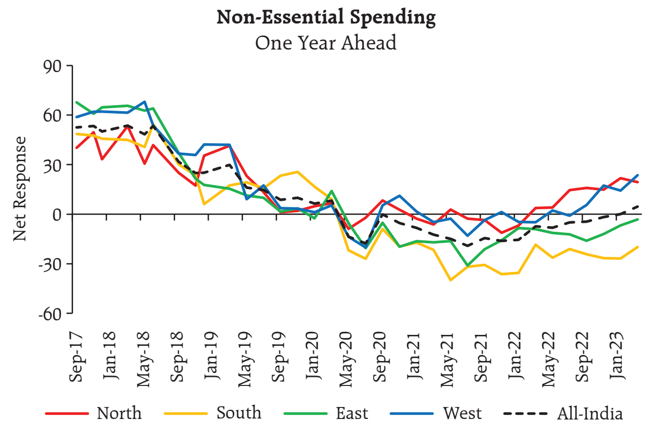


Chart C18: Expectation for Non-essential Spending for One Year Ahead



Source: Consumer confidence survey, RBI and Authors' calculation.

Annex-D: Coherence Between Survey Parameters

Table D1: Coherence Between Survey Parameters - Regions Wise

Parameter combination	Period	Current Period as compared to One Year Ago				
		North	South	East	West	Overall
General Economic Situation *vs* Employment Scenario	Pre-pandemic	56.6	54.8	60.2	**61.6**	57.8
	Pandemic	**76.4**	66.9	74.9	71.2	71.8
	Post-Omicron	65.2	56.2	**66.9**	65.9	62.8
General Economic Situation *vs* Price Levels	Pre-pandemic	42.6	42.1	**59.4**	44.8	45.7
	Pandemic	71.0	68.9	**78.7**	68.7	71.0
	Post-Omicron	55.3	57.3	**67.4**	58.2	58.6
Household Income *vs* Employment Scenario	Pre-pandemic	**46.4**	41.9	40.0	42.4	42.7
	Pandemic	**63.9**	54.9	55.7	56.7	57.9
	Post-Omicron	**47.3**	41.8	45.4	42.7	44.1
Household Income *vs* Non-essential Spending	Pre-pandemic	44.4	42.9	39.7	**46.3**	43.6
	Pandemic	53.6	52.3	55.6	**59.1**	55.0
	Post-Omicron	48.5	42.4	**50.1**	47.8	46.7
Price Levels *vs* Overall Spending	Pre-pandemic	69.3	78.8	**85.0**	73.3	76.2
	Pandemic	55.1	59.7	**68.2**	51.5	57.7
	Post-Omicron	72.8	72.7	**73.0**	72.9	72.8
Price Levels *vs* Essential Spending	Pre-pandemic	72.5	84.2	**87.4**	78.9	80.7
	Pandemic	65.1	71.5	**78.7**	64.0	69.0
	Post-Omicron	81.0	82.5	**86.9**	80.9	82.4
Price Levels *vs* Non-essential Spending	Pre-pandemic	36.7	48.3	**51.5**	44.6	45.2
	Pandemic	13.6	**19.8**	11.7	13.0	15.0
	Post-Omicron	19.1	**26.0**	15.6	21.8	21.4
Overall Spending *vs* Essential Spending	Pre-pandemic	88.2	88.0	**92.1**	86.7	88.4
	Pandemic	83.6	80.1	**84.6**	78.9	81.4
	Post-Omicron	**88.2**	85.6	83.8	87.9	86.6
Overall Spending *vs* Non-essential Spending	Pre-pandemic	51.1	**60.9**	60.0	60.1	58.3
	Pandemic	43.1	**44.2**	27.5	42.4	40.7
	Post-Omicron	37.3	**43.5**	28.6	38.0	38.0

(*Contd.*)

Parameter combination	Period	One Year Ahead from Now				
		North	South	East	West	Overall
General Economic Situation *vs* Employment Scenario	Pre-pandemic	67.5	64.3	67.8	**71.8**	67.5
	Pandemic	70.9	64.2	**71.3**	69.5	68.5
	Post-Omicron	69.2	64.1	69.8	**72.1**	68.5
General Economic Situation *vs* Price Levels	Pre-pandemic	33.7	30.8	**49.5**	33.1	35.1
	Pandemic	44.6	43.7	**56.5**	41.2	45.3
	Post-Omicron	40.8	41.4	**52.7**	38.4	42.2
Household Income *vs* Employment Scenario	Pre-pandemic	51.8	53.2	47.1	**53.9**	52.1
	Pandemic	**49.2**	46.6	45.4	47.6	47.3
	Post-Omicron	49.7	45.3	46.1	**51.5**	48.2
Household Income *vs* Non-essential Spending	Pre-pandemic	49.0	49.3	46.4	**51.2**	49.2
	Pandemic	44.0	38.8	43.9	**45.8**	42.8
	Post-Omicron	**47.9**	33.3	45.8	45.7	42.4
Price Levels *vs* Overall Spending	Pre-pandemic	66.2	74.3	**75.9**	71.6	72.0
	Pandemic	59.0	57.4	**59.9**	58.9	58.6
	Post-Omicron	**69.5**	62.7	65.9	69.2	66.8
Price Levels *vs* Essential Spending	Pre-pandemic	67.6	77.0	**78.4**	73.0	74.0
	Pandemic	62.8	61.3	**65.3**	62.9	62.8
	Post-Omicron	73.4	67.1	**75.0**	72.2	71.4
Price Levels *vs* Non-essential Spending	Pre-pandemic	43.7	**51.5**	51.3	51.4	49.6
	Pandemic	30.3	29.2	25.9	**33.8**	30.2
	Post-Omicron	34.2	28.8	25.4	**40.4**	32.8
Overall Spending *vs* Essential Spending	Pre-pandemic	91.8	89.6	**92.0**	91.5	91.0
	Pandemic	**89.5**	85.1	87.4	88.0	87.4
	Post-Omicron	91.8	88.1	86.2	**92.9**	90.0
Overall Spending *vs* Non-essential Spending	Pre-pandemic	55.9	65.2	63.6	**66.0**	63.0
	Pandemic	47.1	47.2	45.0	**53.6**	48.5
	Post-Omicron	47.3	46.6	42.0	**53.6**	47.9

Sources: CCS; and Authors' calculation.

Annex-E: Results of Ordinal Logistic Regression

Table E1: Odds of Negative Sentiments for Current Period

	Pre-COVID-19 (Before Mar-2020)		COVID-19 Period (Apr 2020 - Jan 2022)		Post-pandemic (Feb 2022 onwards)	
	Odd Ratio (95% CI)	p-value	Odd Ratio (95% CI)	p-value	Odd Ratio (95% CI)	p-value
Dependent Variable: Current Perception on General Economic Situation						
Independent Variables						
Region						
East	Reference		Reference		Reference	
North	0.481 (0.461, 0.501)	0.0000	0.706 (0.662, 0.753)	0.0000	0.610 (0.570, 0.653)	0.0000
South	0.546 (0.526, 0.567)	0.0000	0.609 (0.573, 0.648)	0.0000	0.740 (0.693, 0.790)	0.0000
West	0.551 (0.529, 0.573)	0.0000	0.624 (0.586, 0.665)	0.0000	0.701 (0.656, 0.750)	0.0000
Income						
₹1 lakh or less	Reference		Reference		Reference	
₹1 to less than 3 lakhs	0.803 (0.782, 0.825)	0.0000	0.910 (0.872, 0.948)	0.0000	0.815 (0.776, 0.856)	0.0000
₹ 3 lakh to 5 lakhs	0.689 (0.657, 0.723)	0.0000	0.713 (0.667, 0.762)	0.0000	0.630 (0.591, 0.671)	0.0000
₹5 lakh or more	0.709 (0.660, 0.762)	0.0000	0.670 (0.61, 0.736)	0.0000	0.496 (0.450, 0.546)	0.0000
Education						
Daily Workers	Reference		Reference		Reference	
Employed	0.909 (0.868, 0.952)	0.0001	0.928 (0.863, 0.997)	0.0405	0.817 (0.756, 0.884)	0.0000
Homemakers	1.092 (1.045, 1.142)	0.0001	1.085 (1.011, 1.164)	0.0231	1.040 (0.965, 1.119)	0.3046
Retired/Pensioners	1.237 (1.157, 1.323)	0.0000	0.843 (0.759, 0.936)	0.0014	1.006 (0.893, 1.135)	0.9176
Self Employed/ Business	1.051 (1.001, 1.103)	0.0452	1.091 (1.012, 1.176)	0.0226	0.840 (0.773, 0.912)	0.0000
Others	0.769 (0.728, 0.812)	0.0000	0.855 (0.787, 0.928)	0.0002	0.724 (0.663, 0.790)	0.0000

Sources: CCS; and Authors' calculation.

Table E2: Odds of Negative Sentiments for One Year Ahead

	Pre-COVID-19 (Before Mar-2020)		COVID-19 Period (Apr 2020 - Jan 2022)		Post-pandemic (Feb 2022 onwards)	
	Odd Ratio (95% CI)	p-value	Odd Ratio (95% CI)	p-value	Odd Ratio (95% CI)	p-value
Dependent Variable: 1-Year Ahead Expectations on General Economic Situation						
Independent Variables						
Region						
East	Reference		Reference		Reference	
North	0.527 (0.506, 0.549)	0.0000	0.613 (0.583, 0.645)	0.0000	0.633 (0.595, 0.674)	0.0000
South	0.504 (0.485, 0.523)	0.0000	0.659 (0.628, 0.692)	0.0000	0.686 (0.646, 0.729)	0.0000
West	0.462 (0.444, 0.481)	0.0000	0.564 (0.536, 0.592)	0.0000	0.547 (0.514, 0.582)	0.0000
Income						
1 lakh or less	Reference		Reference		Reference	
₹1 to less than 3 lakh	0.826 (0.804, 0.849)	0.0000	0.932 (0.901, 0.964)	0.0000	0.848 (0.810, 0.887)	0.0000
₹3 lakh to 5 lakh	0.740 (0.704, 0.778)	0.0000	0.731 (0.691, 0.774)	0.0000	0.665 (0.625, 0.707)	0.0000
₹5 lakh or more	0.747 (0.693, 0.805)	0.0000	0.656 (0.604, 0.712)	0.0000	0.579 (0.526, 0.637)	0.0000
Education						
Daily Workers	Reference		Reference		Reference	
Employed	0.905 (0.862, 0.949)	0.0000	0.842 (0.794, 0.893)	0.0000	0.846 (0.785, 0.912)	0.0000
Homemakers	0.973 (0.930, 1.019)	0.2443	0.873 (0.825, 0.925)	0.0000	0.900 (0.839, 0.966)	0.0033
Retired/Pensioners	1.213 (1.134, 1.298)	0.0000	0.906 (0.829, 0.990)	0.0289	1.056 (0.943, 1.182)	0.3477
Self Employed/ Business	1.016 (0.967, 1.067)	0.5280	0.920 (0.865, 0.978)	0.0073	0.904 (0.836, 0.978)	0.0120
Others	0.745 (0.703, 0.788)	0.0000	0.769 (0.718, 0.823)	0.0000	0.703 (0.645, 0.765)	0.0000

Sources: CCS; and Authors' calculation.

CURRENT STATISTICS

Contents

Notes: .. = Not available.

– = Nil/Negligible.

P = Preliminary/Provisional. PR = Partially Revised.

No. 1: Select Economic Indicators

Item	2023-24	2022-23		2023-24	
		Q2	Q3	Q2	Q3
	1	2	3	4	5
1 Real Sector (% Change)					
1.1 GVA at Basic Prices	6.9	5.0	4.8	7.7	6.5
1.1.1 Agriculture	0.7	2.3	5.2	1.6	-0.8
1.1.2 Industry	8.3	-5.5	-2.8	13.6	10.9
1.1.3 Services	7.9	9.4	7.5	6.9	7.4
1.1a Final Consumption Expenditure	3.0	7.6	2.4	3.9	2.7
1.1b Gross Fixed Capital Formation	10.2	4.7	5.0	11.6	10.6
	2023-24	2023		2024	
		Feb.	Mar.	Feb.	Mar.
	1	2	3	4	5
1.2 Index of Industrial Production	5.8	6.0	1.9	5.6	4.9
2 Money and Banking (% Change)					
2.1 Scheduled Commercial Banks					
2.1.1 Deposits	12.9	10.1	9.6	12.5	12.9
	(13.5)			(13.1)	(13.5)
2.1.2 Credit #	16.3	15.5	15.0	16.6	16.3
	(20.2)			(20.5)	(20.2)
2.1.2.1 Non-food Credit #	16.3	15.9	15.4	16.6	16.3
	(20.2)			(20.6)	(20.2)
2.1.3 Investment in Govt. Securities	11.1	14.3	14.5	11.6	11.1
	(12.8)			(13.3)	(12.8)
2.2 Money Stock Measures					
2.2.1 Reserve Money (M0)	6.7	10.5	7.8	6.1	6.7
2.2.2 Broad Money (M3)	11.1	9.5	9.0	10.9	11.1
				(11.4)	(11.6)
3 Ratios (%)					
3.1 Cash Reserve Ratio	4.50	4.50	4.50	4.50	4.50
3.2 Statutory Liquidity Ratio	18.00	18.00	18.00	18.00	18.00
3.3 Cash-Deposit Ratio	5.0	5.0	5.0	4.9	5.0
	(5.0)			(4.9)	(5.0)
3.4 Credit-Deposit Ratio	78.1	75.3	75.8	78.0	78.1
	(80.3)			(80.2)	(80.3)
3.5 Incremental Credit-Deposit Ratio #	95.8	111.6	113.0	97.8	95.8
	(113.4)			(117.5)	(113.4)
3.6 Investment-Deposit Ratio	29.5	29.9	30.0	29.6	29.5
	(29.8)			(29.9)	(29.8)
3.7 Incremental Investment-Deposit Ratio	25.8	43.6	43.5	26.5	25.8
	(28.4)			(29.3)	(28.4)
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	8.65/9.40	8.65/10.10	9.10/10.25	9.10/10.25
4.7 MCLR (Overnight)	8.00/8.60	7.50/8.40	7.50/8.50	8.00/8.60	8.00/8.60
4.8 Term Deposit Rate >1 Year	6.50/7.25	6.00/7.25	6.00/7.25	6.50/7.25	6.50/7.25
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	6.62	6.78	6.64	6.85
4.11 91-Day Treasury Bill (Primary) Yield	-	6.82	-	-	7.01
4.12 182-Day Treasury Bill (Primary) Yield	7.28	7.18	7.28	-	7.14
4.13 364-Day Treasury Bill (Primary) Yield	7.31	7.26	7.31	-	7.08
4.14 10-Year G-Sec Par Yield (FBIL)	7.31	7.43	7.31	-	7.07
5 Reference Rate and Forward Premia					
5.1 INR-US$ Spot Rate (Rs. Per Foreign Currency)	83.37	82.74	82.22	82.89	83.37
5.2 INR-Euro Spot Rate (Rs. Per Foreign Currency)	90.22	87.70	89.61	89.71	90.22
5.3 Forward Premia of US$ 1-month (%)	1.00	2.10	2.41	1.19	1.00
3-month (%)	1.11	2.56	2.19	1.51	1.11
6-month (%)	1.31	2.30	2.31	1.50	1.31
6 Inflation (%)					
6.1 All India Consumer Price Index	5.4	6.4	5.7	5.1	4.9
6.2 Consumer Price Index for Industrial Workers	-	6.2	5.8	-	-
6.3 Wholesale Price Index	-0.7	3.9	1.4	0.2	0.5
6.3.1 Primary Articles	3.5	3.6	2.5	4.6	4.5
6.3.2 Fuel and Power	-4.5	14.0	8.7	-1.7	-0.8
6.3.3 Manufactured Products	-1.7	1.9	-0.7	-1.3	-0.8
7 Foreign Trade (% Change)					
7.1 Imports	-5.7	-4.1	-3.4	12.2	-6.0
7.2 Exports	-3.1	-0.4	-5.9	11.9	-0.6

Note : Financial Benchmark India Pvt. Ltd. (FBIL) has commenced publication of the G-Sec benchmarks with effect from March 31, 2018 as per RBI circularFMRD.DIRD. 7/14.03.025/2017-18 dated March 31, 2018. FBIL has started dissemination of reference rates w.e.f. July 10, 2018.
#: Bank credit growth and related ratios for all fortnights from December 3, 2021 to November 18, 2022 are adjusted for past reporting errors by select scheduled commercial banks (SCBs). Figures in parentheses include the impact of merger of a non-bank with a bank.
*: As per Press Release No. 2022-2023/41 dated April 08, 2022.

Reserve Bank of India

No. 2: RBI - Liabilities and Assets *

(₹ Crore)

Item	As on the Last Friday/ Friday						
	2023-24	2023	2024				
		Apr.	Mar. 29	Apr. 05	Apr. 12	Apr. 19	Apr. 26
	1	2	3	4	5	6	7
1 Issue Department							
1.1 Liabilities							
1.1.1 Notes in Circulation	3482333	3424801	3482333	3498239	3535114	3533137	3532891
1.1.2 Notes held in Banking Department	11	15	11	16	12	13	11
1.1/1.2 Total Liabilities (Total Notes Issued) or Assets	**3482344**	**3424816**	**3482344**	**3498254**	**3535126**	**3533149**	**3532901**
1.2 Assets							
1.2.1 Gold	162996	141580	162996	170248	174409	177265	172260
1.2.2 Foreign Securities	3318885	3282897	3318885	3327582	3360335	3355542	3360359
1.2.3 Rupee Coin	463	339	463	424	382	343	282
1.2.4 Government of India Rupee Securities	-	-	-	-	-	-	-
2 Banking Department							
2.1 Liabilities							
2.1.1 Deposits	1782333	1219180	1782333	1489091	1428922	1514518	1622446
2.1.1.1 Central Government	101	100	101	100	101	101	101
2.1.1.2 Market Stabilisation Scheme	-		-			-	-
2.1.1.3 State Governments	42	42	42	42	42	42	43
2.1.1.4 Scheduled Commercial Banks	1008618	890423	1008618	932312	969404	944236	1017716
2.1.1.5 Scheduled State Co-operative Banks	10092	7730	10092	9615	8654	8657	8776
2.1.1.6 Non-Scheduled State Co-operative Banks	6412	4687	6412	5898	5864	5665	5589
2.1.1.7 Other Banks	48725	48248	48725	47865	48641	48617	49381
2.1.1.8 Others	545400	200029	545400	364764	282726	374911	405934
2.1.1.9 Financial Institution Outside India	162944	67920	162944	128494	113489	132290	134905
2.1.2 Other Liabilities	1804747	1600038	1804747	1797575	1761423	1752864	1742033
2.1/2.2 Total Liabilities or Assets	**3587080**	**2819218**	**3587080**	**3286667**	**3190345**	**3267382**	**3364479**
2.2 Assets							
2.2.1 Notes and Coins	11	15	11	16	12	13	11
2.2.2 Balances Held Abroad	1480408	995491	1480408	1468908	1389734	1365539	1344423
2.2.3 Loans and Advances							
2.2.3.1 Central Government	-	4666	-	-	-	-	-
2.2.3.2 State Governments	2300	4538	2300	17380	12921	17496	13284
2.2.3.3 Scheduled Commercial Banks	266021	73004	266021	10517	9635	85339	209301
2.2.3.4 Scheduled State Co-op.Banks	-	-	-	-	-	-	-
2.2.3.5 Industrial Dev. Bank of India	-	-	-	-	-	-	-
2.2.3.6 NABARD	-	0	-	-	-	-	-
2.2.3.7 EXIM Bank	-	-	-	-	-	-	-
2.2.3.8 Others	12398	19937	12398	9361	9361	8770	9203
2.2.3.9 Financial Institution Outside India	162650	67357	162650	128114	113192	131369	133974
2.2.4 Bills Purchased and Discounted							
2.2.4.1 Internal	-	-	-	-	-	-	-
2.2.4.2 Government Treasury Bills	-	-	-	-	-	-	-
2.2.5 Investments	1365425	1418112	1365425	1363508	1359553	1356982	1358263
2.2.6 Other Assets	297868	236098	297868	288864	295937	301873	296019
2.2.6.1 Gold	272028	232068	272028	284132	291077	296916	290621

* 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
Mar. 1, 2024	-	-	-	-	663	81831	-	-	-	-81168
Mar. 2, 2024	-	-	-	-	281	92129	-	-	-	-91848
Mar. 3, 2024	-	-	-	-	19	65639	-	-	-	-65620
Mar. 4, 2024	-	-	-	44035	419	118731	275	-	-	-162072
Mar. 5, 2024	-	-	-	84025	823	83975	-	-	-	-167177
Mar. 6, 2024	-	-	-	100027	2906	58864	-487	-	-	-156472
Mar. 7, 2024	-	-	50007	-	17927	83674	487	-	-	-15253
Mar. 8, 2024	-	-	-	-	22228	78202	-	-	-	-55974
Mar. 9, 2024	-	-	-	-	9681	51908	-	-	-	-42227
Mar. 10, 2024	-	-	-	-	10146	54540	-	-	-	-44394
Mar. 11, 2024	-	-	-	-	6041	69890	-	-	-	-63849
Mar. 12, 2024	-	-	-	-	749	76554	-	-	-	-75805
Mar. 13, 2024	-	-	-	-	3420	87592	-654	-	-	-84826
Mar. 14, 2024	-	-	-	39670	1993	62397	-538	-	-	-100612
Mar. 15, 2024	-	-	75001	-	3235	78427	1192	-	-	1001
Mar. 16, 2024	-	-	-	-	4048	63209	-	-	-	-59161
Mar. 17, 2024	-	-	-	-	1126	51071	-	-	-	-49945
Mar. 18, 2024	-	-	-	-	4699	77776	-454	-	-	-73531
Mar. 19, 2024	-	-	-	-	3542	95016	-237	-	-	-91711
Mar. 20, 2024	-	-	-	-	12251	60480	-	-	-	-48229
Mar. 21, 2024	-	-	50001	-	15829	68279	342	10	10	-2107
Mar. 22, 2024	-	-	115709	-	49906	95152	818	-	-	71281
Mar. 23, 2024	-	-	-	-	4508	52944	-	-	-	-48436
Mar. 24, 2024	-	-	-	-	4365	55170	-	-	-	-50805
Mar. 25, 2024	-	-	-	-	4875	76217	-	-	-	-71342
Mar. 26, 2024	-	-	100003	-	18316	114966	-	-	-	3353
Mar. 27, 2024	-	-	75002	-	31743	107677	-	-	-	-932
Mar. 28, 2024	-	-	-	-	142104	185423	-452	-	-	-43771
Mar. 29, 2024	-	-	-	-	58851	198001	-	-	-	-139150
Mar. 30, 2024	-	-	-	-	71826	254885	-	-	-	-183059
Mar. 31, 2024	-	-	-	-	65512	241763	-	-	-	-176251

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

i) Operations in onshore / offshore OTC segment

Item	2022-23	2023	2024	
		Mar.	Feb.	Mar.
	1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US $ Million) (1.1-1.2)	-25516	750	8557	13249
1.1 Purchase (+)	187054	6906	8557	14841
1.2 Sale (–)	212570	6156	0	1592
2 ₹ equivalent at contract rate (₹ Crores)	-217259	5883	70981	110023
3 Cumulative (over end-March) (US $ Million)	-25516	-25516	28022	41271
(₹ Crore)	-217259	-217259	229505	339528
4 Outstanding Net Forward Sales (-)/ Purchase (+) at the end of month (US $ Million)	23600	23600	9694	-541

ii) Operations in currency futures segment

Item	2022-23	2023	2024	
		Mar.	Feb.	Mar.
	1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US $ Million) (1.1-1.2)	0	0	0	0
1.1 Purchase (+)	10930	0	0	0
1.2 Sale (–)	10930	0	0	0
2 Outstanding Net Currency Futures Sales (-)/ Purchase (+) at the end of month (US $ Million)	0	0	0	-1080

