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Governor's Statement

*Governor's Statement**

Shaktikanta Das

As I make this statement, the pandemic holds the global economy hostage once again. Despite signs of moderation, record numbers of daily infections in several countries and consequent containment measures are denting the pace of economic activity, especially in contact-intensive sectors, even as supply disruptions persist and restrained workforce participation tightens the labour markets. With inflation at multi-decadal highs in a number of countries, the evolving macroeconomic environment is being rendered highly uncertain by divergent monetary policy intentions and actions. Financial market volatility and geopolitical tensions are adding layers of ambivalence to the outlook.

Notwithstanding a highly transmissible third wave driven by the Omicron variant of COVID-19, India is charting a different course of recovery from the rest of the world. India is poised to grow at the fastest pace year-on-year among major economies, according to projections made by the International Monetary Fund (IMF). This recovery is supported by large-scale vaccination and sustained fiscal and monetary support. Once again, our frontline warriors have admirably risen to the call of duty.

As we gain valuable experience from repeated waves of the pandemic, our responses are also becoming nuanced and calibrated. Protecting life is paramount; and protecting livelihood is rising in the hierarchy of priorities. The focus is on securing the economic and financial conditions of the vulnerable, the wage earners and all those who suffer the most. Accordingly, the emphasis is shifting to targeted containment strategies and a push towards universal vaccination and booster doses. This approach is being complemented by increased adoption of technology in our workplaces and in our day-to-day lives. The effort is to limit the extent of disruptions to economic activity.

Deliberations of the Monetary Policy Committee

The Monetary Policy Committee (MPC) met on 8th, 9th and 10th February 2022 and based on an assessment of the current macroeconomic situation and the outlook, it voted unanimously to keep the policy repo rate unchanged at 4 per cent. The MPC decided by a majority of 5 to 1 to continue with the accommodative stance as long as necessary to revive and sustain growth on a durable basis and continue to mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target going forward. The marginal standing facility (MSF) rate and the Bank Rate remain unchanged at 4.25 per cent. The reverse repo rate also remains unchanged at 3.35 per cent.

The MPC flagged the potential downside risks to economic activity from the highly contagious Omicron variant. Reassuringly, the symptoms have remained relatively mild and the pace of infections is moderating as quickly as it surged. There is, however, some loss of momentum in economic activity as reflected in high frequency indicators such as purchasing managers' indices (PMI) for both manufacturing and services, finished steel consumption and sales of tractors, two wheelers and passenger vehicles. The demand for contact-intensive services is still muted. Going forward, positive impulses for quickening the pace of recovery emanate from buoyant Rabi prospects, robust export demand, accommodative monetary and liquidity conditions, improving credit offtake, and the continued push on capital expenditure and infrastructure in the Union Budget 2022-23.

The MPC also noted that consumer price inflation (CPI) has edged higher since its last meeting, but largely along anticipated lines. The increase in inflation

* Governor's Statement - February 10, 2022.

in December was entirely due to unfavourable base effects despite month-on-month decline in prices. Large buffer stocks of cereals and effective supply-side measures augur well for food inflation. Core inflation remains elevated, but demand-pull pressures are still muted. The renewed surge in international crude oil prices, however, needs close monitoring.

On balance, headline inflation is expected to peak in Q4:2021-22 within the tolerance band and then moderate closer to target in H2:2022-23, providing room for monetary policy to remain accommodative. At the same time, output is just barely above its pre-pandemic level, while private consumption is still lagging. Global headwinds are accentuating. Overall, taking into consideration the outlook for inflation and growth, in particular the comfort provided by the improving inflation outlook, the uncertainties related to Omicron and global spillovers, the MPC was of the view that continued policy support is warranted for a durable and broad-based recovery.

Domestic Growth

In India, real GDP growth at 9.2 per cent for 2021-22 takes it modestly above the level of GDP in 2019-20. Private consumption, the mainstay of domestic demand, continues to trail its pre-pandemic level. The persistent increase in international commodity prices, surge in volatility of global financial markets and global supply bottlenecks can exacerbate risks to the outlook.

Going forward, government's thrust on capital expenditure and exports are expected to enhance productive capacity and strengthen aggregate demand. This would also crowd in private investment. The conducive financial conditions engendered by the RBI's policy actions will provide impetus to investment activity. The surveys done by the RBI reveal that capacity utilisation is rising, and the outlook on business and consumer confidence remain in optimistic territory, which should support investment as well as consumption demand. The prospects for agriculture have brightened on good progress of winter crop sowing.

Overall, there is some loss of the momentum of near-term growth while global factors are turning adverse. Looking ahead, domestic growth drivers are gradually improving. Considering all these factors, real GDP growth is projected at 7.8 per cent for 2022-23 with Q1:2022-23 at 17.2 per cent; Q2 at 7.0 per cent; Q3 at 4.3 per cent; and Q4 at 4.5 per cent.

Inflation

The CPI inflation trajectory has moved in close alignment with our projections. In particular, the softening of food prices is providing welcome relief. The improving prospects for foodgrains production and the expected easing of vegetable prices on fresh winter crop arrivals are adding further optimism. Moreover, the softening of pulses and edible oil prices is likely to continue in response to strong supply-side interventions by the Government and increase in domestic production.

The hardening of crude oil prices, however, presents a major upside risk to the inflation outlook. Core inflation remains elevated at tolerance testing levels, although the continuing pass through of tax cuts relating to petrol and diesel last November would help to moderate input cost pressures to some extent. The transmission of input cost pressures to selling prices remains muted in view of the continuing slack in demand. Further, as risks from Omicron wane and supply chain pressures moderate, there could be some softening of core inflation. On balance, the inflation projection for 2021-22 is retained at 5.3 per cent, with Q4 at 5.7 per cent on account of unfavourable base effects that ease subsequently. In particular, the CPI reading for January 2022 is expected to move closer to the upper tolerance band, largely due to adverse base effects. Taking all these factors into consideration and on the assumption of a normal monsoon, CPI inflation for 2022-23 is projected at 4.5 per cent with Q1:2022-23 at 4.9 per cent; Q2 at 5.0 per cent; Q3 at 4.0 per cent; and Q4 at 4.2 per cent, with risks broadly balanced.

At the current juncture, the conduct of domestic monetary policy is primarily attuned to the evolving inflation and growth dynamics even as we remain watchful of spillovers from the uncertain global developments and divergent monetary policy responses. Our monetary policy would continue to be guided by its primary mandate of price stability over the medium-term, while also ensuring a strong and sustained economic recovery. As stated by me earlier, our actions will be calibrated and well-telegraphed.

Financial Stability

A strong and well-functioning financial sector fortifies the foundations of growth and development. The Reserve Bank has accorded the highest priority to preserving financial stability by taking quick and decisive steps to ease liquidity constraints, restore market confidence and prevent contagion to other segments of the financial market. We have been also strengthening the regulatory and supervisory framework for both banking and non-bank financial sectors to proactively identify, assess and deal with vulnerabilities.

Thus, despite the pandemic induced bouts of volatility, the Indian financial system has remained resilient and is now in a better position to meet the credit demands as recovery takes hold and investment activity picks up. The balance sheets of Scheduled Commercial Banks (SCBs) are relatively stronger with higher capital adequacy, reduced NPA, higher provisioning cover and improved profitability than in the previous years.

We have to be, however, watchful of the impact of the pandemic on the banking and NBFC sectors when the effects of regulatory reliefs and resolutions fully work their way through. Banks and other financial entities would be well advised to further strengthen their corporate governance and risk management strategies to build resilience in an increasingly dynamic and uncertain economic environment. They also need to continue the process of capital augmentation and building up of appropriate buffers.

Liquidity and Financial Market Conditions

The pandemic has delivered a once in a century crisis, with a health shock morphing into a macroeconomic and financial shock. The RBI undertook a slew of measures to deal with such an exceptional situation. As a consequence, borrowing costs fell to their lowest levels in decades and spreads narrowed across rating cohorts. Record levels of government securities, corporate bonds and debentures were issued. Corporate entities have been able to deleverage seamlessly and reduce high-cost debt while improving profitability and retained earnings for future capex. Overall, the financial sector has remained fully functional and has anchored the process of recovery. In our assessment, the policy actions of the RBI have yielded the desired results in a smooth and orderly manner.

With these objectives being achieved on an ongoing basis, the Reserve Bank has turned to rebalancing liquidity on a dynamic basis, while maintaining adequate liquidity in support of its accommodative stance. This rebalancing has involved two-sided operations: first, rebalancing liquidity from the overnight fixed rate reverse repo towards the 14-day variable rate reverse repo (VRRR) auction as the main operation, supported by fine-tuning auctions of varying tenors as envisaged in the Revised Liquidity Management Framework of February 2020; and second, conducting repo auctions of 1-3 day maturities to meet transient liquidity mismatches and shortages, as for instance in the recent case of more than expected GST outflows during the third week of January 2022. The key to effective liquidity management is the 'timing' and having a nuanced and nimble-footed approach that responds swiftly to the manner in which liquidity tilts.

As a result of RBI's rebalancing operations, the daily average absorption under the fixed rate reverse repo has moderated sharply since August 2021 when rebalancing started. Overall system liquidity, however, remains in large surplus, though it has moderated over the same period. Reflecting the migration of surplus liquidity from the overnight window to longer tenors, the effective reverse repo rate - the weighted average rate of the fixed rate reverse repo and the VRRRs of longer maturity - increased from 3.37 per cent as at end-August 2021 to 3.87 percent as on February 4, 2022.

It may be recalled that while instituting the revised liquidity management framework on February 6, 2020, the daily fixed rate repo and the four 14-day term repos within a reporting fortnight were withdrawn. In view of the pandemic and related work from home and social distancing protocols, the MSF and the fixed rate reverse repo windows were made operational throughout the day, instead of only at end of the day under normal circumstances. This passive mode of liquidity management worked well through pandemic conditions in ensuring adequate provision/absorption of liquidity as warranted by the evolving market conditions.

With the progressive return of normalcy, including transient demand for liquidity from the RBI, it is logical to restore the revised liquidity management framework in order to make it more flexible and agile. Accordingly, four decisions have been taken. First, variable rate repo operations of varying tenors will henceforth be conducted as and when warranted by the evolving liquidity and financial conditions within the cash reserve ratio (CRR) maintenance cycle. Second, variable rate repos (VRRs) and variable rate reverse repos (VRRRs) of 14-day tenor will operate as the main liquidity management tool based on liquidity conditions and will be conducted to coincide with the CRR maintenance cycle. Third, these main operations will be supported by fine-tuning operations to tide over any unanticipated liquidity changes during the reserve maintenance period. Auctions of longer maturity will also be conducted as warranted. Fourth, with effect from March 1, 2022, the Fixed Rate Reverse Repo and the MSF operations will be available only during 17.30-23.59 hours on all days and not during 09.00-23.59 hours, as instituted from March 30, 2020 to deal with the pandemic situation. Market participants are advised to shift balances out of the fixed rate reverse repo into VRRR auctions and avail the automated sweep-in and sweep-out (ASISO) facility in the e-Kuber portal for operational convenience[1].

In the forex market, the Indian rupee (INR) has shown resilience in the face of global spillovers, even relative to EME peers. India's external sector sustainability is anchored by high foreign exchange reserve buffers and a modest level of the current account deficit (CAD). In H1:2021-22, the CAD was 0.2 per cent of GDP, underpinned by robust exports of goods and services. The merchandise trade deficit has widened in recent months partly due to elevated crude oil prices and rise in non-oil imports in line with the domestic economic recovery. Buoyant services exports led by IT services with strong prospects going forward are, however, likely to keep the CAD contained well below 2.0 per cent of GDP during 2021-22. Moreover, foreign direct investment (FDI) inflows remain strong, which along with other forms of capital inflows, are expected to comfortably finance this modest level of the CAD.

[1] To provide greater flexibility to banks in managing their day-end CRR balances, the RBI has provided an optional automated sweep-in and sweep-out (ASISO) facility in August 2020 under which banks are able to pre-set a specific (or range) amount that they wish to maintain at the end of the day. Any shortfall or excess balances maintained by banks will automatically trigger marginal standing facility (MSF) or reverse repo bids, as the case may be, under the ASISO facility.

In a global environment rendered highly volatile and uncertain by diverging monetary policy stances, geopolitical tensions, elevated crude oil prices and persistent supply bottlenecks, emerging economies are vulnerable to destabilising global spillovers on an ongoing basis. Thus, policymakers face daunting challenges even as recovery from the pandemic remains incomplete. On its part, the Reserve Bank has been and will continue to insulate the domestic economy and financial markets from these spillovers. Further, while the RBI will continue to focus on smooth completion of the government borrowing programme, market participants also have a stake in the orderly evolution of financial conditions and the yield curve. It is expected that market participants will engage responsibly and contribute to cooperative outcomes that benefit all.

Additional Measures

Based on our continuing assessment, certain additional measures are also being announced today. The details of these measures are set out in the statement on developmental and regulatory policies (Part-B) of the Monetary Policy Statement. The additional measures are as follows:

Extension of On-tap Liquidity Facilities for Emergency Health Services and Contact-intensive Sectors

On-tap liquidity facilities of ₹50,000 crore and ₹15,000 crore for emergency health services and contact-intensive sectors, respectively, were announced in May and June 2021 during the second wave of the Pandemic. Banks were given certain incentives for lending under the two schemes. On account of the continued uncertainties brought on by the third wave, the two schemes are being extended from March 31, 2022 to June 30, 2022.

Voluntary Retention Route (VRR) - Enhancement of Limits

The Voluntary Retention Route (VRR) scheme was introduced in March 2019 to facilitate long-term investment by Foreign Portfolio Investors (FPIs) in debt securities issued by the government and the corporates. The response to the scheme has been very encouraging. It is, therefore, proposed to enhance the limit for investments under the scheme by ₹1.0 lakh crore from ₹1.5 lakh crore at present to ₹2.5 lakh crore with effect from April 1, 2022. This will provide access to additional sources of capital for the domestic debt market including g-secs.

Review of Credit Default Swaps (CDS) Guidelines

The guidelines for Credit Default Swaps (CDS) initially issued in 2013 were reviewed and draft guidelines were issued in February 2021 for public comments. Taking into account the feedback received, the final CDS Directions are being issued today. These guidelines will facilitate the development of a credit derivatives market and deepen the corporate bond market in India.

Permission for Banks to deal in Foreign Currency Settled - Rupee Derivatives Market

Banks in India have already been permitted to offer Rupee interest rate derivatives such as overnight indexed swaps (OIS) to non-residents. Now it has been decided to allow banks in India to undertake transactions in the offshore Foreign Currency Settled-Overnight Indexed Swap (FCS-OIS) market with non-residents and other market makers. This will reduce the segmentation between the onshore and offshore markets, enable more efficient price discovery and further deepen the interest rate derivatives market in India.

Enhancement of the Cap under e-RUPI (Prepaid Digital Vouchers using UPI)

The e-RUPI pre-paid digital voucher developed by the NPCI was launched in August 2021. The single use cashless payment voucher has a cap of ₹10,000. It is now proposed to increase the cap of e-RUPI vouchers issued by the Central government and State governments from ₹10,000 to ₹1,00,000 per voucher and permit such e-RUPI vouchers to be used more than once (until the amount of the voucher is completely redeemed). This will further facilitate the delivery of various government schemes to the beneficiaries more efficiently.

Enabling Better Infrastructure for MSME Receivables Financing – Increasing NACH Mandate Limit for TReDS Settlements

The Trade Receivables Discounting System (TReDS) facilitates the financing of trade receivables of Micro, Small and Medium Enterprises (MSMEs). Transactions in TReDS are settled through the National Automated Clearing House (NACH) system. Keeping in view the requests received from stakeholders and to further enhance the ease of financing the growing liquidity requirements of MSMEs, it is proposed to increase the NACH mandate limit from ₹1 crore at present to ₹3 crore for TReDS related settlements.

Master Direction (MD) on IT Outsourcing and Master Direction (MD) on Information Technology Governance, Risk, Controls and Assurance Practices

Extensive outsourcing of critical IT services, leveraging of technology by the Regulated Entities of RBI and increasing use of digital channels by customers expose the Regulated Entities to significant financial, operational and reputational risks. A need was, therefore, felt to review and consolidate the extant guidelines. Accordingly, two draft directions will be issued for comments of stakeholders and members of the public: (i) Reserve Bank of India (IT Outsourcing) Directions, 2022; and (ii) Reserve Bank of India (Information Technology Governance, Risk, Controls and Assurance Practices) Directions, 2022.

Concluding Remarks

We are living in a world of Knightian uncertainty[2] in the absence of determinate knowledge about the next mutation of COVID-19. The ability to forecast the future course of the economy is so contingent on the evolution of the virus that one prognosis is as good or as bad as the other and as ephemeral. If the last two years of living with the virus have taught us anything, it is to remain humble, but grounded in self-belief, never losing confidence and optimism. As the great Lata Mangeshkar – whom we lost recently – sang in her immortal voice: "aaj phir jeene ki tamanna hai". Together with the spirit behind the next line of this beautiful song, she has conveyed an eternal message of optimism.

We, in the Reserve Bank, have remained steadfast in our commitment to safeguard trust and confidence in the domestic financial system as we rebuild the foundations of strong and sustainable growth with macroeconomic stability. This has been our anchor in the ocean of uncertainty. We are inspired by Mahatma Gandhi's spirit of constant striving amidst challenges: "Satisfaction lies in the effort, …… Full effort is full victory."[3]

Thank you. Stay safe. Stay well. Namaskar.

[2] In economics, Knightian uncertainty is a lack of any quantifiable knowledge about some possible occurrence, as opposed to quantifiable risk. It is an acknowledgement of imperfect knowledge that makes future events essentially unpredictable. The phenomenon is named after Frank Knight (1885-1972), an economist from the University of Chicago, whose seminal work Risk, Uncertainty, and Profit was published in 1921.

[3] The Collected Works of Mahatma Gandhi (CWMG), Vol. 26, p. 293.

MONETARY POLICY STATEMENT FOR 2021-22

Resolution of the Monetary Policy Committee (MPC)
February 8-10, 2022

Monetary Policy Statement, 2021-22 Resolution of the Monetary Policy Committee (MPC) *

On the basis of an assessment of the current and evolving macroeconomic situation, the Monetary Policy Committee (MPC) at its meeting today (February 10, 2022) decided to:

- keep the policy repo rate under the liquidity adjustment facility (LAF) unchanged at 4.0 per cent.

The reverse repo rate under the LAF remains unchanged at 3.35 per cent and the marginal standing facility (MSF) rate and the Bank Rate at 4.25 per cent.

- The MPC also decided to continue with the accommodative stance as long as necessary to revive and sustain growth on a durable basis and continue to mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target going forward.

These decisions are in consonance with the objective of achieving the medium-term target for consumer price index (CPI) inflation of 4 per cent within a band of +/- 2 per cent, while supporting growth.

The main considerations underlying the decision are set out in the statement below.

Assessment

Global Economy

2. Since the MPC's meeting in December 2021, the rapid spread of the highly transmissible Omicron variant and the associated restrictions have dampened global economic activity. The global composite purchasing managers' index (PMI) slipped to an 18 month low of 51.4 in January 2022, with weakness in both services and manufacturing. World merchandise trade continues to grow. There are, however, headwinds emanating from persistent container and labour shortages, and elevated freight rates. In its January 2022 update of the World Economic Outlook, the International Monetary Fund (IMF) revised global output and trade growth projections for 2022 downward to 4.4 per cent and 6.0 per cent from its earlier forecasts of 4.9 per cent and 6.7 per cent, respectively.

3. After reversing the transient correction that had occurred towards end-November, commodity prices resumed hardening and accentuated inflationary pressures. With several central banks focused on policy normalisation, including ending asset purchases and earlier than expected hikes in policy rates, financial markets have turned volatile. Sovereign bond yields firmed up across maturities and equity markets entered correction territory. Currency markets in emerging market economies (EMEs) have exhibited two-way movements in recent weeks, driven by strong capital outflows from equities with elevated uncertainty on the pace and quantum of US rate hikes. The latter also led to an increasing and volatile movement in US bond yields.

Domestic Economy

4. The first advance estimates (FAE) of national income released by the National Statistical Office (NSO) on January 7, 2022 placed India's real gross domestic product (GDP) growth at 9.2 per cent for 2021-22, surpassing its pre-pandemic (2019-20) level. All major components of GDP exceeded their 2019-20 levels, barring private consumption. In its January 31 release, the NSO revised real GDP growth for 2020-21 to (-) 6.6 per cent from the provisional estimates of (-) 7.3 per cent.

* Released on February 10, 2022.

5. Available high frequency indicators suggest some weakening of demand in January 2022 reflecting the drag on contact-intensive services from the fast spread of the Omicron variant in the country. Rural demand indicators – two-wheeler and tractor sales – contracted in December-January. Area sown under Rabi up to February 4, 2022 was higher by 1.5 per cent over the previous year. Amongst the urban demand indicators, consumer durables and passenger vehicle sales contracted in November-December on account of supply constraints while domestic air traffic weakened in January under the impact of Omicron. Investment activity displayed a mixed picture – while import of capital goods increased in December, production of capital goods declined on a year-on-year (y-o-y) basis in November. Merchandise exports remained buoyant for the eleventh successive month in January 2022; non-oil and non-gold imports also continued to expand on the back of domestic demand.

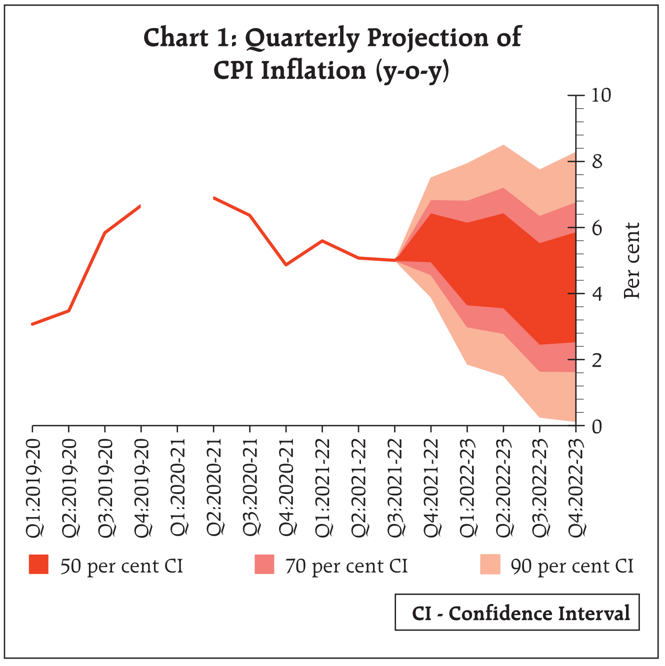
6. The manufacturing PMI stayed in expansion zone in January at 54.0, though it moderated from 55.5 in the preceding month. Among services sector indicators, railway freight traffic, e-way bills, and toll collections posted y-o-y growth in December-January; petroleum consumption registered muted growth and port traffic declined. While finished steel consumption contracted y-o-y in January, cement production grew in double digits in December. PMI services continued to exhibit expansion at 51.5 in January 2022, though the pace weakened from 55.5 in December.

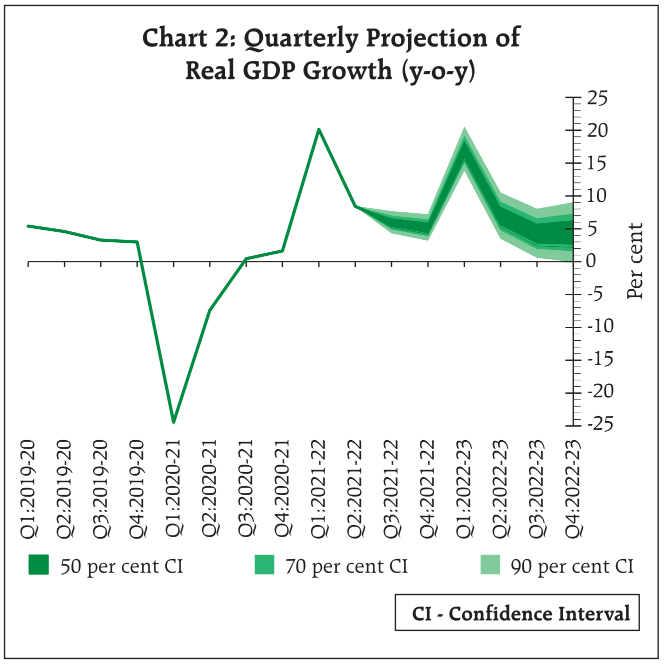
7. Headline CPI inflation edged up to 5.6 per cent y-o-y in December from 4.9 per cent in November due to large adverse base effects. The food group registered a significant decline in prices in December, primarily on account of vegetables, meat and fish, edible oils and fruits, but sharp adverse base effects from vegetables prices resulted in a rise in y-o-y inflation. Fuel inflation eased in December but remained in double digits. Core inflation or CPI inflation excluding food and fuel stayed elevated, though there was some moderation from 6.2 per cent in November to 6.0 per cent in December, driven by transportation and communication, health, housing and recreation and amusement.

8. Overall system liquidity continued to be in large surplus, although average absorption (through both the fixed and variable rate reverse repos) under the LAF declined from ₹8.6 lakh crore during October-November 2021 to ₹7.6 lakh crore in January 2022. Reserve money (adjusted for the first-round impact of the change in the cash reserve ratio) expanded by 8.4 per cent (y-o-y) on February 4, 2022. Money supply (M3) and bank credit by commercial banks rose (y-o-y) by 8.4 per cent and 8.2 per cent, respectively, as on January 28, 2022. India's foreign exchange reserves increased by US$ 55 billion in 2021-22 (up to February 4, 2022) to US$ 632 billion.

Outlook

9. Since the December 2021 MPC meeting, CPI inflation has moved along the expected trajectory. Going forward, vegetables prices are expected to ease further on fresh winter crop arrivals. The softening in pulses and edible oil prices is likely to continue in response to strong supply-side interventions by the Government and increase in domestic production. Prospects of a good Rabi harvest add to the optimism on the food price front. Adverse base effect, however, is likely to prevent a substantial easing of food inflation in January. The outlook for crude oil prices is rendered uncertain by geopolitical developments even as supply conditions are expected to turn more favourable during 2022. While cost-push pressures on core inflation may continue in the near term, the Reserve Bank surveys point to some softening in the pace of increase in selling prices by the manufacturing and services firms going forward, reflecting subdued pass-through. On balance, the inflation projection for 2021-22 is retained at 5.3 per cent, with Q4 at 5.7 per cent. On the assumption of a normal monsoon in





2022, CPI inflation for 2022-23 is projected at 4.5 per cent with Q1:2022-23 at 4.9 per cent; Q2 at 5.0 per cent; Q3 at 4.0 per cent; and Q4:2022-23 at 4.2 per cent, with risks broadly balanced (Chart 1).

10. Recovery in domestic economic activity is yet to be broad-based, as private consumption and contact-intensive services remain below pre-pandemic levels. Going forward, the outlook for the Rabi crop bodes well for agriculture and rural demand. The impact of the ongoing third wave of the pandemic on the recovery is likely to be limited relative to the earlier waves, improving the outlook for contact-intensive services and urban demand. The announcements in the Union Budget 2022-23 on boosting public infrastructure through enhanced capital expenditure are expected to augment growth and crowd in private investment through large multiplier effects. The pick-up in non-food bank credit, supportive monetary and liquidity conditions, sustained buoyancy in merchandise exports, improving capacity utilisation and stable business outlook augur well for aggregate demand. Global financial market volatility, elevated international commodity prices, especially crude oil, and continuing global supply-side disruptions pose downside risks to the outlook. Taking all these factors into consideration, the real GDP growth for 2022-23 is projected at 7.8 per cent with Q1:2022-23 at 17.2 per cent; Q2 at 7.0 per cent; Q3 at 4.3 per cent; and Q4:2022-23 at 4.5 per cent (Chart 2).

11. The MPC notes that inflation is likely to moderate in H1:2022-23 and move closer to the target rate thereafter, providing room to remain accommodative. Timely and apposite supply-side measures from the Government have substantially helped contain inflationary pressures. The potential pick up of input costs is a contingent risk, especially if international crude oil prices remain elevated. The pace of the domestic recovery is catching up with pre-pandemic trends, but private consumption is still lagging. COVID-19 continues to impart some uncertainty to the future outlook. Measures announced in the Union Budget 2022-23 should boost aggregate demand. The global macroeconomic environment is, however, characterised by deceleration in global demand in 2022, with increasing headwinds from financial market volatility induced by monetary policy normalisation in the systemic advanced economies (AEs) and inflationary pressures from persisting supply

chain disruptions. Accordingly, the MPC judges that the ongoing domestic recovery is still incomplete and needs continued policy support. It is in this context that the MPC has decided to keep the policy repo rate unchanged at 4 per cent and to continue with an accommodative stance as long as necessary to revive and sustain growth on a durable basis and continue to mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target going forward.

12. All members of the MPC – Dr. Shashanka Bhide, Dr. Ashima Goyal, Prof. Jayanth R. Varma, Dr. Mridul K. Saggar, Dr. Michael Debabrata Patra and Shri Shaktikanta Das – unanimously voted to keep the policy repo rate unchanged at 4.0 per cent.

13. All members, namely, Dr. Shashanka Bhide, Dr. Ashima Goyal, Dr. Mridul K. Saggar, Dr. Michael Debabrata Patra and Shri Shaktikanta Das, except Prof. Jayanth R. Varma, voted to continue with the accommodative stance as long as necessary to revive and sustain growth on a durable basis and continue to mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target going forward. Prof. Jayanth R. Varma expressed reservations on this part of the resolution.

14. The minutes of the MPC's meeting will be published on February 24, 2022.

15. The next meeting of the MPC is scheduled during April 6-8, 2022.

STATEMENT ON DEVELOPMENTAL AND REGULATORY POLICIES

Statement on Developmental and Regulatory Policies

Statement on Developmental and Regulatory Policies

This Statement sets out various developmental and regulatory policy measures relating to (i) liquidity measures; (ii) financial markets; (iii) payment and settlement systems and (iv) regulation and supervision.

I. Liquidity Measures

1. Extension of Term Liquidity Facility of ₹50,000 crore to Emergency Health Services

On May 5, 2021, an on-tap liquidity window of ₹50,000 crore at the repo rate with tenors of up to three years was announced to boost provision of immediate liquidity for ramping up COVID-19 related healthcare infrastructure and services in the country. Banks were incentivised for quick delivery of credit under the scheme through extension of priority sector classification to such lending up to March 31, 2022. Banks were expected to create a COVID-19 loan book under the scheme. By way of an additional incentive, such banks were eligible to park their surplus liquidity up to the size of the COVID-19 loan book with the RBI under the reverse repo window at a rate 25 bps lower than the repo rate, i.e., 40 bps higher than the reverse repo rate. Banks have deployed their own funds to the tune of ₹9,654 crore (up to February 4, 2022) towards COVID-19 related emergency health services. In view of the response to the scheme, it is now proposed to extend this window up to June 30, 2022 from March 31, 2022 as announced earlier.

2. Extension of On-tap Liquidity Window for Contact-intensive Sectors

On June 4, 2021, it was decided to open a separate liquidity window of ₹15,000 crore at the repo rate with tenors of up to three years available till March 31, 2022 for certain contact-intensive sectors. By way of an incentive, such banks were eligible to park their surplus liquidity up to the size of the COVID-19 loan book, created under this scheme with the RBI. The amount in this COVID-19 loan book attracted a rate which is 25 bps lower than the repo rate or, termed in a different way, 40 bps higher than the reverse repo rate. Banks desirous of deploying their own resources without availing funds from the RBI under the scheme for lending were also eligible for this incentive. Banks have deployed their own funds to the tune of ₹5,041 crore (up to February 4, 2022) to the entities under contact intensive sector. In view of the response to the scheme, it is now proposed to extend this window up to June 30, 2022.