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

Item	As on March 31 , 2024		
	Long (+)	Short (-)	Net (1-2)
	1	2	3
1. Upto 1 month	1006	2200	-1194
2. More than 1 month and upto 3 months	3553	2900	653
3. More than 3 months and upto 1 year	0	0	0
4. More than 1 year	0	0	0
Total (1+2+3+4)	**4559**	**5100**	**-541**

No. 5: RBI's Standing Facilities

(₹ Crore)

Item	As on the Last Reporting Friday							
	2023-24	2023			2024			
		Apr. 21	Nov. 17	Dec. 29	Jan. 26	Feb. 23	Mar. 22	Apr. 19
	1	2	3	4	5	6	7	8
1 MSF	49906	16945	111386	134232	32611	144270	49906	3238
2 Export Credit Refinance for Scheduled Banks								
2.1 Limit	-	-	-	-	-	-	-	-
2.2 Outstanding	-	-	-	-	-	-	-	-
3 Liquidity Facility for PDs								
3.1 Limit	9900	4900	4900	4900	4900	9900	9900	9900
3.2 Outstanding	9810	3719	3181	3167	3174	9066	9810	8770
4 Others								
4.1 Limit	76000	76000	76000	76000	76000	76000	76000	76000
4.2 Outstanding	-	15900	-	-	-	-	-	-
5 Total Outstanding (1+2.2+3.2+4.2)	59716	36564	114567	137399	35785	153336	59716	12008

Money and Banking

No. 6: Money Stock Measures

(₹ Crore)

Item	Outstanding as on March 31/last reporting Fridays of the month/ reporting Fridays				
	2022-23	2023	2024		
		Mar. 24	Feb. 23	Mar. 08	Mar. 22
	1	2	3	4	5
1 Currency with the Public (1.1 + 1.2 + 1.3 – 1.4)	3276436	3278334	3361432	3382592	3418663
1.1 Notes in Circulation	3348219	3350365	3423064	3459148	3486650
1.2 Circulation of Rupee Coin	29542	29264	32455	32455	32455
1.3 Circulation of Small Coins	743	743	743	743	743
1.4 Cash on Hand with Banks	102085	102085	95031	109974	101411
2 Deposit Money of the Public	2398359	2385928	2594337	2602702	2671710
2.1 Demand Deposits with Banks	2320598	2320598	2510518	2519150	2586888
2.2 'Other' Deposits with Reserve Bank	77761	65330	83819	83552	84822
3 M1 (1 + 2)	**5674795**	**5664261**	**5955769**	**5985293**	**6090373**
4 Post Office Saving Bank Deposits	200257	200257	200257	200257	200257
5 M2 (3 + 4)	**5875052**	**5864518**	**6156026**	**6185550**	**6290630**
6 Time Deposits with Banks	16668966	16668966	18538143	18751709	18739918
			(18650930)	(18862203)	(18848160)
7 M3 (3 + 6)	22343760	22333227	24493912	24737002	24830291
			(24606699)	(24847497)	(24938533)
8 Total Post Office Deposits	1113230	1113230	1113230	1113230	1113230
9 M4 (7 + 8)	23456990	23446457	25607142	25850232	25943521
			(25719929)	(25960727)	(26051763)

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				
	2022-23	2023	2024		
		Mar. 24	Feb. 23	Mar. 08	Mar. 22
	1	2	3	4	5
1 Net Bank Credit to Government	**7165533**	**6916058**	**7223794**	**7450055**	**7313197**
			(7315467)	(7541770)	(7404752)
1.1 RBI's net credit to Government (1.1.1–1.1.2)	1451126	1201651	964996	1134272	994394
1.1.1 Claims on Government	1456169	1413446	1377351	1372946	1374532
1.1.1.1 Central Government	1455377	1405821	1362541	1363687	1361281
1.1.1.2 State Governments	792	7625	14809	9259	13251
1.1.2 Government deposits with RBI	5043	211795	412355	238674	380138
1.1.2.1 Central Government	5001	211752	412313	238632	380096
1.1.2.2 State Governments	42	43	42	42	42
1.2 Other Banks' Credit to Government	5714407	5714407	6258798	6315783	6318803
			(6350471)	(6407498)	(6410358)
2 Bank Credit to Commercial Sector	**14429636**	**14423483**	**16434572**	**16541585**	**16669610**
			(16970977)	(17073516)	(17200297)
2.1 RBI's credit to commercial sector	26549	20396	11121	11401	11871
2.2 Other banks' credit to commercial sector	14403087	14403087	16423451	16530184	16657739
			(16959856)	(17062115)	(17188425)
2.2.1 Bank credit by commercial banks	13675235	13675235	15677730	15781628	15901477
			(16214135)	(16313559)	(16432164)
2.2.2 Bank credit by co-operative banks	710187	710187	728279	730762	738194
2.2.3 Investments by commercial and co-operative banks in other securities	17665	17665	17443	17794	18068
			(17443)	(17794)	(18068)
3 Net Foreign Exchange Assets of Banking Sector (3.1 + 3.2)	**4911766**	**4931090**	**5284365**	**5413257**	**5505919**
3.1 RBI's net foreign exchange assets (3.1.1–3.1.2)	4587355	4606680	4984808	5113700	5206362
3.1.1 Gross foreign assets	4587616	4606942	4985066	5113958	5206621
3.1.2 Foreign liabilities	260	262	258	258	259
3.2 Other banks' net foreign exchange assets	324410	324410	299557	299557	299557
4 Government's Currency Liabilities to the Public	**30285**	**30007**	**33198**	**33198**	**33198**
5 Banking Sector's Net Non-monetary Liabilities	**4193459**	**3967411**	**4482016**	**4701092**	**4691633**
			(4997307)	(5214244)	(5205633)
5.1 Net non-monetary liabilities of RBI	1587565	1612360	1699305	1756330	1774674
5.2 Net non-monetary liabilities of other banks (residual)	2605895	2355051	2782711	2944762	2916959
			(3298002)	(3457913)	(3430959)
M_3(1+2+3+4–5)	**22343760**	**22333227**	**24493912**	**24737002**	**24830291**
			(24606699)	(24847497)	(24938533)

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				
	2022-23	2023	2024		
		Mar. 24	Feb. 23	Mar. 08	Mar. 22
	1	2	3	4	5
Monetary Aggregates					
NM_1 (1.1+1.2.1+1.3)	5674795	5664261	5955769	5985293	6090373
NM_2 (NM_1 + 1.2.2.1)	13103413	13092880	14201117	14326746	14423528
			(14251871)	(14376468)	(14472237)
NM_3 (NM_2 +1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	22628165	22617632	25057783	25284722	25383004
			(25170570)	(25395216)	(25491246)
1 Components					
1.1 Currency with the Public	3276436	3278334	3361432	3382592	3418663
1.2 Aggregate Deposits of Residents	18828639	18828639	20833514	21055711	21105010
			(20946301)	(21166205)	(21213252)
1.2.1 Demand Deposits	2320598	2320598	2510518	2519150	2586888
1.2.2 Time Deposits of Residents	16508041	16508041	18322995	18536561	18518121
			(18435783)	(18647055)	(18626364)
1.2.2.1 Short-term Time Deposits	7428619	7428619	8245348	8341452	8333155
			(8296102)	(8391175)	(8381864)
1.2.2.1.1 Certificates of Deposits (CDs)	303993	303993	368278	375829	369399
1.2.2.2 Long-term Time Deposits	9079423	9079423	10077647	10195109	10184967
			(10139680)	(10255880)	(10244500)
1.3 'Other' Deposits with RBI	77761	65330	83819	83552	84822
1.4 Call/Term Funding from Financial Institutions	445329	445329	779019	762867	774509
2 Sources					
2.1 Domestic Credit	22710730	22455103	24781264	25117770	25094632
			(25409342)	(25741416)	(25716874)
2.1.1 Net Bank Credit to the Government	7165533	6916058	7223794	7450055	7313197
			(7315467)	(7541770)	(7404752)
2.1.1.1 Net RBI credit to the Government	1451126	1201651	964996	1134272	994394
2.1.1.2 Credit to the Government by the Banking System	5714407	5714407	6258798	6315783	6318803
			(6350471)	(6407498)	(6410358)
2.1.2 Bank Credit to the Commercial Sector	15545198	15539045	17557470	17667716	17781435
			(18093875)	(18199647)	(18312122)
2.1.2.1 RBI Credit to the Commercial Sector	26549	20396	11121	11401	11871
2.1.2.2 Credit to the Commercial Sector by the Banking System	15518649	15518649	17546349	17656315	17769564
			(18082754)	(18188246)	(18300250)
2.1.2.2.1 Other Investments (Non-SLR Securities)	1096333	1096333	1101595	1107219	1089184
2.2 Government's Currency Liabilities to the Public	30285	30007	33198	33198	33198
2.3 Net Foreign Exchange Assets of the Banking Sector	4699822	4719147	4907130	5036022	5076358
2.3.1 Net Foreign Exchange Assets of the RBI	4587355	4606680	4984808	5113700	5206362
2.3.2 Net Foreign Currency Assets of the Banking System	112467	112467	-77678	-77678	-130004
2.4 Capital Account	3446786	3507217	3961198	3990436	4013348
2.5 Other items (net)	1365887	1079408	1217902	1424984	1321836

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

No. 9: Liquidity Aggregates

(₹ Crore)

Aggregates	2022-23	2023	2024		
		Mar.	Jan.	Feb.	Mar.
	1	2	3	4	5
1 NM3	**22628165**	**22628165**	**24909712**	**25057783**	**25383004**
			(25026014)	(25170570)	(25491246)
2 Postal Deposits	668887	668887	702174	702174	702174
3 L1 (1 + 2)	**23297052**	**23297052**	**25611886**	**25759957**	**26085178**
			(25728188)	(25872744)	(26193420)
4 Liabilities of Financial Institutions	54724	54724	76805	62974	85150
4.1 Term Money Borrowings	1692	1692	1990	678	2375
4.2 Certificates of Deposit	46407	46407	61750	50143	70245
4.3 Term Deposits	6625	6625	13065	12152	12531
5 L2 (3 + 4)	**23351776**	**23351776**	**25688692**	**25822931**	**26170328**
			(25804993)	(25935718)	(26278570)
6 Public Deposits with Non-Banking Financial Companies	85254	85254	..	..	91373
7 L3 (5 + 6)	**23437030**	**23437030**	**..**	**..**	**26261701**

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				
	2022-23	2023	2024		
		Mar. 24	Feb. 23	Mar. 8	Mar. 22
	1	2	3	4	5
1 Components					
1.1 Currency in Circulation	3378521	3380418	3456463	3492565	3520074
1.2 Bankers' Deposits with the RBI	930477	867793	971038	965375	993822
1.2.1 Scheduled Commercial Banks	868940	809907	909400	901857	931483
1.3 'Other' Deposits with the RBI	77761	65330	83819	83552	84822
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	4386759	4313542	4511319	4541491	4598718
2 Sources					
2.1 RBI's Domestic Credit	1356683	1289215	1192619	1150924	1133832
2.1.1 Net RBI credit to the Government	1451126	1201651	964996	1134272	994394
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)	1450376	1194069	950229	1125055	981186
2.1.1.1.1 Loans and Advances to the Central Government	48677	-	-	-	-
2.1.1.1.2 Investments in Treasury Bills	-	-	-	-	-
2.1.1.1.3 Investments in dated Government Securities	1406423	1405521	1362249	1363290	1360996
2.1.1.1.3.1 Central Government Securities	1406423	1405521	1362249	1363290	1360996
2.1.1.1.4 Rupee Coins	277	300	293	396	285
2.1.1.1.5 Deposits of the Central Government	5001	211752	412313	238632	380096
2.1.1.2 Net RBI credit to State Governments	749	7582	14767	9217	13209
2.1.2 RBI's Claims on Banks	-120992	67168	216502	5251	127566
2.1.2.1 Loans and Advances to Scheduled Commercial Banks	-120992	67168	216502	5251	127566
2.1.3 RBI's Credit to Commercial Sector	26549	20396	11121	11401	11871
2.1.3.1 Loans and Advances to Primary Dealers	8476	2442	9066	9341	9810
2.1.3.2 Loans and Advances to NABARD	-	-	-	-	-
2.2 Government's Currency Liabilities to the Public	30285	30007	33198	33198	33198
2.3 Net Foreign Exchange Assets of the RBI	4587355	4606680	4984808	5113700	5206362
2.3.1 Gold	371500	375117	396913	419860	429410
2.3.2 Foreign Currency Assets	4215873	4231580	4587912	4693857	4776970
2.4 Capital Account	1505657	1566088	1646592	1671362	1689585
2.5 Other Items (net)	81908	46272	52713	84968	85089

No. 11: Reserve Money - Components and Sources

(₹ Crore)

Item	2022-23	Outstanding as on March 31/last Fridays of the month/Fridays					
		2023	2024				
		Mar. 31	Mar. 1	Mar. 8	Mar. 15	Mar. 22	Mar. 29
	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)	4386759	4386759	4562261	4541491	4670859	4598718	4682348
1 Components							
1.1 Currency in Circulation	3378521	3378521	3457734	3492565	3498492	3520074	3515765
1.2 Bankers' Deposits with RBI	930477	930477	1021659	965375	1088275	993822	1073846
1.3 'Other' Deposits with RBI	77761	77761	82868	83552	84093	84822	92737
2 Sources							
2.1 Net Reserve Bank Credit to Government	1451126	1451126	1155260	1134272	1134150	994394	1134602
2.2 Reserve Bank Credit to Banks	-120992	-120992	30984	5251	61920	127566	49882
2.3 Reserve Bank Credit to Commercial Sector	26549	26549	11117	11401	11401	11871	14457
2.4 Net Foreign Exchange Assets of RBI	4587355	4587355	5036607	5113700	5174389	5206362	5233764
2.5 Government's Currency Liabilities to the Public	30285	30285	33198	33198	33198	33198	33432
2.6 Net Non- Monetary Liabilities of RBI	1587565	1587565	1704905	1756330	1744198	1774674	1783789

No. 12: Commercial Bank Survey

(₹ Crore)

Item	Outstanding as on last reporting Fridays of the month/ reporting Fridays of the month				
	2022-23	2023	2024		
		Mar. 24	Feb. 23	Mar. 8	Mar. 22
	1	2	3	4	5
1 Components					
1.1 Aggregate Deposits of Residents	17882989	17882989	19876895	20094440	20145188
			(19989682)	(20204934)	(20253430)
1.1.1 Demand Deposits	2180431	2180431	2368308	2374550	2443853
1.1.2 Time Deposits of Residents	15702559	15702559	17508587	17719890	17701334
			(17621374)	(17830384)	(17809577)
1.1.2.1 Short-term Time Deposits	7066151	7066151	7878864	7973950	7965600
1.1.2.1.1 Certificates of Deposits (CDs)	303993	303993	368278	375829	369399
1.1.2.2 Long-term Time Deposits	8636407	8636407	9629723	9745939	9735734
1.2 Call/Term Funding from Financial Institutions	445329	445329	779019	762867	774509
2 Sources					
2.1 Domestic Credit	20197246	20197246	22748921	22912048	23019606
			(23376999)	(23535694)	(23641847)
2.1.1 Credit to the Government	5414322	5414322	5956167	6012188	6014054
			(6047841)	(6103903)	(6105609)
2.1.2 Credit to the Commercial Sector	14782924	14782924	16792754	16899860	17005551
			(17329159)	(17431791)	(17536238)
2.1.2.1 Bank Credit	13675235	13675235	15677730	15781628	15901477
			(16214135)	(16313559)	(16432164)
2.1.2.1.1 Non-food Credit	13655330	13655330	15637228	15749924	15878397
			(16173633)	(16281855)	(16409083)
2.1.2.2 Net Credit to Primary Dealers	19491	19491	21566	19175	22904
2.1.2.3 Investments in Other Approved Securities	826	826	825	801	949
2.1.2.4 Other Investments (in non-SLR Securities)	1087371	1087371	1092632	1098256	1080222
2.2 Net Foreign Currency Assets of Commercial Banks (2.2.1-2.2.2-2.2.3)	112467	112467	-77678	-77678	-130004
2.2.1 Foreign Currency Assets	351387	351387	269656	269656	241661
2.2.2 Non-resident Foreign Currency Repatriable Fixed Deposits	160924	160924	215148	215148	221796
2.2.3 Overseas Foreign Currency Borrowings	77996	77996	132186	132186	149868
2.3 Net Bank Reserves (2.3.1+2.3.2-2.3.3)	833002	833002	775943	994813	893350
2.3.1 Balances with the RBI	809907	809907	909400	901857	931483
2.3.2 Cash in Hand	90263	90263	83045	98206	89433
2.3.3 Loans and Advances from the RBI	67168	67168	216502	5251	127566
2.4 Capital Account	1916959	1916959	2290436	2294904	2299592
2.5 Other items (net) (2.1+2.2+2.3-2.4-1.1-1.2)	897438	897438	500838	676972	563663
2.5.1 Other Demand and Time Liabilities (net of 2.2.3)	711655	711655	789201	815495	787560
2.5.2 Net Inter-Bank Liabilities (other than to PDs)	44733	44733	180617	198827	201214

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

No. 13: Scheduled Commercial Banks' Investments

(₹ Crore)

Item	As on March 22, 2024	2023	2024		
		Mar. 24	Feb. 23	Mar. 08	Mar. 22
	1	2	3	4	5
1 SLR Securities	6106558	5415148	6048666	6104704	6106558
	(6015003)		(5956993)	(6012989)	(6015003)
2 Other Government Securities (Non-SLR)	177136	182265	177882	177786	177136
3 Commercial Paper	61175	65058	53516	52854	61175
4 Shares issued by					
4.1 PSUs	8475	9736	8636	8492	8475
4.2 Private Corporate Sector	77722	71099	79935	81489	77722
4.3 Others	5624	4500	5620	5579	5624
5 Bonds/Debentures issued by					
5.1 PSUs	103999	92304	96898	97041	103999
5.2 Private Corporate Sector	286666	325035	288205	290205	286666
5.3 Others	124586	99384	114923	121988	124586
6 Instruments issued by					
6.1 Mutual funds	62499	48810	89916	89089	62499
6.2 Financial institutions	172340	189180	176856	173733	172340

Note: Data against column Nos. (2) & (3) are Final and for column Nos. (1), (4) & (5) data are Provisional.
1. Data since July 14, 2023 include the impact of the merger of a non-bank with a bank.
2. Figures in parentheses exclude the impact of the merger.

No. 14: Business in India - All Scheduled Banks and All Scheduled Commercial Banks

(₹ Crore)

Item	As on the Last Reporting Friday (in case of March)/ Last Friday							
	All Scheduled Banks				All Scheduled Commercial Banks			
	2023-24	2023	2024		2023-24	2023	2024	
		Mar.	Feb.	Mar.		Mar.	Feb.	Mar.
	1	2	3	4	5	6	7	8
Number of Reporting Banks	210	212	210	210	137	137	137	137
1 Liabilities to the Banking System	**557535**	**355252**	**520348**	**557535**	**552785**	**351843**	**516165**	**552785**
1.1 Demand and Time Deposits from Banks	298436	228517	269766	298436	294471	226119	266228	294471
1.2 Borrowings from Banks	185999	67566	178124	185999	185862	67199	178119	185862
1.3 Other Demand and Time Liabilities	73100	59170	72458	73100	72452	58524	71818	72452
2 Liabilities to Others	**22661129**	**19730504**	**22367660**	**22661129**	**22187163**	**19278894**	**21905235**	**22187163**
2.1 Aggregate Deposits	20931792	18477677	20650054	20931792	20475226	18043914	20204830	20475226
	(20823550)		(20537267)	(20823550)	(20366984)		(20092042)	(20366984)
2.1.1 Demand	2492847	2225416	2416163	2492847	2443853	2180431	2368307	2443853
2.1.2 Time	18438945	16252261	18233891	18438945	18031373	15863483	17836522	18031373
2.2 Borrowings	778827	449945	783905	778827	774509	445329	779019	774509
2.3 Other Demand and Time Liabilities	950510	802881	933701	950510	937428	789651	921387	937428
3 Borrowings from Reserve Bank	**222716**	**165085**	**256409**	**222716**	**222716**	**165085**	**256374**	**222716**
3.1 Against Usance Bills /Promissory Notes	-	-	-	-	-	-	-	-
3.2 Others	222716	165085	256409	222716	222716	165085	256374	222716
4 Cash in Hand and Balances with Reserve Bank	1043274	920953	1014767	1043274	1020916	900170	992445	1020916
4.1 Cash in Hand	91888	92788	85534	91888	89433	90263	83045	89433
4.2 Balances with Reserve Bank	951386	828165	929232	951386	931483	809907	909400	931483
5 Assets with the Banking System	**454635**	**397974**	**428737**	**454635**	**374475**	**326601**	**357114**	**374475**
5.1 Balances with Other Banks	246028	232378	238384	246028	198327	193422	191943	198327
5.1.1 In Current Account	11659	18939	11228	11659	8971	15528	8458	8971
5.1.2 In Other Accounts	234369	213440	227156	234369	189357	177894	183484	189357
5.2 Money at Call and Short Notice	39649	49763	33371	39649	12355	24864	13834	12355
5.3 Advances to Banks	51325	45330	49373	51325	48368	41184	46054	48368
5.4 Other Assets	117634	70503	107609	117634	115424	67130	105284	115424
6 Investment	**6257028**	**5560664**	**6196793**	**6257028**	**6106558**	**5415148**	**6048666**	**6106558**
	(6165473)		(6105120)	(6165473)	(6015003)		(5956993)	(6015003)
6.1 Government Securities	6249663	5553702	6190053	6249663	6105609	5414322	6047841	6105609
6.2 Other Approved Securities	7366	6963	6740	7366	949	826	825	949
7 Bank Credit	**16866328**	**14078261**	**16646357**	**16866328**	**16432164**	**13675235**	**16214135**	**16432164**
	(16335641)		(16109952)	(16335641)	(15901477)		(15677730)	(15901477)
7a Food Credit	75472	65622	92894	75472	23081	19906	40502	23081
7.1 Loans, Cash-credits and Overdrafts	16565340	13824693	16365960	16565340	16134303	13424906	15936696	16134303
7.2 Inland Bills-Purchased	60471	39446	52922	60471	60467	39435	52912	60467
7.3 Inland Bills-Discounted	199761	165428	188407	199761	197358	162910	186108	197358
7.4 Foreign Bills-Purchased	16662	19758	16657	16662	16412	19545	16405	16412
7.5 Foreign Bills-Discounted	24094	28936	22411	24094	23624	28439	22014	23624

Note: Data in column Nos. (1), (4), (5) & (8) are Provisional

1. Data since July 2023 include the impact of the merger of a non-bank with a bank.
2. Figures in parentheses exclude the impact of the merger.

No. 15: Deployment of Gross Bank Credit by Major Sectors

(₹ Crore)

Sector	Outstanding as on			Growth(%)	
	Mar. 24, 2023	2024		Financial year so far	Y-o-Y
		Feb. 23	Mar. 22	2023-24	2024
	1	2	3	%	%
I. Bank Credit (II + III)	**13675235**	**16207362**	**16434662**	**20.2**	**20.2**
		(15670957)	(15903976)	(16.3)	(16.3)
II. Food Credit	**19906**	**40502**	**23081**	**16.0**	**16.0**
III. Non-food Credit	**13655330**	**16166861**	**16411581**	**20.2**	**20.2**
		(15630456)	(15880895)	(16.3)	(16.3)
1. Agriculture & Allied Activities	**1728063**	**2035594**	**2074680**	**20.1**	**20.1**
2. Industry (Micro and Small, Medium and Large)	**3380006**	**3647149**	**3683132**	**9.0**	**9.0**
		(3629825)	(3665813)	(8.5)	(8.5)
2.1 Micro and Small	633587	717158	727924	14.9	14.9
2.2 Medium	268557	299068	304001	13.2	13.2
2.3 Large	2477861	2630923	2651207	7.0	7.0
3. Services	**3736064**	**4514582**	**4589968**	**22.9**	**22.9**
		(4413512)	(4490511)	(20.2)	(20.2)
3.1 Transport Operators	192059	228034	230290	19.9	19.9
3.2 Computer Software	24921	27395	26015	4.4	4.4
3.3 Tourism, Hotels & Restaurants	69331	76315	77642	12.0	12.0
3.4 Shipping	7068	6859	7071	0.0	0.0
3.5 Aviation	27640	43720	43246	56.5	56.5
3.6 Professional Services	139198	162780	168387	21.0	21.0
3.7 Trade	872335	1007503	1024030	17.4	17.4
3.7.1. Wholesale Trade[1]	443168	531108	538007	21.4	21.4
3.7.2 Retail Trade	429167	476395	486024	13.2	13.2
3.8 Commercial Real Estate	322573	442650	448145	38.9	38.9
		(390377)	(396579)	(22.9)	(22.9)
3.9 Non-Banking Financial Companies (NBFCs)[2] of which,	1342070	1514928	1548076	15.3	15.3
3.9.1 Housing Finance Companies (HFCs)	318729	337758	325627	2.2	2.2
3.9.2 Public Financial Institutions (PFIs)	175714	213661	226963	29.2	29.2
3.10 Other Services[3]	738869	1004397	1017065	37.7	37.7
		(969795)	(983287)	(33.1)	(33.1)
4. Personal Loans	**4180838**	**5267835**	**5336129**	**27.6**	**27.6**
		(4849890)	(4922361)	(17.7)	(17.7)
4.1 Consumer Durables	20983	23972	23713	13.0	13.0
4.2 Housing	1988532	2682837	2722720	36.9	36.9
		(2290401)	(2334005)	(17.4)	(17.4)
4.3 Advances against Fixed Deposits	122116	119977	125233	2.6	2.6
4.4 Advances to Individuals against share & bonds	7634	8401	8498	11.3	11.3
4.5 Credit Card Outstanding	204708	258115	257016	25.6	25.6
4.6 Education	96853	118708	119409	23.3	23.3
4.7 Vehicle Loans	502377	582113	589300	17.3	17.3
4.8 Loan against gold jewellery	89382	102458	102658	14.9	14.9
4.9 Other Personal Loans	1148253	1371253	1387582	20.8	20.8
		(1346026)	(1362762)	(18.7)	(18.7)
5. Priority Sector (Memo)					
(i) Agriculture & Allied Activities[4]	1746051	2052550	2084905	19.4	19.4
(ii) Micro & Small Enterprises[5]	1645484	1962680	1976657	20.1	20.1
(iii) Medium Enterprises[6]	423888	480245	490930	15.8	15.8
(iv) Housing	622799	754645	755180	21.3	21.3
		(658400)	(660530)	(6.1)	(6.1)
(v) Education Loans	59513	62106	62321	4.7	4.7
(vi) Renewable Energy	4670	5868	6001	28.5	28.5
(vii) Social Infrastructure	2464	2592	2611	6.0	6.0
(viii) Export Credit	20489	12630	12900	-37.0	-37.0
(ix) Others	60835	62553	61338	0.8	0.8
(x) Weaker Sections including net PSLC- SF/MF	1411633	1624823	1647406	16.7	16.7

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 nonfood credit extended by all SCBs, pertaining to the last reporting Friday of the month.
(2) Data since July 28, 2023 include the impact of the merger of a non-bank with a bank. Figures in parentheses exclude the impact of the merger.
1 Wholesale trade includes food procurement credit outside the food credit consortium.
2 NBFCs include HFCs, PFIs, Microfinance Institutions (MFIs), NBFCs engaged in gold loan and others.
3 “Other Services” include Mutual Fund (MFs), Banking and Finance other than NBFCs and MFs and other services which are not indicated elsewhere under services.
4 “Agriculture and Allied Activities” under the priority sector also include priority sector lending certificates (PSLCs).
5 “Micro and Small Enterprises” under the priority sector include credit to micro and small enterprises in industry and services sectors and also include PSLCs.
6 “Medium Enterprises” under the priority sector include credit to medium enterprises in industry and services sectors.

No. 16: Industry-wise Deployment of Gross Bank Credit

(₹ Crore)

Industry	Outstanding as on			Growth(%)	
	Mar. 24, 2023	2024		Financial year so far	Y-o-Y
		Feb. 23	Mar. 22	2024-25	2024
	1	2	3	%	%
2 Industries (2.1 to 2.19)	3380006	3647149	3683132	9.0	9.0
		(3629825)	(3665813)	(8.5)	(8.5)
2.1 Mining & Quarrying (incl. Coal)	60271	54964	54465	-9.6	-9.6
2.2 Food Processing	182806	202019	210045	14.9	14.9
2.2.1 Sugar	22530	23885	26405	17.2	17.2
2.2.2 Edible Oils & Vanaspati	19353	19208	19929	3.0	3.0
2.2.3 Tea	5211	5668	5705	9.5	9.5
2.2.4 Others	135712	153258	158006	16.4	16.4
2.3 Beverage & Tobacco	23859	29961	31157	30.6	30.6
2.4 Textiles	232022	257019	257671	11.1	11.1
2.4.1 Cotton Textiles	90749	99444	99749	9.9	9.9
2.4.2 Jute Textiles	4023	4298	4328	7.6	7.6
2.4.3 Man-Made Textiles	39656	46046	45157	13.9	13.9
2.4.4 Other Textiles	97594	107232	108437	11.1	11.1
2.5 Leather & Leather Products	11948	12342	12606	5.5	5.5
2.6 Wood & Wood Products	21277	23705	23875	12.2	12.2
2.7 Paper & Paper Products	44354	46442	46455	4.7	4.7
2.8 Petroleum, Coal Products & Nuclear Fuels	149352	137027	133139	-10.9	-10.9
2.9 Chemicals & Chemical Products	224159	247093	250019	11.5	11.5
2.9.1 Fertiliser	34666	36359	37555	8.3	8.3
2.9.2 Drugs & Pharmaceuticals	70699	80933	81173	14.8	14.8
2.9.3 Petro Chemicals	20765	23017	23170	11.6	11.6
2.9.4 Others	98030	106784	108121	10.3	10.3
2.10 Rubber, Plastic & their Products	84131	90387	90513	7.6	7.6
2.11 Glass & Glassware	9548	11615	12008	25.8	25.8
2.12 Cement & Cement Products	58093	61183	60357	3.9	3.9
2.13 Basic Metal & Metal Product	343756	379221	384336	11.8	11.8
2.13.1 Iron & Steel	229360	267489	272722	18.9	18.9
2.13.2 Other Metal & Metal Product	114396	111732	111615	-2.4	-2.4
2.14 All Engineering	180822	198888	201062	11.2	11.2
2.14.1 Electronics	43234	47010	46636	7.9	7.9
2.14.2 Others	137587	151878	154426	12.2	12.2
2.15 Vehicles, Vehicle Parts & Transport Equipment	101823	111008	113733	11.7	11.7
2.16 Gems & Jewellery	80289	83190	86359	7.6	7.6
2.17 Construction	124767	134590	136419	9.3	9.3
2.18 Infrastructure	1202605	1271494	1280258	6.5	6.5
2.18.1 Power	620837	647657	645351	3.9	3.9
2.18.2 Telecommunications	108747	128330	138701	27.5	27.5
2.18.3 Roads	285876	304115	303320	6.1	6.1
2.18.4 Airports	9579	7361	7206	-24.8	-24.8
2.18.5 Ports	7979	7838	6679	-16.3	-16.3
2.18.6 Railways	10176	12144	13025	28.0	28.0
2.18.7 Other Infrastructure	159413	164048	165976	4.1	4.1
2.19 Other Industries	244123	295000	298656	22.3	22.3

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								
	2022-23	2023				2024			
		Feb. 24	Dec. 01	Dec. 15	Dec. 29	Jan. 12	Jan. 26	Feb. 09	Feb. 23
	1	2	3	4	5	6	7	8	9
Number of Reporting Banks	33	33	33	33	33	33	33	33	33
1 Aggregate Deposits (2.1.1.2+2.2.1.2)	**144701.9**	**135950.9**	**135247.4**	**135675.4**	**134207.5**	**134214.5**	**135053.7**	**136218.5**	**132042.0**
2 Demand and Time Liabilities									
2.1 Demand Liabilities	**30241.2**	**28527.7**	**27117.8**	**27960.3**	**28479.2**	**27904.6**	**28067.3**	**28673.3**	**27356.3**
2.1.1 Deposits									
2.1.1.1 Inter-Bank	6893.3	5720.7	7183.8	7223.4	6777.1	7563.8	7628.0	7658.3	7498.1
2.1.1.2 Others	18195.4	17432.4	14047.4	15208.9	14679.1	14503.8	14877.1	15190.9	14122.7
2.1.2 Borrowings from Banks	0.0		339.8				99.9		
2.1.3 Other Demand Liabilities	5152.4	5374.5	5546.8	5528.0	7023.0	5837.0	5462.2	5824.2	5735.6
2.2 Time Liabilities	**194129.9**	**175896.3**	**176297.7**	**177675.1**	**178662.9**	**180822.3**	**181797.1**	**181359.8**	**178609.9**
2.2.1 Deposits									
2.2.1.1 Inter-Bank	65875.0	54797.7	52267.0	53811.7	55648.9	57552.2	58233.2	57471.9	57905.0
2.2.1.2 Others	126506.5	118518.4	121200.0	120466.5	119528.4	119710.7	120176.6	121027.6	117919.3
2.2.2 Borrowings from Banks	845.8	1604.0	1396.5	2152.7	2244.3	2226.8	2181.3	1663.3	1582.3
2.2.3 Other Time Liabilities	902.6	976.1	1434.2	1244.2	1241.3	1332.7	1206.0	1197.0	1203.2
3 Borrowing from Reserve Bank	0.0						100.0	100.0	135.0
4 Borrowings from a notified bank / Government	84382.5	77988.7	87085.9	89193.5	88584.8	89231.9	90881.7	86104.5	86889.8
4.1 Demand	20545.9	16530.5	21603.4	23832.5	22764.0	22757.9	23859.7	22534.7	22632.6
4.2 Time	63836.7	61458.3	65482.5	65361.0	65820.8	66474.0	67022.0	63569.8	64257.3
5 Cash in Hand and Balances with Reserve Bank	**12386.8**	**10769.8**	**11429.7**	**11384.5**	**11065.3**	**11130.5**	**11043.1**	**11768.1**	**11568.9**
5.1 Cash in Hand	1540.1	797.2	803.8	733.9	766.3	849.4	742.4	959.4	758.7
5.2 Balance with Reserve Bank	10846.7	9972.6	10625.9	10650.6	10299.0	10281.1	10300.8	10808.7	10810.2
6 Balances with Other Banks in Current Account	**3500.7**	**2038.1**	**1698.6**	**1634.7**	**1645.3**	**1664.1**	**1446.5**	**2358.8**	**1819.0**
7 Investments in Government Securities	**80906.4**	**72892.1**	**73437.2**	**73867.3**	**74036.6**	**73993.2**	**73701.6**	**73713.3**	**74035.2**
8 Money at Call and Short Notice	**34771.6**	**21601.9**	**24940.7**	**26023.5**	**23160.0**	**25458.4**	**27662.3**	**23670.5**	**24428.3**
9 Bank Credit (10.1+11)	**124978.1**	**123225.6**	**129011.7**	**130325.1**	**132527.0**	**133172.6**	**132726.7**	**132893.5**	**133623.3**
10 Advances									
10.1 Loans, Cash-Credits and Overdrafts	**124928.2**	**123202.0**	**128925.0**	**130234.3**	**132420.5**	**133056.3**	**132569.3**	**132735.7**	**133448.3**
10.2 Due from Banks	131095.9	128522.2	128682.9	131624.2	133287.7	136147.1	136927.3	135069.3	137852.4
11 Bills Purchased and Discounted	49.9	23.6	86.7	90.8	106.5	116.4	157.5	157.8	175.0

Prices and Production

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

Group/Sub group	2023-24			Rural			Urban			Combined		
	Rural	Urban	Combined	Apr.23	Mar.24	Apr.24 (P)	Apr.23	Mar.24	Apr.24 (P)	Apr.23	Mar.24	Apr.24 (P)
	1	2	3	4	5	6	7	8	9	10	11	12
1 Food and beverages	**185.9**	**192.7**	**188.4**	**175.5**	**188.5**	**189.5**	**182.1**	**194.4**	**196.1**	**177.9**	**190.7**	**191.9**
1.1 Cereals and products	181.4	181.7	181.5	173.3	189.3	188.8	174.8	188.5	188.9	173.8	189.0	188.8
1.2 Meat and fish	213.0	221.3	215.9	206.9	217.9	223.0	213.7	226.7	232.8	209.3	221.0	226.4
1.3 Egg	185.4	189.5	187.0	167.9	192.7	180.1	172.4	194.3	184.1	169.6	193.3	181.6
1.4 Milk and products	181.4	181.5	181.4	178.2	183.2	183.6	178.8	183.6	184.0	178.4	183.3	183.7
1.5 Oils and fats	165.3	158.7	162.9	178.5	160.2	160.4	168.7	154.7	154.9	174.9	158.2	158.4
1.6 Fruits	172.1	179.9	175.7	173.7	172.8	182.7	179.2	176.7	188.6	176.3	174.6	185.5
1.7 Vegetables	183.9	229.9	199.5	142.8	182.5	184.9	179.9	222.6	225.3	155.4	196.1	198.6
1.8 Pulses and products	192.2	196.5	193.7	172.8	199.7	200.7	174.7	205.0	206.2	173.4	201.5	202.6
1.9 Sugar and confectionery	126.2	128.1	126.9	120.4	128.0	127.7	123.1	130.1	130.2	121.3	128.7	128.5
1.10 Spices	238.0	228.4	234.8	215.5	236.3	231.8	207.8	228.2	224.7	212.9	233.6	229.4
1.11 Non-alcoholic beverages	180.7	168.2	175.5	178.2	182.1	182.2	165.5	170.3	170.6	172.9	177.2	177.4
1.12 Prepared meals, snacks, sweets	193.3	200.9	196.8	190.5	195.9	196.2	197.0	204.6	204.9	193.5	199.9	200.2
2 Pan, tobacco and intoxicants	**202.0**	**207.1**	**203.3**	**199.5**	**204.0**	**204.9**	**203.5**	**210.2**	**211.1**	**200.6**	**205.7**	**206.6**
3 Clothing and footwear	**192.9**	**181.5**	**188.4**	**190.2**	**195.1**	**195.5**	**178.9**	**183.8**	**184.2**	**185.7**	**190.6**	**191.0**
3.1 Clothing	193.5	183.5	189.6	190.7	195.8	196.2	181.0	185.8	186.2	186.9	191.9	192.3
3.2 Footwear	189.4	170.2	181.4	187.3	191.1	191.1	167.7	172.3	172.8	179.2	183.3	183.5
4 Housing	--	**176.7**	**176.7**	--	--	--	**175.2**	**178.2**	**179.9**	**175.2**	**178.2**	**179.9**
5 Fuel and light	**183.0**	**178.9**	**181.4**	**181.5**	**181.0**	**179.2**	**182.1**	**167.4**	**165.5**	**181.7**	**175.8**	**174.0**
6 Miscellaneous	**181.7**	**173.7**	**177.8**	**178.9**	**184.2**	**185.4**	**170.9**	**176.0**	**176.8**	**175.0**	**180.2**	**181.2**
6.1 Household goods and services	181.5	171.8	176.9	179.1	183.3	183.7	169.6	174.0	174.4	174.6	178.9	179.3
6.2 Health	190.8	185.2	188.7	187.2	194.3	194.9	181.5	189.1	189.7	185.0	192.3	192.9
6.3 Transport and communication	171.1	161.4	166.0	169.4	172.0	171.8	160.1	161.9	161.4	164.5	166.7	166.3
6.4 Recreation and amusement	175.8	171.1	173.2	173.2	177.8	178.1	168.8	172.8	173.0	170.7	175.0	175.2
6.5 Education	184.0	179.1	181.1	179.4	186.1	186.7	174.2	181.2	181.8	176.4	183.2	183.8
6.6 Personal care and effects	186.3	187.4	186.8	183.8	191.3	196.9	184.4	192.8	198.8	184.0	191.9	197.7
General Index (All Groups)	**185.6**	**182.4**	**184.1**	**178.8**	**187.8**	**188.5**	**177.4**	**183.6**	**184.7**	**178.1**	**185.8**	**186.7**

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	2022-23	2023	2024	
				Feb.	Jan.	Feb.
	1	2	3	4	5	6
1 Consumer Price Index for Industrial Workers	2016	2.88	131.1	132.7	138.9	
2 Consumer Price Index for Agricultural Labourers	1986-87	5.89	1148	1171	1258	1258
3 Consumer Price Index for Rural Labourers	1986-87	-	1160	1182	1268	1269

Source: Labour Bureau, Ministry of Labour and Employment, Government of India.

No. 20: Monthly Average Price of Gold and Silver in Mumbai

Item	2022-23	2023	2024	
		Mar.	Feb.	Mar.
	1	2	3	4
1 Standard Gold (₹ per 10 grams)	52731	57514	62017	65229
2 Silver (₹ per kilogram)	61991	66520	70328	73109

Source: India Bullion & Jewellers Association Ltd., Mumbai for Gold and Silver prices in Mumbai.

No. 21: Wholesale Price Index

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2023	2024		
			Apr.	Feb.	Mar.(P)	Apr.(P)
	1	2	3	4	5	6
1 ALL COMMODITIES	**100.000**	**151.5**	**151.1**	**151.2**	**151.8**	**153.0**
1.1 PRIMARY ARTICLES	**22.618**	**183.0**	**177.8**	**181.5**	**183.1**	**186.7**
1.1.1 FOOD ARTICLES	**15.256**	**191.3**	**182.1**	**189.4**	**191.1**	**196.2**
1.1.1.1 Food Grains (Cereals+Pulses)	3.462	193.8	183.7	201.5	202.2	202.4
1.1.1.2 Fruits & Vegetables	3.475	210.1	192.2	187.7	196.7	214.0
1.1.1.3 Milk	4.440	180.2	176.7	183.5	183.6	184.3
1.1.1.4 Eggs, Meat & Fish	2.402	172.1	171.1	169.0	168.7	172.6
1.1.1.5 Condiments & Spices	0.529	235.4	197.7	248.9	233.5	228.5
1.1.1.6 Other Food Articles	0.948	189.4	184.2	197.6	197.5	206.4
1.1.2 NON-FOOD ARTICLES	**4.119**	**162.4**	**165.6**	**159.1**	**160.2**	**158.3**
1.1.2.1 Fibres	0.839	168.2	180.0	159.6	166.5	164.2
1.1.2.2 Oil Seeds	1.115	185.0	191.8	178.7	178.7	179.5
1.1.2.3 Other non-food Articles	1.960	134.9	135.6	133.3	133.4	131.1
1.1.2.4 Floriculture	0.204	279.7	252.1	297.9	291.0	279.3
1.1.3 MINERALS	**0.833**	**218.0**	**224.6**	**225.0**	**225.1**	**221.6**
1.1.3.1 Metallic Minerals	0.648	203.9	214.3	209.7	209.7	212.6
1.1.3.2 Other Minerals	0.185	267.1	260.8	278.9	278.8	253.2
1.1.4 CRUDE PETROLEUM & NATURAL GAS	**2.410**	**153.6**	**155.0**	**155.0**	**157.1**	**162.7**
1.2 FUEL & POWER	**13.152**	**152.3**	**152.7**	**154.9**	**155.2**	**154.8**
1.2.1 COAL	**2.138**	**136.4**	**135.5**	**136.0**	**135.8**	**135.8**
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	119.8	125.8	125.8	125.8
1.2.1.3 Lignite	0.090	267.6	323.3	241.8	236.0	236.0
1.2.2 MINERAL OILS	**7.950**	**159.0**	**159.6**	**159.2**	**159.4**	**159.5**
1.2.3 ELECTRICITY	**3.064**	**146.1**	**146.8**	**157.0**	**157.9**	**156.0**
1.3 MANUFACTURED PRODUCTS	**64.231**	**140.2**	**141.4**	**139.8**	**140.1**	**140.8**
1.3.1 MANUFACTURE OF FOOD PRODUCTS	**9.122**	**160.5**	**160.5**	**160.1**	**161.9**	**162.5**
1.3.1.1 Processing and Preserving of meat	0.134	145.2	146.5	147.4	149.5	151.4
1.3.1.2 Processing and Preserving of fish, Crustaceans, Molluscs and products thereof	0.204	142.9	138.8	143.2	150.1	145.9
1.3.1.3 Processing and Preserving of fruit and Vegetables	0.138	130.4	128.8	130.0	130.0	132.3
1.3.1.4 Vegetable and Animal oils and Fats	2.643	144.9	155.4	141.1	145.2	147.6
1.3.1.5 Dairy products	1.165	179.2	177.7	179.1	179.2	178.8
1.3.1.6 Grain mill products	2.010	175.6	166.8	181.8	182.0	181.3
1.3.1.7 Starches and Starch products	0.110	157.1	155.7	165.7	166.1	163.9
1.3.1.8 Bakery products	0.215	165.4	165.1	166.0	165.7	166.1
1.3.1.9 Sugar, Molasses & honey	1.163	134.6	129.2	136.9	136.6	137.5
1.3.1.10 Cocoa, Chocolate and Sugar confectionery	0.175	139.9	137.3	143.6	143.6	142.7
1.3.1.11 Macaroni, Noodles, Couscous and Similar farinaceous products	0.026	149.9	150.6	149.3	148.8	151.7
1.3.1.12 Tea & Coffee products	0.371	176.2	181.1	150.1	161.9	165.5
1.3.1.13 Processed condiments & salt	0.163	192.1	180.9	196.9	196.2	195.9
1.3.1.14 Processed ready to eat food	0.024	146.3	142.1	148.1	147.1	147.2
1.3.1.15 Health supplements	0.225	179.1	180.7	179.7	174.9	174.1
1.3.1.16 Prepared animal feeds	0.356	208.3	207.7	203.7	204.1	203.8
1.3.2 MANUFACTURE OF BEVERAGES	**0.909**	**131.5**	**130.9**	**132.3**	**132.3**	**133.0**
1.3.2.1 Wines & spirits	0.408	133.3	132.0	133.9	133.5	134.6
1.3.2.2 Malt liquors and Malt	0.225	135.6	135.1	136.1	136.6	136.3
1.3.2.3 Soft drinks; Production of mineral waters and Other bottled waters	0.275	125.5	125.8	126.8	127.0	127.7
1.3.3 MANUFACTURE OF TOBACCO PRODUCTS	**0.514**	**173.5**	**169.8**	**175.2**	**175.7**	**177.5**
1.3.3.1 Tobacco products	0.514	173.5	169.8	175.2	175.7	177.5