II. Financial Markets

3. Voluntary Retention Route (VRR) – Enhancement of Limits

The Voluntary Retention Route (VRR) for investment in government and corporate debt securities by Foreign Portfolio Investors (FPIs) was introduced on March 01, 2019 with a view to facilitating stable investments in debt instruments issued in the country. The Route sought to provide a separate channel, broadly free of macro-prudential controls, to FPIs with long-term investment horizons. A dedicated investment limit of ₹1,50,000 crore was set for investments under the VRR. Given the positive response to the VRR as evident from the near exhaustion of the current limit, it is proposed to increase the investment limit under VRR by ₹1,00,000 crore to ₹2,50,000 crore with effect from April 1, 2022. The revised investment limits are being notified today.

4. Review of Credit Default Swaps (CDS) Guidelines

Guidelines for Credit Default Swaps (CDS) were last issued in January 2013. Given the importance of the CDS market for the development of a liquid market for corporate bonds, especially for the bonds of lower rated issuers, it was announced in the Statement on Developmental and Regulatory Policies of December 4, 2020 that these guidelines would be reviewed.

Accordingly, draft guidelines were issued on February 16, 2021 for public consultation. Taking into account the feedback received, the final Directions are being issued today.

5. Permitting Banks to Deal in offshore Foreign Currency Settled Rupee Derivatives Market

Banks in India were permitted in June 2019 to offer Rupee interest rate derivatives to non-residents to hedge their interest rate risk. Overseas entities were also permitted to undertake Overnight Indexed Swap (OIS) transactions for purposes other than hedging with banks in India either directly or on a back-to-back basis through a foreign branch/parent/group entity (foreign counterpart) of the market-maker in India. The initiative has added to liquidity in the domestic OIS market, promoted diversity in participation and reduced the segmentation between the onshore and offshore markets. With a view to providing a further fillip to the interest rate derivative market in the country, removing the segmentation between onshore and offshore markets and improving the efficiency of price discovery, it has been decided to allow banks in India to undertake transactions in the offshore Foreign Currency Settled Overnight Indexed Swap (FCS-OIS) market with non-residents and other market makers. Banks may participate through their branches in India, their foreign branches or through their IFSC Banking Units. Necessary directions are being issued today.

III. Payment and Settlement Systems

6. Enhancement of the Cap under e-RUPI (Prepaid digital Vouchers using UPI)

The e-RUPI prepaid digital voucher, developed by the National Payments Corporation of India (NPCI) and launched in August 2021, is a person-specific and purpose-specific cashless voucher and can be used by individuals, corporates or governments. e-RUPI runs on the UPI platform and has a cap of ₹10,000/- per voucher and each voucher can be used / redeemed only once. e-RUPI vouchers are presently being used largely for COVID-19 vaccination purposes. There are other use cases being actively considered by various State Government and Central Government Ministries / Departments.

To facilitate digital delivery of various government schemes to the beneficiaries, it is proposed to increase the cap on amount for e-RUPI vouchers issued by Governments to ₹1,00,000/- per voucher and allow use of the e-RUPI voucher multiple times (until the amount of the voucher is completely redeemed). Necessary instructions to NPCI will be issued separately.

7. Enabling Better Infrastructure for MSME Receivables Financing – Increasing NACH Mandate Limit for TReDS Settlements

Trade Receivables Discounting System (TReDS) facilitates discounting / financing of receivables of Micro, Small and Medium Enterprises (MSMEs). TReDS settlements are carried out through mandates in the National Automated Clearing House (NACH) system. Presently the amount of the NACH mandate is capped at ₹1 crore.

To encourage innovation and competition through increased participation, 'on-tap' authorisation of TReDS operators was introduced by Reserve Bank in October 2019. Effective July 1, 2020 the Central Government has revised the definition of MSMEs with linkage to their annual turnover as well. Keeping in view the growing liquidity requirements of the MSMEs and the requests received from the TReDS platforms, it is proposed to increase the NACH mandate limit to ₹3 crore for TReDS settlements.

Necessary instructions will be issued separately.

IV. Regulation and Supervision

8. Master Direction (MD) on IT Outsourcing and Master Direction (MD) on Information Technology Governance, Risk, Controls and Assurance Practices

The financial system is seeing extensive leveraging and outsourcing of critical IT services by Regulated Entities to get easier access to newer technologies through financial technology players to improve efficiencies. These arrangements expose them to significant financial, operational and reputational risks. Similarly, increasing dependence of customers on digital channels to avail banking services makes it imperative for Regulated Entities to focus on operational resilience.

It is, therefore, felt that aspects such as risk management framework for IT outsourcing, managing concentration risk, periodic risk assessment and outsourcing to foreign service providers require suitable regulatory guidelines. Guidelines relating to Information Security Governance and Controls, Business Continuity Management and Information Systems Audit also require to be updated and consolidated.

Accordingly, the Reserve Bank proposes to issue guidelines addressing the above aspects. Two draft directions will be issued for comments of stakeholders and members of the public: (i) Reserve Bank of India (IT Outsourcing) Directions, 2022; and (ii) Reserve Bank of India (Information Technology Governance, Risk, Controls and Assurance Practices) Directions, 2022.

SPEECH

RBI's Pandemic Response: Stepping out of Oblivion
Michael Debabrata Patra

*RBI's Pandemic Response: Stepping out of Oblivion**

Michael Debabrata Patra

Professor Muchkund Dubey, President, Professor Shanta Sinha, Chairperson, Managing Committee, Professor Sujit Kumar Mishra, Regional Director (in-Charge), Dr. Sunny Jose, RBI Chair Professor, faculty and staff of the Council for Social Development, Hyderabad, (hereafter CSD), students, researchers and faculty joining this event from various universities and research institutions across the country, colleagues and friends! It is indeed an honour to share my thoughts today under the prestigious C D Deshmukh Memorial Lecture Series instituted by the CSD since 1997.

For the Reserve Bank of India (hereafter RBI), this lecture series has a special significance. Late Shri Chintaman Dwarakanath Deshmukh was the first Indian Governor of the RBI from August 11, 1943 to June 30, 1949. His association with the RBI began even earlier in July 1939 when he was appointed Liaison Officer to the RBI by the Government of India. Three months later, he was appointed Secretary of the Central Board of the Bank, two years later in December 1941 as the Deputy Governor, and then Governor on August 11, 1943. He presided over the transformation of the RBI from a private shareholders' bank to a nationalised institution. Under his stewardship, a comprehensive legislation for the regulation of banking companies was enacted. Another landmark legislation under his leadership led to the establishment of the first financial institution for the provision of long-term credit to industry, namely, the Industrial Finance Corporation of India (IFCI). He also played an important role in the Bretton Woods Conference in New Hampshire, USA in July 1944, which established the International Monetary Fund (IMF) and the International Bank for Reconstruction and Development (IBRD or the World Bank). His vision and ideas still resonate in the corridors of the RBI.

Among his many outstanding contributions to society at large, Late Shri Deshmukh and his wife Late Shrimati Durgabai Deshmukh played a pioneering role in the establishment of the CSD in 1962 as a leading research and policy studies institution. Today, it is a matter of national pride that the CSD engages in policy-oriented research with a special focus on social aspects of development planning, social justice and equity. Research at the CSD continues to evaluate the diverse impacts of policies on the relationship between the state and people. Our association with the CSD also goes back to 1985 when the RBI Chair Professorship was established. It is a matter of considerable satisfaction that many of our officers have been associated with the CSD in their self-actualisation.

Against this backdrop, I turn to the theme of my address today, which is the RBI's response to the pandemic[1].

When COVID-19 engulfed the world in early 2020, humans had become oblivious of pandemics past. Yet, a hundred years ago and before – between 1817 and 1920 – cholera, plague and influenza pandemics had visited the world repeatedly and wreaked havoc. Of the estimated 70 million lives lost worldwide – roughly the same as the casualties of the two World Wars – India had accounted for nearly 60 per cent, and yet somehow, we had erased those memories. After all, astonishing progress had been made in the control

* Keynote Address delivered by Michael Debabrata Patra, Deputy Governor, Reserve Bank of India at the C D Deshmukh Memorial Lecture organised by the Council for Social Development, Hyderabad on January 28, 2022. Valuable comments from Sitikantha Pattanaik, Rajiv Ranjan, Indranil Bhattacharya, Abhilasha and editorial help from Vineet Kumar Srivastava are gratefully acknowledged.

[1] The word 'pandemic' derives from the Greek word pandemos, which means common to all people.

of diseases, food and nutrition were more plentily available and we had learned to deal with natural calamities more effectively. As a result, longevity, which was as low as 25 years in 1920, had risen to 70 years by 2020[2].

If we had remembered, we would have prepared for the fact that influenza can evade pre-existing immunity by mutations. We would have recalled that infections occur in waves – in the case of the 1918 influenza pandemic, up to four waves occurred, lasting up to 1920. Our consciousness would have stirred to the fact that beyond the usual symptoms of fever and body pain, infections turn pneumonic quickly, allowing bacteria to attack the lungs. In hindsight, it is this loss of collective accumulated knowledge that allowed COVID-19 to catch us off-guard. In fact, this loss of memory resulted in irrational actions – the declaration of COVID-19 as a pandemic by the World Health Organisation (WHO) on March 10, 2020 and India's nationwide lockdown that followed set off one of the biggest migrations in human history as people fled cities in fear of what was perceived widely as an urban disease only to find that the virus pursued them to their villages. This amnesia was global. To illustrate, the WHO, which is mandated to declare pandemics, did so in respect of H1N1 in 2009, but that came to be seriously questioned because it turned out to be unusually mild, and scrutiny focused on pharmaceutical industries which benefited from the production and sale of vaccines. The Severe Acute Respiratory Syndrome (SARS), the Middle East Respiratory Syndrome-Coronavirus (MERS-COV) and Ebola did spark pervasive alarm, but casualties were relatively few and the incidence of infections was localised.

The 2020 pandemic caused worldwide contagion, and the precipitous loss of lives and livelihood. By the end of 2021, several advanced economies may have reached or exceeded pre-pandemic levels of output, but middle income emerging economies have suffered large losses of output, with the heaviest burden falling on low income countries. This pandemic is also noteworthy for the unprecedented policy response mounted by governments and central banks. The IMF estimates that since March 2020 and up to October 2021, US$16.9 trillion or 16.4 per cent of global GDP had been pledged as fiscal support in response to the pandemic, with US$ 14.5 trillion provided by advanced economies (AEs) and US$ 2.4 trillion provided by emerging market economies (EMEs), including the least developed countries. The total monetary support was US$19.0 trillion or 18.4 per cent of global GDP, US$ 16.1 trillion by AEs and US$ 2.9 trillion by EMEs.

What guided this once-in-a-lifetime policy response, given the collective oblivion that I talked about earlier? It was the global financial crisis (GFC) of 2008. Typically, in crises of global proportions, it is governments or fiscal policy that assume a vanguard role, while central banks, known for their conservativeness and preference for the back office, play a supportive role as lenders of the last resort. In response to the GFC, however, it was central banks that rushed to the frontline. Faced with a loss of their main instrument – the interest rate – which had fallen to zero, then considered the lower bound to which interest rates can decline[3], central banks unleashed unconventional measures, using their balance sheets to support economic activity, providing forward guidance to stabilise expectations and anchor the uncertain future, and directly influencing longer-term yields at the cost of being accused of the cardinal sin of effectively monetising stimulus-distended fiscal deficits. In that sense, they did have some sort of a template when the pandemic arrived.

[2] For these insights, I draw heavily on Chinmay Tumbe (2020): Age Of Pandemics (1817-1920): How they shaped India and the World, HarperCollins Publishers India.

[3] More recently, interest rates have fallen even below zero to the negative zone.

Leaning against the Pandemic

Among the first steps that the RBI took within six days of the WHO's declaration of COVID-19 as a pandemic was to create a business continuity bio-bubble. In the event that the rest of us became infected, 150 selected officers, staff and service providers were kept in isolation in the bubble to work 24X7 in order to keep essential RBI services such as currency issue, retail and wholesale payment and settlement systems, financial markets regulation and supervision and liquidity management, to name only a salient few that impact the lives of citizens, businesses and financial institutions on a regular basis. This turned out to be farsighted. Within days of the national lockdown being announced, financial markets in India went into seizure, financial institutions were gripped by liquidity evaporation, and finance, that keeps the wheels of the economy turning, dried up.

From March 27, 2020 the RBI unfurled a panoply of measures numbering more than a hundred in total, some conventional and others out-of-the-box, to address pandemic-induced dislocations and constraints, both system level and also specific to sectors, institutions and financial instruments.

In terms of conventional measures, the policy repo rate was reduced by an unprecedented 115 bps in two phases. The interest rate on the fixed rate reverse repo rate under the liquidity adjustment facility (LAF), under which market participants deposit their surpluses with the RBI, was reduced cumulatively by 155 bps and it became the effective anchor for the evolution of money market rates and even longer-term interest rates. Banks' access to liquidity under the marginal standing facility, a lending window which is priced at 25 bps above the policy repo rate, was expanded by close to ₹1,37,000 crore. System level liquidity was also enhanced though large scale open market purchase operations and a one percentage point reduction in the cash reserve ratio (CRR) that freed up banks' resources to the extent of ₹1,37,000 crore.

Turning to unconventional measures, long-term repo operations (LTROs) and targeted long-term repo operations (TLTROs) were undertaken to augment systemic liquidity, lower the banks' cost of funds and influence longer-term interest rates more directly. While LTROs enhanced the overall liquidity in the system, TLTROs ensured the distribution of liquidity to specific sectors in need of funds. Additionally, when redemption fears gripped the mutual fund industry, a special liquidity facility for mutual funds (SLFMF) was crafted virtually over a weekend. When these liquidity measures encountered risk aversion among banks in on-lending the RBI's funds to troubled entities, special refinance facilities were provided to All India Financial Institutions (AIFIs) to mitigate sector-specific and small institution-specific liquidity constraints. On tap TLTROs provided liquidity to banks for deployment in corporate bonds, commercial paper, nonconvertible debentures and bank loans to specific sectors. In the first half of 2021-22, the RBI pledged its balance sheet to mitigating the impact of the pandemic and reviving the economy. From April through September 2021, the RBI engaged in asset purchases through a secondary market Government securities acquisition programme (G-SAP) which involved an upfront commitment on amounts to be purchased and impacted yields directly. Total G-SAP purchases amounted to ₹2.2 lakh crore. In addition, special open market operations (OMOs) involving simultaneous purchase and sale of securities, which were liquidity neutral, were undertaken to distribute liquidity more evenly across the yield curve, thereby facilitating monetary transmission. Overall, liquidity augmenting measures worth ₹17.2 lakh crore (8.7 per cent of nominal GDP of 2020-21) were announced since February 6, 2020[4].

[4] The specific aspects of all these measures, including amounts sanctioned and utilised, are documented in *https://www.rbi.org.in/scripts/bs_viewcontent.aspx?Id=3894.*

Forward guidance (FG) gained prominence in the RBI's strategy. In every statement of the monetary policy committee (MPC), it was reiterated that the policy stance would remain accommodative, including with explicit time-contingent and state-contingent guidance. Financial markets were assured that the Reserve Bank will maintain congenial financial conditions for sustaining the recovery. This dispelled illiquidity fears and bolstered market sentiment.

While monetary and liquidity measures addressed the immediate panic, the dislocations in everyday activity and access to finance brought to the fore solvency concerns across individuals, small and large businesses, and raised fears of impending asset quality stress among banks and financial institutions. Accordingly, the RBI launched a suite of regulatory measures that included a loan moratorium; asset classification standstill; easing of working capital financing and deferment of interest; increasing of group exposure norms; restructuring of advances to micro, small, and medium enterprises (MSMEs); and reduction of the liquidity coverage ratio (LCR) requirements, to mention the main initiatives. These steps provided a temporary reprieve to borrowers affected by the pandemic and shored up the health of lending institutions, thereby preserving the resilience of the financial system. Several countercyclical regulatory measures were also undertaken to ease stress on both borrowers and the banking system: rationalisation of risk weights for individual housing loans; revised risk weights for banks' regulatory retail portfolio; and restrictions on banks from paying out dividends.

On the technological front, the RBI adopted a proactive approach by leveraging on technology to facilitate digital penetration, innovative payment options and consumer awareness on the road to a "less cash" reliant society. A few initiatives were customised, keeping in view social distancing and contact protocols of the pandemic, including (i) ensuring availability of digital banking channels, ATMs, internet/mobile banking facilities; (ii) strengthening cyber security; (iii) developing mechanisms for faster redressal of customer grievances; and (iv) improving financial literacy through sustained and focused campaigns through RBI Kehta Hai[5].

The Report Card so far

The impact of these measures is still unravelling and even when the outcomes have fully formed, a one-to-one correspondence may be difficult to establish, given the many moving parts that are involved. Notwithstanding this caveat, however, the overall state of the economy and of financial markets – which is what these measures sought to address – provides some evidence of the efficacy or otherwise of the RBI's pandemic response.

Ahead of the pandemic's onset, the Indian economy was into a cyclical downturn, with real GDP growth having decelerated in 2019-20 to its lowest rate in a decade. Consequently, monetary policy had turned accommodative from February 2019, with a cumulative reduction of 135 bps in the policy rate up to February 2020. System level liquidity was kept in surplus from June 2019 in consonance with the stance of monetary policy. At the end of February 2020, market participants had deposited excess liquidity of the order of ₹3 lakh crore under the LAF.

The first quarter of 2020-21 bore the full brunt of the pandemic's onslaught. With mobility of people and goods dropping to all-time lows, real GDP contracted by a precipitous 24.4 per cent, which was among the deepest in the world. Unemployment peaked at 24 per cent in April, although in rural areas, farm activity displayed pandemic proofing and the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) provided a measure of insulation. Exports

[5] 'RBI Kehta Hai' is a 360-degree campaign initiated by the RBI using all mass media, including television, radio, newspapers, hoardings, web banners, gifs, social media and SMS.

plunged 61 per cent in April, with a commensurate decline in imports. The National Statistical Office (NSO) could not collect price quotations for compiling the consumer price index due to the nation-wide lockdown and had to resort to imputations.

By early June, the fury of the pandemic abated and the pace of infections started to ebb. This emboldened the unlocking of the economy in a phased manner that took up to the end of December 2020 to be completed. As businesses haltingly resumed operations and mobility around workplaces, grocery stores and pharmacies improved, outmigration started to reverse and the unemployment rate eased to 10.2 per cent. Supply and work disruptions showed up in inflation surging to 6.2 per cent in June. The Indian economy remained in contraction in the second quarter of 2020-21 and it was only in the second half of the year that on the back of policy stimulus, festival-related spending and the release of pent-up demand a hesitant and uneven recovery started taking shape. Meanwhile, the RBI's measures brought down borrowing costs to their lowest in 17 years and narrowed spreads across rating categories on corporate bonds, commercial paper and debentures to pre-pandemic levels. By engendering congenial financing conditions, the RBI supported the recovery. Governments of various levels and corporates utilised this opportunity to raise a record volume of resources from financial markets. In the corporate sector, deleveraging was facilitated and high cost debt could be replaced, reducing vulnerabilities and preparing the sector to participate in the ongoing recovery. Abundant liquidity and the RBI's measures enabled a quick and full transmission of policy rate cuts to deposit and lending rates, easing the cost of funds for bank clientele.

The second wave dented the recovery in the first quarter of 2021-22, but its impact turned out to be relatively less severe. The Indian economy renewed its tryst with the interrupted recovery, which gained strength and pace through the rest of the year. It is estimated that real GDP will rise by 9.2 per cent during the current financial year, cresting pre-pandemic levels, and marking a turnaround from the decline of 7.3 per cent the year before. Exports have been the silver lining, growing by 49.7 per cent year-on-year in US dollars terms during April-December 2021 at a time when international trade has been hamstrung by supply chain disruptions, shortages and logistics impairments. Import demand has surged on the back of the return of domestic demand to normal conditions. Employment has yet to recover fully though, and labour participation remains low. Bank credit has begun to gain pace, helped by easing of stress in banks' balance sheets. Inflation has eased from pandemic highs to more tolerable levels in recent months, although it remains elevated amidst high commodity prices, including of crude.

To summarise, the RBI's measures have contributed significantly in engineering the turnaround in the Indian economy, supported by rising financial inclusion and digitalisation. We are on course to becoming among the fastest growing economies of the world, but there is far to go. Private consumption and investment are still work in progress. The restoration of livelihoods and the revival of MSMEs is a formidable task that lies ahead. The RBI remains committed to revive and sustain growth on a durable basis and continue to mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target going forward.

Governor's Statements

When the definitive chronicle of this period is recorded, history will judge the role of the RBI in ameliorating the impact of COVID-19 and in lifting the Indian economy out of the depths of the pandemic's contraction. I would not hazard the audacity of anticipating the judgment of history, but today, India is much better placed to deal with future waves of the pandemic relative to the first wave. In the documentation of this journey, however, what I fear may not receive a fuller appreciation is that the RBI's pandemic response was fashioned around and launched with a central anchor, a leit motif if you will, that bound everything together into a coherent whole. I refer to the Governor's statements, which have become an integral element of the institutional edifice of the RBI's pandemic response. I propose to balance the future narrative upfront by sharing with you an insider's view of some noteworthy aspects of these statements that may go unnoticed among the minutiae of rationale, high frequency indicators and measures.

Delving deep into hidden inner reserves of self-belief, conviction and fortitude, and guided by the light shone by the words of Mahatma Gandhi, Governor Shri Shaktikanta Das has made 13 'pandemic' statements so far, starting on March 27, 2020 when the monetary policy committee advanced its scheduled meeting to deal with the extraordinary and unprecedented situation.

The first noteworthy characteristic of the statements is that they have been visionary. In fact, the statement of February 6, 2020 ahead of the formal declaration of the pandemic seemed to have a premonition of the dark days that were to follow. This is reflected in the manner in which it assured markets that policy space is available for future action, which needs to be 'suitably timed' and 'used appropriately'. The March 27, 2020 statement called on the nation to mount a war effort to combat COVID-19, while emphasising that 'tough times never last; only tough people and tough institutions do'. My sense is that a vision of the unprecedented loss and isolation that was to follow was already in the mind's eye when that statement soothed frayed and tense expectations by stating that the RBI 'is at work and in mission mode'. It became the launching pad for aggressively unleashing an array of instruments covering many of the liquidity and regulatory measures enumerated in the preceding section as well as deferment of prudential standards.

Second, the statements were a beacon of light and hope amidst the encircling gloom. Besides the steadfast encouragement to the nation to battle the unseen assassin and emerge victorious, they cheered the warriors at the frontline – government personnel; employees of banks and financial institutions; doctors, healthcare and medical staff; police and law enforcement agencies; and all those who kept essential services operational – commended their tireless striving to beat the virus and inspired them to raise the bar. For us in the RBI, the messages were special and personalised, reaching out to those in the bio-bubble and to those outside it, including those who provided intellectual, analytical and logistics support for the preparation of the statements. In the thick of the second wave, the statements of April 7 and June 4, 2021 reposed a belief in the indomitable spirit of humanity to confront the 'trial by virus', stating that the need of the hour is not to be overwhelmed but to collectively overcome. The August 6, 2021 statement emphasised that the RBI remains in "whatever it takes" mode, with a readiness to deploy all its policy levers - monetary, prudential or regulatory. As the second wave waned, the October 2021 statement started guiding the economy on its course to normalise and entrench the recovery in an Indian trajectory, notwithstanding diverging paths of growth globally and differing monetary policy stances.

By the time of the April 17, 2020 statement, it was clear that providing system level liquidity was not going to be enough because impediments like risk aversion among banks were standing in the way of further intermediation towards the small, the disadvantaged and the truly credit constrained. This brought out the third important characteristic of Governor's statements: a wide consultative approach, which involved reaching out directly to all those entities that had been impacted by the pandemic the most, including small non-banking financial companies (NBFCs) and micro finance institutions (MFIs), and even vaccine manufacturers. When inducements to banks to lend did not work, the RBI reached out to all India financial institutions (AIFIs) to onlend to rural and cooperative institutions, MFIs, and HFCs. In subsequent months, this approach led to the fashioning of liquidity lines and regulatory relief to specific sectors identified for restructuring, emergency health services, contact intensive services, and even individuals and small businesses.

Fourth, the statements in themselves became an instrument of policy by providing consistent and credible forward guidance, especially to financial markets. This assumes central relevance because by that time, the RBI had already acted on conventional instruments to the extent practicable, and had embarked on unconventional ones, including asymmetrically widening the policy interest rate corridor and balance sheet policies, i.e., expansion of its own balance sheet to infuse liquidity into the system. The statements emphasised financial stability, congenial financial conditions for growth and the orderly evolution of the yield curve as public goods and that both market participants and the RBI have a shared responsibility in securing cooperative solutions. By the time of the October 2020 statement, Governor's statements started contemplating the road to recovery, looking back at the hitherto untravelled road and calling upon the courage of hope to strive and revive. Attention turned to qualitative aspects like deepening financial markets, digital payments security, financial inclusion, consumer protection and innovations in payment and settlement. India became one of the few nations in the world that ran its real time gross settlement (RTGS) system of swift, seamless and sound transfers of funds between banks and thereby their customers 365x24x7.

Fifth, the statements became the glue of a new innings in monetary and fiscal coordination. Pandemic-related fiscal stimulus exacerbated fiscal deficits and resulted in record levels of market borrowings by both central and state governments. As the December 2020 statement pointed out, the RBI's role as debt manager and banker to the government was tested to the hilt. A recurring theme in several statements has been that the RBI's policy measures ensured the lowest borrowing costs in nearly two decades and the highest maturity of the stock of public debt while ensuring the smooth passage of the borrowing programme. For the states, ways and means advances (WMA) limits were enhanced and rules governing withdrawals from the consolidated sinking fund were relaxed. Liquidity facilities were linked with credit guarantee schemes offered by the government. A shining example of monetary fiscal coordination, which was placed on record by the statement of April 7, 2021 was the maintenance of status quo in the monetary policy framework by the government, entrenching a regime in which the inflation target is set by the government and the RBI is mandated to achieve the target. Yet another instance that the statements of June 4, August 6, October 8 and December 8, 2021 underscore is the set of strong supply-side interventions by the government that broke the back of then stubborn food inflation and brought headline inflation back into the tolerance band.

Sixth, the statements brought to bear first-hand views from Governor's interactions in various multilateral fora on global developments and outlook, and the implications of global spillovers for the Indian economy and for the setting of monetary policy. In hindsight, these insights turned out to be invaluable. In a situation in which several EMEs were jumping on to the bandwagon of tightening monetary policy and AEs were announcing normalisation or joining their EMEs in raising policy rates, India held its ground and is among a few countries that have retained an accommodative monetary policy[6], despite some views

[6] In fact, the statement of December 8, 2021 states that "our motto is to ensure a soft landing that is well-timed."

that we have fallen behind the curve. Only time will tell whether or not India has got it right but so far, this approach has served us well and helped in charting a course into the future which is different from the world.

Conclusion

In the hallowed tradition of central banks, the RBI as an institution shuns the glare of the limelight, preferring to remain unglorified and grounded. Yet when the chips are down and crises loom, it rises up from the depths that it inhabits and flings itself at the gathering storm. When the job is done, the recovery secured and macroeconomic and financial stability ensured, it falls back, usually unsung, but always on guard. The pandemic continues to shape the future, but the RBI remains armed and battle ready. Continuously evaluating highly volatile and uncertain conditions and remaining prepared to protect the economy from shocks, the RBI has committed all its instruments to this objective, using conventional measures and fashioning new ones, as the pandemic experience showed. The lessons of the pandemic will be imbibed and the RBI will emerge stronger and more resilient than before, and committed to its mandate of price stability, keeping in mind the objective of growth.

ARTICLES

*State of the Economy**

Domestic macroeconomic conditions are striking a path that is diverging from global developments. In India, the recovery in economic activity is gaining strength and traction as it emerges from the third wave. Both manufacturing and services remain in expansion with optimism on demand parameters and uptick in consumer and business confidence. As businesses return to a new normal, the job landscape is expected to improve. Farm sector conditions remain robust albeit with some signs of rural demand slackening. Even as monetary policy remains accommodative, global spillovers have led to a tightening of financial conditions.

Introduction

Economic activity in India is recouping from a brief spell of moderation in January in view of the less virulent effects of Omicron. Better planning and strategy, management of supply chain logistics and accelerated digitalisation helped firms mitigate pandemic risks. Unlike in the first two waves, overall consumer and business confidence stayed resilient on the back of the accelerated pace of vaccination, better prospects on the general economic situation, household incomes and spending.

The vaccination programme that commenced on January 16, 2021 has progressed impressively, with around 95 per cent of the adult population inoculated with the first dose, while 77 per cent have received both the doses. Thus far, 5.24 crore people have been administered with the first dose in the 15-18 year age group. As on February 16, 2022 over 1.79 crore people in the 60 *plus* age group and frontline workers have been inoculated with precautionary dose. With daily infections and total number of infections on a waning trajectory, India seems to be well past the third wave.

In February 2022, mobility indicators have recovered to pre-pandemic levels while unemployment dropped. As businesses return to new normal, hiring activities have gained traction – several Indian firms, global giants and startups have announced massive hiring plans for India[1]. Buoyant revenue collections under the goods and services tax (GST), robust toll collections and e-way bill generations are all reflective of the ongoing revival. The farm sector remains upbeat on the back of higher minimum support prices (MSPs) announced by the Government. The manufacturing activity remains in expansion with optimism on demand parameters such as production volumes, new orders and job landscape during Q4:2021-22. Firms expect further improvement in capacity utilisation and overall financial situation. Firms in the services sector remained optimistic on demand conditions, while their expectations on overall business situation, turnover and employment conditions have moderated marginally.

Set against this backdrop, rest of the article is divided into five sections. The next section encapsulates the evolving global economic and financial market situation. Section III analyses the current developments unfolding in domestic economy. Section IV examines the evolving financial market conditions. The last section sums up the discussion.

II. Global Setting

The outlook for the global economy is beset with downside risks. Omicron continues to weigh on overall activity as mobility restrictions and containment

* This article has been prepared by Madhuresh Kumar, Shashidhar M. Lokare, Kunal Priyadarshi, Rajeev Jain, Vineet Kumar Srivastava, Harshita Keshan, Rigzen Yangdol, Prashant Kumar, Jobin Sebastian, Rachit Solanki, Saksham Sood, Priyanka Sachdeva, Abhinandan Borad, Deepika Rawat, Jibin Jose, Avnish Kumar, Rajas Saroy, Asish Thomas George, Deba Prasad Rath and Samir Ranjan Behera. Views expressed in this article are those of the authors and do not necessarily represent the views of the Reserve Bank of India.

1 *https://www.india.com/business/new-year-new-job-heres-a-list-of-companies-with-promising-hiring-plans-for-2022-employment-opportunities-5201022/*

measures resurface in several jurisdictions. Its mutations are imparting high uncertainty to the future evolution of the pandemic. As an increasing number of central banks watch with alarm ever higher levels of inflation and rush to tighten monetary policy across advanced and emerging market economies (EMEs), the pace of the global recovery is at risk. Financial conditions are tightening as markets brace up for shifts in liquidity and northwards movement in interest rates are triggering wide sell-offs in bond and equity markets as well as in currency markets in the emerging world. Hardening of food and energy prices, along with supply bottlenecks are keeping inflation entrenched and broad-based across economies. Accentuating geopolitical tensions provide another layer of uncertainty to the outlook.

In its latest World Economic Outlook (WEO) update, released on January 25, 2022, the International Monetary Fund (IMF) has projected global growth to moderate from 5.9 per cent in 2021 to 4.4 per cent in 2022 – half a percentage point lower than in its October 2020 projection (Table 1). The IMF regards escalating energy prices and supply disruptions as purveyors of elevated inflation, with the prognosis that they would persist for longer than previously envisioned.

The global composite purchasing managers' index (PMI), though still in expansion zone, slipped to an 18-month low of 51.4 in January (Chart 1a). The global services PMI fell to an 18-month low of 51.3 in January from 54.7 in December on account of lower incoming new orders. The global manufacturing PMI also tumbled to a 15-month low of 53.2 in January – down from 54.3 in December – due to weak growth of new work orders, declining international trade volumes, supply chain disruptions and rising COVID-19 infections. Fortuitously, input price pressure and suppliers' delivery time has eased in January relative to preceding months (Chart 1b).

Table 1: GDP Growth Projections – Select AEs and EMEs

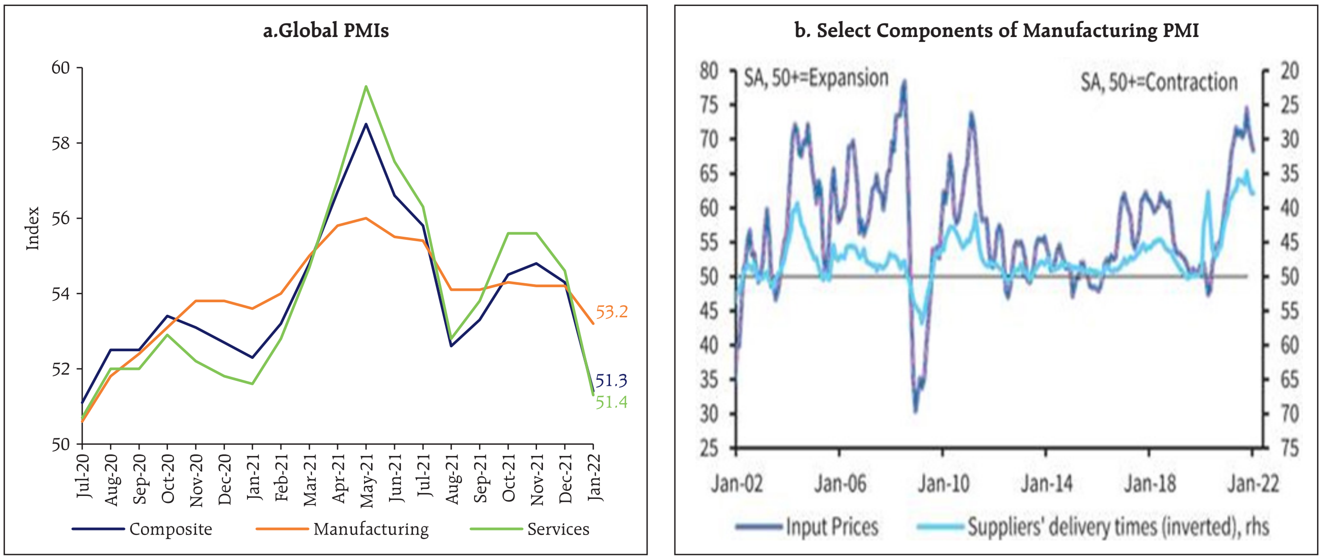
(Per cent)

Country	2021		2022	
	October 2021	January 2022	October 2021	January 2022
World*	5.9	5.9	4.9	4.4
Advanced Economies				
US	6.0	5.6	5.2	4.0
UK	6.8	7.2	5.0	4.7
Euro area	5.0	5.2	4.3	3.9
Japan	2.4	1.6	3.2	3.3
Emerging Market Economies				
Brazil	5.2	4.7	1.5	0.3
Russia	4.7	4.5	2.9	2.8
India	**9.5**	**9.0**	**8.5**	**9.0**
China	8.0	8.1	5.6	4.8
South Africa	5.0	4.6	2.2	1.9

Source: IMF.

Reflecting the modest easing of supply chain and logistics pressures, the United Nations Conference on Trade and Development (UNCTAD) has nowcast global merchandise and service trade volume to have increased by 2.2 per cent (q-o-q) in Q4:2021, up from 0.2 per cent in the previous quarter. Accordingly, world merchandise trade volume would have grown by 9.1 per cent in 2021. This is also borne out by forecast from the IMF and the CPB Netherlands (Chart 2a and b).

Chart 1: Global High Frequency Indicators



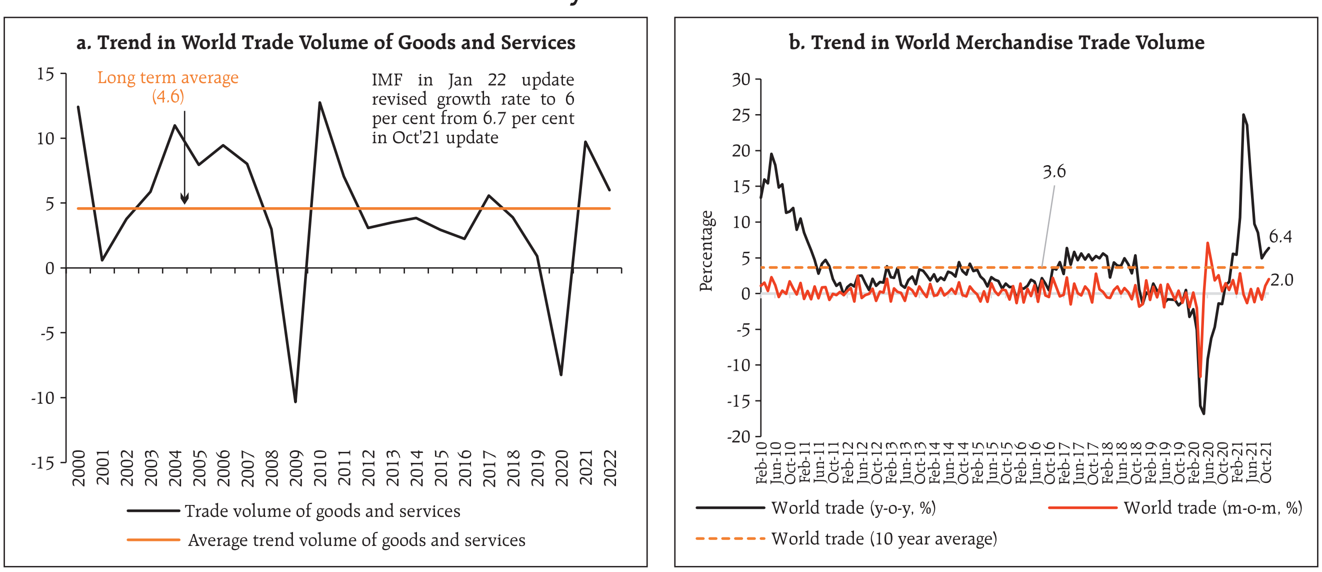
Sources: IHS Markit; and Barclays.

The Baltic Dry Index, a measure of shipping charges for dry bulk commodities, in January, plunged to its lowest level since December 2020 (Chart 3).

Container freight rates across all major sea routes, however, still rule higher than their pre-pandemic levels (Chart 4a). Freight rates from China to the US west coast ports remained ten times higher than their pre-Covid levels, implying strong demand for goods in the US, supply chain bottlenecks causing higher turnaround time at US ports, and truck shortages (Chart 4b).

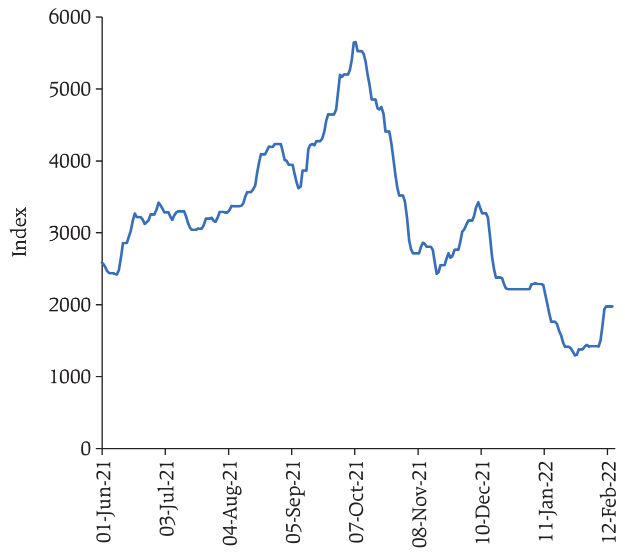
The Bloomberg commodity price index, which had plummeted in November, began rising again

Chart 2: Analysis of World Trade Volume



Sources: CPB Netherlands; and IMF.

Chart 3: Baltic Dry Index

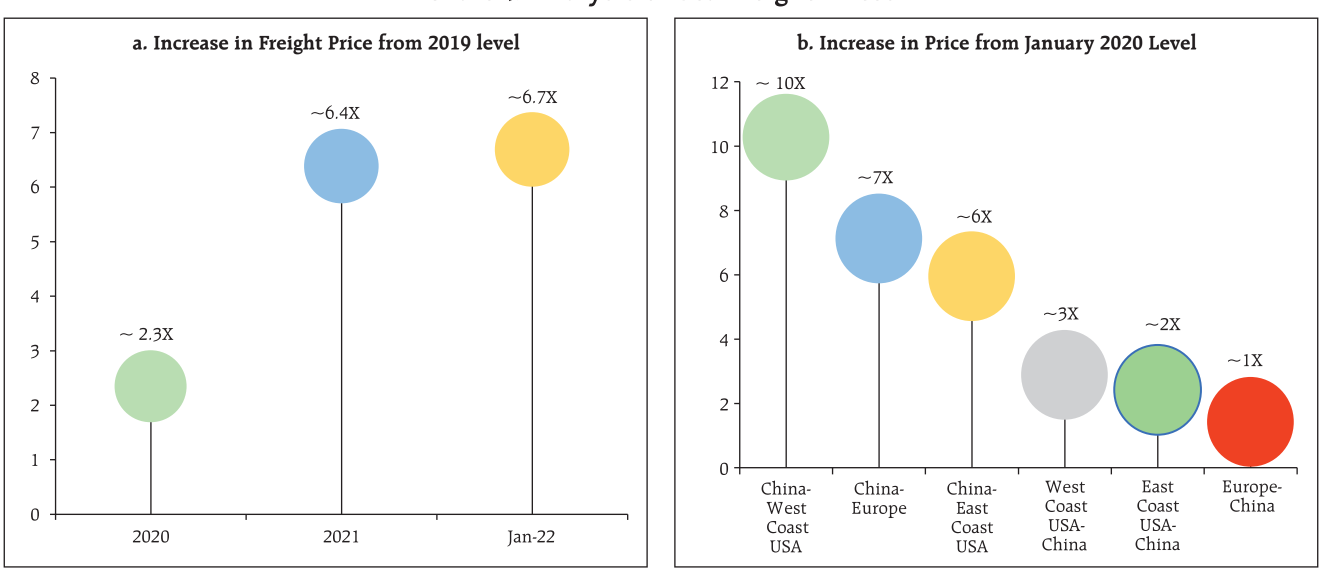


Source: Bloomberg.

to touch a 7- year high in the first week of February (Chart 5a). Prices rallied across most commodities and starkly so for crude oil, with Brent breaching the US$ 95 per barrel in the beginning of February — the first time since 2014. Geopolitical acrimony in the Middle East and in Central Asia are fueling speculations of supply disruptions, and lending support to crude oil prices (Chart 5b). Gold prices faced safe haven competition from a stronger US dollar although geopolitical tensions continue to provide support to bullion (Chart 5c). The FAO Food Price Index averaged 135.7 points in January 2022, 1.1 percent higher than in December 2021 and largely driven by vegetable oils and dairy sub-indices (Chart 5d).

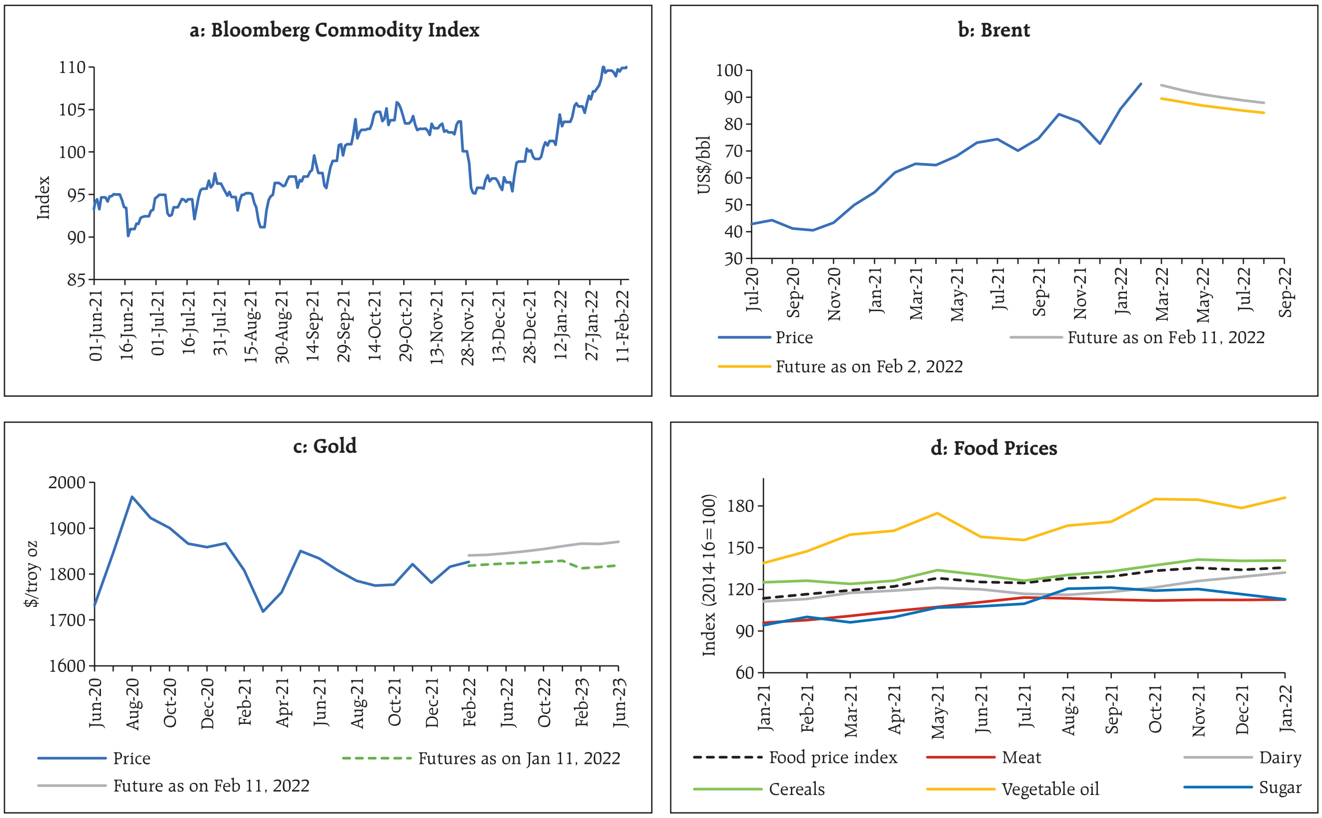
Inflation has soared to multi-decadal highs in most AEs and a few EMEs (Chart 6). In the US, inflation measured by the y-o-y change in consumer price index (CPI) climbed to 7.5 per cent in January 2022 – its highest level since 1982. Fed's preferred gauge of inflation measured by personal consumption expenditure (PCE) price index rocketed to 5.8 per cent in December. Concomitantly, core PCE inflation also accelerated to a near 40-year high of 4.9 per cent for the same month. CPI inflation in the UK also surged to 5.4 per cent in December – the highest in the data series, that began in January 1997. Euro area inflation touched a fresh peak of 5.1 per cent in January from 5 per cent in December. Among BRICS economies, CPI inflation in Brazil and Russia edged up further to 10.38 per cent and 8.7 percent, respectively, in January 2022

Chart 4: Analysis of Sea Freight Prices



Source: Reuters.

Chart 5. Commodity and Food Prices

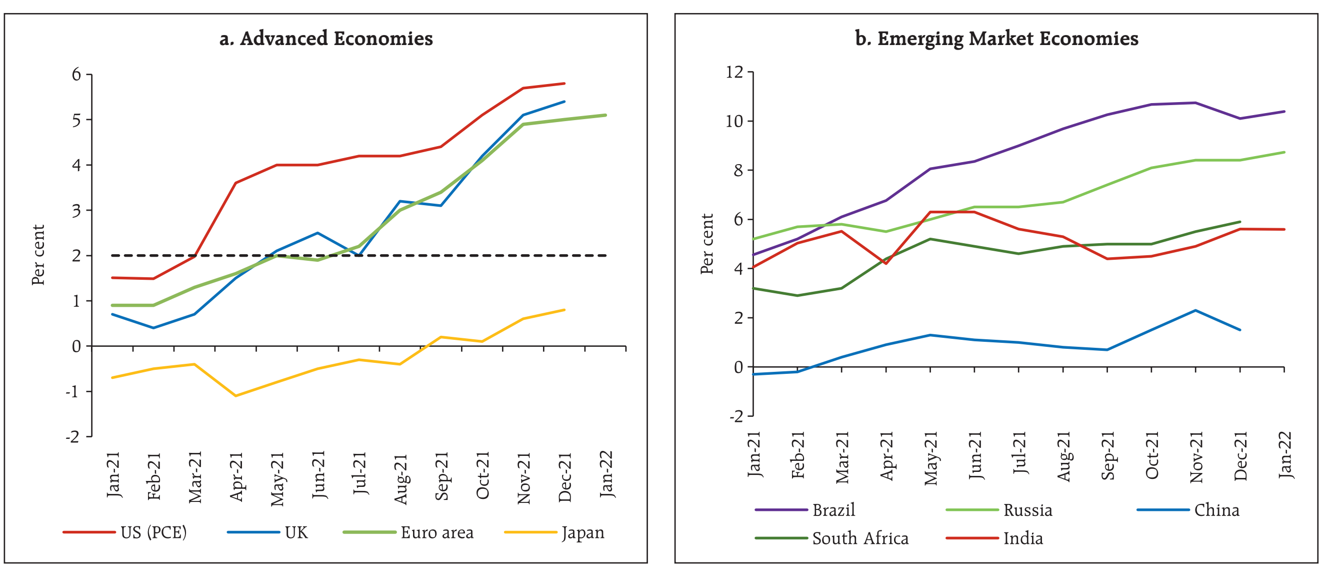


Sources: Bloomberg; World Bank Pink Sheet; and FAO.

from 10.06 per cent and 8.4 per cent, respectively, in December 2021.

Global financial markets were unsettled by sharp sell-offs since the beginning of January and investor

Chart 6: Inflation

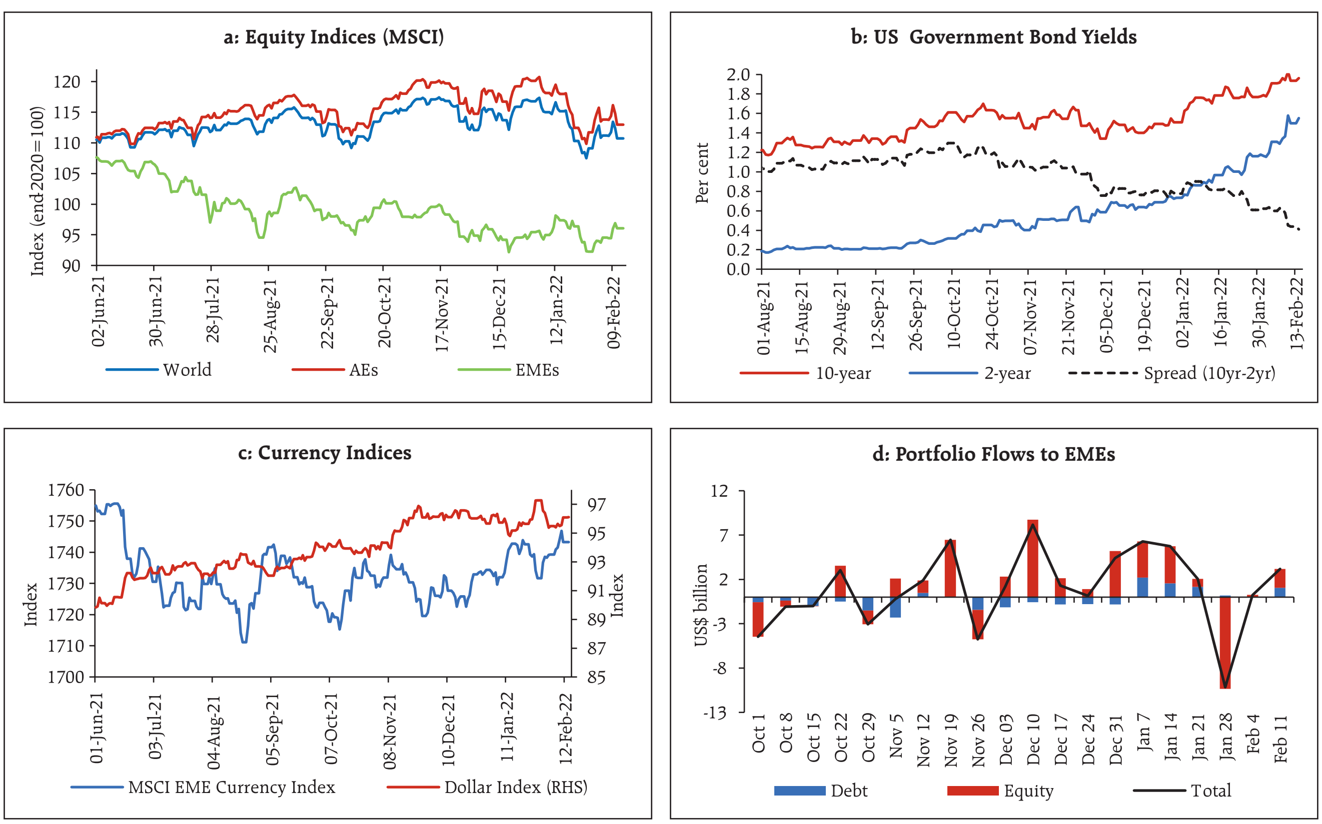


Source: Bloomberg.

sentiments have been shaken by the combination of policy pivots, geopolitical tensions and the slowing pace of global growth. In the last week of January, the Morgan Stanley Capital International (MSCI) World Equity Index fell to levels previously seen in October 2021, driven down by both AE and EME stock indices (Chart 7a). In the bond markets, the US 10-year Treasury yield hardened by more than 25 bps since the commencement of the year; these levels were last seen in February 2020. Bond market participants are pricing in more aggressive tightening by systemic central banks than previously anticipated. Furthermore, with short term rates rising even higher a flatter yield curve has emerged (Chart 7b). The US dollar strengthened in the second half of January amidst a flurry of strong economic data and the Fed's more hawkish stance (Chart 7c). Concomitantly, most EME currencies depreciated, with net capital outflows exacerbating these downward movements (Chart 7d).

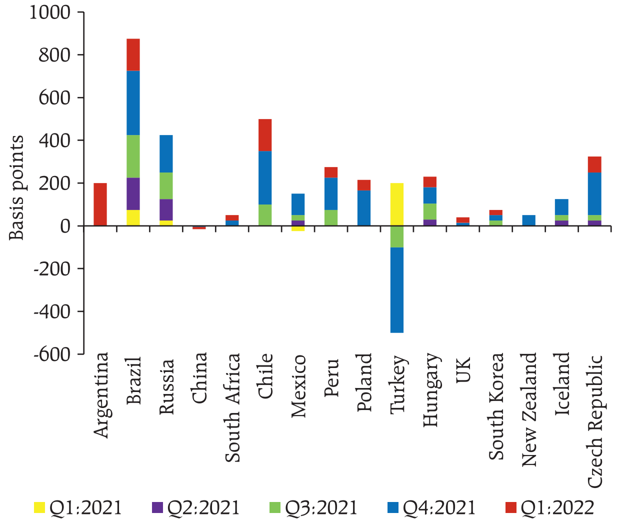
Monetary policy actions and stances continue to deviate across countries, with more AE central banks undertaking or giving forward guidance of rate hikes (Chart 8). In its January meeting, the US Fed announced that it would wind up quantitative easing by early March as scheduled, while also providing forward guidance that it would soon be appropriate to raise the target range for the federal funds rate. It also set out principles for balance sheet reduction. The Bank of England (BoE) effected its second consecutive rate hike in February as it increased its benchmark rate by 25 basis points (bps) to 0.5 per cent, a cumulative increase by 40 bps. The Reserve Bank of Australia maintained its policy rate but announced a halt to its bond purchase programme in early February. The

Chart 7: Financial Markets



Sources: Bloomberg; and IIF.

Chart 8: Rate Actions of Central Banks of Select Countries



Source: Central bank websites.

Bank of Japan kept its benchmark rate unchanged while acknowledging a higher inflation forecast. Similarly, the Bank of Canada did not alter its policy rate, but it withdrew its exceptional forward guidance on its policy rate as economic slack got absorbed. The Monetary Authority of Singapore tightened its monetary policy settings for the second time in seven years in its first out-of-cycle move by raising the rate of appreciation for its S$NEER policy band. Among EME central banks, Chile and Brazil hiked their benchmark rates by 150 bps each in January and February, respectively. Bank of Russia raised its key rates for the eighth consecutive meeting by 100 bps to 10.5 per cent in February 2022. Similarly, Hungary, South Africa and Sri Lanka also increased their policy rates by 50 bps, 25 bps and 50 bps, respectively, last month. Indonesia has made a move towards liquidity normalisation by announcing an increase of 300 bps in domestic currency reserve requirement for commercial banks to be implemented in three steps from March to September 2022. Turkey took a pause in its January meeting after a cumulative 500 bps reduction in rates between September and December 2021. The People's Bank of China cut its 1-year loan prime rate (LPR) for the second consecutive time by 10 bps to 3.7 per cent. It also lowered the 5-year LPR – the benchmark for pricing of mortgages – by 5 bps to 4.6 per cent, its first reduction since April 2020. China also lowered rates on 1-year medium term lending facility loans and 7-day reverse repurchase agreements by 10 bps each.

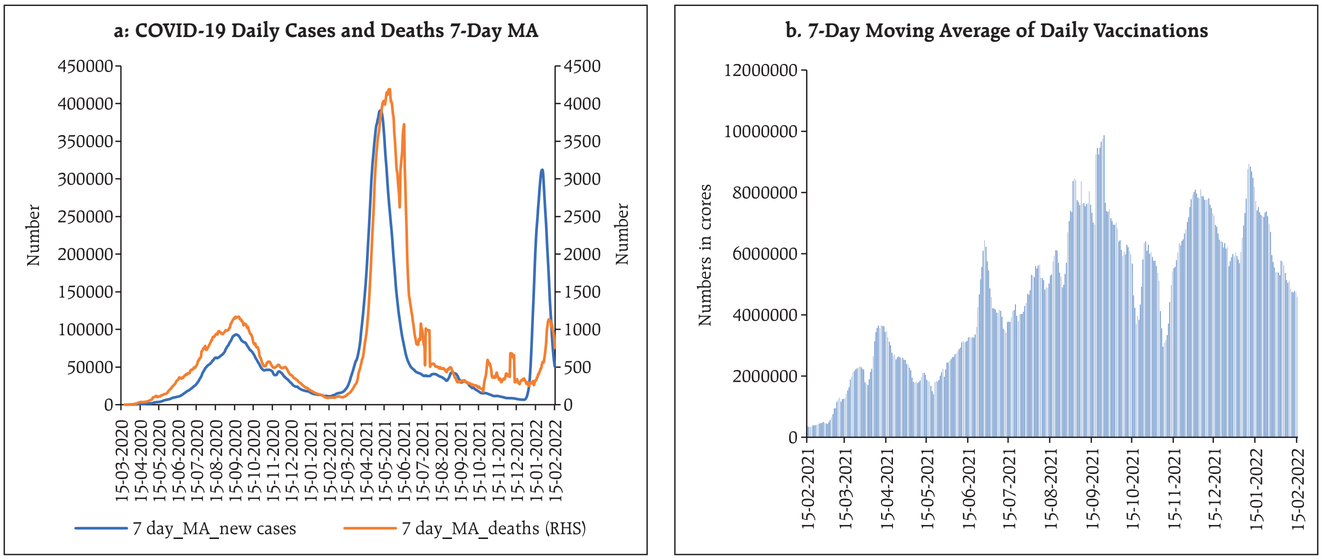
To sum up, the global economic outlook continues to be held hostage by the pandemic, even as geopolitical face-offs and intensified volatility in financial markets impart uncertainty. Supply chain disruptions, strains in production lines, energy price volatility and wage pressures entail upside risks to inflation, sharpening the policy trade-offs. Risks to EMEs in the form of capital outflows, depreciating currencies, and deteriorating fiscal positions have heightened and darkened the outlook.

III. Domestic Developments

Domestic macroeconomic conditions are diverging from global configuration. A recovery in economic activity is gaining strength and traction after the slight moderation encountered in the face of the third wave. India's total active case count surged past 22.36 lakh on January 24, 2022 from a low of 84,349 on December 28, 2021. Daily infections, however, plateaued since January 21, 2022 and declined to 27,409 on February 14, 2022 from a peak of 3.47 lakh on January 20, 2022 (Chart 9a). On the vaccination front, the daily vaccination rate increased to more than 90 lakhs in the first ten days of January but has slowed since then. Currently, while the daily vaccinations stand at around the 50-lakh mark, total vaccinations have crossed 173 crore doses (Chart 9b).

In conjunction with the decline in new infections, mobility improved in February 2022, with Google and Apple mobility indices surpassing levels sequentially as well as over a year ago. The Google mobility index for mobility around retail and recreation activities, parks, transit stations and

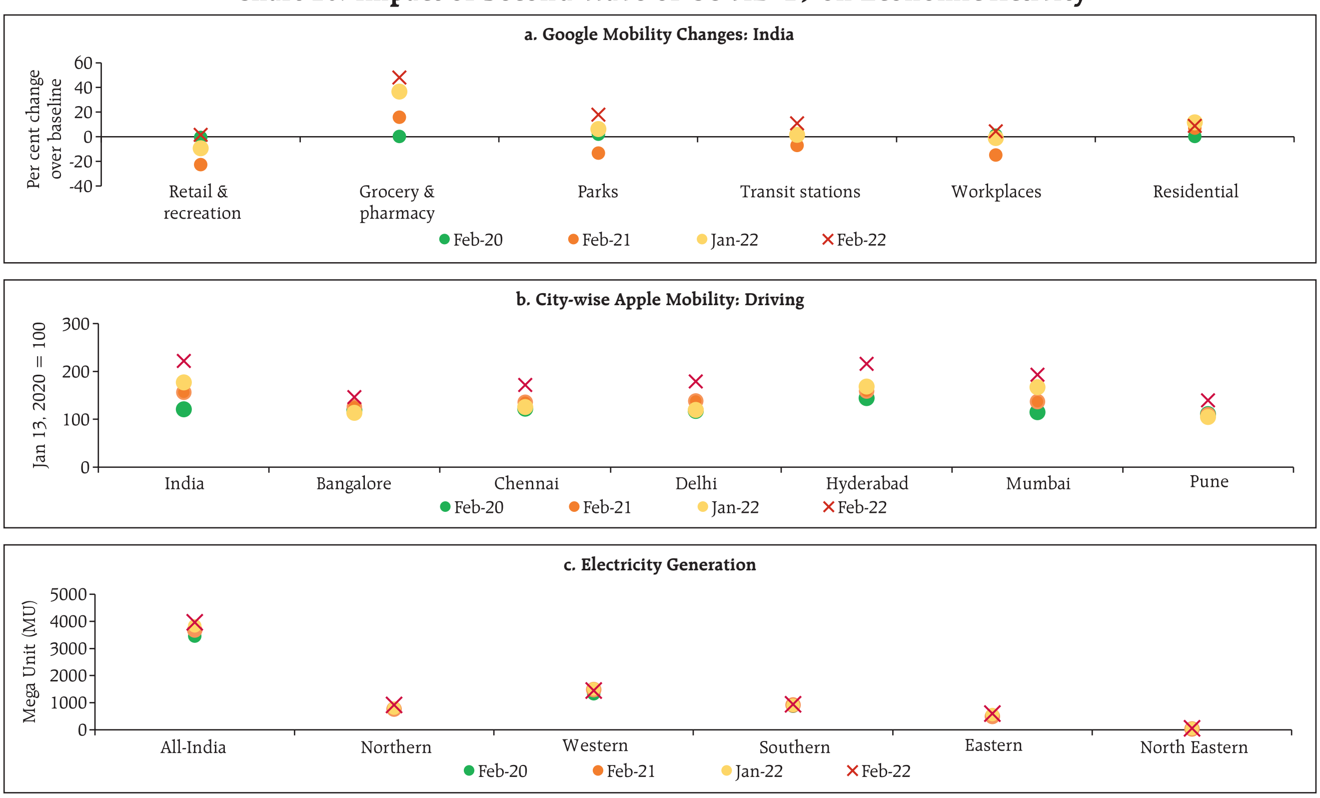
Chart 9: Covid-19 Cases and Vaccinations



Source: Ministry of Health and Family Welfare (MoH&FW).