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2023	2024		
			Apr.	Feb.	Mar.(P)	Apr.(P)
	1	2	3	4	5	6
1.3.4 MANUFACTURE OF TEXTILES	**4.881**	**134.6**	**137.2**	**134.4**	**134.5**	**135.5**
1.3.4.1 Preparation and Spinning of textile fibres	2.582	120.1	123.3	119.8	120.0	121.4
1.3.4.2 Weaving & Finishing of textiles	1.509	157.5	160.3	156.5	156.5	156.6
1.3.4.3 Knitted and Crocheted fabrics	0.193	120.0	122.6	120.3	120.7	123.1
1.3.4.4 Made-up textile articles, Except apparel	0.299	156.5	154.1	157.5	158.3	160.1
1.3.4.5 Cordage, Rope, Twine and Netting	0.098	139.2	143.0	139.9	137.6	138.3
1.3.4.6 Other textiles	0.201	129.5	129.6	132.5	131.2	131.2
1.3.5 MANUFACTURE OF WEARING APPAREL	**0.814**	**150.8**	**149.5**	**151.7**	**151.3**	**153.0**
1.3.5.1 Manufacture of Wearing Apparel (woven), Except fur Apparel	0.593	148.7	148.4	148.8	148.6	150.1
1.3.5.2 Knitted and Crocheted apparel	0.221	156.5	152.2	159.3	158.3	160.6
1.3.6 MANUFACTURE OF LEATHER AND RELATED PRODUCTS	**0.535**	**124.1**	**123.4**	**123.7**	**123.7**	**123.0**
1.3.6.1 Tanning and Dressing of leather; Dressing and Dyeing of fur	0.142	107.3	107.2	103.6	104.8	102.9
1.3.6.2 Luggage, HandbAgs, Saddlery and Harness	0.075	140.9	141.3	140.9	141.2	141.0
1.3.6.3 Footwear	0.318	127.7	126.4	128.5	128.1	127.7
1.3.7 MANUFACTURE OF WOOD AND PRODUCTS OF WOOD AND CORK	**0.772**	**146.6**	**143.9**	**149.5**	**149.4**	**149.4**
1.3.7.1 Saw milling and Planing of wood	0.124	137.9	138.6	140.0	140.0	139.8
1.3.7.2 Veneer sheets; Manufacture of plywood, Laminboard, Particle board and Other panels and Boards	0.493	146.1	142.0	149.9	149.3	149.5
1.3.7.3 Builder's carpentry and Joinery	0.036	206.4	204.6	210.3	214.1	214.3
1.3.7.4 Wooden containers	0.119	139.8	139.4	139.7	140.0	139.9
1.3.8 MANUFACTURE OF PAPER AND PAPER PRODUCTS	**1.113**	**140.4**	**147.2**	**137.9**	**138.6**	**137.0**
1.3.8.1 Pulp, Paper and Paperboard	0.493	147.7	155.1	145.4	145.4	144.2
1.3.8.2 Corrugated paper and Paperboard and Containers of paper and Paperboard	0.314	140.9	141.5	142.1	143.0	143.1
1.3.8.3 Other articles of paper and Paperboard	0.306	128.1	140.1	121.3	123.1	119.1
1.3.9 PRINTING AND REPRODUCTION OF RECORDED MEDIA	**0.676**	**182.2**	**178.4**	**184.2**	**183.4**	**183.8**
1.3.9.1 Printing	0.676	182.2	178.4	184.2	183.4	183.8
1.3.10 MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS	**6.465**	**136.9**	**141.1**	**135.4**	**135.6**	**136.0**
1.3.10.1 Basic chemicals	1.433	139.9	148.2	136.7	136.7	136.7
1.3.10.2 Fertilizers and Nitrogen compounds	1.485	142.8	145.5	142.0	142.2	143.4
1.3.10.3 Plastic and Synthetic rubber in primary form	1.001	132.3	137.2	131.8	132.5	132.5
1.3.10.4 Pesticides and Other agrochemical products	0.454	132.8	136.6	130.0	129.6	129.9
1.3.10.5 Paints, Varnishes and Similar coatings, Printing ink and Mastics	0.491	143.8	145.3	142.9	142.3	141.5
1.3.10.6 Soap and Detergents, Cleaning and Polishing preparations, Perfumes and Toilet preparations	0.612	139.8	140.9	138.6	138.4	139.2
1.3.10.7 Other chemical products	0.692	134.4	137.5	133.2	134.1	134.4
1.3.10.8 Man-made fibres	0.296	103.6	106.7	103.4	103.2	104.9
1.3.11 MANUFACTURE OF PHARMACEUTICALS, MEDICINAL CHEMICAL AND BOTANICAL PRODUCTS	**1.993**	**142.9**	**142.8**	**143.9**	**143.3**	**143.9**
1.3.11.1 Pharmaceuticals, Medicinal chemical and Botanical products	1.993	142.9	142.8	143.9	143.3	143.9
1.3.12 MANUFACTURE OF RUBBER AND PLASTICS PRODUCTS	**2.299**	**127.5**	**128.4**	**127.7**	**128.3**	**128.3**
1.3.12.1 Rubber Tyres and Tubes; Retreading and Rebuilding of Rubber Tyres	0.609	113.8	114.5	113.9	114.0	114.0
1.3.12.2 Other Rubber Products	0.272	107.3	106.7	108.3	108.6	109.1
1.3.12.3 Plastics products	1.418	137.3	138.6	137.4	138.2	138.1
1.3.13 MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS	**3.202**	**134.7**	**135.2**	**133.8**	**133.7**	**132.8**
1.3.13.1 Glass and Glass products	0.295	163.8	163.8	164.2	164.0	164.2
1.3.13.2 Refractory products	0.223	119.7	119.1	119.4	119.4	119.0
1.3.13.3 Clay Building Materials	0.121	124.1	133.4	115.1	122.4	120.7
1.3.13.4 Other Porcelain and Ceramic Products	0.222	122.3	120.2	124.0	124.4	124.5
1.3.13.5 Cement, Lime and Plaster	1.645	137.4	138.2	136.2	135.4	133.6

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2023	2024		
			Apr.	Feb.	Mar.(P)	Apr.(P)
	1	2	3	4	5	6
1.3.13.6 Articles of Concrete, Cement and Plaster	0.292	137.7	137.7	137.0	137.2	139.3
1.3.13.7 Cutting, Shaping and Finishing of Stone	0.234	130.2	127.3	131.2	130.8	131.3
1.3.13.8 Other Non-Metallic Mineral Products	0.169	102.4	105.3	101.5	100.9	99.2
1.3.14 MANUFACTURE OF BASIC METALS	**9.646**	**141.0**	**145.3**	**138.5**	**138.4**	**140.0**
1.3.14.1 Inputs into steel making	1.411	140.2	151.9	134.9	134.1	135.9
1.3.14.2 Metallic Iron	0.653	153.6	157.5	150.4	147.9	149.4
1.3.14.3 Mild Steel - Semi Finished Steel	1.274	119.9	122.8	116.7	116.9	117.8
1.3.14.4 Mild Steel -Long Products	1.081	141.3	145.7	138.3	138.8	141.9
1.3.14.5 Mild Steel - Flat products	1.144	143.5	150.4	140.3	138.8	137.9
1.3.14.6 Alloy steel other than Stainless Steel- Shapes	0.067	137.6	144.4	133.4	133.4	137.9
1.3.14.7 Stainless Steel - Semi Finished	0.924	136.4	146.0	129.4	130.9	131.0
1.3.14.8 Pipes & tubes	0.205	169.6	172.4	169.5	168.9	167.6
1.3.14.9 Non-ferrous metals incl. precious metals	1.693	144.7	146.8	145.0	146.1	150.4
1.3.14.10 Castings	0.925	140.8	133.7	144.1	144.2	145.7
1.3.14.11 Forgings of steel	0.271	173.4	172.9	172.4	172.1	171.2
1.3.15 MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENT	**3.155**	**138.6**	**139.5**	**137.6**	**136.6**	**137.0**
1.3.15.1 Structural Metal Products	1.031	132.3	132.7	130.7	130.7	130.7
1.3.15.2 Tanks, Reservoirs and Containers of Metal	0.660	157.6	161.0	156.0	155.5	153.4
1.3.15.3 Steam generators, Except Central Heating Hot Water Boilers	0.145	106.2	105.3	105.6	105.6	106.0
1.3.15.4 Forging, Pressing, Stamping and Roll-Forming of Metal; Powder Metallurgy	0.383	141.6	139.7	139.5	139.0	138.4
1.3.15.5 Cutlery, Hand Tools and General Hardware	0.208	108.4	110.7	109.4	101.5	110.0
1.3.15.6 Other Fabricated Metal Products	0.728	143.8	144.7	144.0	142.6	144.4
1.3.16 MANUFACTURE OF COMPUTER, ELECTRONIC AND OPTICAL PRODUCTS	**2.009**	**119.2**	**117.5**	**119.5**	**119.6**	**120.6**
1.3.16.1 Electronic Components	0.402	115.0	113.8	114.6	114.5	115.9
1.3.16.2 Computers and Peripheral Equipment	0.336	135.3	135.1	135.1	135.3	135.3
1.3.16.3 Communication Equipment	0.310	136.0	131.0	139.3	139.4	139.2
1.3.16.4 Consumer Electronics	0.641	103.5	101.8	102.7	102.8	103.9
1.3.16.5 Measuring, Testing, Navigating and Control equipment	0.181	113.4	113.0	114.0	114.0	118.5
1.3.16.6 Watches and Clocks	0.076	157.2	153.1	159.8	159.9	160.0
1.3.16.7 Irradiation, Electromedical and Electrotherapeutic equipment	0.055	108.4	110.5	108.3	109.0	109.2
1.3.16.8 Optical instruments and Photographic equipment	0.008	103.8	103.7	105.3	105.3	105.2
1.3.17 MANUFACTURE OF ELECTRICAL EQUIPMENT	**2.930**	**131.4**	**130.7**	**131.8**	**132.1**	**132.4**
1.3.17.1 Electric motors, Generators, Transformers and Electricity distribution and Control apparatus	1.298	130.2	128.1	131.3	131.3	131.2
1.3.17.2 Batteries and Accumulators	0.236	137.8	136.4	139.2	140.4	139.8
1.3.17.3 Fibre optic cables for data transmission or live transmission of images	0.133	123.4	121.5	122.4	121.2	120.1
1.3.17.4 Other electronic and Electric wires and Cables	0.428	146.1	148.6	145.2	146.0	148.9
1.3.17.5 Wiring devices, Electric lighting & display equipment	0.263	116.8	116.9	117.8	117.6	117.6
1.3.17.6 Domestic appliances	0.366	133.8	133.8	133.1	133.4	133.3
1.3.17.7 Other electrical equipment	0.206	120.9	121.2	120.6	121.8	121.6
1.3.18 MANUFACTURE OF MACHINERY AND EQUIPMENT	**4.789**	**129.0**	**128.4**	**130.0**	**130.0**	**130.5**
1.3.18.1 Engines and Turbines, Except aircraft, Vehicle and Two wheeler engines	0.638	129.0	127.7	131.2	130.9	130.5
1.3.18.2 Fluid power equipment	0.162	131.9	132.8	132.2	132.5	133.2
1.3.18.3 Other pumps, Compressors, Taps and Valves	0.552	117.4	117.8	118.0	117.7	117.5
1.3.18.4 Bearings, Gears, Gearing and Driving elements	0.340	127.7	128.1	130.5	130.2	129.0
1.3.18.5 Ovens, Furnaces and Furnace burners	0.008	83.7	80.7	85.2	85.3	86.2
1.3.18.6 Lifting and Handling equipment	0.285	128.6	127.5	129.8	130.1	130.1

No. 21: Wholesale Price Index (Concld.)

(Base: 2011-12 = 100)

Commodities	Weight	2023-24	2023	2024		
			Apr.	Feb.	Mar.(P)	Apr.(P)
	1	2	3	4	5	6
1.3.18.7 Office machinery and Equipment	0.006	130.2	130.2	130.2	130.2	130.2
1.3.18.8 Other general-purpose machinery	0.437	145.2	145.2	144.1	144.7	147.1
1.3.18.9 Agricultural and Forestry machinery	0.833	142.5	140.9	144.1	144.1	146.3
1.3.18.10 Metal-forming machinery and Machine tools	0.224	122.5	122.3	122.6	122.1	122.4
1.3.18.11 Machinery for mining, Quarrying and Construction	0.371	88.6	87.1	88.8	89.2	89.4
1.3.18.12 Machinery for food, Beverage and Tobacco processing	0.228	124.4	124.8	124.3	124.7	124.6
1.3.18.13 Machinery for textile, Apparel and Leather production	0.192	137.1	136.7	137.8	136.9	137.5
1.3.18.14 Other special-purpose machinery	0.468	144.6	143.2	146.0	145.4	145.3
1.3.18.15 Renewable electricity generating equipment	0.046	70.8	71.1	70.0	70.1	70.1
1.3.19 MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS	**4.969**	**128.3**	**128.0**	**128.9**	**129.7**	**129.5**
1.3.19.1 Motor vehicles	2.600	128.5	127.4	129.5	130.6	130.2
1.3.19.2 Parts and Accessories for motor vehicles	2.368	128.2	128.6	128.3	128.7	128.6
1.3.20 MANUFACTURE OF OTHER TRANSPORT EQUIPMENT	**1.648**	**143.1**	**141.9**	**143.5**	**143.5**	**144.4**
1.3.20.1 Building of ships and Floating structures	0.117	163.7	163.6	163.7	163.7	177.9
1.3.20.2 Railway locomotives and Rolling stock	0.110	107.4	104.8	108.4	108.5	108.2
1.3.20.3 Motor cycles	1.302	144.7	143.4	145.2	145.2	145.1
1.3.20.4 Bicycles and Invalid carriages	0.117	137.9	137.3	137.9	137.4	136.6
1.3.20.5 Other transport equipment	0.002	159.2	155.8	160.5	158.3	161.3
1.3.21 MANUFACTURE OF FURNITURE	**0.727**	**159.8**	**160.1**	**158.8**	**159.9**	**158.8**
1.3.21.1 Furniture	0.727	159.8	160.1	158.8	159.9	158.8
1.3.22 OTHER MANUFACTURING	**1.064**	**158.2**	**159.5**	**161.5**	**164.1**	**175.1**
1.3.22.1 Jewellery and Related articles	0.996	157.9	159.1	161.6	164.3	176.1
1.3.22.2 Musical instruments	0.001	187.0	193.9	191.9	192.0	186.6
1.3.22.3 Sports goods	0.012	155.2	154.7	155.2	154.0	158.3
1.3.22.4 Games and Toys	0.005	159.6	159.4	159.9	160.0	161.2
1.3.22.5 Medical and Dental instruments and Supplies	0.049	163.1	166.3	161.2	161.2	160.2
2 FOOD INDEX	**24.378**	**179.7**	**174.0**	**178.4**	**180.1**	**183.6**

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-March		March	
				2022-23	2023-24	2023	2024
	1	2	3	4	5	6	7
General Index	100.00	138.5	146.6	138.5	146.6	151.7	159.2
1 Sectoral Classification							
1.1 Mining	14.37	119.9	128.9	119.9	128.9	154.2	156.1
1.2 Manufacturing	77.63	137.1	144.6	137.1	144.6	147.5	155.1
1.3 Electricity	7.99	185.2	198.3	185.2	198.3	188.0	204.2
2 Use-Based Classification							
2.1 Primary Goods	34.05	139.2	147.6	139.2	147.6	158.3	162.2
2.2 Capital Goods	8.22	100.3	106.5	100.3	106.5	123.0	130.5
2.3 Intermediate Goods	17.22	149.4	157.2	149.4	157.2	159.4	167.5
2.4 Infrastructure/ Construction Goods	12.34	160.7	176.2	160.7	176.2	181.7	194.2
2.5 Consumer Durables	12.84	114.5	118.6	114.5	118.6	118.6	129.9
Consumer non-durables	15.33	147.7	153.6	147.7	153.6	147.5	154.7

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 – February			
	2023-24 (Revised Estimates)	2023-24 (Actuals)	2022-23 (Actuals)	Percentage to Revised Estimates	
				2023-24	2022-23
	1	2	3	4	5
1 Revenue Receipts	**2699713**	**2209782**	**1980828**	**81.9**	**84.3**
1.1 Tax Revenue (Net)	2323918	1849452	1732193	79.6	83.0
1.2 Non-Tax Revenue	375795	360330	248635	95.9	95.0
2 Non Debt Capital Receipt	**56000**	**36140**	**58900**	**64.5**	**70.5**
2.1 Recovery of Loans	26000	23480	20229	90.3	86.1
2.2 Other Receipts	30000	12660	38671	42.2	64.5
3 Total Receipts (excluding borrowings) (1+2)	**2755713**	**2245922**	**2039728**	**81.5**	**83.9**
4 Revenue Expenditure of which :	3540239	2941674	2903363	83.1	83.9
4.1 Interest Payments	1055427	880788	798957	83.5	84.9
5 Capital Expenditure	950246	805613	590227	84.8	81.0
6 Total Expenditure (4+5)	**4490486**	**3747287**	**3493590**	**83.4**	**83.4**
7 Revenue Deficit (4-1)	**840527**	**731892**	**922535**	**87.1**	**83.1**
8 Fiscal Deficit (6-3)	**1734773**	**1501365**	**1453862**	**86.5**	**82.8**
9 Gross Primary Deficit (8-4.1)	**679346**	**620577**	**654905**	**91.3**	**80.4**

Source: Controller General of Accounts (CGA), Ministry of Finance, Government of India and Interim Union Budget 2024-25.

No. 24: Treasury Bills – Ownership Pattern

(₹ Crore)

Item	2022-23	2023	2024					
		Mar. 31	Feb. 23	Mar. 1	Mar. 8	Mar. 15	Mar. 22	Mar. 29
	1	2	3	4	5	6	7	8
1 91-day								
1.1 Banks	6191	6191	8870	9315	9273	10588	10155	18054
1.2 Primary Dealers	20071	20071	20801	18037	17589	14929	18396	22676
1.3 State Governments	8038	8038	16384	16384	16384	16604	14376	5701
1.4 Others	80638	80638	84728	90048	93538	97883	97848	88670
2 182-day								
2.1 Banks	53154	53154	74065	74430	72096	68312	73225	84913
2.2 Primary Dealers	97274	97274	73474	76367	82298	90444	90960	87779
2.3 State Governments	2592	2592	5037	5037	5337	4437	5220	4070
2.4 Others	110072	110072	92465	96207	99610	102248	103819	102311
3 364-day								
3.1 Banks	101834	101834	89312	86887	84588	83856	86148	91819
3.2 Primary Dealers	146080	146080	169184	172500	172090	174631	170813	159085
3.3 State Governments	48284	48284	44559	44491	40500	41430	41542	41487
3.4 Others	149086	149086	182504	176613	174322	167513	164039	165095
4 14-day Intermediate								
4.1 Banks								
4.2 Primary Dealers								
4.3 State Governments	212758	212758	224502	317650	267634	234820	239401	318736
4.4 Others	926	926	638	296	613	607	1317	442
Total Treasury Bills (Excluding 14 day Intermediate T Bills) #	823313	823313	861383	866316	867625	872875	876542	871662

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										
2023-24										
Feb. 28	10000	136	44351	1536	27	9964	1536	11500	98.29	6.9594
Mar. 6	10000	110	31113	1052	31	9948	1052	11000	98.31	6.8988
Mar. 13	10000	125	41060	2568	40	9952	2568	12520	98.31	6.8781
Mar. 20	10000	100	26211	814	52	9958	814	10772	98.31	6.8785
Mar. 27	10000	54	14001	558	45	9967	558	10525	98.28	7.0101
182-day Treasury Bills										
2023-24										
Feb. 28	15000	218	46325	25	97	14975	25	15000	96.55	7.1673
Mar. 6	15000	220	46996	1378	70	14922	1378	16300	96.56	7.1475
Mar. 13	15000	225	45652	829	71	14971	829	15800	96.56	7.1350
Mar. 20	15000	190	45962	873	76	14910	873	15783	96.57	7.1236
Mar. 27	15000	135	34324	19	74	14981	19	15000	96.56	7.1447
364-day Treasury Bills										
2023-24										
Feb. 28	9000	164	37576	29	44	8980	29	9008	93.37	7.1199
Mar. 6	9000	140	37831	187	35	8985	187	9172	93.38	7.1049
Mar. 13	9000	156	39700	992	34	8987	992	9980	93.40	7.0900
Mar. 20	9000	134	35895	127	30	8985	127	9112	93.40	7.0828
Mar. 27	9000	126	37189	23	21	8984	23	9007	93.41	7.0787

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
March 01 ,2024	5.00-7.15	6.59
March 02 ,2024	5.70-6.24	6.15
March 04 ,2024	5.10-6.65	6.49
March 05 ,2024	5.50-6.55	6.43
March 06 ,2024	5.10-6.55	6.44
March 07 ,2024	5.10-6.90	6.55
March 11 ,2024	5.10-6.82	6.59
March 12 ,2024	5.10-6.76	6.51
March 13 ,2024	5.00-7.05	6.47
March 14 ,2024	5.00-7.05	6.44
March 15 ,2024	5.00-6.80	6.58
March 16 ,2024	5.50-6.70	6.12
March 18 ,2024	5.00-7.15	6.57
March 19 ,2024	5.00-7.20	6.53
March 20 ,2024	5.00-6.78	6.48
March 21 ,2024	5.00-6.85	6.63
March 22 ,2024	5.00-6.85	6.71
March 26 ,2024	5.00-7.75	6.68
March 27 ,2024	5.00-8.00	6.67
March 28 ,2024	5.00-9.00	7.41
March 30 ,2024	5.80-6.75	6.14
April 02 ,2024	5.00-6.60	6.44
April 03 ,2024	5.10-6.55	6.44
April 04 ,2024	5.10-6.55	6.44
April 05 ,2024	5.10-6.60	6.47
April 06 ,2024	5.50-6.24	6.12
April 08 ,2024	5.10-6.60	6.49
April 10 ,2024	5.00-6.75	6.55
April 12 ,2024	5.00-6.75	6.56
April 15 ,2024	5.00-6.70	6.51

Note: Includes Notice Money.