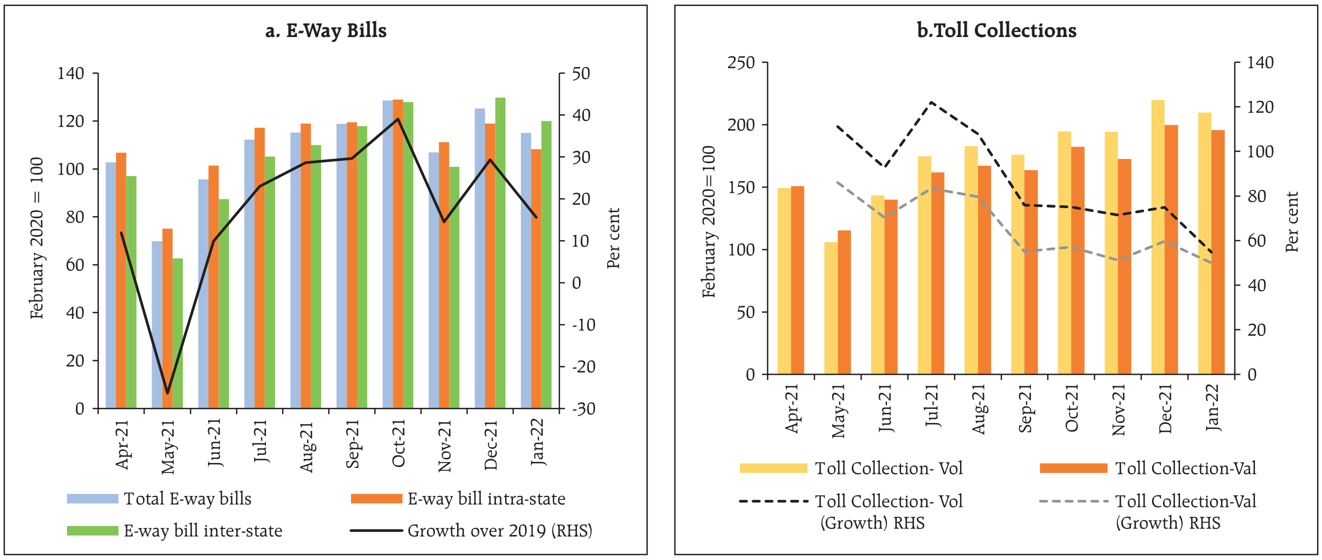
workplaces reached pre-pandemic levels, while the Apple mobility index moved upward across all major cities (Charts 10a and 10b). With the resumption of activity, electricity generation, picked up in the first fortnight of February, surpassing pre-pandemic levels (Chart 10c).

Chart 10: Impact of Second Wave of COVID-19 on Economic Activity



Sources: Google; CEIC; and POSOCO.

Chart 11: E-way Bills and Toll Collections



Sources: GSTN; Reserve Bank of India; and Authors' own calculations.

Aggregate Demand

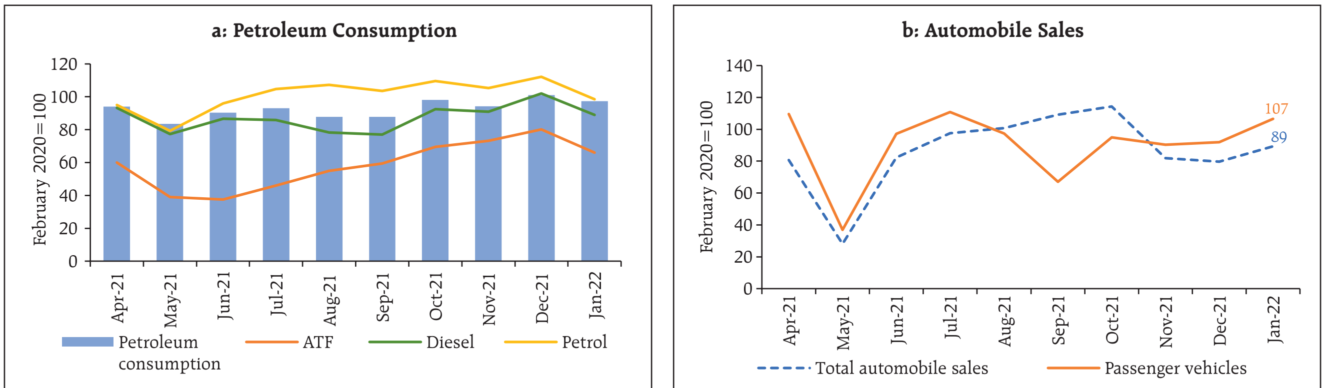
In spite of the third wave, e-way bills generation remained above pre-pandemic levels (Chart 11a), although there was a sequential dip in January due to mobility restrictions. Toll collections remained resilient in January 2022, even as the y-o-y growth moderated to 54.8 per cent owing to the waning of base effect (Chart 11b).

Petroleum consumption moderated with re-invocation of mobility restrictions. The moderation was recorded across all major categories in January 2022. The consumption of diesel and aviation turbine fuel also declined (Chart 12a).

Vehicle registrations continued to decline, led by a drag in the non-transport segment, though the transport segment registered a sequential increase (Chart 12c). Rural demand slumped, with domestic sales of tractors contracting by 32.6 per cent partially owing to an unfavourable base effect. The decline in tractor demand is reported to be attributed to delayed harvest of *Kharif* crops due to late monsoons. Sales of two wheelers, three wheelers and motorcycles tumbled on both y-o-y and over pre-pandemic levels, owing to a lackluster rural demand, coupled with rising fuel prices (Chart 12d). Within two wheelers, the electric segment continued to post robust growth by over 44 per cent sequentially in January 2022 as online retailers turned to electric two wheelers for logistical operations and last mile deliveries.

As per the household survey of the Centre for Monitoring Indian Economy (CMIE), the labour participation rate fell from 40.9 in December 2021 to 39.9 in January 2022 as containment measures increased (Chart 13).

Chart 12: Transport Sector Indicators



Sources: Petroleum Planning & Analysis Cell; and Authors' own calculations.

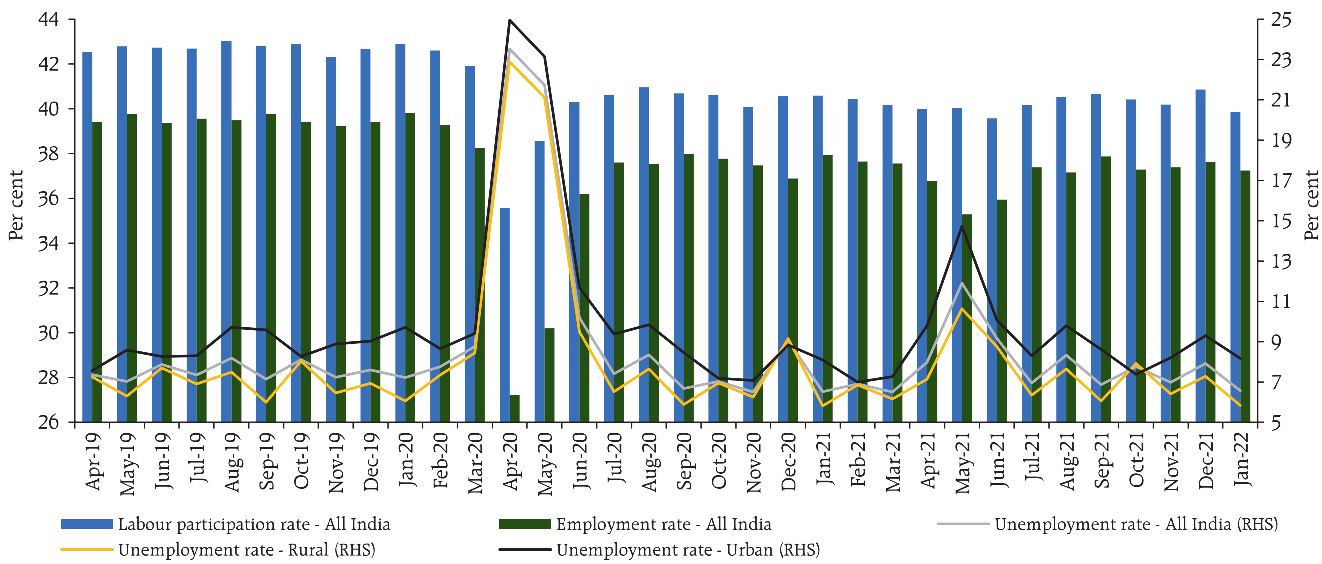
Sources: SIAM; and Authors' own calculations.

Sources: Vahan Dashboard; and Authors' own calculations.

Sources: SIAM; and TMA; and Authors' own calculations.

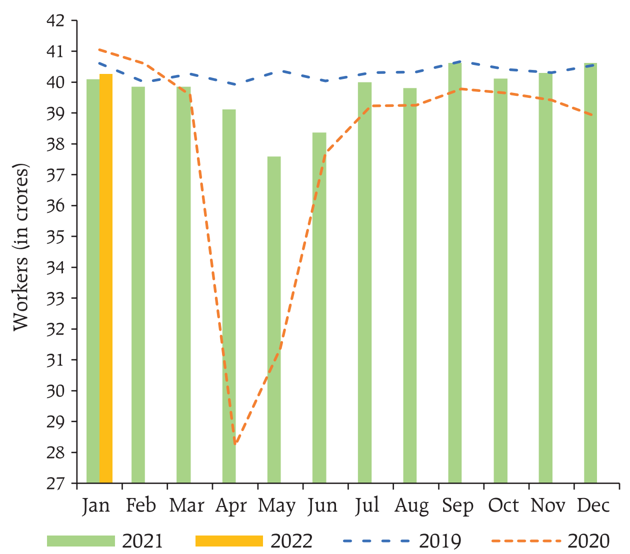
As per the CMIE's employment statistics, the labour market suffered marginally in January 2022 under the impact of the third wave. Though the number of workers employed declined sequentially,

Chart 13: Employment, Unemployment and Labour Participation Rates



Sources: CMIE.

Chart 14: Number of Workers in Employment



Source: CMIE.

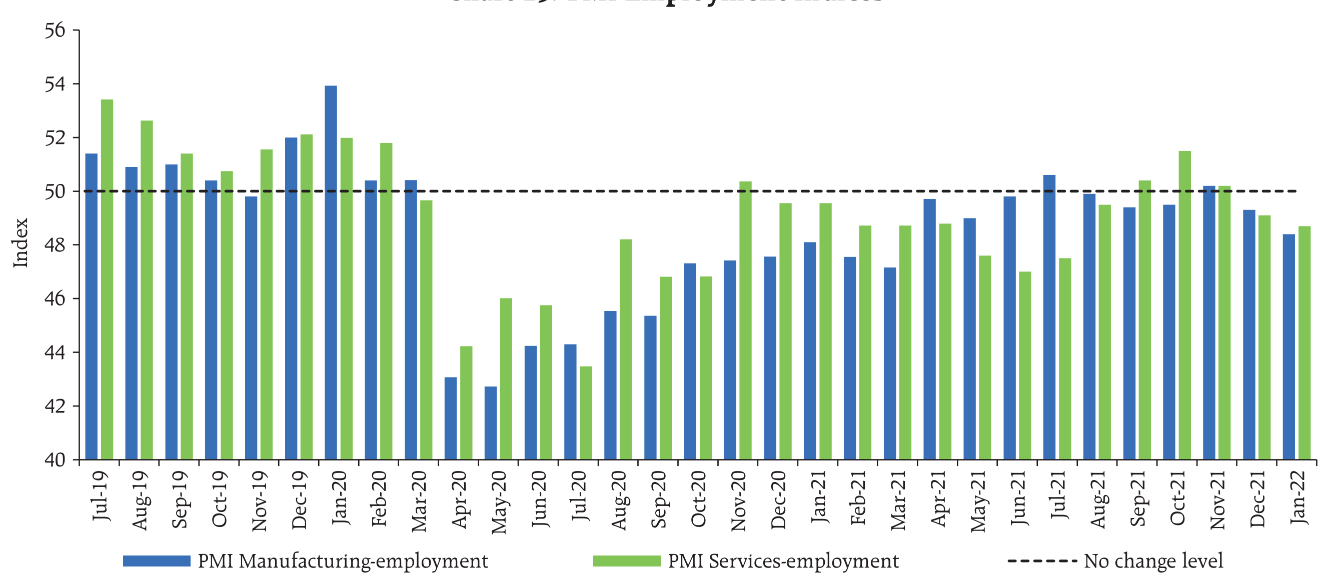
there was an expansion in the workforce over a year ago (Chart 14).

The PMIs show that employment under both manufacturing and services contracted for the second consecutive month after showing expansion in November 2021 (Chart 15).

India's merchandise exports at US$ 34.1 billion in January 2022 registered a robust expansion of 23.7 per cent y-o-y (31.8 per cent over the pre-pandemic level) (Chart 16a and b). During April 2021 – January 2022, the merchandise exports reached US$ 335.4 billion, covering 83.9 per cent of the target set for 2021-22.

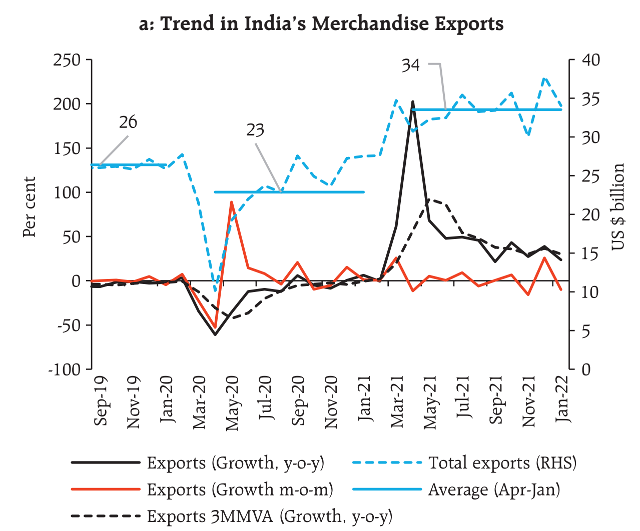
Export growth was broad-based, with ten major commodity groups accounting for more than 78 per cent of exports recording an expansion above their pre-pandemic level (Table 2). However, decline in export momentum was visible across major categories. The improvement in export performance stemmed from higher value of shipments of engineering goods, chemicals and petroleum products. Pharmaceuticals exports grew by 15.3 per cent over the pre-pandemic level supported by record exports of 309.3 lakh COVID-19 vaccine doses. The engineering goods exports stayed above US$ 9 billion mark for the second consecutive month in January 2022. The Engineering Exports Promotion Council (EEPC) expects exports of heating, ventilation, air-conditioning and refrigeration (HVAC) segment to

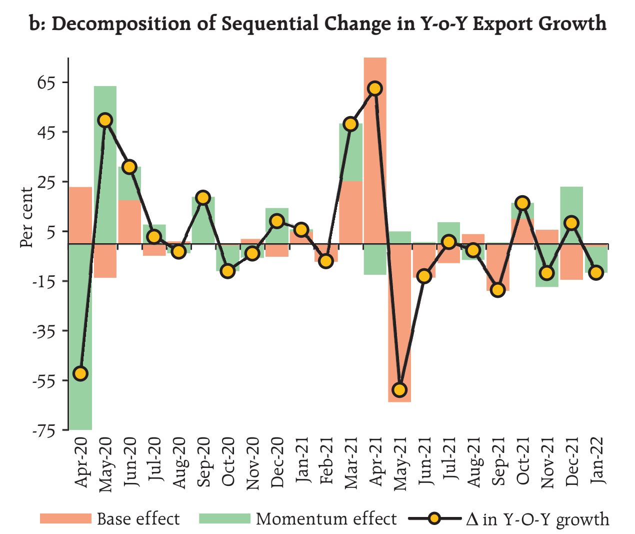
Chart 15: PMI Employment Indices



Sources: IHS Markit.

Chart 16: India's Merchandise Exports – January 2022





Sources: PIB; DGCI&S; and Authors' own calculations.

grow exponentially. Rice, the largest constituent of the agricultural export basket, surged by 35.9 per cent over the pre-pandemic level.

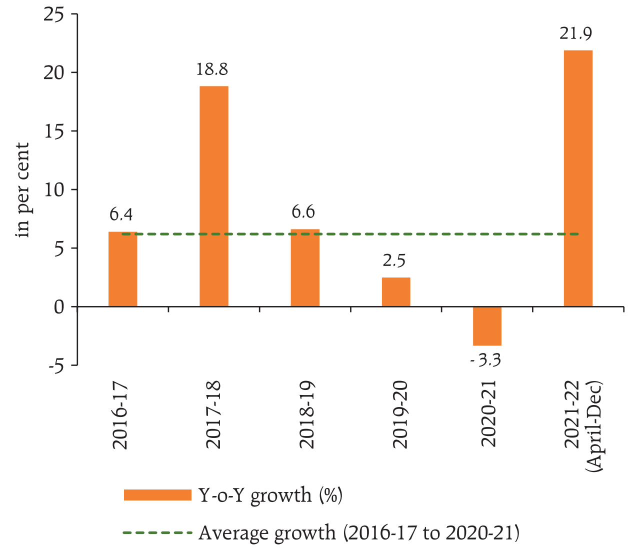
During April 2021-January 2022, exports of electronic goods accelerated by 26.3 per cent over pre-pandemic levels. The recent policy measures announced in the Union Budget 2022-23 such as calibration of customs duty to promote domestic manufacturing of electronic goods would further bolster electronic export potential. The reduction of customs duty on diamonds and gemstones that was also announced in the Budget may lower the input costs and thus turn our gems and jewellery exports more competitive. The rationalisation of custom duties aims to empower Aatmanirbhar Bharat goals through increasing value-added manufacturing and thereby strengthening India's participation in global value chains.

Table 2: Top 10 Exported Commodities

Top 10 Export Commodity Group	Jan-22 (% Share)	Jan-22/Jan-20 (Growth)	Jan-22/Dec-21 (Growth)	Apr 21 - Jan 22/Apr 19 - Jan 20 (Growth)
Engineering Goods	27.0	47.9	-6.0	37.7
Petroleum Products	11.0	17.1	-36.6	32.4
Gems and Jewellery	9.5	12.4	8.0	4.5
Organic and Inorganic Chemicals	7.2	29.4	-8.1	28.3
Drugs and Pharmaceuticals	6.0	15.3	-11.4	16.2
Readymade Garments of All Textiles	4.5	6.7	5.6	-1.7
Cotton Yarn/Fabrics	4.1	52.8	-3.8	50.2
Electronic Goods	4.0	33.8	-18.4	26.3
Plastic and Linoleum	2.5	46.5	-6.2	26.4
Rice	2.4	35.9	-9.1	52.1
Total of 10 Major Commodity Groups	78.2	29.8	-11.3	26.9
Total Exports	**100.0**	31.8	-9.9	27

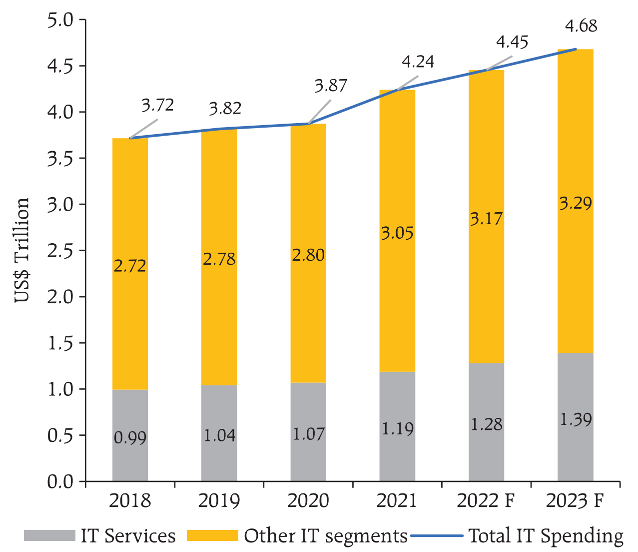
Source: MoCI.

Chart 17: Growth in India's Services exports



Source: RBI.

Chart 18: Global IT Spending



Source: Gartner.

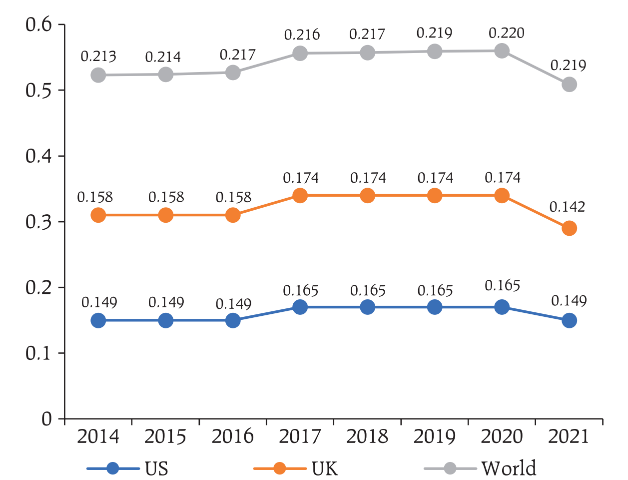
As per the provisional data released on services trade (February 1), India's services exports surged rapidly to clock a double-digit growth for the third consecutive quarter in Q3:2021-22, boosted mainly by IT and business services. During April-December 2021, the y-o-y growth in services exports surged well beyond the average growth recorded during preceding 5 years (Chart 17).

The latest forecasts of global IT spending by Gartner[2] for 2022 and 2023 indicate a buoyant outlook (Chart 18). Furthermore, the OECD's latest services trade restrictiveness index[3] indicates accelerated pace of liberalisation in 2021 relative to 2020. Trade liberalisation in sectors such as computer services by India's major trading partners, *i.e.*, the US and the UK, may bolster India's software exports going forward and aid in sustaining the higher growth (Chart 19).

Merchandise imports at US$ 52.0 billion in January 2022 rose sharply even though import growth moderated sequentially. Nonetheless, imports remained above the US$ 50 billion mark for the fifth consecutive month (Chart 20a and 20b).

Import growth was broad-based, with nine major commodity groups accounting for more than half of imports recording an expansion over their pre-pandemic levels (Table 3). Higher demand for imports of electronic goods, electrical and non-electrical machinery, chemicals and coal drove this expansion.

Chart 19: OECD's Trade Restrictiveness Index for Computer Services

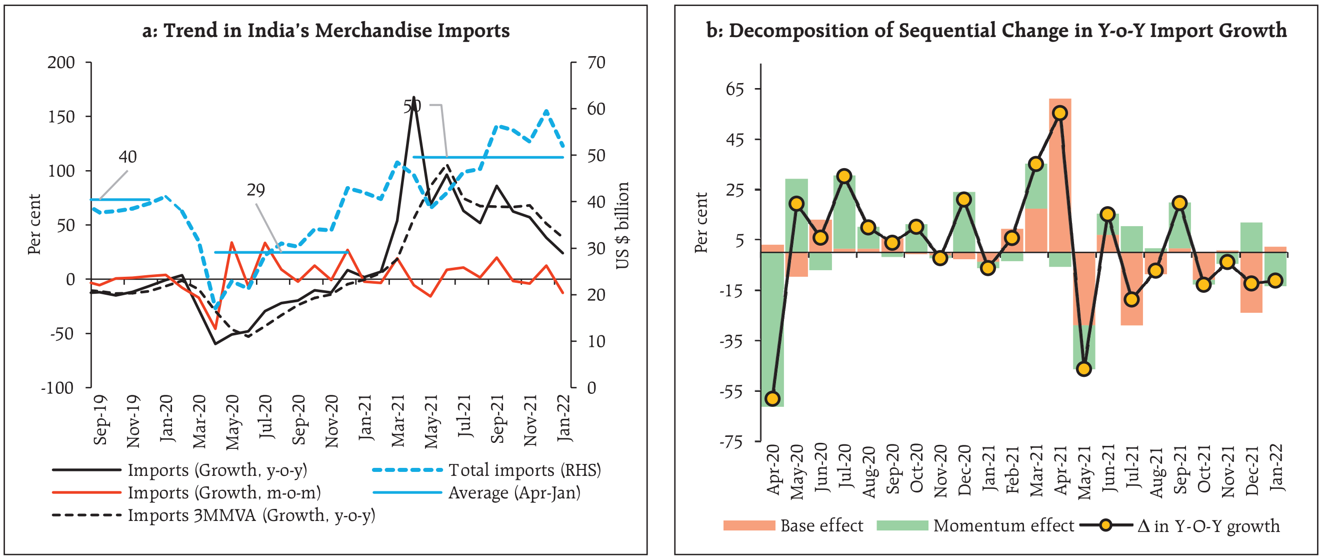


Note: STRI (Services Trade Restrictiveness Index) take values between 0 to 1, where 0 is completely open and 1 is completely closed.
Source: OECD.

2 Gartner press release on Worldwide IT spending dated January 18, 2022.

3 OCED press release on Services trade restrictiveness index dated February 02, 2022.

Chart 20: India's Merchandise Imports – January 2022



Sources: PIB; DGCI&S; and Authors' own calculations.

Oil imports, on the other hand, slumped by 12.1 per cent in January 2022 over pre-pandemic levels as restrictions in the wake of Omicron impacted demand. Gold imports witnessed contraction on both y-o-y and sequential basis due to weak demand. The World Gold Council (WGC) expects India's gold imports to reach 800-850 tonnes level in 2022.

The imports of electronic goods remained at record levels in January 2022 and expanded by 82.6 per cent over pre- pandemic performance (Chart 21a). Overall non-oil non-gold imports maintained strong growth for the eighth consecutive month in January 2022 (Chart 21b).

India's merchandise trade deficit widened to US$ 17.9 billion in January 2022, up from US$ 14.5 billion a year ago and US$ 15.3 billion in January 2020.

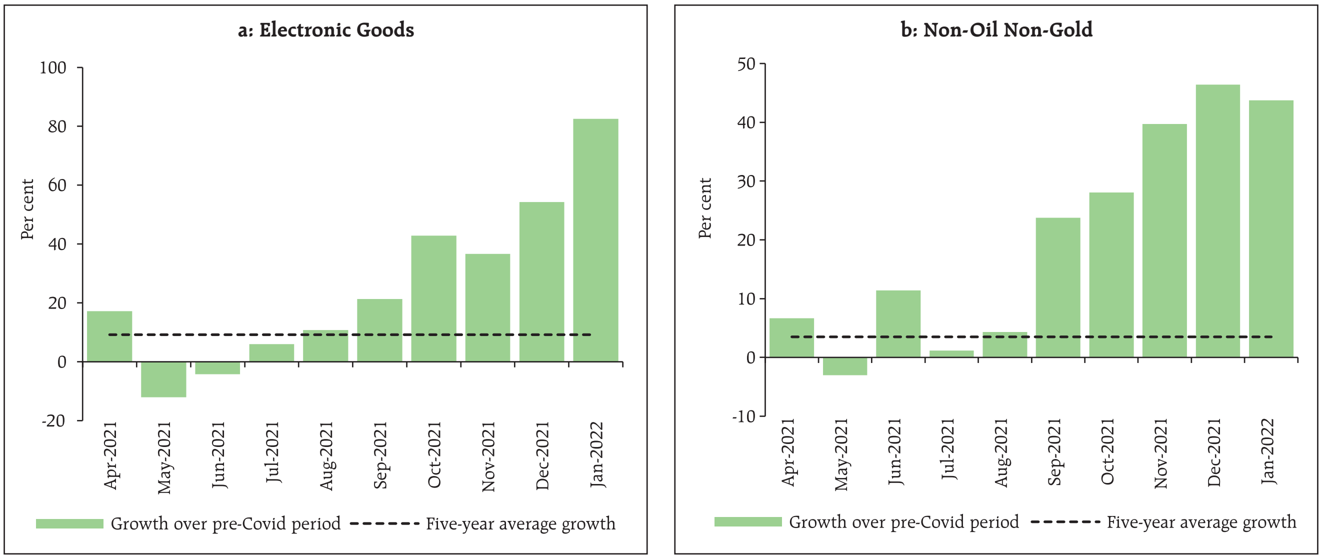
The Union Budget 2022-23 reiterated the commitment to growth revival through a focus on

Table 3: Top 10 Imported Commodities

Top 10 Import Commodity Group	Jan-22 (% Share)	Jan-22/Jan-20 (Growth)	Jan-22/Dec-21 (Growth)	Apr 21 - Jan 22/Apr 19 - Jan 20 (Growth)
Petroleum, Crude & products	22.0	-12.1	-29.3	18.9
Electronic goods	15.8	82.6	27.8	24.3
Machinery, electrical & non-electrical	7.8	18.3	6.4	1.8
Organic & Inorganic Chemicals	5.1	56.2	-17.8	40.8
Coal, Coke & Briquettes, etc.	5.0	53.2	-7.0	27.5
Gold	4.6	51.7	-49.2	64.1
Pearls, pre & Semi-prec. stones	4.5	59.5	-19.3	31.6
Vegetable Oil	3.6	121.5	1.7	96.6
Non-ferrous metals	3.5	59.6	7.4	28.6
Artificial resins, plastic materials,	3.4	39.3	-10.6	32.1
Total of 10 Major Commodity Groups	75.3	27.8	-14.1	27.3
Total Imports	**100.0**	26.4	-12.6	22.3

Source: MoCI.

Chart 21: Growth in Imports of Key Commodities (Growth over Pre-Covid Level)



Sources: PIB; DGCI&S; and Authors' own calculations.

capital expenditure. Its emphasis on public investment through infrastructure development is expected to crowd-in private investment and strengthen job creation and demand in 2022-23 and beyond.

The gross fiscal deficit (GFD) in 2021-22 (RE) is placed at 6.9 per cent of GDP as against budget estimates (BE) of 6.8 per cent of GDP. Underlying the modest deviation of 0.1 percentage points are sizeable deviations in revenue and expenditure from their budgeted levels. Specifically, net tax revenue of the Union government exceeded the budget estimates (BE) by 0.9 per cent of GDP. Non-tax revenue overshot the BE by 0.3 per cent of GDP, aided by higher than budgeted surplus transfer by the Reserve Bank. In the revised estimates (RE) disinvestment receipts have been brought down by 0.4 per cent of GDP. On the expenditure front, both revenue and capital expenditure have overshot the BE by 1.0 and 0.2 per cent of GDP, respectively.