No. 27: Certificates of Deposit

Item	2023	2024			
	Mar. 24	Feb. 9	Feb. 23	Mar. 8	Mar. 22
	1	2	3	4	5
1 Amount Outstanding (₹ Crore)	304521.02	369142.87	381444.86	379574.59	375812.94
1.1 Issued during the fortnight (₹ Crore)	40358.05	44656.90	63348.26	60381.38	68973.11
2 Rate of Interest (per cent)	7.07-7.80	7.23-8.02	7.17-8.22	7.11-8.15	7.06-8.16

No. 28: Commercial Paper

Item	2023	2024			
	Mar. 31	Feb. 15	Feb. 29	Mar. 15	Mar. 31
	1	2	3	4	5
1 Amount Outstanding (₹ Crore)	353688.25	395262.10	408048.25	406182.50	388559.20
1.1 Reported during the fortnight (₹ Crore)	61469.10	57899.85	82067.80	93685.95	57334.10
2 Rate of Interest (per cent)	6.88-12.67	7.38-12.74	7.05-11.91	7.09-13.92	7.07-14.20

No. 29: Average Daily Turnover in Select Financial Markets

(₹ Crore)

Item	2022-23	2024					
		Feb. 23	Mar. 1	Mar. 8	Mar. 15	Mar. 22	Mar. 29
	1	2	3	4	5	6	7
1 Call Money	19987	19049	18315	16697	20150	19460	18683
2 Notice Money	2605	323	4361	261	4741	1451	5553
3 Term Money	612	732	1311	839	931	1352	1042
4 Triparty Repo	697245	576941	712802	541029	699427	556798	634402
5 Market Repo	504418	531995	652752	563167	702183	579484	661720
6 Repo in Corporate Bond	2085	2511	2620	2553	4853	3460	2612
7 Forex (US $ million)	67793	99179	122015	111344	121529	136534	165277
8 Govt. of India Dated Securities	66200	102031	59429	67275	83840	84092	90054
9 State Govt. Securities	5450	7059	10427	8945	19040	14235	15232
10 Treasury Bills							
10.1 91-Day	4380	3757	3740	6175	4464	6989	13965
10.2 182-Day	4480	6843	5309	4448	5138	5233	9470
10.3 364-Day	2900	4784	3685	2797	3857	4223	2929
10.4 Cash Management Bills			0	0	0	0	0
11 Total Govt. Securities (8+9+10)	83410	124474	82589	89640	116338	114771	131649
11.1 RBI	660	204	760	278	458	482	342

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

(Amount in ₹ Crore)

Security & Type of Issue	2022-23		2022-23 (Apr.-Mar.)		2023-24 (Apr.-Mar.) *		Mar. 2023		Mar. 2024 *	
	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount
	1	2	3	4	5	6	7	8	9	10
1 Equity Shares	**237**	**45266**	**237**	**45266**	**339**	**80942**	**37**	**3065**	**36**	**4277**
1A Premium	218	42408	218	42408	328	76319	34	2825	36	3020
1.1 Public	164	38515	164	38515	272	65832	23	996	26	3856
1.1.1 Premium	161	37158	161	37158	272	62791	23	922	26	2813
1.2 Rights	73	6751	73	6751	67	15110	14	2069	10	420
1.2.1 Premium	57	5250	57	5250	56	13527	11	1903	10	207
2 Preference Shares	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
2.1 Public	-	-	-	-	-	-	-	-	-	-
2.2 Rights	-	-	-	-	-	-	-	-	-	-
3 Bonds & Debentures	**34**	**9221**	**34**	**9221**	**44**	**16342**	**3**	**485**	**3**	**703**
3.1 Convertible	-	-	-	-	-	-	-	-	-	-
3.1.1 Public	-	-	-	-	-	-	-	-	-	-
3.1.2 Rights	-	-	-	-	-	-	-	-	-	-
3.2 Non-Convertible	34	9221	34	9221	44	16342	3	485	3	703
3.2.1 Public	34	9221	34	9221	44	16342	3	485	3	703
3.2.2 Rights	-	-	-	-	-	-	-	-	-	-
4 Total (1+2+3)	**271**	**54487**	**271**	**54487**	**383**	**97284**	**40**	**3550**	**39**	**4980**
4.1 Public	198	47736	198	47736	316	82174	26	1481	29	4559
4.2 Rights	73	6751	73	6751	67	15110	14	2069	10	420

Note : 1. Since April 2020, monthly data on equity issues is compiled on the basis of their listing date.
2. Figures in the columns might not add up to the total due to rounding off numbers.

Source : Securities and Exchange Board of India.

* : Data is Provisional

External Sector

No. 31: Foreign Trade

Item	Unit	2022-23	2023			2024		
			Mar.	Nov.	Dec.	Jan.	Feb.	Mar.
		1	2	3	4	5	6	7
1 Exports	₹ Crore	3621550	345265	281097	319716	310242	343518	346123
	US $ Million	451070	41958	33746	38391	37324	41406	41703
1.1 Oil	₹ Crore	782303	68687	61557	57369	71607	68163	44951
	US $ Million	97468	8347	7390	6889	8615	8216	5416
1.2 Non-oil	₹ Crore	2839247	276578	219540	262347	238635	275356	301173
	US $ Million	353602	33611	26356	31502	28709	33190	36287
2 Imports	₹ Crore	5749801	501309	453855	470194	443426	498718	475381
	US $ Million	715969	60921	54486	56460	53347	60113	57277
2.1 Oil	₹ Crore	1682475	148300	124404	124423	129050	140134	142994
	US $ Million	209418	18022	14935	14941	15526	16891	17229
2.2 Non-oil	₹ Crore	4067326	353009	329452	345771	314375	358584	332387
	US $ Million	506551	42899	39551	41520	37821	43222	40048
3 Trade Balance	₹ Crore	-2128251	-156044	-172758	-150479	-133184	-155200	-129258
	US $ Million	-264899	-18963	-20740	-18069	-16023	-18707	-15574
3.1 Oil	₹ Crore	-900172	-79613	-62846	-67054	-57443	-71972	-98044
	US $ Million	-111950	-9675	-7545	-8052	-6911	-8675	-11813
3.2 Non-oil	₹ Crore	-1228079	-76430	-109912	-83425	-75740	-83229	-31214
	US $ Million	-152949	-9288	-13195	-10018	-9112	-10032	-3761

Source: DGCI&S and Ministry of Commerce & Industry.

No. 32: Foreign Exchange Reserves

Item	Unit	2023	2024					
		May. 05	Mar. 22	Mar. 29	Apr. 05	Apr. 12	Apr. 19	Apr. 26
		1	2	3	4	5	6	7
1 Total Reserves	**₹ Crore**	**4875737**	**5359608**	**5384281**	**5401575**	**5365440**	**5344921**	**5317256**
	US $ Million	**595976**	**642631**	**645583**	**648562**	**643162**	**640334**	**637922**
1.1 Foreign Currency Assets	₹ Crore	4303465	4739393	4759071	4756930	4710510	4681529	4665274
	US $ Million	526021	568264	570618	571166	564653	560860	559701
1.2 Gold	₹ Crore	378914	429410	435024	454381	465486	474181	462881
	US $ Million	46315	51487	52160	54558	55798	56808	55533
	Volume (Metric Tonnes)	794.63	819.79	822.09	822.09	822.09	823.96	827.69
1.3 SDRs	SDRs Million	13667	13694	13694	13694	13694	13694	13694
	₹ Crore	150918	151946	151335	151325	150802	150529	150439
	US $ Million	18447	18219	18145	18170	18077	18034	18048
1.4 Reserve Tranche Position in IMF	₹ Crore	42439	38859	38851	38939	38642	38682	38661
	US $ Million	5192	4662	4660	4669	4634	4631	4639

* 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	
	2022-23	2023	2024		2022-23	2023-24
		Mar.	Feb.	Mar. (P)	Apr.-Mar.	Apr.-Mar.(P)
	1	2	3	4	5	6
1 NRI Deposits	**138879**	**138879**	**149724**	**151879**	**8989**	**14702**
1.1 FCNR(B)	19363	19363	24902	25733	2445	6370
1.2 NR(E)RA	95817	95817	97682	98624	2505	4156
1.3 NRO	23699	23699	27140	27522	4039	4176

P: Provisional.

No. 34: Foreign Investment Inflows

(US $ Million)

Item	2022-23	2022-23	2023-24 (P)	2023	2024 (P)	
		Apr.-Mar.	Apr.-Mar.	Mar.	Feb.	Mar.
	1	2	3	4	5	6
1.1 Net Foreign Direct Investment (1.1.1-1.1.2)	**27986**	**27986**	**10587**	**1274**	**327**	**-3960**
1.1.1 Direct Investment to India (1.1.1.1-1.1.1.2)	**42006**	**42006**	**26550**	**2392**	**1544**	**-143**
1.1.1.1 Gross Inflows/Gross Investments	**71355**	**71355**	**70954**	**4572**	**5054**	**5957**
1.1.1.1.1 Equity	47600	47600	45860	2522	2789	3883
1.1.1.1.1.1 Government (SIA/FIPB)	692	692	585	9	47	64
1.1.1.1.1.2 RBI	37097	37097	31826	1901	2136	3107
1.1.1.1.1.3 Acquisition of shares	8245	8245	12013	471	466	571
1.1.1.1.1.4 Equity capital of unincorporated bodies	1566	1566	1437	140	140	140
1.1.1.1.2 Reinvested earnings	19105	19105	19533	1659	1659	1659
1.1.1.1.3 Other capital	4650	4650	5561	391	606	416
1.1.1.2 Repatriation/Disinvestment	**29349**	**29349**	**44404**	**2179**	**3510**	**6100**
1.1.1.2.1 Equity	27094	27094	41267	2085	3330	5992
1.1.1.2.2 Other capital	2255	2255	3137	95	180	108
1.1.2 Foreign Direct Investment by India (1.1.2.1+1.1.2.2+1.1.2.3-1.1.2.4)	**14020**	**14020**	**15962**	**1118**	**1217**	**3817**
1.1.2.1 Equity capital	8771	8771	9065	720	640	2373
1.1.2.2 Reinvested Earnings	4412	4412	5138	368	368	368
1.1.2.3 Other Capital	4714	4714	5383	440	300	1305
1.1.2.4 Repatriation/Disinvestment	3877	3877	3624	409	90	229
1.2 Net Portfolio Investment (1.2.1+1.2.2+1.2.3-1.2.4)	**-5152**	**-5152**	**42218**	**1560**	**3828**	**6662**
1.2.1 GDRs/ADRs	-	-	-	-	-	-
1.2.2 FIIs	-4828	-4828	42880	1585	3752	6746
1.2.3 Offshore funds and others	-	-	-	-	-	-
1.2.4 Portfolio investment by India	324	324	662	26	-75	84
1 Foreign Investment Inflows	**22834**	**22834**	**52805**	**2834**	**4155**	**2702**

P: Provisional

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

(US $ Million)

Item	2022-23	2023	2024		
		Mar.	Jan.	Feb.	Mar.
	1	2	3	4	5
1 Outward Remittances under the LRS	**27140.65**	**2956.76**	**2619.71**	**2013.28**	**2302.36**
1.1 Deposit	1011.07	194.16	33.88	36.70	107.77
1.2 Purchase of immovable property	188.73	33.01	17.31	15.38	26.08
1.3 Investment in equity/debt	1256.15	232.86	59.87	135.40	224.70
1.4 Gift	3005.27	452.95	209.58	233.91	318.66
1.5 Donations	12.78	1.08	0.82	0.84	1.11
1.6 Travel	13662.15	1149.85	1549.97	1053.64	1002.41
1.7 Maintenance of close relatives	4174.06	630.10	267.02	266.39	394.13
1.8 Medical Treatment	55.74	5.15	9.32	7.25	8.17
1.9 Studies Abroad	3427.81	228.49	449.46	246.82	197.02
1.10 Others	346.89	29.11	22.47	16.96	22.31

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

Item	2022-23	2023-24	2023	2024	
			Apr	Mar	Apr
	1	2	3	4	5
40-Currency Basket (Base: 2015-16=100)					
1 Trade-Weighted					
1.1 NEER	91.27	90.76	89.11	92.15	92.20
1.2 REER	102.86	103.74	99.05	104.63	103.46
2 Export-Weighted					
2.1 NEER	93.03	93.13	91.54	94.58	94.59
2.2 REER	101.12	101.23	97.15	101.68	100.34
6-Currency Basket (Trade-weighted)					
1 Base : 2015-16 =100					
1.1 NEER	85.93	83.65	83.01	83.60	83.78
1.2 REER	101.80	101.79	98.44	101.68	102.23
2 Base : 2021-22 =100					
2.1 NEER	98.72	96.10	95.37	96.05	96.25
2.2 REER	99.69	99.68	96.39	99.57	100.11

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

(Amount in US $ Million)

Item	2022-23	2023	2024	
		Mar.	Feb.	Mar.
	1	2	3	4
1 Automatic Route				
1.1 Number	1093	134	104	123
1.2 Amount	24156	3466	2021	5762
2 Approval Route				
2.1 Number	9	1	3	8
2.2 Amount	2473	374	275	1972
3 Total (1+2)				
3.1 Number	1102	135	107	131
3.2 Amount	26629	3840	2296	7734
4 Weighted Average Maturity (in years)	5.72	5.60	5.80	6.10
5 Interest Rate (per cent)				
5.1 Weighted Average Margin over alternative reference rate (ARR) for Floating Rate Loans@	1.68	1.81	1.77	1.73
5.2 Interest rate range for Fixed Rate Loans	0.00-11.80	0.50-11.00	0.00-10.00	0.00-10.63
Borrower Category				
I. Corporate Manufacturing	6925	678	591	1730
II. Corporate-Infrastructure	8396	1985	341	2116
a.) Transport	333	174	75	0
b.) Energy	2235	10	152	706
c.) Water and Sanitation	32	1	0	0
d.) Communication	1538	0	0	0
e.) Social and Commercial Infrastructure	530	0	0	20
f.) Exploration,Mining and Refinery	2085	800	10	105
g.) Other Sub-Sectors	1643	1000	104	1285
III. Corporate Service-Sector	1773	31	330	205
IV. Other Entities	1806	0	127	851
a.) units in SEZ	6	0	0	1
b.) SIDBI	0	0	0	0
c.) Exim Bank	1800	0	127	850
V. Banks	0	0	0	0
VI. Financial Institution (Other than NBFC)	0	0	0	0
VII. NBFCs	7540	1125	902	2704
a). NBFC- IFC/AFC	3031	574	398	1145
b). NBFC-MFI	313	74	11	103
c). NBFC-Others	4196	477	493	1456
VIII. Non-Government Organization (NGO)	0	0	0	0
IX. Micro Finance Institution (MFI)	0	0	0	0
X. Others	189	21	5	128

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	Oct-Dec 2022			Oct-Dec 2023 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance Of Payments (1+2+3)	**403847**	**392778**	**11069**	**451389**	**445391**	**5998**
1 Current Account (1.1+ 1.2)	**227509**	**244341**	**-16832**	**235949**	**246468**	**-10519**
1.1 Merchandise	**105603**	**176940**	**-71337**	**106656**	**178259**	**-71603**
1.2 Invisibles (1.2.1+1.2.2+1.2.3)	**121906**	**67401**	**54505**	**129293**	**68209**	**61084**
1.2.1 Services	83421	44708	38713	87787	42767	45020
1.2.1.1 Travel	8123	6910	1213	9850	7487	2363
1.2.1.2 Transportation	8758	9409	-652	6951	6457	494
1.2.1.3 Insurance	783	797	-13	811	856	-46
1.2.1.4 G.n.i.e.	185	282	-97	182	280	-98
1.2.1.5 Miscellaneous	65572	27310	38262	69993	27688	42306
1.2.1.5.1 Software Services	37599	4058	33541	41041	4774	36267
1.2.1.5.2 Business Services	21198	15125	6073	22647	14067	8581
1.2.1.5.3 Financial Services	1949	1292	657	2491	956	1535
1.2.1.5.4 Communication Services	842	329	514	701	397	303
1.2.2 Transfers	30867	2400	28467	31539	2237	29302
1.2.2.1 Official	58	232	-174	94	230	-135
1.2.2.2 Private	30809	2168	28641	31445	2007	29438
1.2.3 Income	7618	20293	-12675	9967	23205	-13238
1.2.3.1 Investment Income	5902	19426	-13525	7957	22329	-14372
1.2.3.2 Compensation of Employees	1716	867	850	2010	876	1134
2 Capital Account (2.1+2.2+2.3+2.4+2.5)	**176339**	**147451**	**28887**	**215440**	**198081**	**17358**
2.1 Foreign Investment (2.1.1+2.1.2)	**95269**	**88629**	**6641**	**144372**	**128184**	**16189**
2.1.1 Foreign Direct Investment	17018	14988	2030	18896	14719	4176
2.1.1.1 In India	16124	8796	7327	18330	9947	8382
2.1.1.1.1 Equity	10246	7932	2314	11912	8773	3139
2.1.1.1.2 Reinvested Earnings	5066	0	5066	5196		5196
2.1.1.1.3 Other Capital	811	865	-53	1222	1175	47
2.1.1.2 Abroad	895	6192	-5297	566	4772	-4206
2.1.1.2.1 Equity	895	3612	-2717	566	2271	-1705
2.1.1.2.2 Reinvested Earnings	0	1103	-1103	0	1345	-1345
2.1.1.2.3 Other Capital	0	1477	-1477	0	1156	-1156
2.1.2 Portfolio Investment	78251	73641	4611	125477	113465	12012
2.1.2.1 In India	77433	72916	4517	124485	112814	11671
2.1.2.1.1 FIIs	77433	72916	4517	124485	112814	11671
2.1.2.1.1.1 Equity	71477	65940	5537	108785	102117	6668
2.1.2.1.1.2 Debt	5956	6976	-1020	15701	10697	5003
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	
2.1.2.2 Abroad	818	724	93	991	651	341
2.2 Loans (2.2.1+2.2.2+2.2.3)	**25543**	**24995**	**547**	**24641**	**28119**	**-3478**
2.2.1 External Assistance	3088	1584	1504	4605	1401	3204
2.2.1.1 By India	8	22	-14	9	48	-40
2.2.1.2 To India	3080	1562	1518	4596	1353	3244
2.2.2 Commercial Borrowings	4710	7119	-2409	6575	10995	-4420
2.2.2.1 By India	439	316	123	2712	4503	-1791
2.2.2.2 To India	4272	6803	-2531	3863	6492	-2629
2.2.3 Short Term to India	17744	16292	1452	13461	15723	-2262
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	17744	15437	2307	12535	15723	-3188
2.2.3.2 Suppliers' Credit up to 180 days	0	855	-855	926	0	926
2.3 Banking Capital (2.3.1+2.3.2)	**36230**	**21795**	**14435**	**40849**	**24492**	**16358**
2.3.1 Commercial Banks	36230	21649	14580	40654	24492	16162
2.3.1.1 Assets	18145	6135	12009	16550	5276	11274
2.3.1.2 Liabilities	18085	15514	2571	24103	19215	4888
2.3.1.2.1 Non-Resident Deposits	16928	14359	2569	22381	18461	3921
2.3.2 Others	0	145	-145	196	0	196
2.4 Rupee Debt Service	**0**	**1**	**-1**		**2**	**-2**
2.5 Other Capital	**19297**	**12033**	**7265**	**5577**	**17286**	**-11709**
3 Errors & Omissions	**0**	**986**	**-986**	**0**	**841**	**-841**
4 Monetary Movements (4.1+ 4.2)	**0**	**11069**	**-11069**		**5998**	**-5998**
4.1 I.M.F.	0	0	0	0	0	
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	11069	-11069	0	5998	-5998

Note: P: Preliminary.

No. 39: India's Overall Balance of Payments

(₹ Crore)

Item	Oct-Dec 2022			Oct-Dec 2023 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance Of Payments (1+2+3)	**3319825**	**3228834**	**90992**	**3758748**	**3708801**	**49947**
1 Current Account (1.1+ 1.2)	**1870236**	**2008604**	**-138368**	**1964766**	**2052357**	**-87591**
1.1 Merchandise	**868107**	**1454536**	**-586429**	**888131**	**1484372**	**-596242**
1.2 Invisibles (1.2.1+1.2.2+1.2.3)	**1002128**	**554068**	**448061**	**1076635**	**567985**	**508651**
1.2.1 Services	685765	367522	318243	731006	356123	374883
1.2.1.1 Travel	66776	56807	9970	82022	62341	19681
1.2.1.2 Transportation	71992	77348	-5356	57885	53767	4117
1.2.1.3 Insurance	6438	6548	-110	6750	7130	-380
1.2.1.4 G.n.i.e.	1520	2317	-797	1512	2328	-816
1.2.1.5 Miscellaneous	539038	224502	314536	582837	230556	352281
1.2.1.5.1 Software Services	309080	33356	275723	341751	39756	301995
1.2.1.5.2 Business Services	174257	124338	49919	188585	117135	71450
1.2.1.5.3 Financial Services	16021	10624	5397	20739	7958	12781
1.2.1.5.4 Communication Services	6924	2701	4223	5834	3309	2524
1.2.2 Transfers	253741	19726	234014	262631	18628	244002
1.2.2.1 Official	478	1907	-1429	785	1913	-1127
1.2.2.2 Private	253262	17819	235443	261845	16716	245130
1.2.3 Income	62623	166820	-104197	82999	193233	-110235
1.2.3.1 Investment Income	48514	159694	-111180	66258	185935	-119678
1.2.3.2 Compensation of Employees	14109	7126	6984	16741	7298	9443
2 Capital Account (2.1+2.2+2.3+2.4+2.5)	**1449590**	**1212123**	**237467**	**1793982**	**1649438**	**144544**
2.1 Foreign Investment (2.1.1+2.1.2)	**783160**	**728570**	**54589**	**1202200**	**1067396**	**134804**
2.1.1 Foreign Direct Investment	139897	123209	16688	157346	122568	34778
2.1.1.1 In India	132544	72310	60233	152632	82832	69800
2.1.1.1.1 Equity	84224	65203	19021	99189	73050	26139
2.1.1.1.2 Reinvested Earnings	41648	0	41648	43269	0	43269
2.1.1.1.3 Other Capital	6671	7107	-436	10175	9783	392
2.1.1.2 Abroad	7353	50898	-43545	4713	39735	-35022
2.1.1.2.1 Equity	7353	29691	-22337	4713	18909	-14196
2.1.1.2.2 Reinvested Earnings	0	9067	-9067	0	11199	-11199
2.1.1.2.3 Other Capital	0	12141	-12141	0	9628	-9628
2.1.2 Portfolio Investment	643263	605362	37901	1044854	944828	100026
2.1.2.1 In India	636539	599406	37133	1036599	939411	97188
2.1.2.1.1 FIIs	636539	599406	37133	1036599	939411	97188
2.1.2.1.1.1 Equity	587580	542060	45520	905860	850336	55523
2.1.2.1.1.2 Debt	48959	57346	-8387	130739	89075	41664
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	6723	5955	768	8255	5417	2838
2.2 Loans (2.2.1+2.2.2+2.2.3)	**209972**	**205473**	**4499**	**205189**	**234148**	**-28959**
2.2.1 External Assistance	25384	13021	12363	38345	11667	26679
2.2.1.1 By India	63	180	-117	72	404	-331
2.2.1.2 To India	25321	12841	12480	38273	11263	27010
2.2.2 Commercial Borrowings	38722	58523	-19800	54752	91553	-36802
2.2.2.1 By India	3608	2599	1010	22583	37494	-14911
2.2.2.2 To India	35114	55924	-20810	32168	54059	-21891
2.2.3 Short Term to India	145866	133929	11937	112092	130928	-18836
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	145866	126902	18964	104379	130928	-26549
2.2.3.2 Suppliers' Credit up to 180 days	0	7027	-7027	7714	0	7714
2.3 Banking Capital (2.3.1+2.3.2)	**297825**	**179162**	**118663**	**340156**	**203943**	**136212**
2.3.1 Commercial Banks	297825	177967	119858	338525	203943	134582
2.3.1.1 Assets	149160	50436	98724	137815	43936	93879
2.3.1.2 Liabilities	148665	127531	21135	200710	160008	40702
2.3.1.2.1 Non-Resident Deposits	139159	118040	21119	186372	153723	32648
2.3.2 Others	0	1195	-1195	1630	0	1630
2.4 Rupee Debt Service	**0**	**4**	**-4**	**0**	**13**	**-13**
2.5 Other Capital	**158633**	**98914**	**59719**	**46437**	**143939**	**-97501**
3 Errors & Omissions	**0**	**8107**	**-8107**	**0**	**7005**	**-7005**
4 Monetary Movements (4.1+ 4.2)	**0**	**90992**	**-90992**	**0**	**49947**	**-49947**
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	90992	-90992	0	49947	-49947

Note: P: Preliminary.