In 2022-23 (BE), the GFD is placed at 6.4 per cent of GDP, a consolidation of 42 basis points over 2021-22 (RE) in line with the medium-term target of bringing GFD below 4.5 per cent by 2024-25. Revenue projections for 2022-23 (BE) are based on realistic assumptions, *viz.*, tax buoyancy of 0.9 and disinvestment receipts of ₹65,000 crore (as against the target of ₹1.75 lakh crore in 2021-22 (BE)). On the expenditure front, the government has placed a major thrust on infrastructure spending. Capital expenditure is budgeted to increase to 2.9 per cent from an average of 1.7 per cent during 2010-20. Effective capital expenditure, which includes capital expenditure of the centre *plus* grants-in-aid to states for creation of capital assets, is budgeted at 4.1 per cent in 2022-23(BE). The Budget proposals for 2022-23 entail gross market borrowings of ₹14.95 lakh crore, which somewhat exceeded the market expectations, and resulted in the hardening of 10-year G-sec benchmark (6.54 GS 2032) by 15 basis points, recording its largest jump in 12 months (Table 4).

After contracting by around 9 per cent in 2020-21, tax devolution to states has recovered sharply in 2021-22 (RE), exceeding the budget estimates for 2021-22. Overall tax devolution grew by 25.2 per cent

Table 4: Key Indicators (as per cent of GDP)

	2020-21	2021-22		2022-23
	Actuals	BE	RE	BE
1	2	3	4	5
1. Fiscal Deficit	9.2	6.8	6.9	6.4
2. Revenue Deficit	7.3	5.1	4.7	3.8
3. Primary Deficit	5.7	3.1	3.3	2.8
4. Gross Tax Revenue	10.2	9.9	10.8	10.7
5. Non-Tax Revenue	1.0	1.1	1.4	1.0
6. Revenue Expenditure	15.6	13.1	13.6	12.4
7. Capital Expenditure	2.2	2.5	2.6	2.9
of which:				
Capital Outlay	*1.6*	*2.3*	*2.4*	*2.4*

Note: Capital outlay is capital expenditure *less* loans and advances.
Source: Union Budget Documents.

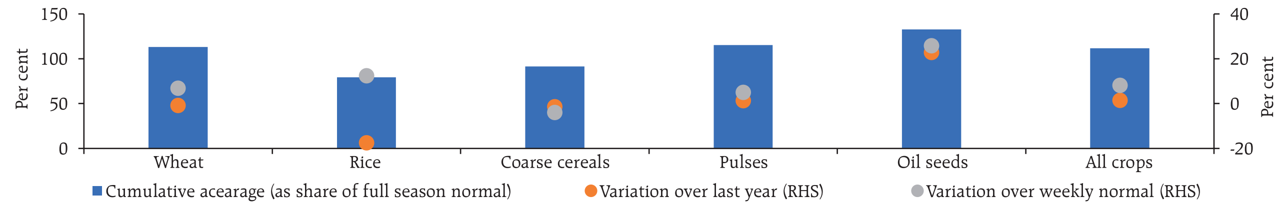
in 2021-22 (RE) over a year ago and has been budgeted to grow further by 9.6 per cent in 2022-23. In order to give impetus to states' capital expenditure, the budget has stepped up the outlay for the 'Scheme for Financial Assistance to States for Capital Investment' from ₹15,000 crore in 2021-22 (RE) to ₹1 lakh crore in 2022-23 (BE). The y-o-y growth in states' capital outlay for the period April-November, 2021 stands at a robust 55.2 per cent, with many states registering a growth of over 100 per cent y-o-y.

Aggregate Supply

As on February 04, 2022 the overall acreage under *rabi* crops touched a new record of 700.8 lakh hectares, which is 1.5 per cent above the previous year's acreage and 8.2 per cent above the normal (5-year average) acreage (Chart 22a). The sowing was spurred by adequate reservoir levels (Chart 22b) and a spatially and temporally well-distributed Northeast (NE) monsoon rainfall. Wheat sowing has recorded a decline from last year mainly due to diversification towards oilseeds and pulses in Haryana, Maharashtra and Gujarat. The share of oilseeds, mainly rapeseed

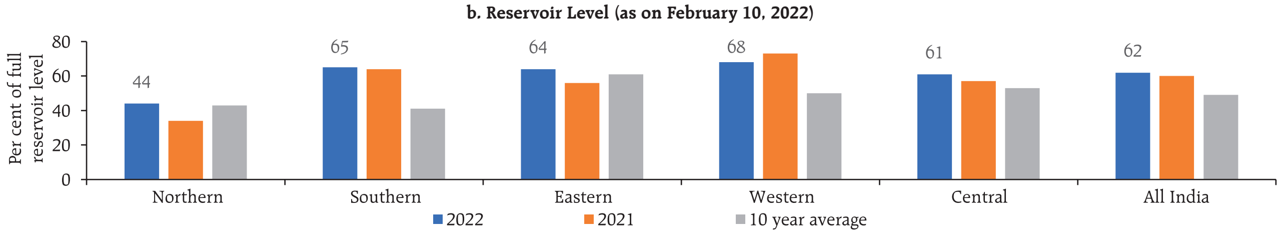
Chart 22: Rural Economy

a. Progress of *Rabi* Sowing (as on February 04,2022)



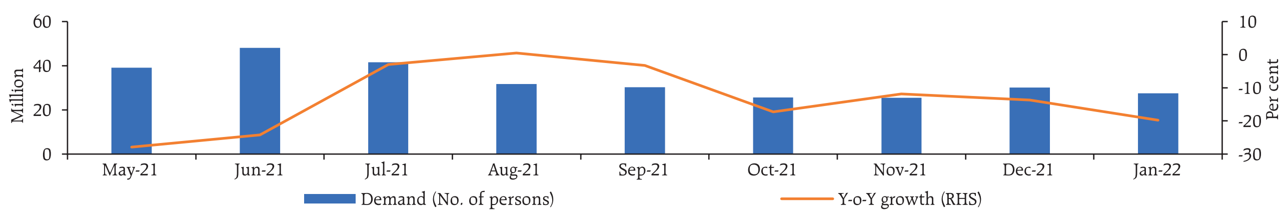
Note: Normal refers to previous 5-year average.
Source: Ministry of Agriculture and Farmer's Welfare.

b. Reservoir Level (as on February 10, 2022)



Source: Central Water Commission.

c: Demand for work under MGNREGS



Source: Ministry of Rural Development.

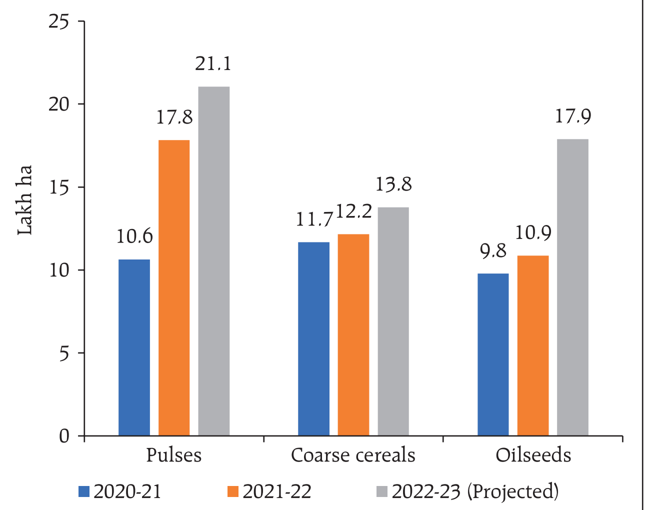
and mustard in total acreage has stepped up from 12.3 per cent (full season normal) to 14.7 per cent. The demand for work under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) has been on decline (y-o-y basis) all through the season, partly reflecting the employment generated by the rabi sowing in the rural hinterlands (Chart 22c).

The *Zaid* crop season (March to May), that extends from the end of the *rabi* season to the beginning of *kharif* season, accounts for between 2.9 per cent to 5.1 per cent of net sown area. The increase in *zaid* acreage in the last couple of years has engaged the attention (Chart 23).

As on February 14, 2022, procurement of rice touched 457.5 lakh tonnes (*kharif* marketing season 2021-22) which is 6.5 higher than a year ago. As per the quarterly buffer norms (January-March) stock levels for both rice and wheat stay comfortable (7.8 and 2.0 times respectively) as of end-January 2022.

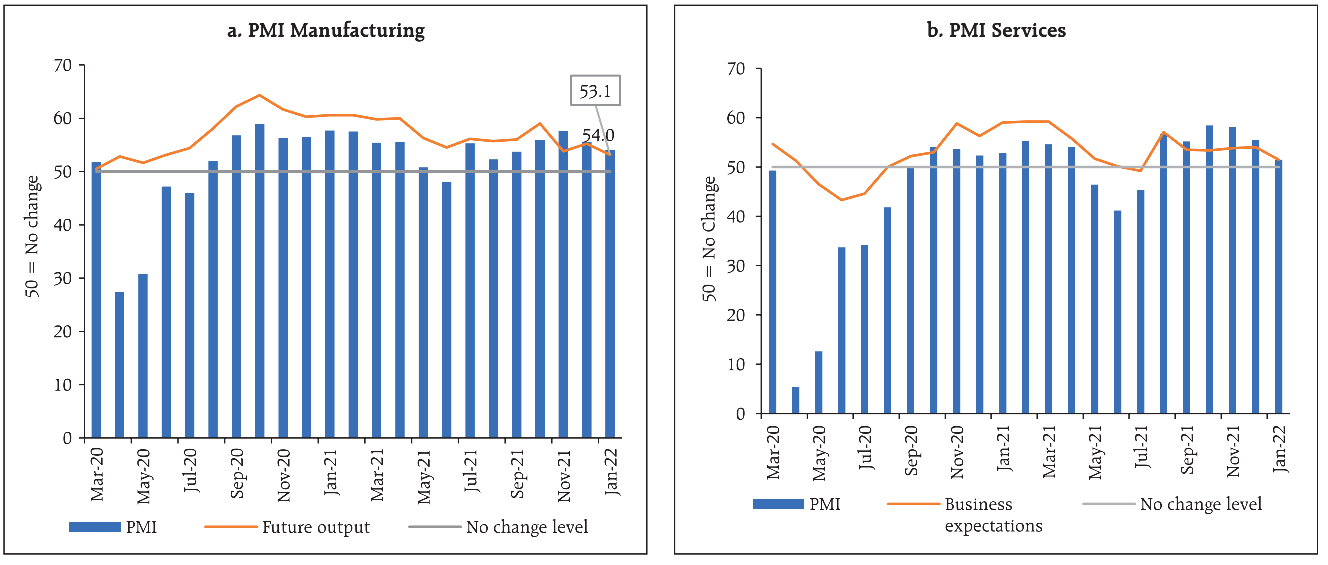
In the industrial sector, the headline manufacturing PMI remained in expansion at 54.0 in January 2022 even as it decreased from 55.5 a month ago. The sub-indices of new orders and production expanded at a slower pace and output prices picked up. PMI services too remained in expansion mode at 51.5, though it recorded the lowest expansion in the last six months. The business expectations index (BEI) for services expanded for the sixth successive month in January 2022 (Chart 24).

Chart 23: Increasing Prospects for *Zaid* Season



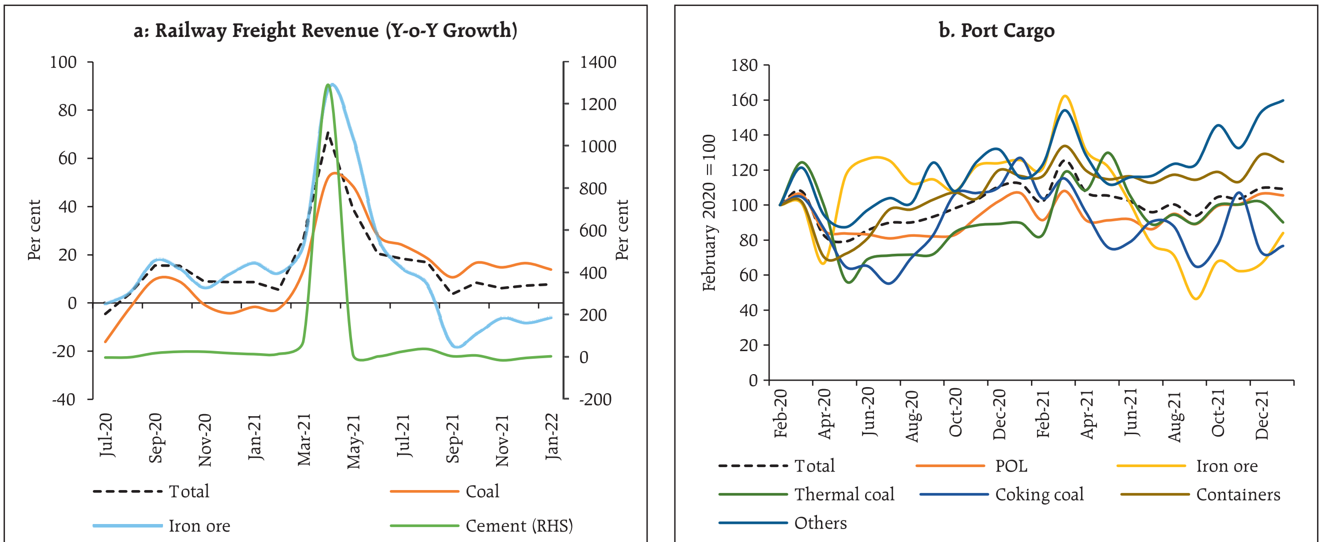
Note: Some states grow summer rice (nearly 20-30 lakh ha area) which overlaps with *kharif* season. Summer vegetables are also grown in many states.
Source: Ministry of Agriculture and Farmers' Welfare.

Chart 24: Purchasing Managers' Index



Source: IHS Markit.

Chart 25: Railway and Air Traffic



Source: Rail Drishti.

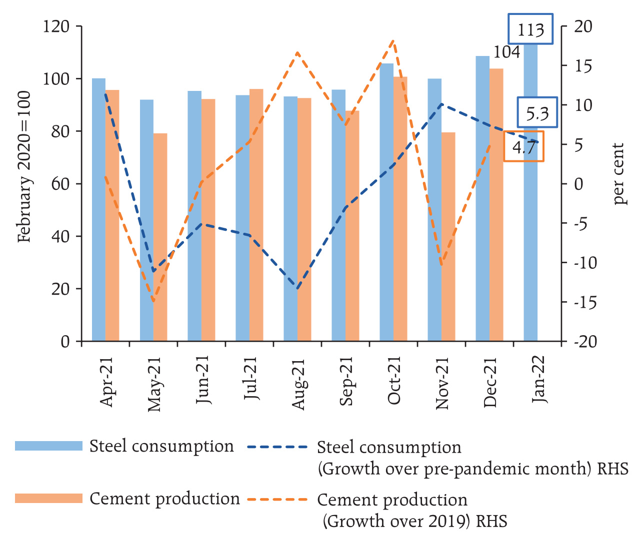
Source: Indian Ports Association.

In the services sector, railways freight traffic clocked a growth of 7.7 per cent y-o-y in January 2022 *vis-à-vis* 8.7 per cent a year ago (Chart 25a). An increase in freight was recorded for coal and cement, even as iron ore registered a decline on a high base. Cumulatively, railway freight traffic improved by 17.1 per cent y-o-y in April-January 2021-22, after recording a contraction for two years. The 'operating ratio[4]' for the railways sector is expected to be above 95 in 2021-22, an improvement over previous years[5]. As shipping begins to overcome the constraints of container shortages globally, port traffic witnessed a marginal sequential recovery in January (Chart 25b).

Both cement production and steel consumption recorded growth over pre-pandemic levels (Chart 26). An improved demand outlook in respect of construction is expected to be matched with capacity additions in the industry, with more than 84 million tonnes (MT) new capacity planned to be added over next two fiscal years.

In the first fortnight of February 2022, daily domestic airport footfalls averaged 4.7 lakh per day – a contraction by 5.7 per cent from the corresponding period in January. International airport footfalls also declined by 7.1 per cent sequentially, while the cargo segment recorded a contraction by 1.8 per cent for domestic cargo and a growth of 4.6 per cent for international cargo.

Chart 26: Construction Sector Indicators



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

[4] Operating ratio is expressed as a company's operating expenses as a percentage of revenue. A lower ratio implies higher efficiency.

[5] Mint, Jan 29, 2022.

Table 5: High Frequency Indicators- Services

		High Frequency Indicators- Services Growth (y-o-y, per cent)						Growth over 2019			
Sector	**Indicator**	**Aug-21**	**Sep-21**	**Oct-21**	**Nov-21**	**Dec-21**	**Jan-22**	**Oct 21/ Oct 19**	**Nov 21/ Nov 19**	**Dec 21/ Dec 19**	**Jan 22/ Jan 20**
Urban Demand	Passenger Vehicles Sales	7.6	-41.2	-27.1	-18.6	-13.3	-8.1	-16.7	-14.8	-1.5	2.2
Rural Demand	Two Wheelers Sales	-14.6	-17.4	-24.9	-34.4	-10.8	-21.1	-12.3	-25.5	-4.2	-15.9
	Three Wheelers Sales	59.7	53.8	19.1	-6.6	27.0	-8.5	-52.6	-59.7	-47.7	-60.4
	Tractor Sales	-17.0	-14.8	0.4	-22.5	-27.5	-32.6	8.2	17.2	3.8	-1.2
Trade, hotels, transport, communication	Commercial Vehicles Sales		24.5			0.9				-0.3	
	Railway Freight Traffic	16.9	3.6	8.4	6.1	7.2	7.7	25.1	15.6	16.5	17.1
	Port Cargo Traffic	11.5	0.5	6.3	-0.2	-0.4	-2.7	5.2	3.9	4.0	1.3
	Domestic Air Cargo Traffic	35.7	10.1	6.7	-1.7	2.0		-10.0	-11.4	-1.1	
	International Air Cargo Traffic	25.8	18.1	23.8	11.7	10.5		8.4	-5.0	-3.6	
	Domestic Air Passenger Traffic	132.6	76.5	68.7	65.5	53.3		-27.0	-17.6	-12.5	
	International Air Passenger Traffic	119.2	155.9	162.9	140.2	121.7		-61.0	-58.6	-54.5	
	GST E-way Bills (Total)	33.3	18.3	14.5	5.9	11.6	4.7	39.0	14.5	29.3	15.6
	GST E-way Bills (Intra State)	30.8	15.6	14.1	7.3	8.9	2.2	40.7	17.6	33.0	9.2
	GST E-way Bills (Inter State)	37.2	22.3	15.1	3.9	13.4	6.3	36.7	10.1	24.0	20.1
	Tourist Arrivals	329.9	278.8	337.0	255.0	235.5		-80.8	-76.9	-75.2	
Construction	Steel Consumption	-2.2	-3.2	-3.8	-7.7	-8.6	-3.7	2.4	10.1	7.4	5.3
	Cement Production	36.3	10.8	14.5	-3.6	12.9		18.1	-10.6	4.8	
PMI Index	Manufacturing	52.3	53.7	55.9	57.6	55.5	54.0				
	Services	56.7	55.2	58.4	58.1	55.5	51.5				

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

Within the services sector, the contact intensive non-transport segment of the automobile sector and aviation sectors continue to experience a slowdown even as some improvement in trade and transport became evident (Table 5).

Inflation

Data released by the NSO on February 14, 2022 showed that headline CPI inflation (year-on-year) for the month of January 2022 edged up to 6.0 per cent from 5.7 per cent a month ago (Chart 27a). A month-on-month decline in CPI by around 30 bps was more than offset by a large unfavourable base effect (month-on-month change in prices a year ago) of around 65 bps, resulting in the increase in headline inflation by around 35 bps between December and January.

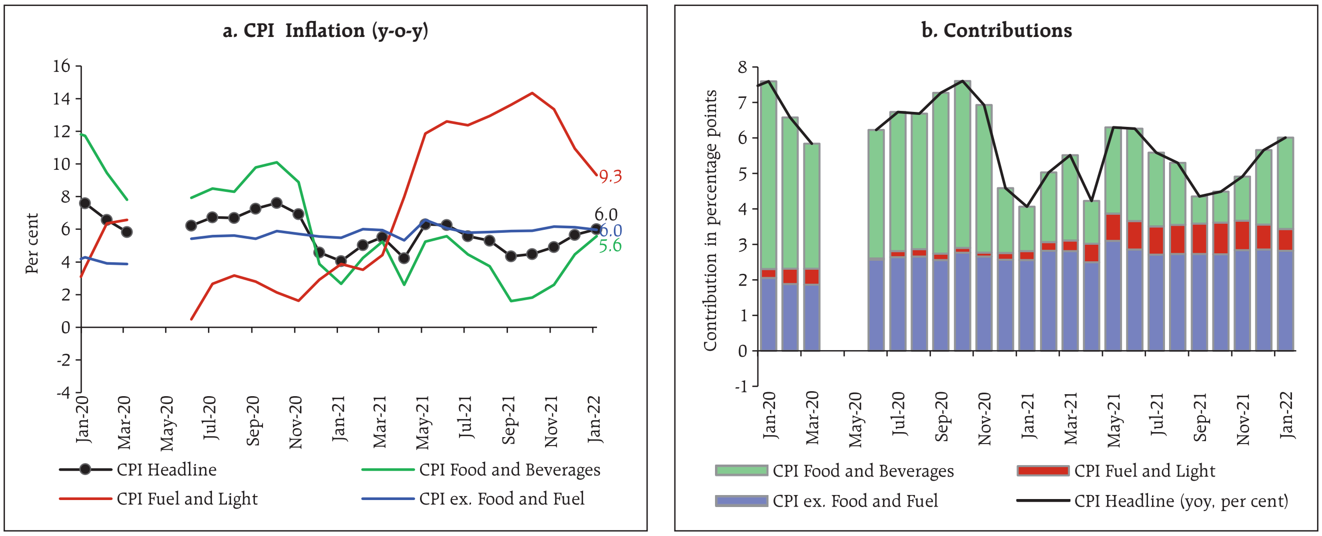
Food group inflation was the main driver, rising 5.6 per cent in January from 4.5 per cent in December. The decline in food price momentum by around 1.1 percentage points was subdued by an unfavourable base effect of around 2.1 percentage points. Vegetables prices moved out of deflation in January. Price increased on a year-on-year basis in respect of cereals, meat and fish, eggs, milk, pulses and spices while inflation in oils and fats, fruits, sugar and confectionary, non-alcoholic beverages and prepared meals and snacks moderated.

After remaining in double digits for eight consecutive months, fuel inflation moderated to 9.3 per cent in January from 11.0 per cent in December. LPG and kerosene inflation moderated, and electricity prices continued to remain in deflation in January. CPI fuel (weight of 6.84 per cent in the CPI basket) contributed around 10 per cent of headline inflation in January (Chart 27b).

CPI inflation excluding food and fuel[6] or core inflation remained elevated at 6.0 per cent in January,

[6] CPI excluding food and fuel is worked out by eliminating the groups 'food and beverages' and 'fuel and light' from the headline CPI.

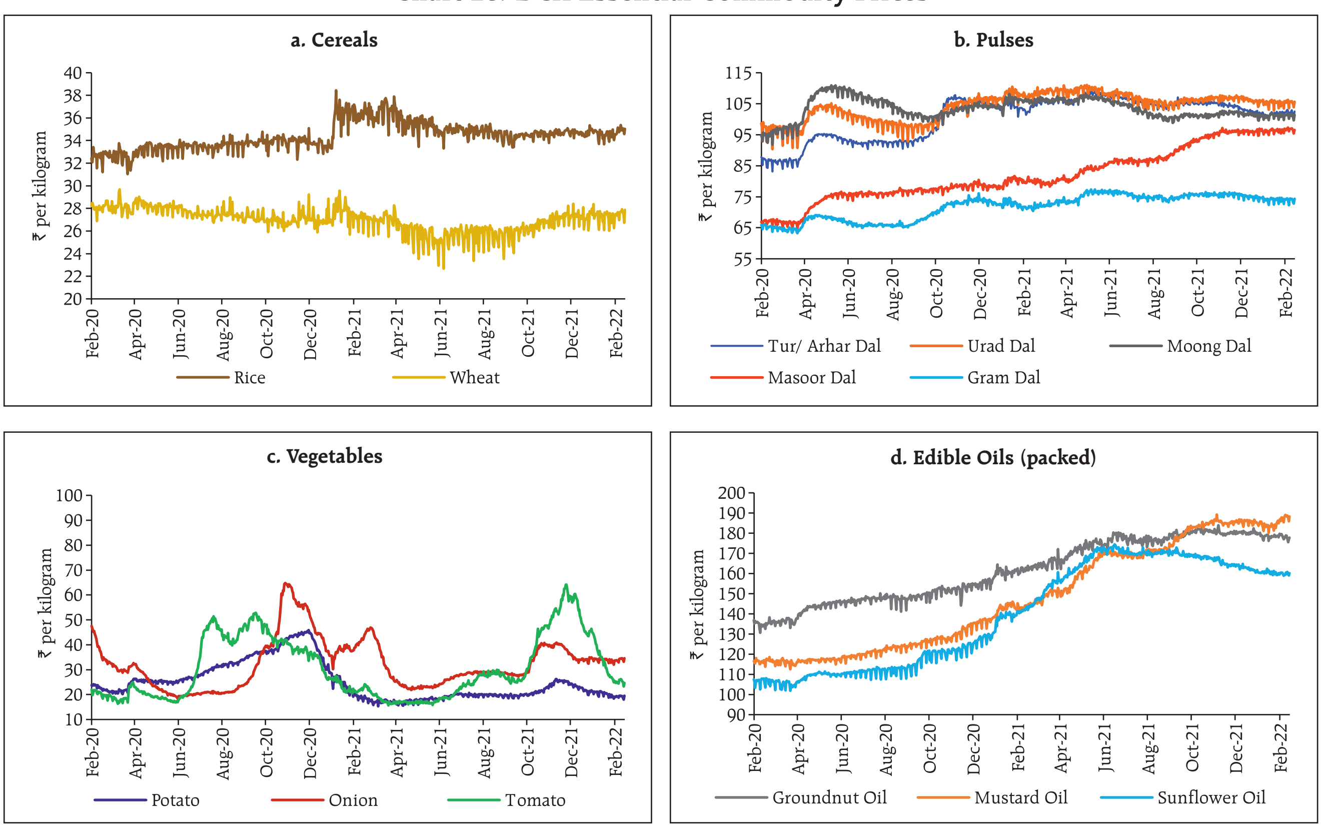
Chart 27: CPI Inflation



Note: CPI inflation for April-May 2021 were computed based on imputed CPI indices for April-May 2020.
Sources: National Statistical Office (NSO); and RBI staff estimates.

though it eased from 6.1 per cent in December (Chart 27a). While inflation in clothing and footwear, and household goods and services edged up, inflation in pan, tobacco and intoxicants, housing,

Chart 28: DCA Essential Commodity Prices



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

health, transport and communication, recreation and amusement and personal care and effects moderated.

High frequency food price data from the Ministry of Consumer Affairs, Food and Public Distribution (Department of Consumer Affairs) for February so far (February 1-14, 2022) indicate some uptick in prices of cereals. Pulses prices remained largely steady. In the case of edible oils, refined edible oils like sunflower oil continued to experience price declines, on the other hand, prices of mustard oil and vanaspati edged up. Prices of tomatoes and potatoes witnessed further seasonal price correction, while onion prices have remained steady in February so far (Chart 28).

In February so far (February 1-14, 2022), retail selling prices of petrol and diesel in the four major metros remained unchanged. While LPG prices remained steady, kerosene prices registered an increase in the first half of February (Table 6).

Input costs rose further in January, across manufacturing and services, as reflected in the PMIs, with services seeing a more pronounced rate of increase. Selling price increases, however, remained muted across manufacturing and services in January.

Table 6: Petroleum Products Prices

Item	Unit	Domestic Prices			Month-over-month (per cent)	
		Feb-21	Jan-22	Feb-22^	Jan-22	Feb-22
Petrol	₹/litre	91.26	102.87	102.87	-0.1	0.0
Diesel	₹/litre	82.99	90.51	90.51	0.0	0.0
Kerosene (subsidised)	₹/litre	27.36	36.56	42.17*	-5.5	15.4
LPG (non-subsidised)	₹/cylinder	771.29#	910.13	910.13	0.0	0.0

^: For the period February 1-14, 2022. *: As on February 2, 2022.
#: Average price in February 2021.

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 subsidized prices in Kolkata, Mumbai and Chennai.

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

IV. Financial Conditions

Domestic financial conditions remain benign although there has been some tightening more recently. In its monetary policy statement on February 10, 2022, the Reserve Bank announced four decisions to restore the revised liquidity management framework in order to make it more flexible and agile: (i) variable rate repo operations of varying tenors to be conducted as and when warranted by the evolving liquidity and financial conditions within the cash reserve ratio (CRR) maintenance cycle; (ii) variable rate repos (VRRs) and variable rate reverse repos (VRRRs) of 14-day tenor to operate as the main liquidity management tool and to be conducted to coincide with the CRR maintenance cycle; (iii) main operations to be supported by fine-tuning operations to tide over any unanticipated liquidity changes during the reserve maintenance period and auctions of longer maturity to be conducted as warranted; and (iv) with effect from March 1, 2022, the fixed rate reverse repo and the marginal standing facility (MSF) operations to be available only during 17.30-23.59 hours on all days and not during 09.00-23.59 hours, as instituted from March 30, 2020 to deal with the pandemic situation. In view of Omicron-related infections and disruption, on-tap liquidity facilities of ₹50,000 crore and ₹15,000 crore for emergency health services and contact-intensive sectors, respectively, were extended from March 31, 2022 to June 30, 2022.

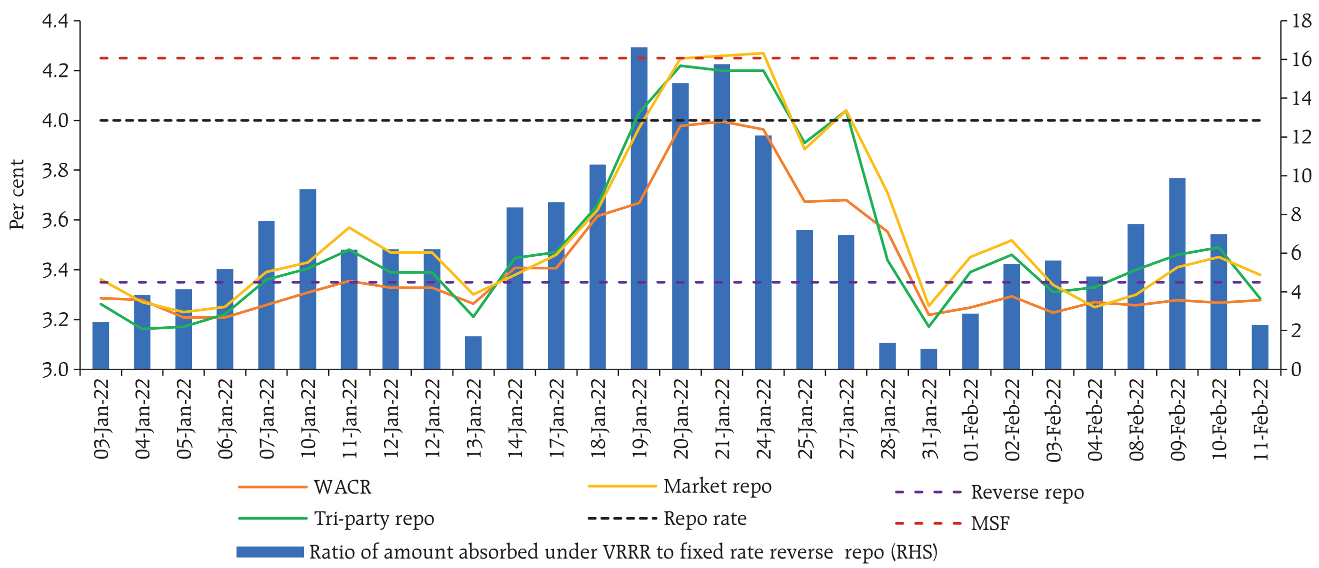
Surplus liquidity in the banking system moderated, with daily net liquidity absorption under the LAF averaging ₹6.4 lakh crore in the second half of January through February 14, 2022, lower than ₹7.0 lakh crore during December 2021 to mid-January 2022. Liquidity rebalancing continued, with surplus liquidity migrating from the overnight fixed rate reverse repo window to VRRR auctions of various maturities, including the main 14-day VRRR operation, in a seamless and non-disruptive manner. Consequently, the average daily absorption under the fixed rate reverse repo window moderated to ₹1.4 lakh crore during the second fortnight of January through February 14, 2022 from ₹1.5 lakh crore during mid-December 2021 to mid-January 2022. In view of transient tightness in systemic liquidity due to higher than anticipated GST collections, the Reserve Bank conducted three VRR operations – one auction of ₹50,000 crore on January 20, and two auctions of ₹75,000 crore each on January 21 and January 24, 2022, respectively.