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

(US$ Million)

Item	Oct-Dec 2022			Oct-Dec 2023 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	**227504**	**244321**	**-16817**	**235942**	**246446**	**-10504**
1.A Goods and Services (1.A.a+1.A.b)	**189024**	**221648**	**-32624**	**194443**	**221026**	**-26583**
1.A.a Goods (1.A.a.1 to 1.A.a.3)	**105603**	**176940**	**-71337**	**106656**	**178259**	**-71603**
1.A.a.1 General merchandise on a BOP basis	105241	168818	-63577	106124	164558	-58434
1.A.a.2 Net exports of goods under merchanting	362	0	362	532	0	532
1.A.a.3 Nonmonetary gold	0	8123	-8123		13701	-13701
1.A.b Services (1.A.b.1 to 1.A.b.13)	**83421**	**44708**	**38713**	**87787**	**42767**	**45020**
1.A.b.1 Manufacturing services on physical inputs owned by others	553	108	446	330	20	310
1.A.b.2 Maintenance and repair services n.i.e.	55	255	-200	49	297	-248
1.A.b.3 Transport	8758	9409	-652	6951	6457	494
1.A.b.4 Travel	8123	6910	1213	9850	7487	2363
1.A.b.5 Construction	1129	573	556	1097	624	473
1.A.b.6 Insurance and pension services	783	797	-13	811	856	-46
1.A.b.7 Financial services	1949	1292	657	2491	956	1535
1.A.b.8 Charges for the use of intellectual property n.i.e.	318	3435	-3116	434	4633	-4199
1.A.b.9 Telecommunications, computer, and information services	38538	4590	33947	41837	5400	36437
1.A.b.10 Other business services	21198	15125	6073	22647	14067	8581
1.A.b.11 Personal, cultural, and recreational services	997	1155	-158	1006	1464	-459
1.A.b.12 Government goods and services n.i.e.	185	282	-97	182	280	-98
1.A.b.13 Others n.i.e.	835	776	59	103	228	-124
1.B Primary Income (1.B.1 to 1.B.3)	**7618**	**20293**	**-12675**	**9967**	**23205**	**-13238**
1.B.1 Compensation of employees	1716	867	850	2010	876	1134
1.B.2 Investment income	3769	18983	-15214	6456	22009	-15553
1.B.2.1 Direct investment	1808	11460	-9653	2003	13776	-11773
1.B.2.2 Portfolio investment	69	2853	-2784	51	1911	-1860
1.B.2.3 Other investment	146	4570	-4423	557	6098	-5541
1.B.2.4 Reserve assets	1746	101	1645	3845	224	3621
1.B.3 Other primary income	2132	443	1689	1501	320	1181
1.C Secondary Income (1.C.1+1.C.2)	**30862**	**2379**	**28483**	**31532**	**2215**	**29317**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	30809	2168	28641	31445	2007	29438
1.C.1.1 Personal transfers (Current transfers between resident and/non-resident households)	29973	1548	28425	30589	1430	29160
1.C.1.2 Other current transfers	836	619	216	856	578	278
1.C.2 General government	53	212	-158	87	208	-120
2 Capital Account (2.1+2.2)	**127**	**188**	**-62**	**191**	**280**	**-89**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	23	37	-14	36	86	-50
2.2 Capital transfers	104	151	-47	155	194	-38
3 Financial Account (3.1 to 3.5)	**176217**	**158352**	**17864**	**215256**	**203822**	**11434**
3.1 Direct Investment (3.1A+3.1B)	**17018**	**14988**	**2030**	**18896**	**14719**	**4176**
3.1.A Direct Investment in India	16124	8796	7327	18330	9947	8382
3.1.A.1 Equity and investment fund shares	15312	7932	7380	17108	8773	8335
3.1.A.1.1 Equity other than reinvestment of earnings	10246	7932	2314	11912	8773	3139
3.1.A.1.2 Reinvestment of earnings	5066	0	5066	5196		5196
3.1.A.2 Debt instruments	811	865	-53	1222	1175	47
3.1.A.2.1 Direct investor in direct investment enterprises	811	865	-53	1222	1175	47
3.1.B Direct Investment by India	895	6192	-5297	566	4772	-4206
3.1.B.1 Equity and investment fund shares	895	4715	-3820	566	3616	-3050
3.1.B.1.1 Equity other than reinvestment of earnings	895	3612	-2717	566	2271	-1705
3.1.B.1.2 Reinvestment of earnings	0	1103	-1103		1345	-1345
3.1.B.2 Debt instruments	0	1477	-1477	0	1156	-1156
3.1.B.2.1 Direct investor in direct investment enterprises	0	1477	-1477		1156	-1156
3.2 Portfolio Investment	**78251**	**73641**	**4611**	**125477**	**113465**	**12012**
3.2.A Portfolio Investment in India	77433	72916	4517	124485	112814	11671
3.2.1 Equity and investment fund shares	71477	65940	5537	108785	102117	6668
3.2.2 Debt securities	5956	6976	-1020	15701	10697	5003
3.2.B Portfolio Investment by India	818	724	93	991	651	341
3.3 Financial derivatives (other than reserves) and employee stock options	**5509**	**5955**	**-446**	**5776**	**7904**	**-2128**
3.4 Other investment	**75439**	**52700**	**22739**	**65108**	**61737**	**3371**
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	16928	14505	2424	22577	18461	4117
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	0	145	-145	196	0	196
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	16928	14359	2569	22381	18461	3921
3.4.2.3 General government	0	0	0			0
3.4.2.4 Other sectors	0	0	0			0
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	27100	15993	11107	29452	18427	11026
3.4.3.A Loans to India	26653	15655	10998	26731	13876	12856
3.4.3.B Loans by India	447	338	109	2721	4551	-1830
3.4.4 Insurance, pension, and standardized guarantee schemes	30	38	-8	37	158	-121
3.4.5 Trade credit and advances	17744	16292	1452	13461	15723	-2262
3.4.6 Other accounts receivable/payable - other	13636	5872	7764	-420	8968	-9388
3.4.7 Special drawing rights	0	0	0			0
3.5 Reserve assets	**0**	**11069**	**-11069**	**0**	**5998**	**-5998**
3.5.1 Monetary gold	0	0	0			0
3.5.2 Special drawing rights n.a.	0	0	0			0
3.5.3 Reserve position in the IMF n.a.	0	0	0			0
3.5.4 Other reserve assets (Foreign Currency Assets)	0	11069	-11069	0	5998	-5998
4 Total assets/liabilities	**176217**	**158352**	**17864**	**215256**	**203822**	**11434**
4.1 Equity and investment fund shares	94041	85304	8737	133262	123217	10045
4.2 Debt instruments	68539	56107	12432	82413	65638	16775
4.3 Other financial assets and liabilities	13636	16941	-3305	-420	14966	-15386
5 Net errors and omissions	**0**	**986**	**-986**	**0**	**841**	**-841**

Note: P: Preliminary.

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

(₹ Crore)

Item	Oct-Dec 2022			Oct-Dec 2023 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	**1870195**	**2008436**	**-138241**	**1964708**	**2052173**	**-87465**
1.A Goods and Services (1.A.a+1.A.b)	**1553872**	**1822058**	**-268186**	**1619137**	**1840496**	**-221359**
1.A.a Goods (1.A.a.1 to 1.A.a.3)	**868107**	**1454536**	**-586429**	**888131**	**1484372**	**-596242**
1.A.a.1 General merchandise on a BOP basis	865134	1387765	-522631	883699	1370284	-486584
1.A.a.2 Net exports of goods under merchanting	2973	0	2973	4432	0	4432
1.A.a.3 Nonmonetary gold	0	66771	-66771	0	114089	-114089
1.A.b Services (1.A.b.1 to 1.A.b.13)	**685765**	**367522**	**318243**	**731006**	**356123**	**374883**
1.A.b.1 Manufacturing services on physical inputs owned by others	4547	885	3663	2746	163	2583
1.A.b.2 Maintenance and repair services n.i.e.	451	2097	-1646	407	2474	-2067
1.A.b.3 Transport	71992	77348	-5356	57885	53767	4117
1.A.b.4 Travel	66776	56807	9970	82022	62341	19681
1.A.b.5 Construction	9284	4710	4575	9139	5196	3942
1.A.b.6 Insurance and pension services	6438	6548	-110	6750	7130	-380
1.A.b.7 Financial services	16021	10624	5397	20739	7958	12781
1.A.b.8 Charges for the use of intellectual property n.i.e.	2616	28234	-25618	3611	38576	-34965
1.A.b.9 Telecommunications, computer, and information services	316797	37734	279063	348376	44964	303412
1.A.b.10 Other business services	174257	124338	49919	188585	117135	71450
1.A.b.11 Personal, cultural, and recreational services	8199	9498	-1299	8373	12194	-3820
1.A.b.12 Government goods and services n.i.e.	1520	2317	-797	1512	2328	-816
1.A.b.13 Others n.i.e.	6865	6382	483	861	1896	-1035
1.B Primary Income (1.B.1 to 1.B.3)	**62623**	**166820**	**-104197**	**82999**	**193233**	**-110235**
1.B.1 Compensation of employees	14109	7126	6984	16741	7298	9443
1.B.2 Investment income	30987	156053	-125066	53759	183272	-129513
1.B.2.1 Direct investment	14860	94208	-79349	16677	114713	-98036
1.B.2.2 Portfolio investment	569	23452	-22883	425	15915	-15490
1.B.2.3 Other investment	1203	37564	-36362	4636	50778	-46142
1.B.2.4 Reserve assets	14355	829	13527	32021	1866	30155
1.B.3 Other primary income	17527	3641	13886	12499	2663	9836
1.C Secondary Income (1.C.1+1.C.2)	**253700**	**19559**	**234141**	**262572**	**18444**	**244128**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	253262	17819	235443	261845	16716	245130
1.C.1.1 Personal transfers (Current transfers between resident and/non-resident households)	246394	12727	233667	254718	11904	242814
1.C.1.2 Other current transfers	6868	5092	1776	7127	4811	2316
1.C.2 General government	438	1740	-1302	727	1728	-1001
2 Capital Account (2.1+2.2)	**1043**	**1549**	**-506**	**1590**	**2328**	**-739**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	190	307	-117	296	715	-419
2.2 Capital transfers	852	1242	-390	1293	1613	-320
3 Financial Account (3.1 to 3.5)	**1448587**	**1301733**	**146854**	**1792450**	**1697241**	**95209**
3.1 Direct Investment (3.1A+3.1B)	**139897**	**123209**	**16688**	**157346**	**122568**	**34778**
3.1.A Direct Investment in India	132544	72310	60233	152632	82832	69800
3.1.A.1 Equity and investment fund shares	125873	65203	60669	142458	73050	69408
3.1.A.1.1 Equity other than reinvestment of earnings	84224	65203	19021	99189	73050	26139
3.1.A.1.2 Reinvestment of earnings	41648	0	41648	43269	0	43269
3.1.A.2 Debt instruments	6671	7107	-436	10175	9783	392
3.1.A.2.1 Direct investor in direct investment enterprises	6671	7107	-436	10175	9783	392
3.1.B Direct Investment by India	7353	50898	-43545	4713	39735	-35022
3.1.B.1 Equity and investment fund shares	7353	38758	-31404	4713	30108	-25395
3.1.B.1.1 Equity other than reinvestment of earnings	7353	29691	-22337	4713	18909	-14196
3.1.B.1.2 Reinvestment of earnings	0	9067	-9067	0	11199	-11199
3.1.B.2 Debt instruments	0	12141	-12141	0	9628	-9628
3.1.B.2.1 Direct investor in direct investment enterprises	0	12141	-12141	0	9628	-9628
3.2 Portfolio Investment	**643263**	**605362**	**37901**	**1044854**	**944828**	**100026**
3.2.A Portfolio Investment in India	636539	599406	37133	1036599	939411	97188
3.2.1 Equity and investment fund shares	587580	542060	45520	905860	850336	55523
3.2.2 Debt securities	48959	57346	-8387	130739	89075	41664
3.2.B Portfolio Investment by India	6723	5955	768	8255	5417	2838
3.3 Financial derivatives (other than reserves) and employee stock options	**45283**	**48951**	**-3668**	**48093**	**65814**	**-17720**
3.4 Other investment	**620145**	**433220**	**186924**	**542157**	**514085**	**28073**
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	139159	119235	19924	188002	153723	34279
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	0	1195	-1195	1630	0	1630
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	139159	118040	21119	186372	153723	32648
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)	222772	131471	91301	245251	153440	91811
3.4.3.A Loans to India	219101	128692	90409	222595	115543	107052
3.4.3.B Loans by India	3671	2779	893	22656	37898	-15242
3.4.4 Insurance, pension, and standardized guarantee schemes	250	315	-65	306	1315	-1009
3.4.5 Trade credit and advances	145866	133929	11937	112092	130928	-18836
3.4.6 Other accounts receivable/payable - other	112098	48271	63827	-3493	74679	-78172
3.4.7 Special drawing rights	0	0	0	0	0	0
3.5 Reserve assets	**0**	**90992**	**-90992**	**0**	**49947**	**-49947**
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	90992	-90992	0	49947	-49947
4 Total assets/liabilities	**1448587**	**1301733**	**146854**	**1792450**	**1697241**	**95209**
4.1 Equity and investment fund shares	773062	701242	71820	1109685	1026039	83646
4.2 Debt instruments	563427	461228	102199	686259	546576	139683
4.3 Other financial assets and liabilities	112098	139263	-27165	-3493	124626	-128119
5 Net errors and omissions	**0**	**8107**	**-8107**	**0**	**7005**	**-7005**

Note: P: Preliminary.

No. 42: India's International Investment Position

(US$ Million)

Item	As on Financial Year/Quarter End							
	2022-23		2022		2023			
			Dec.		Sep.		Dec.	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	1	2	3	4	5	6	7	8
1. Direct investment Abroad/in India	225592	523318	222628	510703	231750	528612	235956	536930
1.1 Equity Capital*	142071	493896	140072	482123	145817	497690	148866	505691
1.2 Other Capital	83521	29422	82556	28581	85933	30921	87090	31239
2. Portfolio investment	10966	243561	10890	244229	11664	259422	11323	269153
2.1 Equity	4958	138958	8624	140469	7939	154634	8461	161206
2.2 Debt	6008	104602	2266	103759	3726	104788	2862	107947
3. Other investment	87717	503353	79507	494051	101948	527594	103989	537985
3.1 Trade credit	27507	124304	26063	124591	30854	124735	31715	122459
3.2 Loan	10714	202586	8628	196764	9739	208935	16288	215019
3.3 Currency and Deposits	30526	141133	27093	136132	43364	146166	37997	149326
3.4 Other Assets/Liabilities	18970	35330	17723	36564	17991	47758	17989	51181
4. Reserves	578449		562721		587714		622452	
5. Total Assets/ Liabilities	902725	1270232	875745	1248983	933076	1315628	973720	1344068
6. Net IIP (Assets - Liabilities)	-367507		-373238		-382553		-370348	

Note: * Equity capital includes share of investment funds and reinvested earnings.

Payment and Settlement Systems

No.43: Payment System Indicators

PART I - Payment System Indicators - Payment & Settlement System Statistics

System	Volume (Lakh)				Value (₹ Crore)			
	FY 2023-24	2023	2024		FY 2023-24	2023	2024	
		Mar.	Feb.	Mar.		Mar.	Feb.	Mar.
	1	-2	-1	0	5	2	3	4
A. Settlement Systems								
Financial Market Infrastructures (FMIs)								
1 CCIL Operated Systems (1.1 to 1.3)	43.04	3.66	3.60	3.48	259206893	22458408	21907760	21627756
1.1 Govt. Securities Clearing (1.1.1 to 1.1.3)	16.80	1.25	1.46	1.14	170464587	14269424	14722762	13374679
1.1.1 Outright	9.51	0.65	0.87	0.60	13463848	952079	1273135	981057
1.1.2 Repo	4.94	0.40	0.39	0.35	76718788	6682508	6575139	6226720
1.1.3 Tri-party Repo	2.35	0.20	0.20	0.19	80281951	6634836	6874488	6166902
1.2 Forex Clearing	24.92	2.28	2.04	2.27	80984671	7329087	6537554	7795104
1.3 Rupee Derivatives @	1.31	0.13	0.09	0.07	7757636	859897	647444	457973
B. Payment Systems								
I Financial Market Infrastructures (FMIs)	-	-	-	-	-	-	-	-
1 Credit Transfers - RTGS (1.1 to 1.2)	2700.16	248.01	238.26	278.47	170886670	16122902	14614297	18128366
1.1 Customer Transactions	2686.04	246.66	237.09	277.25	152406168	14416322	13083464	16588625
1.2 Interbank Transactions	14.12	1.35	1.17	1.22	18480503	1706580	1530833	1539741
II Retail								
2 Credit Transfers - Retail (2.1 to 2.6)	1486106.89	100851.12	137733.21	152969.08	67542859	5906936	6039675	7152557
2.1 AePS (Fund Transfers) @	3.92	0.36	0.32	0.34	261	24	21	22
2.2 APBS $	25888.17	1932.07	2965.77	3014.53	390743	26400	48312	44707
2.3 IMPS	60053.35	4970.56	5346.35	5806.36	6495652	546235	568092	634706
2.4 NACH Cr $	16227.27	1962.73	1504.81	1808.71	1525104	178757	123887	173928
2.5 NEFT	72639.50	5469.06	6889.23	7939.10	39136014	3750569	3471495	4320840
2.6 UPI @	1311294.68	86516.34	121026.73	134400.04	19995086	1404951	1827869	1978353
2.6.1 of which USSD @	26.19	1.50	1.66	1.78	352	18	19	20
3 Debit Transfers and Direct Debits (3.1 to 3.3)	18249.53	1403.39	1611.25	1661.00	1687658	126113	153734	165047
3.1 BHIM Aadhaar Pay @	193.59	12.92	15.43	22.68	6112	492	376	584
3.2 NACH Dr $	16426.49	1246.53	1464.78	1492.00	1678769	125376	153173	164223
3.3 NETC (linked to bank account) @	1629.45	143.94	131.04	146.32	2777	246	184	240
4 Card Payments (4.1 to 4.2)	58469.79	5016.79	4634.92	5034.13	2423563	191035	190658	209208
4.1 Credit Cards (4.1.1 to 4.1.2)	35610.15	2634.29	3112.44	3439.38	1831134	137311	149206	164459
4.1.1 PoS based $	18614.08	1404.60	1618.50	1800.04	651911	50920	54431	60378
4.1.2 Others $	16996.08	1229.69	1493.94	1639.34	1179223	86391	94775	104081
4.2 Debit Cards (4.2.1 to 4.2.1)	22859.64	2382.50	1522.47	1594.75	592429	53724	41452	44749
4.2.1 PoS based $	16477.95	1652.35	1108.96	1163.77	393589	35222	27918	29309
4.2.2 Others $	6381.69	730.15	413.51	430.98	198840	18502	13534	15440
5 Prepaid Payment Instruments (5.1 to 5.2)	78775.39	6402.38	6470.84	5804.84	283048	24005	22674	18200
5.1 Wallets	63256.69	5183.32	5211.85	4489.88	234353	19681	18434	13741
5.2 Cards (5.2.1 to 5.2.2)	15518.70	1219.06	1259.00	1314.96	48694	4324	4240	4459
5.2.1 PoS based $	8429.87	705.70	702.41	699.02	11247	1041	919	964
5.2.2 Others $	7088.83	513.36	556.58	615.94	37447	3283	3321	3494
6 Paper-based Instruments (6.1 to 6.2)	6632.10	642.76	541.88	585.31	7212333	706181	602630	688745
6.1 CTS (NPCI Managed)	6632.10	642.76	541.88	585.31	7212333	706181	602630	688745
6.2 Others	0.00	–	–	–	–	–	–	–
Total - Retail Payments (2+3+4+5+6)	1648233.71	114316.43	150992.11	166054.36	79149461	6954270	7009371	8233757
Total Payments (1+2+3+4+5+6)	1650933.87	114564.44	151230.37	166332.84	250036131	23077172	21623668	26362123
Total Digital Payments (1+2+3+4+5)	1644301.77	113921.68	150688.49	165747.53	242823798	22370991	21021038	25673378

PART II - Payment Modes and Channels

System	Volume (Lakh)				Value (Crore)			
	FY 2023-24	2023	2024		FY 2023-24	2023	2024	
		Mar.	Feb.	Mar.		Mar.	Feb.	Mar.
	1	2	3	4	5	6	7	8
A. Other Payment Channels								
1 Mobile Payments (mobile app based) (1.1 to 1.2)	1252424.21	81648.69	117275.04	128450.58	30683078	2250094	2828120	3127951
1.1 Intra-bank $	83000.56	5868.83	7774.97	8771.04	5676805	436885	530845	602816
1.2 Inter-bank $	1169423.65	75779.86	109500.07	119679.54	25006272	1813209	2297275	2525135
2 Internet Payments (Netbanking / Internet Browser Based) @ (2.1 to 2.2)	45034.98	3879.51	3800.36	4250.54	102117756	8981727	8867591	10374065
2.1 Intra-bank @	12033.40	987.21	1008.05	1143.12	53247090	4769894	4540083	5235883
2.2 Inter-bank @	33001.58	2892.30	2792.31	3107.43	48870666	4211833	4327508	5138182
B. ATMs								
3 Cash Withdrawal at ATMs $ (3.1 to 3.3)	66440.72	5921.71	5172.34	5563.96	3259388	286761	257238	278271
3.1 Using Credit Cards $	95.80	8.26	7.91	8.83	4648	402	395	446
3.2 Using Debit Cards $	66001.01	5878.89	5139.17	5528.63	3241538	284949	255809	276714
3.3 Using Pre-paid Cards $	343.90	34.56	25.26	26.50	13202	1411	1034	1111
4 Cash Withdrawal at PoS $ (4.1 to 4.2)	15.18	2.32	0.55	0.53	148	23	5	5
4.1 Using Debit Cards $	15.06	2.31	0.53	0.51	147	23	5	5
4.2 Using Pre-paid Cards $	0.12	0.02	0.01	0.02	1	0	0	0
5 Cash Withrawal at Micro ATMs @	11754.95	1083.61	812.15	1059.56	314003	30015	21543	27303
5.1 AePS @	11754.95	1083.61	812.15	1059.56	314003	30015	21543	27303

PART III - Payment Infrastructures (Lakh)

System	As on March 2024	2023	2024	
		Mar.	Feb.	Mar.
	1	2	3	4
Payment System Infrastructures				
1 Number of Cards (1.1 to 1.2)	10667.22	10465.62	10612.71	10667.22
1.1 Credit Cards	1018.03	853.03	1006.00	1018.03
1.2 Debit Cards	9649.19	9612.59	9606.71	9649.19
2 Number of PPIs @ (2.1 to 2.2)	16743.63	16441.50	17118.53	16743.63
2.1 Wallets @	13381.80	13268.53	13795.76	13381.80
2.2 Cards @	3361.82	3172.97	3322.78	3361.82
3 Number of ATMs (3.1 to 3.2)	2.58	2.59	2.57	2.58
3.1 Bank owned ATMs $	2.23	2.23	2.23	2.23
3.2 White Label ATMs $	0.35	0.36	0.34	0.35
4 Number of Micro ATMs @	17.55	16.11	17.01	17.55
5 Number of PoS Terminals	89.03	77.90	87.73	89.03
6 Bharat QR @	62.50	53.82	61.50	62.50
7 UPI QR *	3462.03	2563.77	3371.80	3462.03

@: New inclusion w.e.f. November 2019
#: Data reported by Co-operative Banks, LABs and RRBs included with effect from December 2021.
$: Inclusion separately initiated from November 2019 - would have been part of other items hitherto.
*: New inclusion w.e.f. September 2020; Includes only static UPI QR Code
Note : 1. Data is provisional.
1. ECS (Debit and Credit) has been merged with NACH with effect from January 31, 2020.
2. The data from November 2019 onwards for card payments (Debit/Credit cards) and Prepaid Payment Instruments (PPIs) may not be comparable with earlier months/ periods, as more granular data is being published along with revision in data definitions.
3. Only domestic financial transactions are considered. The new format captures e-commerce transactions; transactions using FASTags, digital bill payments and card-to-card transfer through ATMs, etc.. Also, failed transactions, chargebacks, reversals, expired cards/ wallets, are excluded.
Part I-A. Settlement systems
1.1.3: Tri- party Repo under the securities segment has been operationalised from November 05, 2018.
Part I-B. Payments systems
4.1.2: 'Others' includes e-commerce transactions and digital bill payments through ATMs, etc.
4.2.2: 'Others' includes e-commerce transactions, card to card transfers and digital bill payments through ATMs, etc.
5: Available from December 2010.
5.1: includes purchase of goods and services and fund transfer through wallets.
5.2.2: includes usage of PPI Cards for online transactions and other transactions.
6.1: Pertain to three grids – Mumbai, New Delhi and Chennai.
6.2: 'Others' comprises of Non-MICR transactions which pertains to clearing houses managed by 21 banks.
Part II-A. Other payment channels
1: Mobile Payments –
4. Include transactions done through mobile apps of banks and UPI apps.
5. The data from July 2017 includes only individual payments and corporate payments initiated, processed, and authorised using mobile device. Other corporate payments which are not initiated, processed, and authorised using mobile device are excluded.
2: Internet Payments – includes only e-commerce transactions through 'netbanking' and any financial transaction using internet banking website of the bank.
Part II-B. ATMs
3.3 and 4.2: only relates to transactions using bank issued PPIs.
Part III. Payment systems infrastructure
3: Includes ATMs deployed by Scheduled Commercial Banks (SCBs) and White Label ATM Operators (WLAOs). WLAs are included from April 2014 onwards.