GST outflows in the latter part of January 2022 pulled the overnight money market rates above the policy repo rate. In the uncollateralised segment, the weighted average call rate (WACR) touched the policy repo rate while the collateralised rates – the tri-party repo and the market repo rate – reached the ceiling of the interest rate corridor (marginal standing facility rate) briefly. This transient tightness eased with liquidity injections through the variable rate repo operations and large government spending towards the end of January (Chart 29). The use of fine-tuning operations to tide over unanticipated liquidity mismatches demonstrated the inherent flexibility of the revised liquidity management framework in coping with evolving liquidity requirements.

Interest rates rose across the outer term money market segment. The 3-month T-bill rate and certificates of deposit (CD) rate were pulled up towards the policy repo rate, notwithstanding softer overnight rates. At the same time, the 3-month commercial paper (CP)-NBFC rate traded above the policy repo rate, reflecting large issuances (Chart 30). The gradual enhancement in the size of absorption through the VRRR at higher cut offs has nudged short term rates upwards.

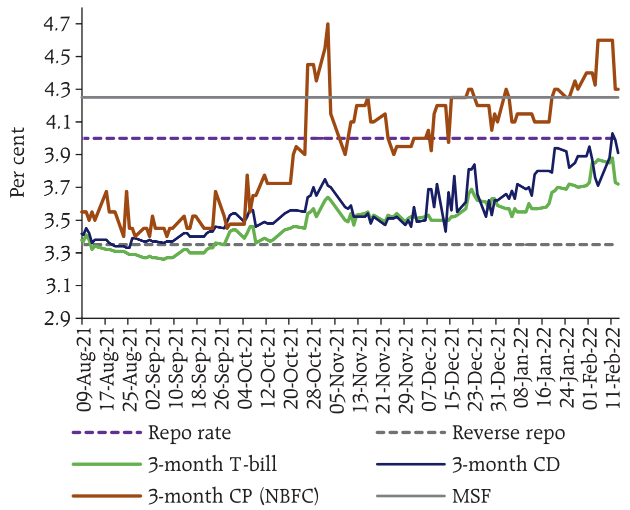
Bond yields hardened, with the yield on the newly issued 10-year G-sec benchmark (6.54 GS 2032) closing at 6.67 per cent as on February 14, 2022 (Chart 31a). The yield curve remained steady, but with a sharp rise in 8-10 year maturities (Chart 31b). While the conduct of switch operations for government securities and oil bonds worth ₹1.2 lakh crore provided temporary respite, the yields hardened sharply with the announcements in the Union Budget 2022-23 translating into higher than expected central government market borrowing of

Chart 29: Absorption under Reverse Repo and Overnight Money Market Rates



Sources: RBI; and RBI staff calculations.

Chart 30: Policy Corridor and Money Market Rates

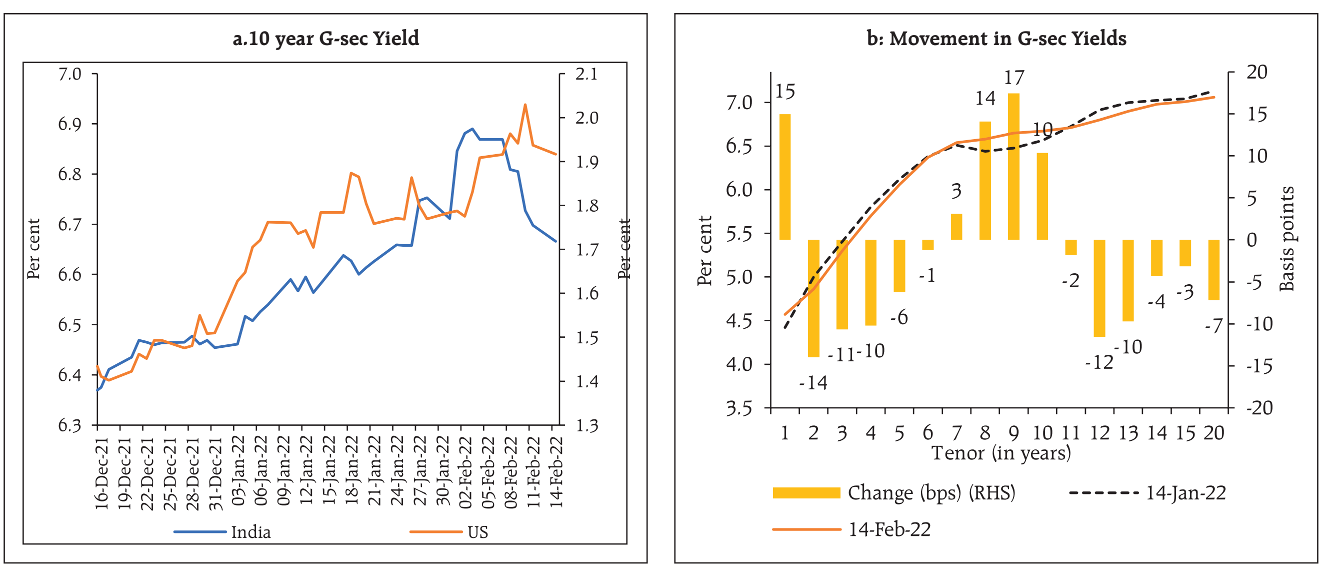


Source: Bloomberg.

₹14.95 lakh crore which rattled market sentiment. The resultant sell-off pushed up the 10-year benchmark yield by almost 15 bps with the Budget day ending at 6.83 per cent. On the global front, the faster pace of policy normalisation signalled by the US Fed, elevated crude oil prices amidst rising geopolitical tensions and domestic bond market concerns on the size of the market borrowing programme ahead of the Union Budget 2022-23, contributed to the hardening of G-sec yields. Yields, however, softened thereafter following the announcement of monetary policy on February 10, 2022 and cancellation of the auction of securities scheduled to be held on February 11, 2022 and further on February 18, 2022. In the primary market, all weekly auctions conducted during January 2022 witnessed partial devolvement. Subsequently, the Reserve Bank did not accept any bids for 5 year and 14 year securities in the weekly auction conducted on February 4, 2022.

In tandem with G-sec yields, yields on corporate bonds exhibited a hardening bias, *albeit*, to a lesser extent than the risk-free (G-sec) rate (Table 7). Consequently, the risk premia (corporate bond spreads over G-sec of comparable maturities) remained unchanged or rose at the margin during February 2022 (up to Feb 10) from a month ago. Lower issuance of corporate bonds during 2021-22 has capped the upward pressure on yields.

Chart 31: Bond Yields



Source: Bloomberg.

Table 7: Financial Markets - Rates and Spread

Instrument	Interest Rates (Per cent)			Spread (bps) (Over corresponding risk-free rate)		
	Jan 2022	Feb 2022 (up to Feb 10)	Variation (in bps)	Jan 2022	Feb 2022 (up to Feb 10)	Variation (in bps)
1	2	3	(4 = 3-2)	5	6	(7 = 6-5)
Corporate Bonds						
(i) AAA (1-year)	4.65	4.82	17	14	12	-2
(ii) AAA (3-year)	5.61	5.82	21	12	18	6
(iii)AAA (5-year)	6.07	6.23	16	-17	-16	1
(iv) AA (3-year)	6.40	6.57	17	91	93	2
(v) BBB-minus (3-year)	10.41	10.22	8	458	458	0
10-year G-sec	6.41	6.73	32			

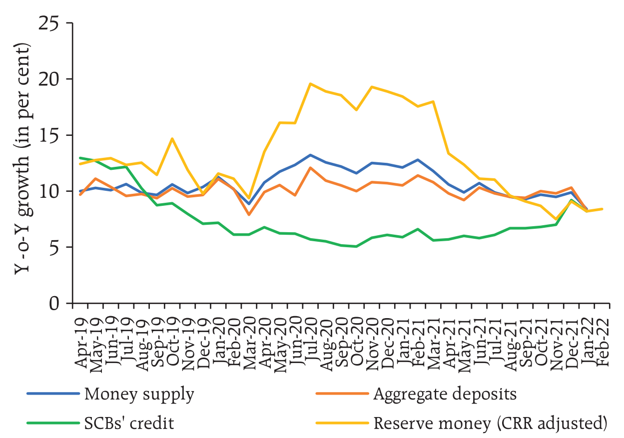
Note: Yields and spreads are computed as monthly averages.
Sources: Fixed Income Money Market and Derivatives Association of India (FIMMDA); and Bloomberg.

Overall monetary and credit conditions evolved in sync with the Reserve Bank's accommodative policy stance. Reserve money (RM), excluding the first-round impact of the cash reserve ratio (CRR) restoration, grew at 8.4 per cent y-o-y as on February 4, 2022 (18.9 per cent a year ago) with the currency in circulation, the largest constituent of RM, rising at a similar pace (8.2 per cent; 20.8 per cent a year ago). Money supply (M_3) also expanded by 8.4 per cent as on January 28, 2022 (12.1 per cent a year ago), primarily reflecting growth in banks' aggregate deposits at 8.3 per cent (10.5 per cent a year ago). The growth in scheduled commercial banks' (SCBs') credit to the commercial sector, which rose above the 7 per cent mark in November 2021 for the first time since April 2020, stood at 8.2 per cent as on January 28, 2022 (much above the 5.9 per cent level a year ago) [Chart 32].

SCBs continue to price new loans at historically low rates, mirroring improved transmission during the current easing phase. Testifying to the effectiveness of the Reserve Bank's policy measures, SCBs have effected complete pass-through of the policy rate cuts of 115 bps to weighted average lending rate (WALR) on fresh rupee loans as well as outstanding loans since March 2020. During March 2020 through January 2022, the one-year median marginal cost of funds-based lending rate (MCLR) declined by 95 bps (Chart 33). The improved monetary transmission has resulted in lower cost of borrowings for many sectors, including for major non-banking financial companies (NBFCs) sector.

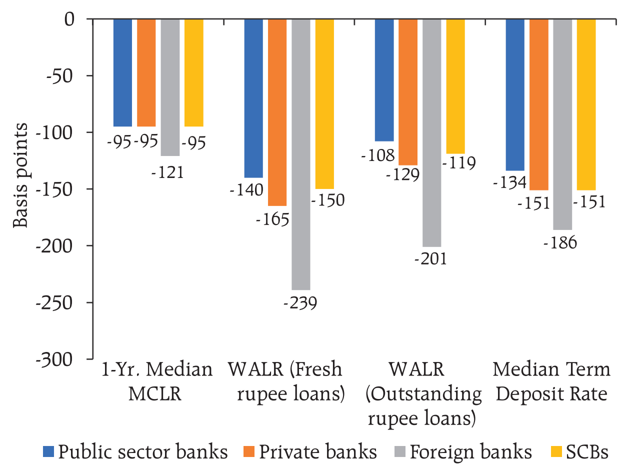
The median term deposit rate (MTDR) moderated by 151 bps during March 2020 to January 2022 on account of surplus liquidity. The perceptible decline of 178 bps is particularly discernible for shorter tenor deposits of maturity of up to one year. Across domestic banks, private banks have effected higher

Chart 32: Monetary and Credit Aggregates



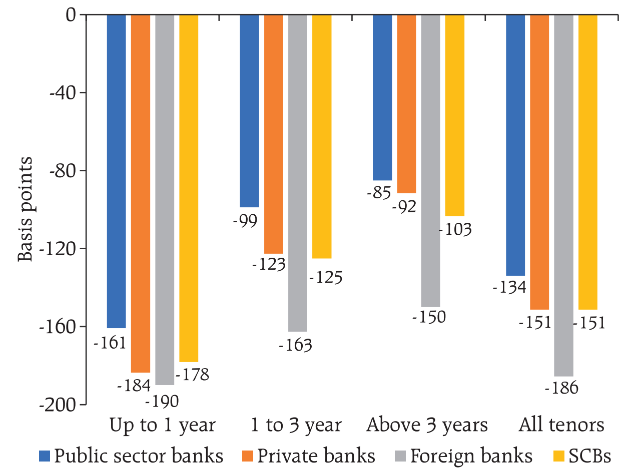
Note: 1. Data pertain to the last reporting Friday of every month for money supply, aggregate deposits, and SCBs' credit; and last Friday of every month for reserve money.
2. For February, however, reserve money data are as on February 4, 2022.
Source: RBI.

Chart 33: Transmission to Lending and Deposit Rates (March 2020 to January 2022)



Note: Latest data on WALRs pertain to December 2021.
Sources: RBI; and RBI staff estimates.

Chart 34: Maturity-wise Transmission to Median Term Deposit Rate (March 2020 to January 2022)

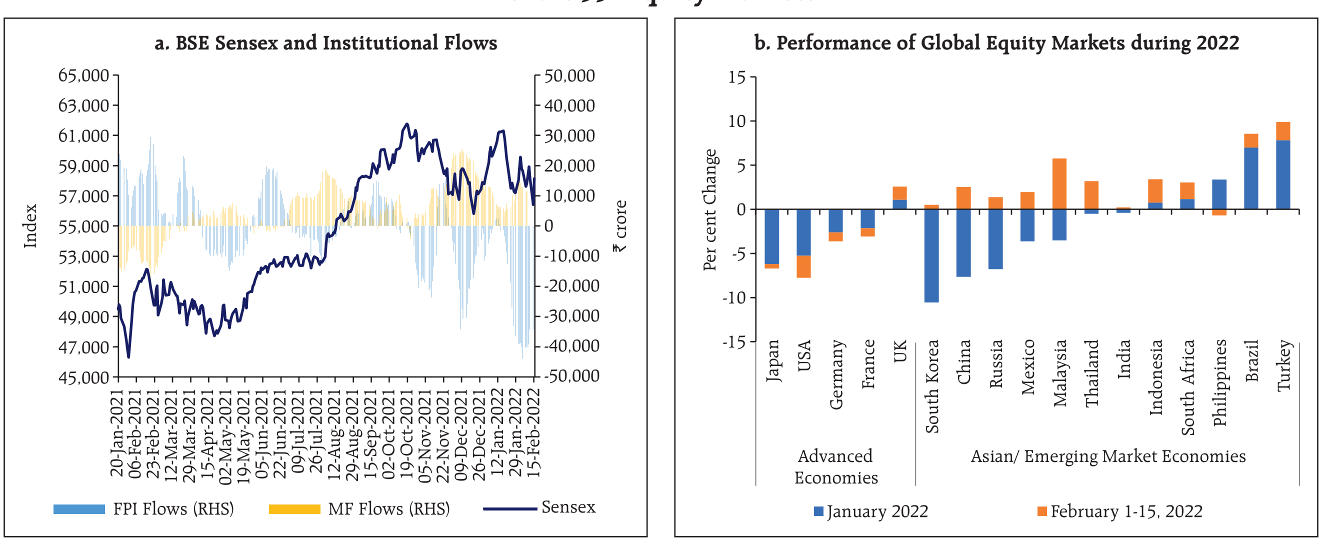


Sources: RBI; and RBI staff estimates.

pass-through to term deposit rates than public sector banks (PSBs) on account of robust deposit growth (Chart 34). However, SCBs have reached an inflection point. With an increase in credit demand and lower accretion in aggregate deposits, banks have started pricing in their deposits at higher rates in recent months. As a result, the MTDR rose marginally by 5 bps since October 2021.

Indian equity markets experienced high volatility in the month of January 2022 amidst risk-off sentiments sparked by the prospects of early tightening of monetary policy by the US Fed (Chart 35a). Equity markets in major economies, recorded larger declines, with investors turning cautious towards the technology sector (Chart 35b). After opening the month on a positive note, the

Chart 35: Equity Markets



Note: FPI and MF investments are represented on 15 days rolling-sum basis.
Sources: Bloomberg; NSDL; and SEBI.

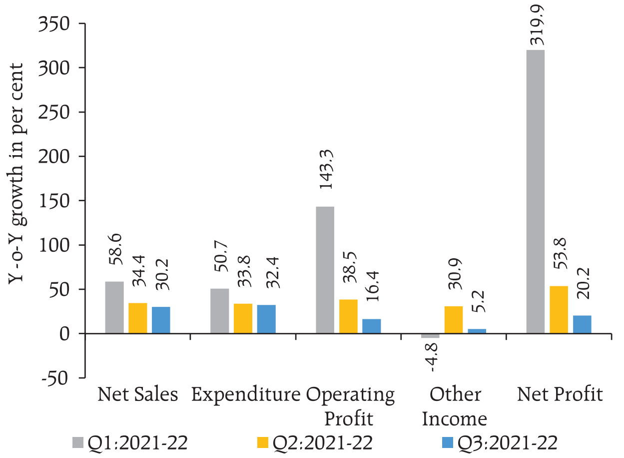
BSE Sensex turned volatile on rising number of Omicron cases and the hawkish tone in the minutes of the latest US Federal Open Market Committee (FOMC) meeting. Thereafter, the market bounced back on expectations of robust Q3:2021-22 corporate earnings results and expectations of a limited economic impact of Omicron. The rally, however, proved transient as investors fretted over rising global inflation, US Treasury yields, and crude oil prices coupled with the geopolitical tensions between Russia and Ukraine. In early February, the equity markets rebounded on prospects of announcements in the Union Budget with positive global cues aiding the domestic sentiment. Sharp swings followed thereafter, mostly tracking global cues. The markets tumbled on February 14, 2022 on escalating geopolitical tensions but recovered almost entirely on the following day amid de-escalation of concerns. Overall, the BSE Sensex declined by 0.2 per cent during 2022 so far – a decline of 0.4 per cent during January 2022, and a gain of 0.2 per cent during February 2022 (up to February 15, 2022). The BSE IPO index, which tracks the performance of recently listed initial public offering (IPO) stocks, underperformed the market benchmark, declining by 13.8 per cent during 2022 so far (up to February 15, 2022).

Corporate earnings results of 1,273 listed non-financial companies representing 80 per cent of market capitalisation of all listed non-financial companies, show double-digit y-o-y sales growth during Q3:2021-22 (Chart 36). High performance sectors in terms of sales growth were hotels and tourism, oil and gas, metals and mining, textiles, chemicals, machinery, consumer durables and information technology (IT). Input cost pressures impacted the profitability of a few sectors.

During April-December 2021, gross inward foreign direct investment (FDI) moderated to US$ 60.3 billion from its level US$ 68.3 billion a year ago (Chart 37). Manufacturing, computer services, communication services, retail and wholesale trade and education, research and development are the sectors that attracted most of the investment. Net outward FDI from India turned out to be higher on a y-o-y basis.

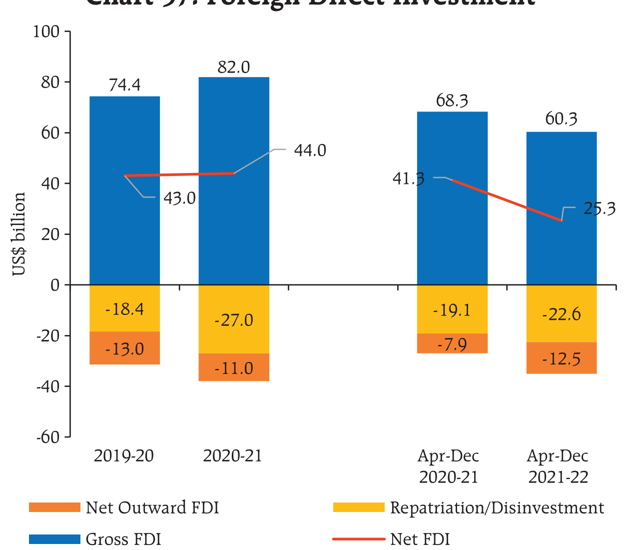
Foreign portfolio investors (FPIs) continued to pull their investment out of the domestic equity market during January 2022 amidst global geopolitical tensions, rising crude oil prices and concerns over aggressive policy normalisation in the US. The debt segment, however, recorded modest inflows during the month (Chart 38).

Chart 36: Performance of Listed Non-Financial Companies



Note: Excludes extra-ordinary items.
Sources: Prowess; and RBI staff calculations.

Chart 37: Foreign Direct Investment

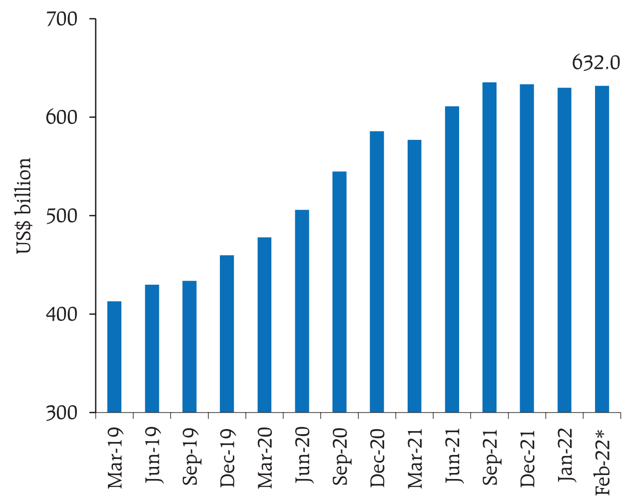


Source: RBI.

Chart 38: Net Foreign Portfolio Investment

*: Up to February 11th.
Source: National Securities Depository Limited (NSDL).

Chart 39: Foreign Exchange Reserves



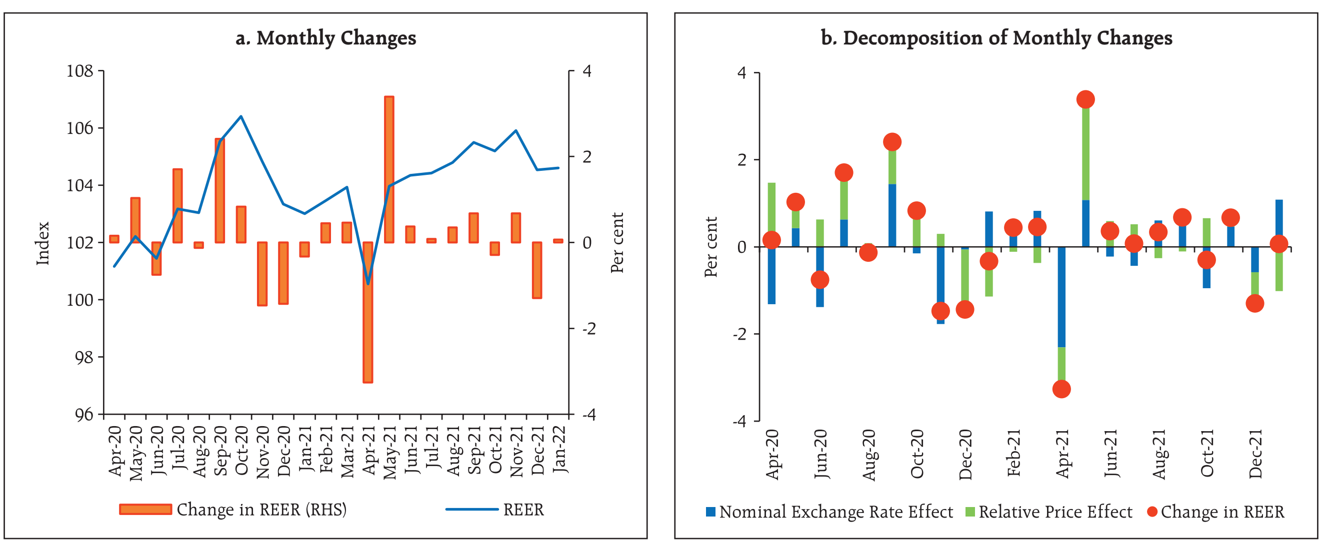
*: As on February 4.
Source: RBI.

Net disbursements of external commercial borrowings (ECBs) to India, including inter-company borrowings, were to the tune of US$ 6.6 billion during April-December 2021 as compared with net outflows of US$ 2.6 billion a year ago, while net disbursements excluding repayments and inter-company borrowings were of the order of US$ 3.6 billion as against net repayments of US$ 5.9 billion a year ago. In December, a considerable amount of borrowing was channelised for on-lending/sub-lending, refinancing of earlier ECBs and refinancing of rupee loans.

The foreign exchange reserves were at US$ 632.0 billion on February 4, 2022 equivalent to about 12.6 months of imports projected for 2021-22 (Chart 39).

In the foreign exchange market, the Indian rupee (INR) appreciated against the US dollar in January 2022 by 1.3 per cent (m-o-m). In both nominal and

Chart 40: Monthly Movements in 40-Currency Real Effective Exchange Rate (REER) (Base:2015-16 = 100)



Note: Figures for January 2022 are provisional.
Sources: RBI.

Table 8: Growth Rates in Select Payment Systems

Payment System	Transaction Volume Growth (Y-o-Y, per cent)				Transaction Value Growth (Y-o-Y, per cent)			
	Dec-2020	Dec-2021	Jan-2021	Jan-2022	Dec-2020	Dec-2021	Jan-2021	Jan-2022
RTGS	20.2	17.9	14.1	15.7	3.3	21.7	-7.2	13.9
NEFT	31.6	22.3	10.3	26.2	31.7	6.5	12.3	12.8
UPI	70.8	104.4	76.5	100.5	105.5	98.7	99.4	93.0
IMPS	38.7	24.5	33.5	27.0	38.6	35.6	33.1	34.1
NACH	28.0	-2.7	-14.6	28.8	32.2	5.1	11.6	26.4
NETC	115.2	74.9	60.4	54.8	83.3	59.7	48.1	50.0
BBPS	86.2	137.0	84.0	130.2	97.9	165.2	106.0	148.8

Source: RBI.

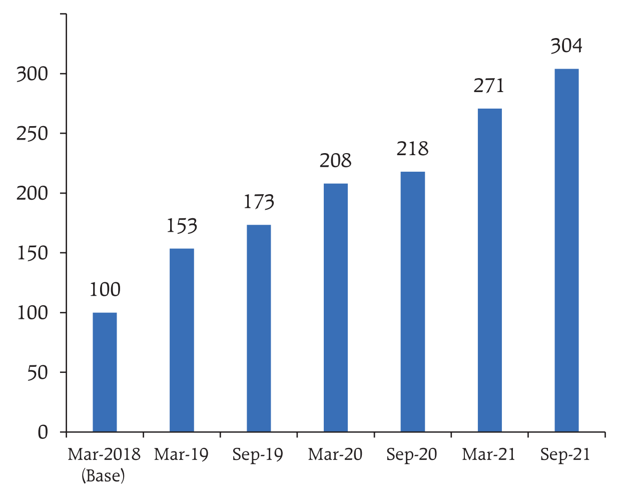
real effective terms (40-currency basket), the INR appreciated by 1.1 and 0.1 per cent, respectively, over its level a month ago (Chart 40a and 40b).

Payment Systems

The year 2022 has begun with a strong rally in digital payments in the first month, with wholesale and retail transactions exhibiting consistent growth (y-o-y) on the top of remarkable milestones achieved in the previous year. On the large value payments front, transaction volume through the Real Time Gross Settlement (RTGS) sustained double-digit growth in January 2022 (Table 8). In the retail segment, UPI transactions nearly doubled in terms of both volume and value relative to January 2021. The Bharat Bill Payment System (BBPS) - a one-stop ecosystem for recurring bill payments, mirrored this trend. With efforts to reach the *hitherto* unreached in the payments space bearing fruit, the Aadhar-enabled Payments System (AePS) achieved its highest number of transactions ever this month.

Recent evidence suggests that the digital divide across geographies, sectors and businesses may have narrowed over the year gone by, with online transaction volumes from Tier 2 and 3 cities on a private payment gateway during 2021 demonstrating growth of 45.6 per cent and 54.3 per cent respectively.[7] Overall, the highest growth stemmed from the food and beverages sector, followed closely by financial services. Games, utilities and e-commerce were also prominent drivers of digital payments growth. Furthermore, strong growth was recorded in the wholesale e-commerce segment over the year.

Chart 41: RBI Digital Payments Index



Source: RBI.

[7] https://razorpay.com/blog/the-covid-era-of-rising-fintech-razorpay-report-10th-edition/

[8] The RBI DPI comprises 5 broad parameters that enable measurement of deepening and penetration of digital payments in the country over different time periods. These parameters are – (i) Payment Enablers (weight 25 per cent); (ii) Payment Infrastructure – Demand-side factors (10 per cent); (iii) Payment Infrastructure – Supply-side factors (15 per cent); (iv) Payment Performance (45 per cent); and (v) Consumer Centricity (5 per cent).

The Reserve Bank's Digital Payments Index[8] climbed to 304 in September 2021 (Chart 41), reflecting the rapid growth in digital payments. There has been rapid penetration of digital technology and smartphones since the outbreak of the pandemic, with the number of wireless internet subscribers reaching 77.7 crore[9], and the average time spent on mobile per day per Indian user jumping from 3.7 hours in 2019 to 4.7 hours in 2021[10] (fifth highest among the countries analysed). The continuous expansion of the app economy is expected to lead to sustained growth in the digital payments ecosystem. According to NASSCOM, digital payments volume in India may surge by 16 times over the five years spanning up to 2025.[11]

In the Statement on Developmental and Regulatory Policies[12], the Reserve Bank has announced the enhancement of the amount cap on e-RUPI vouchers issued by governments from ₹10,000 to ₹1,00,000, which will further facilitate digital delivery of government benefits and services. The cap on the National Automated Clearing House (NACH) mandate limit – a solution facilitating repetitive and periodic payments – for settlements on the Trade Receivables Discounting System (TReDS) is also proposed to be raised from ₹1 crore to ₹3 crore. This will help cater to the growing liquidity requirements of micro, small and medium enterprises (MSMEs). The Union Budget 2022-23 has proposed various measures to promote the digital and FinTech ecosystem, including the setting up of digital banking units, the continuation of financial support to incentivise digital modes of payment and relaxations in the tax incentive scheme for start-ups.

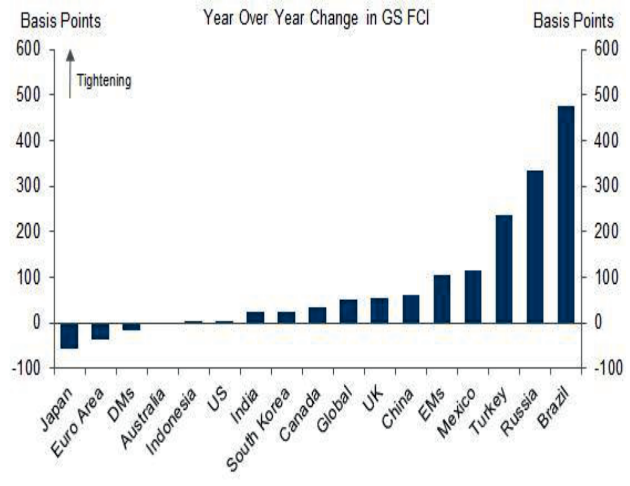
9 https://www.trai.gov.in/sites/default/files/PR_No.04of2022_1.pdf

10 https://www.appannie.com/en/go/state-of-mobile-2022/

11 https://nasscom.in/knowledge-center/publications/india-digital-payments-40-2025-outlook

12 https://rbi.org.in/Scripts/BS_PressReleaseDisplay.aspx?prid=53248

Chart 42: Financial Conditions Index



Source: Goldman Sachs.

Conclusion

Today global economy stands at an inflection point. Inflation has become entrenched across economies owing to a spike in commodity prices and persistence of supply chain bottlenecks. The global macroeconomic situation remains embroiled in a heightened state of uncertainty, with risks tilted to the downside. The Goldman Sachs Financial Conditions Index - a composite index including interest rates, equity valuations, borrowing costs and currency data - shows significant tightening of financial conditions especially for the emerging market economies (Chart 42). Investor sentiment has been dampened by risk aversion, which could unsettle capital flows and impede the embryonic recovery going forward.

Notwithstanding this unsettled global environment, the domestic economic situation continues to improve. The Union Budget 2022-23 and the monetary policy announcement of February 10, 2022 have set the tone for a durable and broad-based revival. The renewed emphasis on public investment through infrastructure development is expected to crowd-in private investment and strengthen job creation and demand in 2022-23. Fundamental to the infrastructure boost is the *GatiShakti* national master plan, which aims to achieve inclusive growth through multi-modal connectivity and logistics efficiency.

With inflation projected to stay within the tolerance band in 2022-23, the Monetary Policy Committee (MPC) decided to pause and persevere with an accommodative policy stance. Governor Shri Shaktikanta Das emphasised that monetary policy would continue in its endeavour to achieve price stability, while ensuring a strong and sustained economic recovery[13]. Higher spending and ease of doing business have brightened the outlook. India has once again emerged as the fastest growing economy among the major economies of the world according to the IMF.

[13] Governor's statement on February 10, 2022.

*Zombies and the Process of Creative Destruction**

The Schumpeterian creative destruction process requires a dynamic reallocation of resources from weak and vulnerable firms to strong firms having high growth potential. Zombie firms that often survive longer than desirable taking advantage of countercyclical policy support, however, tend to thwart that process. Using firm-level data for India, this article finds that monetary policy does not hinder the creative destruction process by misallocating credit flows to zombies during periods of economic slowdown, but zombies seem to have dampened the effectiveness of monetary policy at the margin as they use borrowed resources more for their survival than for undertaking new investment.

Introduction

There is a growing evidence-based realisation that business cycles are costly and stabilisation policies are more beneficial than widely thought (Jordà, Schularick and Taylor, 2020). Because of the endogenous effects from weak cyclical conditions on the growth trajectory, aggressive and proactive countercyclical policy actions may be optimal (Cerra, Fatás and Saxena, 2020). It has often been argued that in the post-global financial crisis (GFC) period, the slowdown in productivity growth – a secular pre-GFC trend that was only amplified by the crisis – might have also been partly the result of ultra-accommodative monetary policy, that created an enabling environment for weak banks to evergreen loans to zombies and keep them alive (Obstfeld and Duval, 2018).

The Schumpeterian creative destruction process requires a dynamic reallocation of resources from weak and vulnerable firms to strong firms with high growth potential, but policy interventions to protect weak firms and mitigate job losses can hinder medium-term progress and involve technological "sclerosis" (Caballero and Hammour, 1996). The countercyclical policy response, thus, involves a choice – preserving existing jobs *versus* encouraging creative destruction, allowing jobs and resources to move away from unsuccessful firms towards more successful firms (G30, 2020).

Globally, there has been an increase in the number of perpetually loss-making zombie firms, who use more credit/external finance to service debt regularly, enabling them to remain in business (Banerjee and Hofmann, 2020). Weak banks often lend to such zombie firms at higher interest rates, enabling the survival of such weak banks in a financial system. Accommodative monetary policy and low-interest rates also help zombies – dubbed widely as the "living dead" – to remain in business. Following the unpleasant Japanese experience with the zombies in the 1990s, it has been progressively realised that zombification may be a global phenomenon, and accordingly, research attention has shifted to multiple facets of this challenge – zombies crowd-out growth opportunities of more productive firms and their rising presence in an economy can lower potential growth (McGowan, Andrews and Millot, 2018); countries operating with weak banks and weak insolvency regimes allow zombies to thrive (Andrews and Petroulakis, 2019); the "zombie credit channel" thrives in a weakly capitalised banking (financial) system, and accommodative monetary policy in such a system can propel a practice of "loan evergreening" enabling weak banks and weak firms to stay afloat, with the latter servicing debt timely using new borrowings from the former, and the former thereby also postponing recognition of bad assets to stay above the minimum regulatory capital requirement (Acharya, 2019); "…Schumpeter's theory of creative destruction is not corroborated in the data" (Bosio,

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Djankov, Jolevski and Ramalho, 2020); and, the risk of death of a weak firm decreases the longer it survives as a zombie (Nurmi, Vanhala and Virén, 2020).

The nature of the firms operating in an economy – strong, weak or zombies – can often influence the outcome of monetary policy response and the impact of a shock on the economy. Strong firms may pile up surplus cash in the event of a recession, deleverage to strengthen the balance sheet and remain prepared to take advantage of the cyclical pick-up. Weak firms, with limited liquid assets and collaterals and poor credit history, however, may face the heat of flight to quality, leading to lower access to credit when they may need it the most, that too at higher rates (or external finance premium). Counter-cyclical monetary policy can help contain the propagation of a shock by protecting weak firms.

The creditworthiness of borrowers is endogenous to an adverse shock, as they suffer cash-flow disruptions (or liquidity stress) at a time when their net worth (or capacity to present collateral or own equity) goes down. While the net worth of a firm is pro-cyclical (*i.e.*, a recession lowers the capacity of a firm to borrow), the external finance premium is countercyclical (*i.e.*, in a recession, given information asymmetry, banks may either charge higher interest rate or ration credit[1]), and therefore a counter-cyclical monetary policy (that can mitigate the risk of excessive increase in external finance premium and propel credit supply from banks to the vulnerable) becomes necessary. Both the balance sheet channel and credit channel of monetary policy could help stabilise the economy following an exogenous shock. As regards the balance sheet channel, first, lower interest rates may increase the value of marketable collaterals (such as shares and bonds); second, debt servicing burden may decline to the extent that loans are contracted at variable rates of interest; and third, cash flows of firms may improve when the aggregate demand situation in the economy responds to the monetary stimulus. All these three forces could help reduce the external finance premium for the firms. The credit channel (or the credit supply channel) can also mitigate the risk of credit rationing.

In an atmosphere characterised by growing presence of zombies, however, stabilisation policies can potentially endanger the medium-term growth trajectory by hampering creative destruction. Set against this context, this article focuses on examining how the influence of zombies in the Indian economy has changed over time, and how zombies respond to monetary policy *vis-à-vis* non-zombies. Section II outlines the relevance of a clear distinction between zombies and non-zombies in empirical firm-level research to monetary policy analysis. It also explains the approach followed in this paper for the identification of zombies, and then presents a factual assessment of how zombies have performed relative to non-zombies over time in India. Section III examines empirically the sensitivity of (a) borrowings from banks, (b) investment, and (c) cost of finance of zombies to changes in the monetary policy rate and liquidity conditions relative to non-zombies. While monetary policy is captured through the weighted average call money rate (WACR) – it being the operating target of monetary policy in India, liquidity condition is captured through net surplus/deficit position under the liquidity adjustment facility (LAF) as a percentage of net demand and time liabilities (NDTL). Concluding observations are presented in Section IV.

II. Some Evidence of Zombification in India

In India, the non-government non-financial corporate sector comprises firms in both organised and unorganised sectors. The information available on the former has both listed and unlisted companies, while many small and medium enterprises are in the

[1] When banks manage to deal with the information asymmetry challenge (by say monitoring cash flows/balance sheet position) the cost of credit may rise (Beranke and Gertler, 1989), whereas when banks fail to overcome the problem of information asymmetry they may resort to credit rationing (Stiglitz and Weiss, 1981).

unorganised sector. The analysis presented in this paper is based on the Prowess database of the CMIE and therefore relates to the organised sector. Past studies using this dataset for India have found that smaller firms rely more on external finance compared with larger firms[2]. Importantly, "alternative finance" within "external finance" – *i.e.*, finance raised from friends/relatives/family, business partners and trade credit, often without legal contracts – is the primary source for small and medium enterprises (SMEs) and unlisted firms, with financing from banks and markets coming second in the pecking order for them, unlike large and listed firms. Moreover, contrary to perceptions, firms relying more on alternative finance, rather than finance from banks and markets, exhibit stronger growth (Allen, Chakrabarti, De and Qian, 2012)[3].

Changes in the leverage of non-zombie firms (or their recourse to external finance as opposed to internal finance), unlike zombies, could depend on the state of the business cycle, which may impact not only their cash flows but also their decisions on the timing and size of new investment. The investment cycle could go through either a period of temporary cyclical slowdown or protracted weakness, depending on several causative factors (Pattanaik, Behera, Kavediya and Shrivastava, 2020). In the case of the latter, the unholy relationship between zombies[4] and weak banks (that face the risk of falling below the minimum regulatory capital requirement in the event of defaults) may strengthen. The response of firms (their leverage) to business cycles, and counter-cyclical monetary policy, may differ between zombies and non-zombies. Depending on the relative importance of zombies in the leverage cycle in the overall non-financial non-government corporate sector, the effectiveness of monetary policy – in stabilising the business cycle *versus* promoting zombies – could be assessed. In India, limited literature is available on the effect of the business cycle on the leverage of firms (Pattanaik and Sengupta, 2018). To the best of our knowledge, no research is available on how counter-cyclical monetary policy operates through the leverage profile of zombies *versus* non-zombies, and accordingly, whether monetary policy impedes creative destruction and thereby contributes to misallocation of resources.

On the role of Zombies in India, Kashyap, Mahapatro and Tantri (2021) found evidence of indirect evergreening in India (*i.e.*, weak firms increase leverage by borrowing through related parties from weak banks, but decrease real investment) which often goes undetected. Such resource misallocation supports the crowding-out effects ascribed to zombies. In empirical research, it is not that straightforward though to identify zombies and distinguish them from firms that face stress due to an adverse shock striking the economy or those that by design may be promoted through subsidies and directed credit. Kulkarni, Ritadhi, Vij and Waldock (2019) deployed a novel approach using supervisory data to identify Indian zombies as those firms that are 60-90 days past due (but still not classified as NPAs) and of below AA credit rating. 11 per cent of borrowers in India, as per this approach, were found to be zombies.

For the empirical analysis (in the next section), annual financial statements of non-financial firms have been considered in this article for the period

2 The total pool of financing available to firms has two broad components - internal sources (which include net income after payment of dividends, plus depreciation, plus provisions) and external sources (which include funds sourced from banks and financial institutions, markets and alternative finance).

3 The initial cost of alternative financing may be high, but once the relationship between firms, customers, investors, and suppliers is forged, the average cost for them remains lower than the cost of bank or market financing. Such businesses run on mutual trust and the track record of relationships, rather than legal enforceability of contracts. In regimes with weak investor/firm protection, "alternative finance" within external finance may remain high.

4 Zombies are firms that must borrow more to survive, and they often do not make enough profits to service their debt. Accommodative monetary policy can set off a process of creeping zombification, perpetually delaying/deferring Schumpeterian creative destruction.

2000-01 to 2019-20. This is an unbalanced panel data. Firms are classified into zombies and non-zombies based on the following criteria:

A firm is categorized as a *zombie* at time *t* if:

1. The leverage of the firm is above the median leverage;
2. Interest coverage ratio (ICR) < 1;
3. Rating is in the risky category; and
4. Debt growth is positive.

Among the above-mentioned classification filters, (1), (2) and (3) indicate the degree of financial distress facing a firm, while condition (4) reflects its access to external financing. Detailed definitions of other variables considered for the study are provided in Appendix-1. The summary statistics of variables used in the analysis have been provided separately for zombies and non-zombies in Table 1. It can be observed that there are no significant differences between zombies and non-zombies in respect of their age (*i.e.*, the number of years in business) and size; however, on profitability, zombies, on average, have delivered only negative return on their assets, unlike non-zombies. The average debt of non-zombies is below 35 per cent of their total assets, while zombies have debt levels of about 65 per cent of their total assets. Part of this high difference in leverage could be the result of the choice of the first classification filter. The average cost of funds, defined as the ratio of their total interest expenses to average debt, is only 40 basis points higher for zombies. Zombies have relationships with fewer banks on average compared to non-zombies, but the length of the relationship continuing with a bank is higher for non-zombies than zombies. Investment, measured by the ratio of annual addition of fixed assets to total assets is lower for zombies, though for non-zombies the average investment is not significantly higher. From the perspective of rating, since zombies are identified based on the average rating of different instruments, they fall in the risky category *vis-à-vis* non-zombies.

In India, close to two-thirds of the total financing of non-financial corporates is secured from external sources, corroborating the significance of examining not only the external finance premium channel of monetary policy but also the importance of zombification to the effectiveness of monetary policy (Chart 1).

As per the scheme of identification laid out earlier, around 10 per cent of non-financial firms in India could be viewed as zombies (Chart 2). This share increased in the post-global financial crisis (GFC) period up to 2016, and subsequently, some stabilisation has been

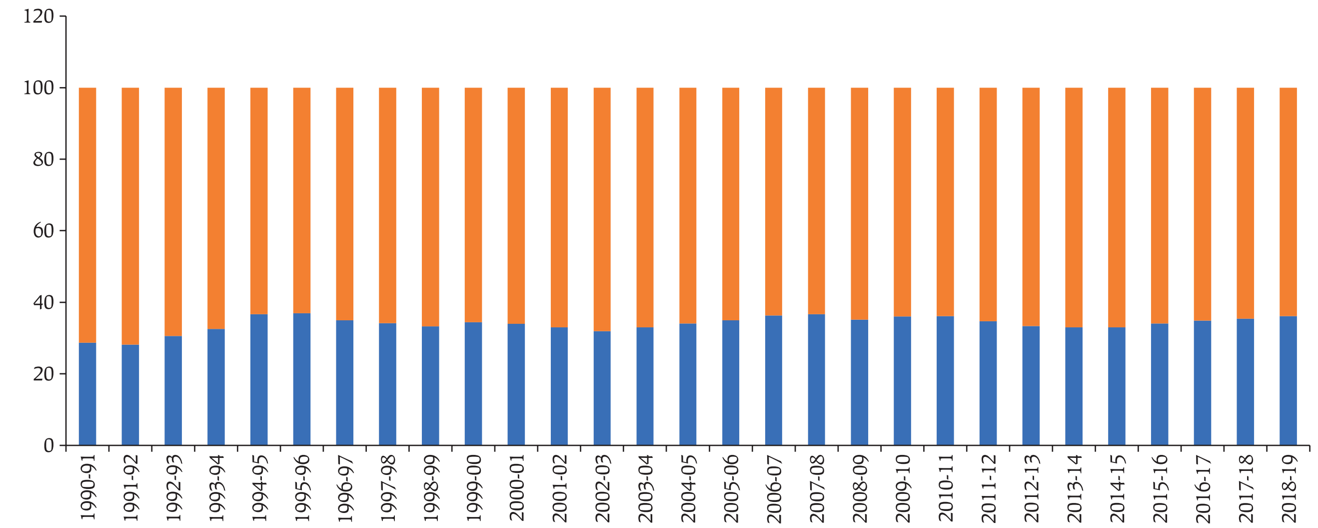
Table 1: Summary Statistics

	Obs.	Mean	Std. Dev.	Median	Kurtosis	Skewness
Non-zombies						
Age (years)	24137	30.90	20.23	26.00	6.31	1.56
Size	24137	8.25	1.66	8.12	2.48	0.33
ROA (%)	24137	3.59	6.21	3.22	4.73	-0.35
Leverage (%)	24137	33.15	24.77	31.60	638.68	13.12
Cost of Funds (%)	24137	10.11	5.08	9.79	4.63	0.82
Bank Relationship	24137	4.87	4.13	4.00	4.76	1.48
Bank Relationship Length	24137	10.81	7.75	9.00	2.28	0.59
Investment	21198	0.06	0.09	0.03	77.91	5.47
Bank Borrowings	16154	2744.98	5283.64	686.35	13.93	3.22
Mean Rating	24137	6.18	2.12	6.33	2.67	-0.70
Zombies						
Age (years)	2046	27.56	18.24	24.00	6.67	1.61
Size	2046	7.59	1.65	7.43	2.41	0.49
ROA (%)	2046	-5.08	6.90	-2.86	1.99	-0.56
Leverage (%)	2046	66.00	37.81	58.07	59.93	5.60
Cost of Funds (%)	2046	10.41	4.43	10.73	4.16	0.08
Bank Relationship	2046	4.43	4.10	3.00	5.60	1.72
Bank Relationship Length	2046	8.77	7.16	7.00	2.85	0.88
Investment	1726	0.04	0.09	0.01	31.96	4.82
Bank Borrowings	1453	3027.63	5462.31	745.50	11.56	2.87
Mean Rating	2046	1.67	0.66	2.00	1.98	0.41

Note: Please refer to Appendix-1 for explanation of variables used in this table.

Source: Centre for Monitoring Indian Economy (CMIE) and authors' estimates.

Chart 1:Internal *versus* External Financing Pattern (Non-financial Corporate Sector in India)

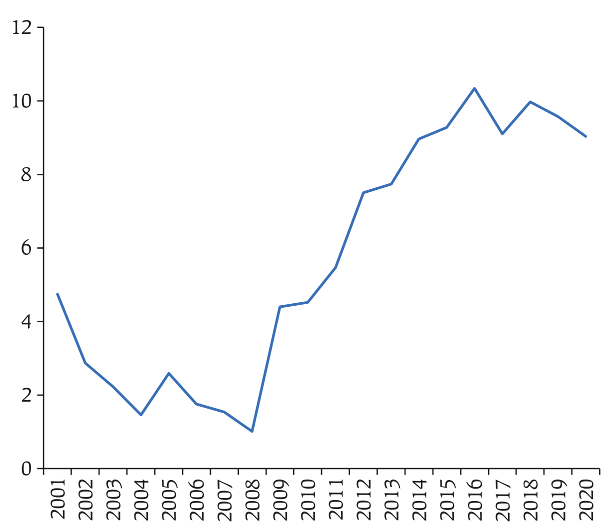


Source: Reserve Bank of India and authors' estimates.

observed. While the post-GFC increase could have been an outcome of the massive policy stimulus that was directed at containing the damage to the real economy from the GFC, the recent stabilisation may be on account of the welcome change in India's credit market conditions following the new insolvency and bankruptcy (IBC)-led regime that is relatively less tolerant of non-performing businesses staying alive for long.

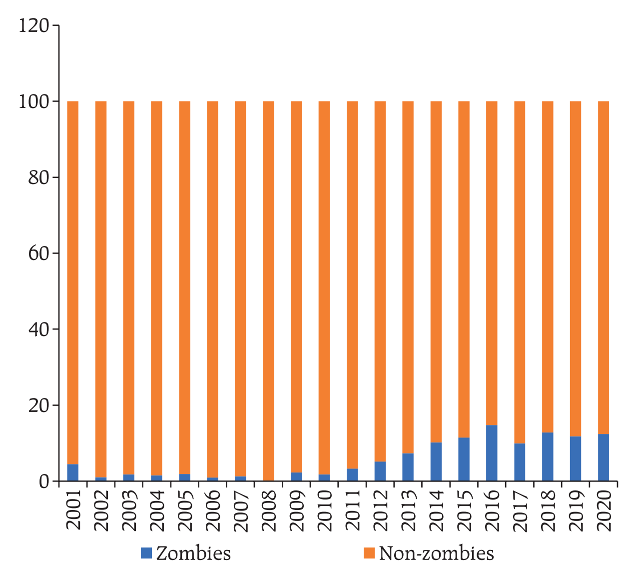
What emerges as a particularly striking finding is that zombies in India, post-GFC, have increased their share in total non-financial corporate sector debt to more than 10 per cent (Chart 3). Further analysis corroborates the expected differences between

Chart 2: Share of Zombie Firms in total Number of Non-Financial Firms



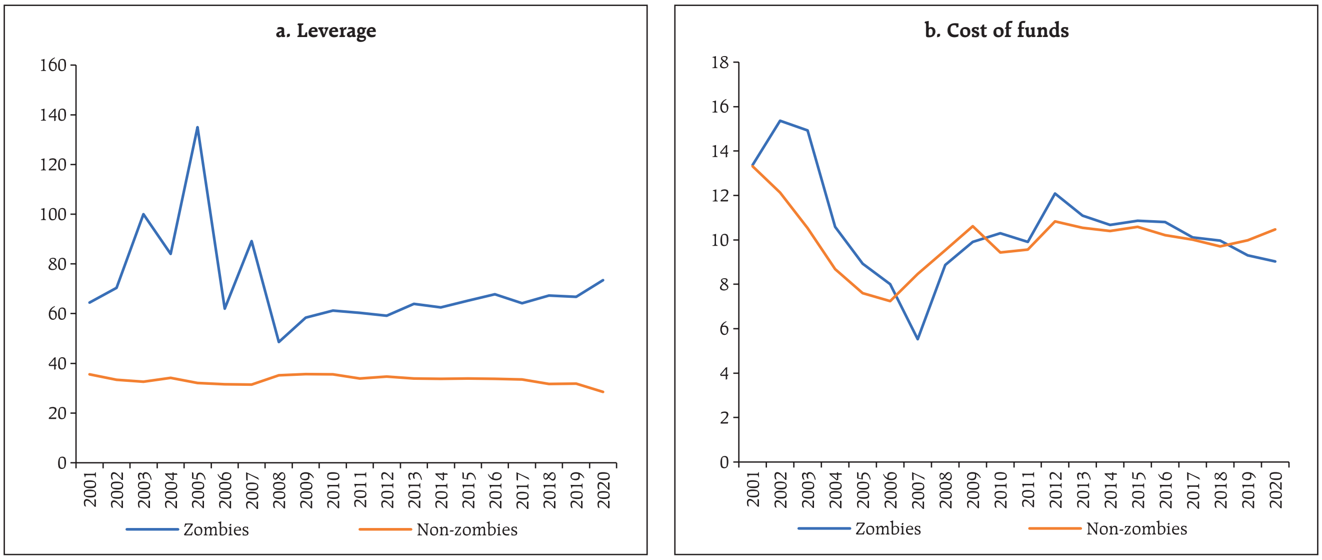
Source: Centre for Monitoring Indian Economy (CMIE) and authors' estimates.

Chart 3: Debt Share of Zombies *vs.* Non-zombies



Source: Centre for Monitoring Indian Economy (CMIE) and authors' estimates.

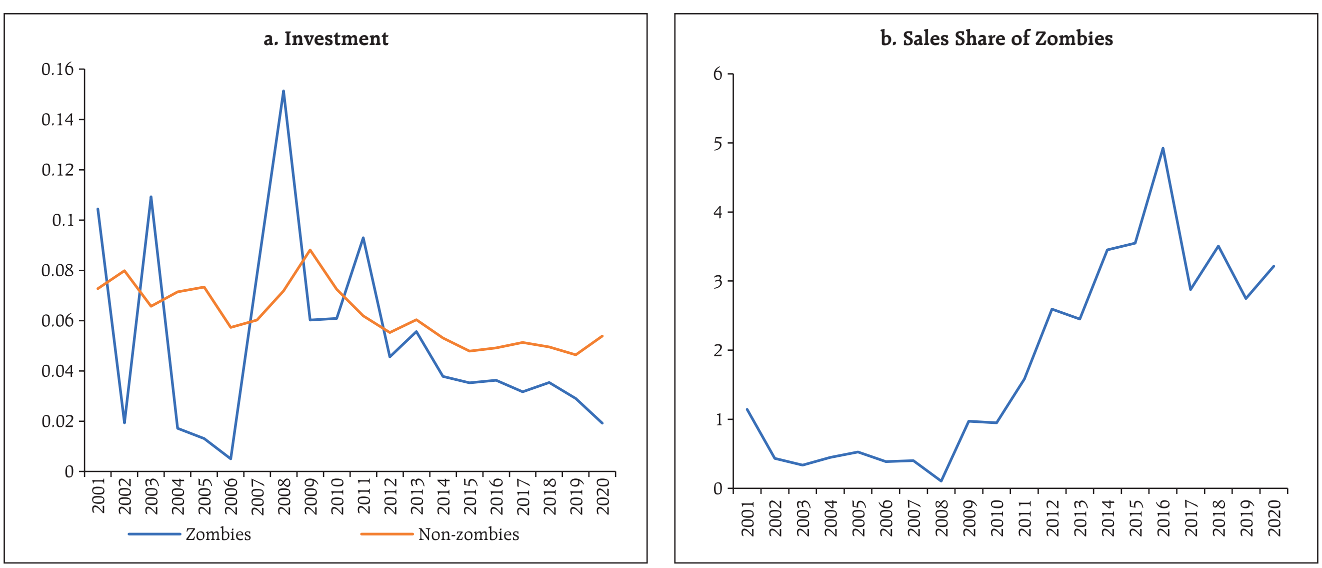
Chart 4: Leverage and Cost of Funds of Zombies



Source: Centre for Monitoring Indian Economy (CMIE) and authors' estimates.

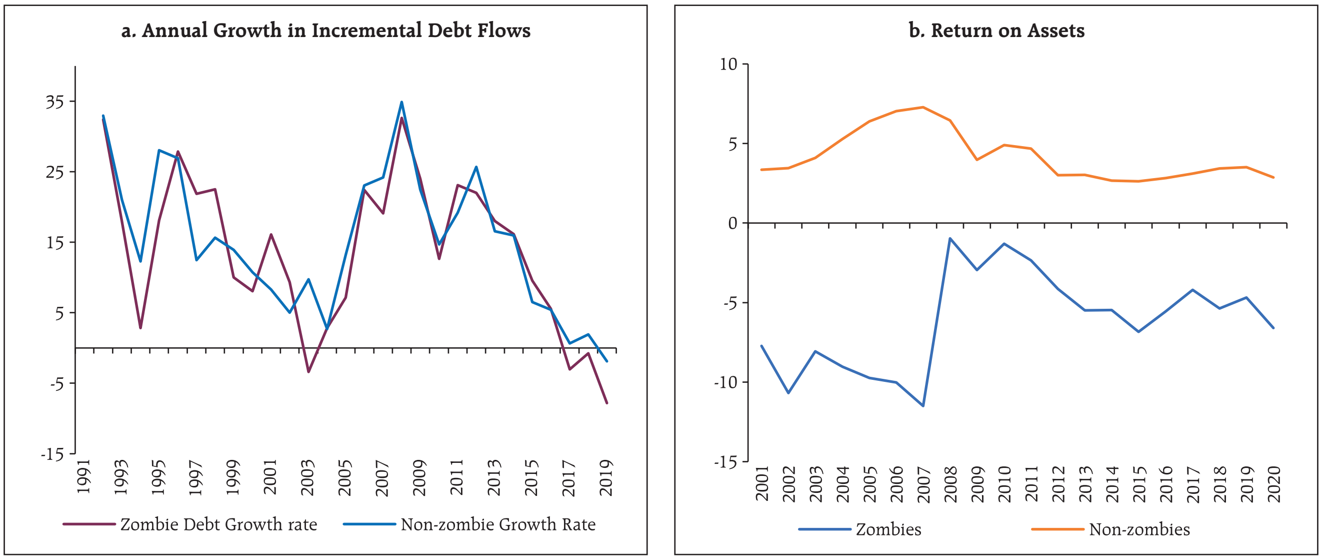
zombies and non-zombies in key financial parameters – zombies in India operate with significantly higher leverage, defined by total debts to total assets, compared to non-zombies, but surprisingly they manage to borrow funds at costs somewhat similar to what non-zombies pay (Chart 4). Despite their greater leverage, the share of zombies in total sales of the non-financial corporate sector has declined in recent times, which can be viewed as an evidence of zombies in India contributing to misallocation of resources and hampering creative destruction in the economy (Chart 5). Moreover, while the year-on-year (Y-o-Y) growth in debt of zombies has been very similar to that of non-zombies, the former lagged consistently in generating profits, which is another noticeable evidence of resource misallocation (Chart 6).

Chart 5: Investment and Share in Sales



Source: Centre for Monitoring Indian Economy (CMIE) and authors' estimates.

Chart 6: Debt Growth and Profitability - Zombies *versus* Non-zombies



Source: Centre for Monitoring Indian Economy (CMIE) and authors' estimates.

III. Empirical Analysis

Creative destruction and the effectiveness of monetary policy in stabilising business cycle are often studied in isolation in empirical research, even as the latter could potentially undermine the former, and the former can also potentially ease the burden on monetary policy to support growth over an extended period, implying that both issues may be interconnected. This paper aims to examine only one aspect of this interconnectedness, *i.e.*, whether growth supportive monetary policy protects zombies and thereby clogs the creative destruction process in the Indian economy. Monetary policy actions tend to operate by impacting the cost of funds of firms and their volume of new borrowings (or change in leverage), which in turn may influence new investment decisions (or change in fixed assets). It would be interesting to know how the cost of funds, new borrowings and new investment of zombies and non-zombies respond to monetary policy shocks, under different liquidity conditions. Accordingly, the following three empirical issues are emphasised in this paper:

- The impact of monetary policy on the cost of funds of zombies *versus* non-zombies;
- Sensitivity of bank borrowings to changes in the cost of funds of zombies *versus* non-zombies; and
- Sensitivity of investment to changes in bank borrowings of zombies *versus* non-zombies.

As a first step, the study examines the role of identified factors in influencing the likelihood of a firm being categorized as a zombie. For this estimation, a panel data logit model has been employed. Formally, let $\pi(x_{it})$ or a firm i with characteristics vector x_{it} be represented as a zombie at time t. In the case of a logistic model, it can be expressed as:

$$\pi(x_{it}) = \Phi(x_{it}'\beta + \mu_i + u_t)$$

Here $\Phi(.)$ is the cumulative distribution of a standard normal distribution and μ_i and u_t are individual and time fixed effects, respectively. The impact of specific variables on the likelihood of a firm being a zombie is estimated by examining the marginal effect of a change in any variable, say

x_{ij} on $\pi(x_{it})$. So, the marginal effect of a unit change in the j^{th}characteristics of variables on the likelihood of a firm i being categorised as a zombie could be approximated as:

$$\frac{d\pi(x_{it})}{dx_{ijt}} = \beta_j \phi\left(x_{it}^{'}\beta + \mu_i + u_t\right)$$

Here $\phi(.)$ is the normal probability density function. These estimates show the incremental impact of these variables on the likelihood of a firm being classified as zombies.

As the next step, the following panel regression framework is used to test the three specific empirical hypotheses discussed earlier. The general specification of the model is:

$$y_{it} = X_{it}\beta + u_{it}\ , \forall\ i, t$$

$$u_{it} = \mu_i + \lambda_t + v_{it}$$

where y_{it} is the dependent variable, X_{it} is the vector of explanatory variables, and u_{it} is the error term with individual fixed effect μ_i and time fixed effect λ_t. For certain regression specifications in which panel-invariant explanatory variables are included (for instance, the monetary policy rate is the same for all firms during a year), only firm-specific fixed effect is considered for the estimation.

Monetary policy is captured through the weighted average call rate (WACR) – the operating target of monetary policy in India, to study the impact on the cost of funds of firms. In addition to WACR, the role of firm-specific factors such as their size, profitability, and the number and length of banking relationships that may determine the cost of funds are also included in the model. To assess whether the credit channel of monetary policy works at the firm level, the differential bank borrowing pattern of zombies and non-zombies in response to changes in their cost of funds is also estimated. The response pattern is separately studied for surplus and deficit liquidity phases [captured through annual average net liquidity adjustment facility (LAF) positions as a percentage of net demand and time liabilities (NDTL)]. To examine whether zombies borrow from banks to undertake new investment or to just survive by meeting current expenses, the sensitivity of investment of firms to new borrowings is studied next. Bank borrowings can be broadly categorised into two types: short-term borrowings and long-term borrowings, with the latter often indicating the intention of new investment by firms. In the data sample used in this paper, around 40 per cent of total bank borrowings are found to be of long-term.