Occasional Series

No. 44: Small Savings

(₹ Crore)

Scheme		2022-23	2022	2023		
			Nov.	Sep.	Oct.	Nov.
		1	2	3	4	5
1 Small Savings	**Receipts**	**173993**	**9057**	**17908**	**12669**	**14108**
	Outstanding	**1636935**	**1565352**	**1747246**	**1759706**	**1773591**
1.1 Total Deposits	**Receipts**	**125209**	**6204**	**13376**	**8731**	**10115**
	Outstanding	**1137451**	**1088482**	**1216325**	**1225055**	**1235170**
1.1.1 Post Office Saving Bank Deposits	Receipts	20680	-393	2879	-160	548
	Outstanding	209112	196053	211296	211136	211685
1.1.2 Sukanya Samriddhi Yojna	Receipts	29003	1597	1672	1594	1667
	Outstanding	87787	71773	99427	101021	102688
1.1.3 National Saving Scheme, 1987	Receipts	-244	-20	0	0	0
	Outstanding	0	1680	0	0	0
1.1.4 National Saving Scheme, 1992	Receipts	-20	-2	0	0	0
	Outstanding	0	-198	0	0	0
1.1.5 Monthly Income Scheme	Receipts	6492	275	2073	1614	1676
	Outstanding	242313	240946	258381	259995	261670
1.1.6 Senior Citizen Scheme 2004	Receipts	17971	1256	2643	2382	2266
	Outstanding	137304	131908	162188	164570	166836
1.1.7 Post Office Time Deposits	Receipts	29155	1547	1849	1762	1973
	Outstanding	280436	273732	291826	293588	295561
1.1.7.1 1 year Time Deposits	Outstanding	125951	124073	131305	132337	133476
1.1.7.2 2 year Time Deposits	Outstanding	9497	8686	10640	10842	11049
1.1.7.3 3 year Time Deposits	Outstanding	7543	6913	8255	8317	8388
1.1.7.4 5 year Time Deposits	Outstanding	137445	134060	141626	142092	142648
1.1.8 Post Office Recurring Deposits	Receipts	21552	1941	2284	1561	2000
	Outstanding	178422	172491	191314	192875	194875
1.1.9 Post Office Cumulative Time Deposits	Receipts	0	0	0	0	0
	Outstanding	0	-19	0	0	0
1.1.10 Other Deposits	Receipts	288	0	-24	-23	-23
	Outstanding	1745	22	1553	1530	1507
1.1.11 PM Care for children	Receipts	332	3	0	1	8
	Outstanding	332	94	340	340	348
1.2 Saving Certificates	**Receipts**	**33965**	**2564**	**4343**	**3756**	**3767**
	Outstanding	**366317**	**356308**	**396508**	**400056**	**403601**
1.2.1 National Savings Certificate VIII issue	Receipts	10793	627	1176	1074	1060
	Outstanding	165836	162779	173807	174881	175941
1.2.2 Indira Vikas Patras	Receipts	0	0	0	0	0
	Outstanding	0	142	0	0	0
1.2.3 Kisan Vikas Patras	Receipts	-1892	-165	0	0	0
	Outstanding	0	-9466	0	0	0
1.2.4 Kisan Vikas Patras - 2014	Receipts	25064	2102	1853	1419	1536
	Outstanding	199624	191756	211987	213406	214941
1.2.5 National Saving Certificate VI issue	Receipts	0	0	0	0	0
	Outstanding	0	-22	0	0	0
1.2.6 National Saving Certificate VII issue	Receipts	0	0	0	0	0
	Outstanding	0	-44	0	0	0
1.2.7 M.S. Certificates	Receipts		0	1314	1263	1171
	Outstanding		0	11454	12717	13888
1.2.8 Other Certificates	Outstanding	857	11163	-740	-948	-1169
1.3 Public Provident Fund	**Receipts**	**14819**	**289**	**189**	**182**	**226**
	Outstanding	**133167**	**120562**	**134413**	**134595**	**134820**

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	2022	2023			
	Dec.	Mar.	Jun.	Sep.	Dec.
	1	2	3	4	5
(A) Total (in ₹. Crore)	**9373372**	**9645776**	**9898751**	**10383607**	**10538792**
1 Commercial Banks	36.13	36.61	36.58	37.96	37.55
2 Co-operative Banks	1.70	1.64	1.56	1.52	1.49
3 Non-Bank PDs	0.44	0.49	0.73	0.66	0.67
4 Insurance Companies	26.14	25.97	26.21	26.05	26.16
5 Mutual Funds	2.87	2.81	2.69	3.02	3.03
6 Provident Funds	4.67	4.71	4.59	4.42	4.57
7 Pension Funds	3.91	3.98	4.18	4.32	4.44
8 Financial Institutions	1.07	0.98	1.20	0.54	0.55
9 Corporates	1.57	1.62	1.22	1.21	1.33
10 Foreign Portfolio Investors	1.31	1.36	1.59	1.61	1.92
11 RBI	14.73	14.26	13.78	13.06	12.54
12 Others	5.45	5.57	5.67	5.64	5.74
12.1 State Governments	1.88	2.03	2.03	2.04	2.07

State Governments Securities					
Category	2022	2023			
	Dec.	Mar.	Jun.	Sep.	Dec.
	1	2	3	4	5
(B) Total (in ₹. Crore)	**4712902**	**4929079**	**5050874**	**5161642**	**5338587**
1 Commercial Banks	34.34	33.91	34.13	33.87	33.90
2 Co-operative Banks	3.80	3.64	3.68	3.60	3.53
3 Non-Bank PDs	0.44	0.62	0.50	0.61	0.63
4 Insurance Companies	27.42	26.80	26.73	26.97	26.64
5 Mutual Funds	2.02	1.94	2.08	1.86	2.00
6 Provident Funds	20.31	21.29	21.19	21.70	22.00
7 Pension Funds	4.74	4.81	4.84	4.82	4.56
8 Financial Institutions	1.77	1.84	1.82	1.65	1.63
9 Corporates	1.94	2.00	1.92	1.87	2.03
10 Foreign Portfolio Investors	0.02	0.02	0.02	0.02	0.03
11 RBI	0.75	0.72	0.70	0.69	0.66
12 Others	2.45	2.42	2.39	2.34	2.37
12.1 State Governments	0.24	0.27	0.27	0.27	0.27

Treasury Bills					
Category	2022	2023			
	Dec.	Mar.	Jun.	Sep.	Dec.
	1	2	3	4	5
(C) Total (in ₹. Crore)	**839931**	**823313**	**1012301**	**925317**	**849151**
1 Commercial Banks	49.15	53.92	47.64	56.35	57.18
2 Co-operative Banks	1.27	1.29	1.20	1.20	1.28
3 Non-Bank PDs	2.17	2.85	1.99	0.54	1.70
4 Insurance Companies	5.81	6.11	4.93	5.26	5.50
5 Mutual Funds	14.23	15.30	17.04	12.74	11.21
6 Provident Funds	1.37	0.10	1.46	1.52	0.08
7 Pension Funds	0.02	0.07	0.01	0.01	0.00
8 Financial Institutions	4.52	3.72	7.96	4.10	5.34
9 Corporates	3.59	4.99	4.42	4.00	4.58
10 Foreign Portfolio Investors	0.50	0.40	0.12	0.10	0.07
11 RBI	0.00	0.00	0.00	0.00	0.00
12 Others	17.37	11.25	13.23	14.17	13.06
12.1 State Governments	13.38	7.16	10.33	11.36	9.26

Note: (-) represents nil or negligible
The Table format is revised since Monthly Bulletin for the month of June 2023.
State Government Securities include special bonds issued under Ujwal DISCOM Assurance Yojana (UDAY).
Bank PDs are clubbed under Commercial Banks. However, they form a small fraction of total outstanding securities.
The category 'Others' comprises State Governments, DICGC, PSUs, Trusts, Foreign Central Banks, HUF/Individuals etc.
Data since September 2023 includes the impact of the merger of a non-bank with a bank.

No. 46: Combined Receipts and Disbursements of the Central and State Governments

(₹ Crore)

Item	2018-19	2019-20	2020-21	2021-22	2022-23 RE	2023-24 BE
	1	2	3	4	5	6
1 Total Disbursements	**5040747**	**5410887**	**6353359**	**7098451**	**8376972**	**9045119**
1.1 Developmental	2882758	3074492	3823423	4189146	5073367	5426440
1.1.1 Revenue	2224367	2446605	3150221	3255207	3838714	3836447
1.1.2 Capital	596774	588233	550358	861777	1146013	1471534
1.1.3 Loans	61617	39654	122844	72163	88639	118460
1.2 Non-Developmental	2078276	2253027	2442941	2810388	3188699	3490946
1.2.1 Revenue	1965907	2109629	2271637	2602750	2988556	3277722
1.2.1.1 Interest Payments	894520	955801	1060602	1226672	1403183	1589435
1.2.2 Capital	111029	141457	169155	175519	196688	208268
1.2.3 Loans	1340	1941	2148	32119	3455	4957
1.3 Others	79713	83368	86995	98916	114906	127733
2 Total Receipts	**5023352**	**5734166**	**6397162**	**7156342**	**8258187**	**9149787**
2.1 Revenue Receipts	3797731	3851563	3688030	4823821	5706246	6337126
2.1.1 Tax Receipts	3278947	3231582	3193390	4160414	4837048	5477428
2.1.1.1 Taxes on commodities and services	2030050	2012578	2076013	2626553	2967610	3372525
2.1.1.2 Taxes on Income and Property	1246083	1216203	1114805	1530636	1865298	2100430
2.1.1.3 Taxes of Union Territories (Without Legislature)	2814	2800	2572	3225	4140	4473
2.1.2 Non-Tax Receipts	518783	619981	494640	663407	869198	859698
2.1.2.1 Interest Receipts	36273	31137	33448	35250	37974	45199
2.2 Non-debt Capital Receipts	140287	110094	64994	44077	88273	119373
2.2.1 Recovery of Loans & Advances	44667	59515	16951	27665	25661	34501
2.2.2 Disinvestment proceeds	95621	50578	48044	16412	62611	84872
3 Gross Fiscal Deficit [1 - (2.1 + 2.2)]	**1102729**	**1449230**	**2600335**	**2230553**	**2582453**	**2588620**
3A Sources of Financing: Institution-wise						
3A.1 Domestic Financing	1097210	1440548	2530155	2194406	2558579	2566503
3A.1.1 Net Bank Credit to Government	387091	571872	890012	627255	687904	...
3A.1.1.1 Net RBI Credit to Government	325987	190241	107493	350911	529	...
3A.1.2 Non-Bank Credit to Government	710119	868676	1640143	1567151	1870675	...
3A.2 External Financing	5519	8682	70180	36147	23874	22118
3B Sources of Financing: Instrument-wise						
3B.1 Domestic Financing	1097210	1440548	2530155	2194406	2558579	2566503
3B.1.1 Market Borrowings (net)	795845	971378	1696012	1213169	1776747	1902862
3B.1.2 Small Savings (net)	88961	209232	458801	526693	403838	441189
3B.1.3 State Provident Funds (net)	51004	38280	41273	28100	36454	37114
3B.1.4 Reserve Funds	-18298	10411	4545	42153	3524	24429
3B.1.5 Deposits and Advances	66289	-14227	25682	42203	82485	58404
3B.1.6 Cash Balances	17395	-323279	-43802	-57891	118784	-104667
3B.1.7 Others	96014	548753	347643	399980	136748	207172
3B.2 External Financing	5519	8682	70180	36147	23874	22118
4 Total Disbursements as per cent of GDP	*26.7*	*26.9*	*32.0*	*30.1*	*31.1*	*30.0*
5 Total Receipts as per cent of GDP	*26.6*	*28.5*	*32.2*	*30.3*	*30.6*	*30.3*
6 Revenue Receipts as per cent of GDP	*20.1*	*19.2*	*18.6*	*20.4*	*21.2*	*21.0*
7 Tax Receipts as per cent of GDP	*17.3*	*16.1*	*16.1*	*17.6*	*17.9*	*18.2*
8 Gross Fiscal Deficit as per cent of GDP	*5.8*	*7.2*	*13.1*	*9.5*	*9.6*	*8.6*

… : Not available; RE: Revised Estimates; BE: Budget Estimates
Source : Budget Documents of Central and State Governments.
Note: GDP data is based on 2011-12 base. GDP for 2023-24 is from Union Budget 2023-24.
Data pertains to all States and Union Territories.
1 & 2: Data are net of repayments of the Central Government (including repayments to the NSSF) and State Governments.
1.3: Represents compensation and assignments by States to local bodies and Panchayati Raj institutions.
2: Data are net of variation in cash balances of the Central and State Governments and includes borrowing receipts of the Central and State Governments.
3A.1.1: Data as per RBI records.
3B.1.1: Borrowings through dated securities.
3B.1.2: Represent net investment in Central and State Governments' special securities by the National Small Savings Fund (NSSF).
This data may vary from previous publications due to adjustments across components with availability of new data.
3B.1.6: Include Ways and Means Advances by the Centre to the State Governments.
3B.1.7: Include Treasury Bills, loans from financial institutions, insurance and pension funds, remittances, cash balance investment account.

No. 47: Financial Accommodation Availed by State Governments under various Facilities

(₹ Crore)

Sr. No	State/Union Territory	During March-2024					
		Special Drawing Facility (SDF)		Ways and Means Advances (WMA)		Overdraft (OD)	
		Average amount availed	Number of days availed	Average amount availed	Number of days availed	Average amount availed	Number of days availed
	1	2	3	4	5	6	7
1	Andhra Pradesh	808.48	28	1456.67	20	1384.34	7
2	Arunachal Pradesh	-	-	-	-	-	-
3	Assam	-	-	-	-	-	-
4	Bihar	-	-	-	-	-	-
5	Chhattisgarh	-	-	-	-	-	-
6	Goa	-	-	-	-	-	-
7	Gujarat	-	-	-	-	-	-
8	Haryana	485.65	6	534.34	2	-	-
9	Himachal Pradesh	-	-	-	-	-	-
10	Jammu & Kashmir UT	-	-	352.07	10	-	-
11	Jharkhand	-	-	-	-	-	-
12	Karnataka	-	-	-	-	-	-
13	Kerala	263.65	14	943.01	14	1021.86	1
14	Madhya Pradesh	-	-	-	-	-	-
15	Maharashtra	-	-	-	-	-	-
16	Manipur	14.41	21	178.35	21	150.46	11
17	Meghalaya	156.07	4	159.21	3	62.97	2
18	Mizoram	43.75	8	54.07	3	-	-
19	Nagaland	-	-	-	-	-	-
20	Odisha	-	-	-	-	-	-
21	Puducherry	-	-	-	-	-	-
22	Punjab	2157.98	28	762.33	25	250.35	7
23	Rajasthan	5089.87	14	-	-	-	-
24	Tamil Nadu	-	-	-	-	-	-
25	Telangana	909.90	30	1308.55	29	723.59	14
26	Tripura	-	-	-	-	-	-
27	Uttar Pradesh	-	-	-	-	-	-
28	Uttarakhand	443.35	19	492.78	17	391.23	11
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 March 2024			
		Consolidated Sinking Fund (CSF)	Guarantee Redemption Fund (GRF)	Government Securities	Auction Treasury Bills (ATBs)
	1	2	3	4	5
1	Andhra Pradesh	10901	1072	0	0
2	Arunachal Pradesh	2495	6	0	0
3	Assam	5881	85	0	0
4	Bihar	10279	-	0	200
5	Chhattisgarh	7323	15	1	3861
6	Goa	926	431	0	0
7	Gujarat	12549	628	0	0
8	Haryana	2206	1608	0	0
9	Himachal Pradesh	-	-	0	0
10	Jammu & Kashmir UT	-	-	0	0
11	Jharkhand	1691	-	0	750
12	Karnataka	17228	518	0	26384
13	Kerala	2934	-	0	0
14	Madhya Pradesh	-	1202	0	0
15	Maharashtra	65876	1648	0	0
16	Manipur	65	132	0	0
17	Meghalaya	1200	102	0	0
18	Mizoram	432	60	0	0
19	Nagaland	1681	44	0	0
20	Odisha	17136	1927	110	4712
21	Puducherry	547	-	0	1100
22	Punjab	8637	0	0	0
23	Rajasthan	-	-	129	10350
24	Tamil Nadu	3226	-	0	3877
25	Telangana	7453	1630	0	0
26	Tripura	1154	25	0	25
27	Uttarakhand	4726	199	0	0
28	Uttar Pradesh	7687	-	89	0
29	West Bengal	12211	926	239	0
	Total	**206441**	**12259**	**568**	**51258**

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	2021-22		2022-23		2023-24						Total amount raised, so far in 2023-24	
						January		February		March			
		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	46443	36103	57478	45814	6550	4038	6900	5388	-	-1750	68400	55330
2	Arunachal Pradesh	563	530	559	389	-	-	-	-80	232	182	902	672
3	Assam	12753	10753	17100	16105	1750	1250	1500	1500	2500	1000	18500	16000
4	Bihar	28489	24334	36800	27467	8000	7000	8000	6000	3612	2488	47612	29910
5	Chhattisgarh	4000	913	2000	-2287	4000	3300	10000	9000	10000	8913	32000	26213
6	Goa	2000	1450	1350	500	200	100	-	-100	250	160	2550	1560
7	Gujarat	31054	13554	43000	28300	9500	6440	4000	1576	-	-1500	30500	11947
8	Haryana	30500	20683	45158	28638	4000	2944	3000	1000	8500	3350	47500	28364
9	Himachal Pradesh	4000	1875	14000	11941	1000	800	-	-589	1772	1772	8072	5856
10	Jammu & Kashmir UT	8562	5373	8473	5969	330	-70	2630	2630	1204	810	16337	13904
11	Jharkhand	5000	3191	4000	-155	1000	50	-	-700	-	-1055	1000	-2505
12	Karnataka	59000	49000	36000	26000	23000	19000	10000	8805	21000	21000	81000	63003
13	Kerala	27000	18120	30839	15620	1930	930	-	-2500	13608	12008	42438	26638
14	Madhya Pradesh	22000	13900	40158	26849	2500	500	13000	13000	-	-5236	38500	26264
15	Maharashtra	68750	40790	72000	42815	9000	4213	11000	9166	30000	30000	110000	79738
16	Manipur	1476	1326	1422	1147	-	-	-	-	326	176	1426	1076
17	Meghalaya	1608	1298	1753	1356	-	-	-	-	-	-93	1364	912
18	Mizoram	747	447	1315	1129	80	80	80	30	81	81	901	641
19	Nagaland	1727	1222	1854	1199	-	-	400	300	400	355	2551	2016
20	Odisha	0	-6473	0	-7500	-	-938	-	-720	-	-	-	-4658
21	Puducherry	1374	841	1200	698	200	-30	400	400	500	500	1100	475
22	Punjab	25814	12428	45500	33660	4500	3900	1899	1299	-	-1686	42386	29517
23	Rajasthan	51149	38243	46057	30110	6500	5500	6000	5326	14575	8625	73624	49718
24	Sikkim	1511	1471	1414	1320	481	481	-	-	485	450	1916	1701
25	Tamil Nadu	87000	72500	87000	65722	10001	8822	4000	2600	22000	18369	113001	75970
26	Telangana	45716	39256	40150	30922	3000	1205	3000	1919	7718	5575	49618	39385
27	Tripura	300	0	0	-645	-	-200	-	-150	-	-200	-	-550
28	Uttar Pradesh	62500	42355	55612	41797	-	-500	8450	8450	34500	31472	97650	85335
29	Uttarakhand	3200	1800	3200	1450	-	-500	1000	-	2500	1500	6300	3800
30	West Bengal	67390	45199	63000	42500	6500	3500	11000	9000	17000	16000	69910	48910
	Grand Total	701626	492483	758392	518829	104022	71815	106259	82550	192763	153267	1007058	717140

- : Nil.

Note: The State of J&K has ceased to exist constitutionally from October 31, 2019 and the liabilities of the State continue to remain as liabilities of the new UT of Jammu and Kashmir.

Source: Reserve Bank of India.

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

(Amount in ₹ Crore)

Item	2020-21				
	Q1	Q2	Q3	Q4	Annual
Net Financial Assets (I-II)	**583412.7**	**554437.6**	**463583.5**	**679174.4**	**2280608.2**
Per cent of GDP	*15.0*	*11.7*	*8.5*	*11.8*	*11.5*
I. Financial Assets	**788786.3**	**592945.3**	**633317.9**	**1047276.1**	**3062325.6**
Per cent of GDP	*20.3*	*12.5*	*11.6*	*18.2*	*15.4*
of which:					
1.Total Deposits (a+b)	**297412.4**	**278631.7**	**158172.2**	**506213.3**	**1240429.7**
(a) Bank Deposits	**281191.3**	**264565.3**	**147096.0**	**507719.3**	**1200571.8**
i. Commercial Banks	279010.5	262033.7	143558.6	462689.8	1147292.5
ii. Co-operative Banks	2180.8	2531.6	3537.3	45029.5	53279.3
(b) Non-Bank Deposits	**16221.1**	**14066.4**	**11076.3**	**-1506.0**	**39857.9**
of which:					
Other Financial Institutions (i+ii)	**11040.9**	**8886.2**	**5896.0**	**-6686.2**	**19137.0**
i. Non-Banking Financial Companies	1441.0	3763.0	3514.8	3521.2	12240.0
ii. Housing Finance Companies	9599.9	5123.2	2381.3	-10207.3	6897.0
2. Life Insurance Funds	**124387.9**	**143462.2**	**157535.1**	**142216.5**	**567601.8**
3. Provident and Pension Funds (including PPF)	**114496.3**	**107087.9**	**105344.6**	**175769.3**	**502698.2**
4. Currency	**202432.7**	**21286.9**	**91456.0**	**66800.5**	**381976.1**
5. Investments	**6249.8**	**-12956.4**	**67659.3**	**63624.0**	**124576.7**
of which:					
(a) Mutual Funds	-16021.0	-28837.7	57675.4	51267.0	64083.8
(b) Equity	18599.4	8291.5	5307.1	6333.3	38531.2
6. Small Savings (excluding PPF)	**42751.6**	**54377.4**	**52095.1**	**91597.0**	**240821.1**
II. Financial Liabilities	**205373.6**	**38507.7**	**169734.4**	**368101.7**	**781717.4**
Per cent of GDP	*5.3*	*0.8*	*3.1*	*6.4*	*3.9*
Loans/Borrowings					
1. Financial Corporations (a+b)	**205490.3**	**38624.3**	**169851.0**	**368219.1**	**782184.7**
(a) Banking Sector	**211058.8**	**13213.0**	**139622.0**	**276579.8**	**640473.6**
of which:					
i. Commercial Banks	211259.3	13213.8	140514.3	240050.4	605037.9
(b) Other Financial Institutions	**-5568.6**	**25411.3**	**30229.0**	**91639.4**	**141711.1**
i. Non-Banking Financial Companies	-15450.4	21627.1	15921.2	64881.1	86979.0
ii. Housing Finance Companies	10516.6	2875.1	13048.5	25336.1	51776.2
iii. Insurance Corporations	-634.8	909.2	1259.3	1422.2	2955.9
2. Non-Financial Corporations (Private Corporate Business)	**33.8**	**33.8**	**33.8**	**33.0**	**134.4**
3. General Government	**-150.4**	**-150.4**	**-150.4**	**-150.4**	**-601.7**

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

(Amount in ₹ Crore)

Item	2021-22				
	Q1	Q2	Q3	Q4	Annual
Net Financial Assets (I-II)	**370115.8**	**334234.9**	**489774.4**	**503089.0**	**1696155.6**
Per cent of GDP	*7.2*	*6.0*	*7.9*	*7.7*	*7.2*
I. Financial Assets	**364661.7**	**527896.1**	**818355.4**	**887657.3**	**2597511.9**
Per cent of GDP	*7.1*	*9.4*	*13.1*	*13.6*	*11.1*
of which:					
1.Total Deposits (a+b)	**-82726.1**	**204033.6**	**426977.3**	**277625.7**	**824852.1**
(a) Bank Deposits	**-106428.9**	**197105.1**	**422392.9**	**264882.9**	**777952.1**
i. Commercial Banks	-107940.7	195441.8	418267.0	262326.1	768094.3
ii. Co-operative Banks	1511.8	1663.4	4125.9	2556.8	9857.8
(b) Non-Bank Deposits	**23702.8**	**6928.5**	**4584.5**	**12742.8**	**46900.0**
of which:					
Other Financial Institutions (i+ii)	**16950.0**	**170.7**	**-2178.3**	**5960.0**	**20902.3**
i. Non-Banking Financial Companies	4972.6	-765.5	73.3	4211.8	8492.2
ii. Housing Finance Companies	11977.3	936.2	-2251.6	1748.2	12410.1
2. Life Insurance Funds	**114711.5**	**127449.8**	**103248.6**	**121541.6**	**466951.5**
3. Provident and Pension Funds (including PPF)	**127624.0**	**115463.1**	**98146.0**	**221372.4**	**562605.5**
4. Currency	**128660.2**	**-68631.2**	**62793.3**	**146845.0**	**269667.4**
5. Investments	**24929.6**	**82305.4**	**69760.9**	**50972.1**	**227967.9**
of which:					
(a) Mutual Funds	14573.0	63151.3	37912.2	44963.7	160600.1
(b) Equity	4502.5	13218.5	27808.2	3084.1	48613.3
6. Small Savings (excluding PPF)	**50405.2**	**66218.1**	**56372.0**	**68243.2**	**241238.4**
II. Financial Liabilities	**-5454.1**	**193661.2**	**328581.0**	**384568.3**	**901356.3**
Per cent of GDP	*-0.1*	*3.5*	*5.3*	*5.9*	*3.8*
Loans/Borrowings					
1. Financial Corporations (a+b)	**-5562.3**	**193553.0**	**328472.8**	**384460.1**	**900923.7**
(a) Banking Sector	**21436.5**	**138722.6**	**267950.7**	**348360.4**	**776470.2**
of which:					
i. Commercial Banks	26978.6	140268.7	265271.5	337009.8	769528.5
(b) Other Financial Institutions	**-26998.8**	**54830.4**	**60522.2**	**36099.7**	**124453.5**
i. Non-Banking Financial Companies	-34757.9	28876.8	29476.5	-2163.2	21432.2
ii. Housing Finance Companies	7132.0	24403.8	29494.8	37436.2	98466.8
iii. Insurance Corporations	627.1	1549.8	1550.9	826.7	4554.5
2. Non-Financial Corporations (Private Corporate Business)	**33.8**	**33.8**	**33.8**	**33.8**	**135.1**
3. General Government	**74.4**	**74.4**	**74.4**	**74.4**	**297.4**

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

(Amount in ₹ Crore)

Item	2022-23				
	Q1	Q2	Q3	Q4	Annual
Net Financial Assets (I-II)	**297770.4**	**293705.1**	**279460.1**	**505937.8**	**1376873.5**
Per cent of GDP	*4.6*	*4.5*	*4.0*	*7.0*	*5.1*
I. Financial Assets	**586920.5**	**646714.8**	**750856.7**	**974558.5**	**2959050.5**
Per cent of GDP	*9.0*	*9.8*	*10.8*	*13.6*	*10.9*
of which:					
1.Total Deposits (a+b)	**183072.0**	**315216.2**	**276593.9**	**324746.6**	**1099628.6**
(a) Bank Deposits	**163162.9**	**299545.0**	**256363.7**	**307491.6**	**1026563.1**
i. Commercial Banks	158613.3	300565.0	248459.8	284968.0	992606.2
ii. Co-operative Banks	4549.6	-1020.1	7903.8	22523.6	33956.9
(b) Non-Bank Deposits	**19909.1**	**15671.3**	**20230.2**	**17255.0**	**73065.5**
of which:					
Other Financial Institutions (i+ii)	**6314.4**	**2076.7**	**6635.6**	**3660.4**	**18687.1**
i. Non-Banking Financial Companies	4040.2	3267.2	1800.9	5372.2	14480.5
ii. Housing Finance Companies	2274.2	-1190.5	4834.7	-1711.8	4206.6
2. Life Insurance Funds	**73669.9**	**152049.5**	**167894.1**	**141206.6**	**534820.1**
3. Provident and Pension Funds (including PPF)	**155604.2**	**132126.0**	**140204.4**	**235093.2**	**663027.7**
4. Currency	**66438.9**	**-54579.3**	**76760.1**	**148990.2**	**237609.8**
5. Investments	**51603.2**	**48630.6**	**49879.2**	**64168.5**	**214281.5**
of which:					
(a) Mutual Funds	35443.5	44484.0	40205.9	58954.5	179087.8
(b) Equity	13560.9	1378.2	6434.1	1664.9	23038.1
6. Small Savings (excluding PPF)	**54375.1**	**51114.5**	**37367.7**	**58196.2**	**201053.5**
II. Financial Liabilities	**289150.0**	**353009.7**	**471396.5**	**468620.7**	**1582177.0**
Per cent of GDP	*4.4*	*5.4*	*6.8*	*6.5*	*5.8*
Loans/Borrowings					
1. Financial Corporations (a+b)	**289141.6**	**353001.2**	**471388.1**	**468612.3**	**1582143.3**
(a) Banking Sector	**234845.3**	**263782.5**	**368167.4**	**349555.0**	**1216350.1**
of which:					
i. Commercial Banks	230283.8	261265.3	365304.6	331292.5	1188146.3
(b) Other Financial Institutions	**54296.3**	**89218.8**	**103220.8**	**119057.3**	**365793.1**
i. Non-Banking Financial Companies	29281.6	54439.6	75878.8	80295.9	239895.9
ii. Housing Finance Companies	22336.7	33031.2	24903.3	36745.8	117017.0
iii. Insurance Corporations	2678.0	1747.9	2438.7	2015.6	8880.3
2. Non-Financial Corporations (Private Corporate Business)	**33.7**	**33.7**	**33.7**	**33.7**	**135.0**
3. General Government	**-25.3**	**-25.3**	**-25.3**	**-25.3**	**-101.3**

Notes :1. Net Financial Savings of households refer to the net financial assets, which are measured as difference of financial asset and liabilities flows.
2. Preliminary estimates for 2022-23 and revised estimates for 2020-21 and 2021-22.
3. The preliminary estimates for 2022-23 will undergo revision with the release of first revised estimates of national income, consumption expenditure, savings, and capital formation, 2022-23 by the NSO.
4. Non-bank deposits apart from other financial institutions, comprises state power utilities, co-operative non credit societies etc.
5. Figures in the columns may not add up to the total due to rounding off.

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

(Amount in ₹ Crore)

Item	Jun-2020	Sep-2020	Dec-2020	Mar-2021
Financial Assets (a+b+c+d+e+f+g+h)	**20405824.2**	**21066027.8**	**21906338.5**	**22874301.5**
Per cent of GDP	*107.2*	*111.5*	*114.0*	*115.4*
(a) Bank Deposits (i+ii)	**9977865.6**	**10242430.9**	**10389526.9**	**10897246.1**
i. Commercial Banks	9192702.5	9454736.2	9598294.8	10060984.6
ii. Co-operative Banks	785163.1	787694.7	791232.1	836261.6
(b) Non-Bank Deposits				
of which:				
Other Financial Institutions	**180857.4**	**189743.6**	**195639.6**	**188953.5**
i. Non-Banking Financial Companies	51463.0	55226.1	58740.8	62262.0
ii. Housing Finance Companies	129394.4	134517.6	136898.8	126691.5
(c) Life Insurance Funds	**4102000.7**	**4274424.9**	**4551882.0**	**4752932.3**
(d) Currency	**2434693.7**	**2455980.6**	**2547436.6**	**2614237.0**
(e) Mutual funds	**1343752.0**	**1443784.4**	**1648999.0**	**1730461.0**
(f) Public Provident Fund (PPF)	**663478.0**	**671884.3**	**678997.2**	**742189.5**
(g) Pension Funds	**464705.0**	**494930.0**	**548913.0**	**578025.0**
(h) Small Savings (excluding PPF)	**1238471.7**	**1292849.1**	**1344944.2**	**1370257.1**
Financial Liabilities (a+b)	**7190710.8**	**7229335.1**	**7399186.1**	**7767405.3**
Per cent of GDP	*37.8*	*38.3*	*38.5*	*39.2*
Loans/Borrowings				
(a) Banking Sector	**5728735.3**	**5741948.3**	**5881570.2**	**6158150.0**
of which:				
i. Commercial Banks	5226482.2	5239696.0	5380210.4	5620260.7
ii. Co-operative Banks	500870.2	500865.3	499968.8	536494.1
(b) Other Financial Institutions	**1461975.5**	**1487386.9**	**1517615.9**	**1609255.3**
of which:				
i. Non-Banking Financial Companies	687643.6	709270.7	725191.9	790073.0
ii. Housing Finance Companies	673118.3	675993.4	689041.8	714377.9
iii. Insurance Corporations	101213.7	102122.8	103382.2	104804.4

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

(Amount in ₹ Crore)

Item	Jun-2021	Sep-2021	Dec-2021	Mar-2022
Financial Assets (a+b+c+d+e+f+g+h)	**23318920.4**	**23991428.3**	**24700622.2**	**25435684.2**
Per cent of GDP	*110.7*	*109.3*	*108.7*	*108.4*
(a) Bank Deposits (i+ii)	**10790817.3**	**10987922.4**	**11410315.3**	**11675198.2**
i. Commercial Banks	9953043.9	10148485.7	10566752.7	10829078.8
ii. Co-operative Banks	837773.4	839436.7	843562.6	846119.4
(b) Non-Bank Deposits				
of which:				
Other Financial Institutions	**205903.4**	**206074.1**	**203895.8**	**209855.7**
i. Non-Banking Financial Companies	67234.6	66469.1	66542.3	70754.2
ii. Housing Finance Companies	138668.8	139605.0	137353.4	139101.6
(c) Life Insurance Funds	**4929725.2**	**5142278.8**	**5213527.2**	**5357350.2**
(d) Currency	**2742897.3**	**2674266.1**	**2737059.4**	**2883904.4**
(e) Mutual funds	**1855000.1**	**2064363.5**	**2126112.0**	**2152140.5**
(f) Public Provident Fund (PPF)	**757397.8**	**762264.0**	**767287.3**	**834147.6**
(g) Pension Funds	**616517.0**	**667379.0**	**699173.0**	**736592.0**
(h) Small Savings (excluding PPF)	**1420662.3**	**1486880.4**	**1543252.3**	**1586495.5**
Financial Liabilities (a+b)	**7755119.8**	**7868215.0**	**8256715.7**	**8668329.0**
Per cent of GDP	*36.8*	*35.9*	*36.3*	*36.9*
Loans/Borrowings				
(a) Banking Sector	**6172863.3**	**6231128.1**	**6559106.7**	**6934620.2**
of which:				
i. Commercial Banks	5640516.1	5700327.0	6025626.4	6389789.3
ii. Co-operative Banks	530937.1	529376.2	532040.6	543376.3
(b) Other Financial Institutions	**1582256.5**	**1637086.9**	**1697609.1**	**1733708.8**
of which:				
i. Non-Banking Financial Companies	755315.1	784191.9	813668.4	811505.2
ii. Housing Finance Companies	721510.0	745913.7	775408.5	812844.7
iii. Insurance Corporations	105431.4	106981.2	108532.1	109358.8

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

(Amount in ₹ Crore)

Item	Jun-2022	Sep-2022	Dec-2022	Mar-2023
Financial Assets (a+b+c+d+e+f+g+h)	**25689017.4**	**26240728.5**	**27208717.9**	**28083947.0**
Per cent of GDP	*103.2*	*101.5*	*102.4*	*103.1*
(a) Bank Deposits (i+ii)	**11911196.2**	**11956360.9**	**12421907.5**	**12701761.3**
i. Commercial Banks	11060527.2	11106712.0	11564354.7	11821685.0
ii. Co-operative Banks	850669.0	849648.9	857552.8	880076.4
(b) Non-Bank Deposits				
of which:				
Other Financial Institutions	**216170.2**	**218246.9**	**224882.5**	**228542.9**
i. Non-Banking Financial Companies	74794.4	78061.6	79862.5	85234.7
ii. Housing Finance Companies	141375.8	140185.3	145020.0	143308.2
(c) Life Insurance Funds	**5325967.3**	**5559681.9**	**5786592.6**	**6038630.4**
(d) Currency	**2950343.2**	**2895763.9**	**2972524.0**	**3121514.2**
(e) Mutual funds	**2048097.3**	**2260209.7**	**2355315.8**	**2367792.5**
(f) Public Provident Fund (PPF)	**851913.4**	**858591.1**	**864730.6**	**939814.6**
(g) Pension Funds	**744459.2**	**799889.0**	**853412.0**	**898342.0**
(h) Small Savings (excluding PPF)	**1640870.6**	**1691985.1**	**1729352.9**	**1787549.1**
Financial Liabilities (a+b)	**8957470.6**	**9310471.8**	**9781859.9**	**10253472.2**
Per cent of GDP	*36.0*	*36.0*	*36.8*	*37.6*
Loans/Borrowings				
(a) Banking Sector	**7169465.5**	**7433248.0**	**7801415.3**	**8153970.3**
of which:				
i. Commercial Banks	6620073.1	6881338.5	7246643.0	7580935.6
ii. Co-operative Banks	547894.8	550354.8	553201.4	571339.8
(b) Other Financial Institutions	**1788005.1**	**1877223.8**	**1980444.6**	**2099501.9**
of which:				
i. Non-Banking Financial Companies	840786.9	895226.5	971105.3	1051401.1
ii. Housing Finance Companies	835181.3	868212.5	893115.8	929861.7
iii. Insurance Corporations	112036.9	113784.8	116223.5	118239.1

Note : 1. Data as ratios to GDP have been calculated based on the Provisional Estimates of National Income 2022-23, released by NSO on May 31, 2023.
2. Pension funds comprises funds with the National Pension Scheme.
3. Outstanding deposits with Small Savings are sourced from the Controller General of Accounts, Government of India.
4. Non-bank deposits apart from other financial institutions, comprises state power utilities, co-operative non credit societies etc. Data for outstanding deposits are available only for other financial institutions.
5. Figures in the columns may not add up to the total due to rounding off.

Explanatory Notes to the Current Statistics

Table No. 1

1.2& 6: Annual data are average of months.

3.5 & 3.7: Relate to ratios of increments over financial year so far.

4.1 to 4.4, 4.8,4.9 &5: Relate to the last friday of the month/financial year.

4.5, 4.6 & 4.7: Relate to five major banks on the last Friday of the month/financial year.

4.10 to 4.12: Relate to the last auction day of the month/financial year.

4.13: Relate to last day of the month/ financial year

7.1&7.2: Relate to Foreign trade in US Dollar.

Table No. 2

2.1.2: Include paid-up capital, reserve fund and Long-Term Operations Funds.

2.2.2: Include cash, fixed deposits and short-term securities/bonds, e.g., issued by IIFC (UK).

Table No. 4

Maturity-wise position of outstanding forward contracts is available at http://nsdp.rbi.org.in under ''Reserves Template''.

Table No. 5

Special refinance facility to Others, *i.e.* to the EXIM Bank, is closed since March 31, 2013.

Table No. 6

For scheduled banks, March-end data pertain to the last reporting Friday.

2.2: Exclude balances held in IMF Account No.1, RBI employees' provident fund, pension fund, gratuity and superannuation fund.

Table Nos. 7 & 11

3.1 in Table 7 and 2.4 in Table 11: Include foreign currency denominated bonds issued by IIFC (UK).

Table No. 8

NM_2 and NM_3 do not include FCNR (B) deposits.

2.4: Consist of paid-up capital and reserves.

2.5: includes other demand and time liabilities of the banking system.

Table No. 9

Financial institutions comprise EXIM Bank, SIDBI, NABARD and NHB.

L_1 and L_2 are compiled monthly and L_3 quarterly.

Wherever data are not available, the last available data have been repeated.

Table No. 13

Data against column Nos. (1), (2) & (3) are Final and for column Nos. (4) & (5) data are Provisional.

Table No. 14

Data in column Nos. (4) & (8) are Provisional.

Table No. 17

2.1.1: Exclude reserve fund maintained by co-operative societies with State Co-operative Banks

2.1.2: Exclude borrowings from RBI, SBI, IDBI, NABARD, notified banks and State Governments.

4: Include borrowings from IDBI and NABARD.

Table No. 24

Primary Dealers (PDs) include banks undertaking PD business.

Table No. 30

Exclude private placement and offer for sale.

1: Exclude bonus shares.

2: Include cumulative convertible preference shares and equi-preference shares.

Table No. 32

Exclude investment in foreign currency denominated bonds issued by IIFC (UK), SDRs transferred by Government of India to RBI and foreign currency received under SAARC and ACU currency swap arrangements. Foreign currency assets in US dollar take into account appreciation/depreciation of non-US currencies (such as Euro, Sterling, Yen and Australian Dollar) held in reserves. Foreign exchange holdings are converted into rupees at rupee-US dollar RBI holding rates.

Table No. 34

1.1.1.1.2 & 1.1.1.1.1.4: Estimates.

1.1.1.2: Estimates for latest months.

'Other capital' pertains to debt transactions between parent and subsidiaries/branches of FDI enterprises.

Data may not tally with the BoP data due to lag in reporting.

Table No. 35

1.10: Include items such as subscription to journals, maintenance of investment abroad, student loan repayments and credit card payments.

Table No. 36

Increase in indices indicates appreciation of rupee and *vice versa*. For 6-Currency index, base year 2021-22 is a moving one, which gets updated every year. REER figures are based on Consumer Price Index (combined). The details on methodology used for compilation of NEER/REER indices are available in December 2005, April 2014 and January 2021 issues of the RBI Bulletin.

Table No. 37

Based on applications for ECB/Foreign Currency Convertible Bonds (FCCBs) which have been allotted loan registration number during the period.

Table Nos. 38, 39, 40 & 41

Explanatory notes on these tables are available in December issue of RBI Bulletin, 2012.

Table No. 43

Part I-A. Settlement systems

1.1.3: Tri- party Repo under the securities segment has been operationalised from November 05, 2018.

Part I-B. Payments systems

4.1.2: 'Others' includes e-commerce transactions and digital bill payments through ATMs, *etc.*

4.2.2: 'Others' includes e-commerce transactions, card to card transfers and digital bill payments through ATMs, *etc.*

5: Available from December 2010.

5.1: includes purchase of goods and services and fund transfer through wallets.

5.2.2: includes usage of PPI Cards for online transactions and other transactions.

6.1: Pertain to three grids – Mumbai, New Delhi and Chennai.

6.2: 'Others' comprises of Non-MICR transactions which pertains to clearing houses managed by 21 banks.

Part II-A. Other payment channels

1: Mobile Payments –
- 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.

Table No. 45

(-) represents nil or negligible

The table format is revised since June 2023 issue of the bulletin.

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

Bank PDs are clubbed under Commercial Banks. However, they form very small fraction of total outstanding securities.

The category 'Others' comprises State Governments, DICGC, PSUs, Trusts, Foreign Central Banks, HUF/ Individuals *etc.*

Data since September 2023 includes the impact of the merger of a non-bank with a bank.

Table No. 46

GDP data is based on 2011-12 base. GDP for 2023-24 is from Union Budget 2023-24.

Data pertains to all States and Union Territories.

1 & 2: Data are net of repayments of the Central Government (including repayments to the NSSF) and State Governments.

1.3: Represents compensation and assignments by States to local bodies and Panchayati Raj institutions.

2: Data are net of variation in cash balances of the Central and State Governments and includes borrowing receipts of the Central and State Governments.

3A.1.1: Data as per RBI records.

3B.1.1: Borrowings through dated securities.

3B.1.2: Represent net investment in Central and State Governments' special securities by the National Small Savings Fund (NSSF).

This data may vary from previous publications due to adjustments across components with availability of new data.

3B.1.6: Include Ways and Means Advances by the Centre to the State Governments.

3B.1.7: Include Treasury Bills, loans from financial institutions, insurance and pension funds, remittances, cash balance investment account.

Table No. 47

SDF is availed by State Governments against the collateral of Consolidated Sinking Fund (CSF), Guarantee Redemption Fund (GRF) & Auction Treasury Bills (ATBs) balances and other investments in government securities.

WMA is advance by Reserve Bank of India to State Governments for meeting temporary cash mismatches.

OD is advanced to State Governments beyond their WMA limits.

Average amount Availed is the total accommodation (SDF/WMA/OD) availed divided by number of days for which accommodation was extended during the month.

- : Nil.

Table No. 48

CSF and GRF are reserve funds maintained by some State Governments with the Reserve Bank of India.

ATBs include Treasury bills of 91 days, 182 days and 364 days invested by State Governments in the primary market.

--: Not Applicable (not a member of the scheme).

The concepts and methodologies for Current Statistics are available in Comprehensive Guide for Current Statistics of the RBI Monthly Bulletin **(https://rbi.org.in/Scripts/PublicationsView.aspx?id=17618)**

Time series data of 'Current Statistics' is available at https://dbie.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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2. Handbook of Statistics on the Indian States 2022-23	₹550 (Normal) ₹600 (inclusive of postage)	US$ 24 (inclusive of air mail courier charges)
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5. Report on Currency and Finance 2022-23	₹575 per copy (over the counter) ₹625 per copy (inclusive of postal charges)	US$ 22 per copy (inclusive of air mail courier charges)
6. Reserve Bank of India Occasional Papers Vol. 44, No. 1, 2023	₹200 per copy (over the counter) ₹250 per copy (inclusive of postal charges)	US$ 18 per copy (inclusive of air mail courier charges)
7. Finances of Panchayati Raj Institutions	₹300 per copy (over the counter) ₹350 per copy (inclusive of postal charges)	US$ 16 per copy (inclusive of air mail courier charges)
8. Report on Trend and Progress of Banking in India 2022-23	Issued as Supplement to RBI Bulletin January, 2024	
9. Financial Stability Report, December 2023	Issued as Supplement to RBI Bulletin January, 2024	
10. Monetary Policy Report - April 2024	Included in RBI Bulletin April 2024	

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 (http://dbie.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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