Before proceeding to examine the three empirical issues, the importance of specific factors that may characterise a firm as a zombie (or influence the likelihood of a firm as a zombie) is assessed first (Table 2). A firm with a higher age profile (or that survives longer) is relatively less likely to be a zombie; but overall, zombies tend to succeed in surviving long enough, posing risks to creative destruction. A higher return on assets lowers a firm's likelihood of being a zombie. There are two interesting findings on banking relationships: first, firms having relationships with a lesser number of banks are more likely to be zombies; second, firms with shorter banking relationships are also more likely to be zombies. A longer banking relationship helps banks in acquiring soft information about firms, which in turn may contribute to the realistic assessment of a firm's creditworthiness. The banking relationship structure for zombies is expected to differ from that of non-zombies in a competitive banking system that may progressively assign greater importance to the risk-return profile and outlook of firms rather than the past relationship with a firm. Zombies tend to depend more on bank borrowings (evident for overall as well as long-term loans) as market sources may differentiate better between good and bad firms and deny access to the latter.

On the first empirical issue of interest, estimates suggest that a 100-basis point reduction in WACR lowers the cost of funds of firms by 35 basis points in the same year (Table 3). Surprisingly, in some specifications, zombies seem to manage lower average cost of funds, which could be an indication of the impact of evergreening to avoid higher explicit recognition of NPAs and the associated higher capital charges by banks, or also simple relationship-based banking that some banks may prefer to protect as long as the magnitude of the problem is manageable. The interactive dummy coefficient highlights that compared to non-zombies, the cost of funds of zombies is more sensitive to changes in WACR. An interest rate shock, expectedly, matters more to zombies but, from the standpoint of the effectiveness of monetary policy, it is found that cost of funds of all firms (zombies and non-zombies) change in response to changes in WACR. Again, along the expected lines, firms that are larger and profitable have lower average costs of funds.

The lower average cost of funds tends to stimulate higher bank borrowings for all firms (Table 4). During liquidity surplus phases, borrowings are also generally higher, attesting to the overall effectiveness of monetary policy. As one would expect, bank borrowings of zombies are comparatively higher than non-zombies. However, importantly, zombies borrow relatively less compared to non-zombies during surplus liquidity conditions, which does not support the perception that pro-growth counter-cyclical monetary policy may at times clog the creative destruction process in the economy. Normally, in a period of economic slowdown, good firms may accumulate cash surpluses while bad firms may need more credit to survive. Banks that may be driven by credit growth targets could still meet the credit needs of the latter, but in a well-supervised banking system, the increasing emphasis on the risk sensitivity of new assets created by banks may refrain them from doing so, despite the challenge of being viewed as risk-averse. Effective bank supervision and credible insolvency and bankruptcy procedures could, thus, lower the probability of accommodative monetary policy impeding creative destruction in an economy.

An increase in bank borrowings in response to an accommodative monetary policy shock is found to raise the investment of firms, defined as the ratio of incremental addition of fixed capital to total assets (Table 5). The sensitivity of investment, however, is found to be lower for zombies. The interactive dummy coefficient validates similar results even for long-term bank borrowings. Given that bank borrowings of zombies account for around 10 per cent of total bank credit absorbed by all non-financial firms in the past five years, they seem to be dampening the effectiveness of monetary policy to some extent. The real investment response to an accommodative monetary policy shock could strengthen if further improvement in resource allocation in the banking system could lower the share of zombies in the flow of new credit from banks. An accommodative monetary policy stance often aims at boosting the flow of credit to productive sectors of the economy and by intent, therefore, it does not work against the process of creative destruction, which is also corroborated by the empirical results of this article.

IV. Conclusion

In the post-Global Financial Crisis (GFC) period, return to a robust and durable growth trajectory has been elusive for a vast majority of countries, even as counter-cyclical policies have experimented with extreme variants of conventional and unconventional measures to support growth. In the process of doing so, a perception has developed that such policies may be hindering creative destruction and thereby contributing, quite inadvertently though, to lower trend investment and productivity growth. With the number of zombie firms – that cannot service debt, but still manage to borrow more to survive – rising globally over time, empirical examination of the relevance of this perception has acquired significance.

In India, zombies are estimated to account for about 10 per cent of total debt of the non-financial corporate sector and they have also absorbed about 10 per cent of total bank credit extended to all firms in the economy. As one would expect, they are found in general to be highly leveraged; generate a negative return on assets over successive years and borrow more to survive rather than undertake new investment. Their average cost of funds is more sensitive to monetary policy shocks. Their borrowings from banks, however, often do not give rise to higher real investment activity, unlike non-zombies. This validates that accommodative monetary policy is effective overall in lowering the cost of funds, stimulating higher flow of credit and raising new investment, but it gets dampened at the margin by zombies who tend to use borrowed resources, including long-term bank loans, less for new investment and more for survival. Importantly, during surplus liquidity conditions, which often accompany accommodative phases of monetary policy, credit flows to zombies remain weaker than flows to non-zombies, which could largely be due to the salubrious impact of risk-based supervision and the insolvency and bankruptcy regime that may no longer support evergreening of zombies. The empirical findings, *i.e.*, no evidence of surplus liquidity flowing excessively to zombies during phases of accommodative monetary policy corroborate that monetary policy in India has not hindered the creative destruction process and, therefore, does not pose any attendant risks to trend growth. With further improvement in resource allocation through the banking system, however, there is scope for enhancing the effectiveness of counter-cyclical monetary policy.

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Appendix-1

Variables	Definition
Age	Age of a firm at time t is defined as (t – the year of incorporation) number of years.
Size	The logarithm of total assets.
Return on assets (ROA)	Net income (*i.e.*, profit after tax) to total assets (in per cent).
Leverage	Total debt to total assets (in per cent).
Cost of funds	Interest expenses to total average debt (in per cent).
Bank relationship (BR)	The number of banks with which a firm has a relationship at time t.
Bank relationship length (BRL)	The maximum year of relationship with a bank (among all bankers) (in years).
Investment	Addition to fixed capital in a year (new investment) to total assets (in per cent).
Bank borrowings	Amount of bank borrowings during a year, including both short-term and long-term borrowings (in million rupees).
Average rating	The average rating is the average rating for different instruments of a firm at time t. The lowest rating value is 1, representing default; the highest rating value is 8; any rating value of less than 4 falls under the risky category.
Zombie Dummy	A dummy variable which takes the value of 1 if the firm is categorised as a zombie, else it is 0.
LAF Dummy	A dummy variable which takes the value of 1 for the years when net LAF was in surplus, else it is 0.

Source: Centre for Monitoring Indian Economy (CMIE) and authors' estimates.

Table 2: Factors that Determine the Likelihood of a Firm being a Zombie

	Marginal Effects			
	P(Zombie Dummy=1)	P(Zombie Dummy=1)	P(Zombie Dummy=1)	P(Zombie Dummy=1)
Age	-0.00692***	-0.00403***	-0.00483***	-0.00425***
	(0.00123)	(0.00128)	(0.00155)	(0.00154)
Number of Banking Relationships	-0.0136**	-0.00287	-0.0177**	-0.00844
	(0.00556)	(0.00572)	(0.00839)	(0.00678)
Return on assets	-0.120***	-0.120***	-0.126***	-0.126***
	(0.00304)	(0.00302)	(0.00392)	(0.00391)
Bank relationship length		-0.0205***	-0.0185***	-0.0179***
		(0.00319)	(0.00378)	(0.00375)
Bank borrowings			0.0526**	
			(0.0207)	
Long-term bank borrowing share				0.00287***
				(836×10^{-6})
Constant	-1.620***	-1.563***	-1.833***	-1.665***
	(0.0529)	(0.0520)	(0.132)	(0.0751)
N	26183	26183	17607	17607
Firm fixed effect	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Source: Authors' estimates.

Table 3: Sensitivity of Cost of Funds to Monetary Policy Changes

	(1)	(2)	(3)	(4)	(5)
	Cost of Funds	**Cost of Funds**	**Cost of Funds**	**Cost of Funds**	**Cost of Funds**
WACR	0.356***	0.356***	0.340***	0.356***	0.320***
	(0.0201)	(0.0201)	(0.0207)	(0.0201)	(0.0321)
Size	-0.262***	-0.260***	-0.258***	-0.259***	-0.261***
	(0.0534)	(0.0535)	(0.0535)	(0.0571)	(0.0571)
ROA	-0.0261***	-0.0277***	-0.0275***	-0.0277***	-0.0276***
	(0.00559)	(0.00577)	(0.00577)	(0.00579)	(0.00579)
Zombie Dummy		-0.139	-2.062***	-0.139	-0.141
		(0.124)	(0.616)	(0.124)	(0.124)
Zombie Dummy × WACR			0.291***		
			(0.0914)		
BR				-0.000781	-0.0437
				(0.0166)	(0.0344)
BR × WACR					0.00656
					(0.00460)
Constant	10.06***	10.06***	10.15***	10.06***	10.31***
	(0.457)	(0.457)	(0.458)	(0.465)	(0.498)
N	26183	26183	26183	26183	26183
Overall R^2	0.00992	0.0101	0.0104	0.0100	0.00993
Firm fixed effect	Yes	Yes	Yes	Yes	Yes
Year fixed effect	No	No	No	No	No

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. **Source**: Authors' estimates.

Table 4: Sensitivity of Bank Borrowings to Changes in Cost of Funds

	(1)	(2)	(3)
	log(Bank Borrowings)	log(Bank Borrowings)	log(Bank Borrowings)
Cost of funds	-0.0148***	-0.0149***	-0.0160***
	(0.00188)	(0.00188)	(0.00194)
Zombie Dummy	0.367***	0.436***	0.299***
	(0.0250)	(0.0298)	(0.0701)
LAF Dummy	0.0259**	0.0387***	0.0384***
	(0.0113)	(0.0117)	(0.0117)
Zombie Dummy × LAF Dummy		-0.199***	-0.146***
		(0.0470)	(0.0472)
Zombie Dummy × Cost of funds			0.0125**
			(0.00567)
Constant	6.735***	6.732***	6.743***
	(0.0208)	(0.0208)	(0.0214)
N	17607	17607	17607
Overall R^2	0.00340	0.00418	0.00471
Firm fixed effect	Yes	Yes	Yes
Year fixed effect	No	No	No

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Source: Authors' estimates.

Table 5: Sensitivity of Investment to Changes in Bank Borrowings

	(1)	(2)	(3)
	Investment	**Investment**	**Investment**
Long-term bank borrowings	$162 \times 10^{-8***}$	$181 \times 10^{-8***}$	
	(367×10^{-9})	(379×10^{-9})	
Zombie Dummy	-0.0112***	-0.00823**	-0.0108**
	(0.00309)	(0.00343)	(0.00534)
ROA	$631 \times 10^{-6***}$	$626 \times 10^{-6***}$	$731 \times 10^{-6***}$
	(161×10^{-6})	(161×10^{-6})	(158×10^{-6})
Long-term bank borrowings × Zombie Dummy		$-132 \times 10^{-8**}$	
		(662×10^{-9})	
Long-term bank borrowings / total bank borrowings			$423 \times 10^{-6***}$
			(391×10^{-7})
Long-term bank borrowings / total bank borrowings × Zombie Dummy			220×10^{-6}
			(102×10^{-6})
Constant	0.0839***	0.0839***	0.0691***
	(0.0140)	(0.0140)	(0.0135)
N	17259	17259	15788
Overall R^2	0.0178	0.0176	0.0600
Firm fixed effect	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes

Standard errors in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Source: Authors' estimates.

*Bad Banks as Good Samaritans: Lessons from Cross-Country Experience for India**

The cross-country experience in management of non-performing assets (NPAs) suggests that the establishment of a bad bank proves most effective when it has adequate government and legal backing. In the Indian context, the setting up of the National Asset Reconstruction Company Ltd. (NARCL), with a clear mandate and an explicit government guarantee, will help in alleviating the financial stress on commercial banks. NARCL will be an additional mechanism for resolution of large stressed assets, complementing the activities of existing asset management companies. Going forward, continued commitment, professional staff and transparency in operation will help in making the exercise cost and time effective.

1. Introduction

The establishment of the National Asset Reconstruction Company Ltd. (NARCL) as a 'bad bank' and the recent announcement by the Government to extend guarantee of ₹30,600 crore for its security receipts (SRs) have been received with enthusiasm as well as scepticism in equal measure[1]. While some have hailed this development as a panacea for all ills, other less sanguine analysts point out the pre-existence of a multitude of avenues for resolution of distressed assets and the challenges faced by them.

Such conflicting views represent the trade-offs inherent in establishment of bad banks. The present paper analyses cross-country practices of such banks to understand the characteristics that helped in their success. The features of the NARCL are then juxtaposed against the lessons learnt from international experience to gauge the possibility of its success. The rest of the article is structured as follows- Section 2 explains the concept and the evolution of bad banks and Section 3 elaborates upon cross-country design elements. Sections 4 and 5 outline the advantages in their creation and challenges faced in their operation, respectively. The next section evaluates the features of the NARCL *vis-à-vis* cross-country learnings, while Section 7 concludes.

2. Concept and Development of Bad Banks

Globally, the policy options to deal with the overhang of non-performing assets (NPAs) include loan restructuring, harnessing and reforming insolvency and resolution frameworks and operationalisation of bad banks. Although these alternative mechanisms have been tried and tested over a period across countries, the bad bank remains one of the more popular concepts, especially while dealing with system-wide stressed assets.

The term 'bad bank' may be used to represent any structure which enables a segregation of performing assets from the non-performing, either on or off-balance sheet. On-balance sheet models, where bad assets are placed in a separate internal unit, help increase transparency and work as a signalling mechanism for the market, showcasing the bank's commitment to clean its balance sheet. The off-balance sheet models, on the other hand, can take the form of a special-purpose entity structure, wherein bad assets are offloaded, securitized and sold to a diverse set of investors. Alternatively, the bad assets can be shifted to an external asset management or reconstruction company (AMC/ARC). The latter model, though complex and expensive, ensures maximum risk transfer in comparison to the others (Martini, *et al.*, 2009).

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1 Press Bureau of India, press release dated September 16, 2021, available at *https://pib.gov.in/PressReleseDetailm.aspx?PRID=1755466*.

Table 1: CAMCs and their Dates of Establishment

Country	Name of Centralised Asset Management Company	Establishment Date
Korea	Korean Asset Management Company (KAMCO)*	1962
US	Resolution Trust Corporation (RTC)	1989
Sweden	Securum	1992
Indonesia	Indonesian Bank Restructuring Agency (IBRA)	1998
Malaysia	Danaharta	1998
China	Orient, Great Wall, Cinda, Huarong Asset Management	1999
Japan	Resolution and Collection Corporation (RCC)	1999
Thailand	Thai Asset Management Company (TAMC)	2001
Ireland	National Asset Management Company (NAMA)	2009
Germany	FMS Wertmanagement	2010
UK	UK Asset Resolution Limited (UKAR)	2010
Spain	SAREB	2012

Note: *KAMCO's role expanded after the Asian Financial Crisis.

The present study focuses on centralised asset management companies (CAMCs)- characterised by varying degrees of government involvement and discusses their design features, while outlining factors that led to the success of some CAMCs over others. Pioneered in the 1980s in the US, the idea of CAMCs received traction when several other countries adopted it in the aftermath of the East Asian Crisis in the late 1990s, and more recently, after the global financial crisis (GFC) (Annex I). A list of CAMCs reviewed for this study, along with their dates of establishment, is presented in Table 1.

3. Design Elements of Bad Banks: Cross-Country Evidence

Centralised bad banks can be differentiated from each other based on several criteria, such as their capital funding, methods of acquisition of assets and the price paid for the same, mechanism for disposal of bad loans, as also the bank's winding down strategy on completion of its objective. An analysis of cross-country experiences suggests that political consensus, efficient legal processes, adequate statutory powers to the new institution, well-developed financial markets and use of private sector expertise are crucial ingredients for the success of bad banks (Martini, *et al.*, 2009). In the case of some Asian AMCs, a clear mandate, well-defined lifespan, realistic pricing and explicit government financial support have also been touted as reasons for their success (Fung, George, Hohl, and Ma, 2004).

3.1 Financing of CAMC

A bad bank can be financed through partial or full funding by the government—either through issuance of bonds or through equity contribution, special loans from the central bank, or public offering of shares. In the case of Sweden and the United States, Securum and Resolution Trust Corporation (RTC), respectively, were funded fully by their respective governments (Bhagwati, Khan, & Bogathi, 2017). In many East Asian countries, CAMCs have been financed through issuance of government guaranteed AMC bonds, which allows the government to keep the potential liability off its balance sheet. For instance, the Korean Asset Management Company (KAMCO) issues government-guaranteed bonds to raise funds and other financial institutions contribute about one-fourth of its paid-up capital (He, 2004). Explicit government guarantee ensures that these bonds are often characterised by zero risk weight in capital adequacy calculations, thus providing an incentive to banks to invest in them.

3.2 Acquisition of Bad Assets

CAMCs have historically bought toxic assets from financial institutions, mostly from banks and investment trust companies, at varied discount rates, ranging from 20 per cent to 80 per cent. Typically, the seller is compensated with cash and security receipts (SRs), the latter usually guaranteed by the government. NPAs are also screened based on whether their collateral and transfer rights are legally executable. Some of the other factors that are considered in the acquisition process are as follows:

- Depending on the degree of government involvement and the mandate of the bad bank, transfer of stressed assets can be voluntary or compulsory. In Thailand, for instance, while TAMC acquired assets from both government-owned and private-owned financial institutions, transfer of qualifying assets was obligatory for the former and optional for the latter.

- In some cases, bad banks are mandated to buy only a part of the toxic assets. In South Korea, for example, half of the loans were required to be disposed off by financial institutions themselves, and the remaining half were to be purchased by the CAMC. In Malaysia, Danaharta concentrated only on non-performing loans (NPLs) above MYR 5 million, as smaller NPLs would be best handled by the financial institutions themselves. Moreover, the sheer number of accounts relating to small loans made it cost and time ineffective to be dealt with by a centralised AMC.
- There are wide variations in terms of the volume of assets taken over in different countries depending on the scale of the problem and the capacity of the bad bank, among other factors. Danaharta acquired 80 per cent of the total NPLs, while the Irish NAMA took over assets worth 44 per cent of the country's GDP in 2009.
- In some cases, there are geographical restrictions on acquisition of assets; for example, in China, the local and provincial AMCs being set up since 2013-14 can only acquire toxic assets originating from the same region in which they are located, although no such regional restrictions exist while disposing them off.
- Bad banks can also be distinguished based on whether their mandate is sector-specific or general purpose. General purpose bad banks are those which do not make a distinction in the sectoral composition of the bad assets they acquire. In China, for example, the four state-owned AMCs took over diverse assets, ranging from the manufacturing sector to the farm sector. IBRA has concentrated more on corporate loans, which constitute 84 per cent of its acquired assets. On the other hand, some of the European AMCs, such as NAMA and SAREB, have land and commercial real estate as their target assets and acquire these from different banks.

3.3 Pricing and Recovery

The viability and success of the bad bank crucially depend upon pricing that is fair to both the originator bank as well as the CAMC, irrespective of the method of transfer. Overpriced NPAs dampen the CAMC's profitability and ability to achieve the mandate, in addition to serving as a disguise for the government to bail out troubled financial institutions. Alternately, acquiring NPAs at very low prices defeats the purpose of the entire exercise, affecting the financial gain that banks stand to make. Countries adopt different mechanisms to decide on the transfer price depending on various factors like the availability of data, nature and quality of assets acquired, and the market for stressed assets (Table 2). In the European countries, transfer price is typically set between the estimated (current) market value and the estimated real (long term) economic value, which in turn is based on projected future cash flows, book value, market value, value of collateral, and probability of recovery, amongst others.

3.4 Management and Disposal of Assets

Acquisition and aggregation of assets by a centralised agency does not in itself guarantee their effective or profitable handling, as the two functions may require separate sets of skills and expertise. In Malaysia, for example, Danaharta was accompanied by a Corporate Debt Restructuring Committee, as well

Table 2: Pricing, Acquisition and Recovery

Bad Bank	Purchase or Transfer Price	Assets acquired (as percentage of GDP)	Average rate of recovery (per cent)
Danaharta	Market value based on new appraisal for real estate loans; 10 per cent of outstanding principal in case of unsecured loans.	5	58
Indonesian Bank Restructuring Agency (IBRA)	Assets transferred at zero value.	27	22
KAMCO	Based on present value of discounted projected cash flows; 3 per cent of face value in case of unsecured loans.	20	47
Orient, Great Wall, Cinda, Huarong	NPLs purchased from respective banks at book value.	18	34
Resolution Trust Corporation (RTC)	Did not purchase assets.	N.A.	87
SAREB	Based on real economic value calculated by independent valuation reports, determined by the Central Bank.	10	N.A.
Securum	Did not purchase assets. Loans and associated reserves were transferred, while the government recapitalised the banks directly.	4	N.A.
NAMA	Transferred below book value and paid for with Irish Government Bonds based on appraisals.	44	33

N.A.: Not applicable/ not available.
Source: Based on referred research papers.

as Danamodal, a banking recapitalisation agency, to aid the completion of the resolution process. Joint venture partnerships are also used to access specialised knowledge on asset management and bridge the lack of expertise in a government-owned AMC.

Techniques employed by CAMCs for asset disposal are tailor-made to suit the type of assets being dealt with. Viable loans may be restructured, while the non-viable businesses, assets, or the underlying collateral, are sold off. For example, homogenous assets could be pooled and securitised through issuance of asset-backed securities. Cases in which liquidation of individual assets is required, foreclosure and public auctions of collateral are undertaken for price discovery.

3.5 Wind-down Strategy

Two views have emerged on the ideal lifetime of the AMC. The 'European view' is dominated by moral hazard concerns and advocates a clearly defined, realistic lifetime of the AMC, with asset transfers from banks preferably being completed in a single round. SAREB, UKAR and FMS were all set up with clear mandates of winding up after making profits or selling off all the loans on their books, or after a pre-specified time period. SAREB aims to make a profit of 15 per cent over its 15-year life, while the UKAR was set up to sell off the government's stake in the troubled institutions. The 'Asian view', on the other hand, usually believes in making AMCs a part of its financial crisis toolkit, retaining the infrastructure and expertise, while requiring safeguards to prevent moral hazard problems (Martin, 2020). While the Chinese and Korean AMCs had no clear sunset dates, Danaharta was set up with a finite timeline and wound down its operations in 2005.

3.6 Super Legal Powers

In countries where the extant legal system caused impediments or delays to debt workouts, restructuring negotiations or foreclosures, the CAMCs were bestowed with super legal powers to overcome the hurdles. For instance, Danaharta was conferred with two special powers: ability to acquire NPLs *via* statutory vesting with certainty of title; and power to appoint independent special administrators to manage financially troubled company borrowers. Similarly, SAREB enjoys a special status as a preferential creditor for subordinated debt over other creditors, and other legal advantages that do not apply to all Spanish limited liability companies. NAMA, under its Act, has been allowed to take over commercial real estate collateral from its insolvent debtors, a facility not allowed for other lenders in Ireland.

4. Advantages of a Centralised Bad Bank

Evidence world-wide suggests that a centralised bad bank can help in substantial stress reduction and has various systemic benefits, complementing and enabling the pre-existing stressed asset resolution mechanisms.

- For selling banks, the clear segregation of weak assets from the rest grants an occasion and rationale to restructure its balance sheet and reshape the business model, while providing transparent insights to customers and investors into the bank's core performance. By freeing up provisions and thereby, boosting capital for lending, CAMCs enable banks to support the economy. Scarce human resources can also concentrate on more important banking operations such as new lending, rather than managing distressed assets and corporate restructuring.
- The CAMC model can be relied upon when banks do not have sufficient resources to resolve large amounts of NPAs through individual departments within banks or through subsidiaries. As opposed to internal restructuring, a CAMC provides a swift vehicle to get stressed assets off a bank's balance sheet and reduces the need for fresh recapitalisation either from the government or from markets.
- Leveraging this mechanism, banks can avoid fire sales of assets which result in lower recovery values. Gradual sales through CAMCs that have expertise in the field can help in optimal recovery rates.
- CAMCs are usually driven by other concerns in addition to value maximisation, such as preserving the economic value of assets. For instance, RTC timed the sale of its real estate assets so as to not cause further deterioration in prices.
- Consolidation of stressed loans in bad banks and centralised ownership of collateral can effectively address the problems faced by individual banks in attracting investors for these assets. For instance, public AMCs in Asia provided a market for NPLs by giving banks an option to either sell their NPLs or through forcing them to offload the problematic assets (Lee, 2020).
- Centralised AMCs and public or private ARCs can complement each other, like in Thailand, and need not be substitutes in stressed assets management. Bad banks can hold assets which the private AMCs may not, due to their long gestation periods, or the assets that might not be adequately profitable in the medium term but are economically important and have significant positive externalities (Acharya, 2017)
- CAMCs are usually set up through special acts of law or through government orders. As such, they can be bestowed with special legal powers to accelerate loan recovery, as seen in some successful experiences such as Danaharta.
- The use of cash and/or coupon-paying government-guaranteed securities to purchase NPAs, apart from being more attractive than the SRs issued by private ARCs, improve banks' balance sheets and add to the income of the financial institutions. It facilitates more efficient price discovery through creation of a vibrant market for distressed assets and a uniform valuation criterion as compared to private forces working in isolation.

5. Challenges of a Centralised Bad Bank

Economists and policymakers have long acknowledged that the establishment of a bad bank is fraught with many trade-offs. These include – how to relieve banking stress without encouraging moral hazard; how to minimise the cost to the government exchequer and how to arrive at a valuation that is fair to both the acquiring entity as well as the seller. In view of the following serious challenges, utmost care needs to be taken in their design and structure.

- Bad banks, essentially formed to ease the burden off banks' balance sheets, may encourage further build-up of risky assets. Knowing that they have the bad bank option to fall back on, banks may become less vigilant in giving out loans, leading to the problem of moral hazard.
- The design of CAMCs needs to be carefully crafted to suit country-specific and/or sector-specific requirements. Furthermore, there is also a tendency to deviate from the primary objective as in the case of China's big four bad banks, wherein investments in financial institutions—such as banks and insurance companies—rather than in bad loans, now constitute a major part of their business (Ingves, Seelig, & He, 2004). There is also a need to provide proper incentives to their governing bodies and employees, as staff recruitment and retention are problems that often arise.
- Financing remains a dominant issue in the context of a central bad bank. Unless carefully designed and efficiently executed, the cost of setting up a CAMC falls inevitably on the resource-constrained government, and ultimately, on the taxpayers. Even in countries where the CAMC has succeeded in reducing the NPLs, it has come at a cost to the government exchequer (Fung, George, Hohl, & Ma, 2004).
- Another challenge that emerges is keeping the bad bank funded enough to tackle a major share of NPLs. International experience suggests that in certain cases, the bad bank's resources accounted for a miniscule share of the bad assets, thus rendering the whole exercise redundant.
- Market creation for distressed assets and their fair valuation at both the buying and selling stages is another operational challenge that arises, as it determines the viability and sustainability of the solution. Asset disposal by state-owned AMCs may be disincentivised by challenges such as political pressures against selling of certain assets and the fear of audit scrutiny relating to sell-offs (Fung, George, Hohl, & Ma, 2004).
- The CAMCs, by virtue of being financed by the government, are required to take a macroeconomic perspective rather than focusing on asset value maximisation. Thus, their decisions relating to either sell-offs or retaining the assets may be constrained by the need to help stabilise asset markets.
- Lack of transparency in operations and lack of reliable data can hinder the objective valuation of assets and creation of optimal portfolios for resale (Deloitte, 2020). In countries such as Ireland and Spain, insufficient or missing documentation created hurdles in smooth functioning of their CAMCs (Cas & Peresa, 2016).

6. Stressed Assets Management in India

The Indian banking system has been weighed down by mounting NPAs since 2012. Various mechanisms like Lok Adalats, Debt Recovery Tribunals, SARFAESI Act and the Insolvency and Bankruptcy Code (IBC) are available to banks to deal with the stress, while maintaining these assets in their books till resolution. An internal restructuring unit-like model has also been experimented in India, but only with partial success. While the Specified Undertaking of Unit Trust of India (SUUTI) was set up as a special purpose entity with the primary function of managing the bad loans of UTI and administering redemptions, it is yet to be wound up. Other assets that were transferred to SUUTI have subsequently increased in value, disincentivising their disposal and making their retention and continuation of SUUTI as a going concern, beneficial.

Alternately, banks can exercise the option of outright sale of bad loans to private ARCs against the issue of SRs, *albeit* at a haircut. The ARC model has proved to be constrained by several factors, like vintage NPAs being passed on to them, lack of debt aggregation, non-availability of additional funding for stressed borrowers, difficulty in raising funds by the ARCs, etc. Also, they lack the focus on recovery and acquiring necessary skill sets for holistic resolution of distressed borrowers (RBI, 2021). Further, the uncertainty surrounding recovery makes the secondary market for SRs illiquid, causing these SRs to remain on the books of the subscribing entity, which are often the original selling banks themselves (Yadav & Chavan, 2021).

In the Indian case, majority of the bad assets lie with public sector banks (PSBs) and their top management have always faced a dilemma while taking decisive action on stressed assets: what is the right amount of haircut that could be assumed without the fear of raising eyebrows now and the possibility of vigilance action in the future?[2] Deciding the right price for a bad asset could be tricky and these commercial decisions can go wrong with evolving circumstances. In such a situation, not taking bold actions for resolution now and kicking the can down the road may always be perceived as a pareto superior option.

The experience so far suggests that due to repeated litigations, the resolution processes drag on, leading to asset value erosion, which adversely affects the health of the banking sector in the meantime. The ineffectiveness of these mechanisms manifests itself in the large outstanding stock of bad assets, a major share of which (72.1 per cent as at end-September 2021) are in the balance sheets of PSBs, resulting in the burden of recapitalisation falling on the public exchequer. Moreover, the bad loan problem has dampened the risk-taking ability of the banks, affecting their credit growth.

Design Features of NARCL

Certain features of NARCL closely resemble successful models adopted elsewhere and may prove helpful in reducing the NPA stress.

- Structure: The establishment of NARCL for acquiring and consolidating stressed assets, along with the India Debt Resolution Company Limited (IDRCL) for managing these assets by engaging market professionals and turnaround experts, is similar to the mechanism followed in Malaysia, which proved highly successful in resolving its stressed assets.
- Ownership: NARCL, has an initial capital base of ₹6,000 crores, of which PSBs own a majority (51 per cent) stake while the remaining shareholding vests in private sector banks and non-bank finance companies[3]. This structure, thus, does not put immediate strain on the

[2] 'CVC finds many flaws in sale of bad debt by banks', Times of India dated March 18, 2019. *Available on https://timesofindia.indiatimes.com*, accessed on February 15, 2022.

[3] Accessed on February 14, 2022, from *https://www.moneycontrol.com/* article dated October 5, 2021.

government's limited resources. The majority private shareholding of the IDRCL and the resultant professional and expert handling of bad assets is expected to ensure maximum and timely recovery.

- Acquisition: The NPAs will be acquired from banks by paying up to 15 per cent of the agreed or discounted value of the loans in cash, while issuing government-guaranteed SRs for the rest, following successful models such as Korea and Malaysia. Given that in phase I, assets worth ₹90,000 crores (out of total planned acquisition of ₹2,00,000 crores) that have already been fully provided for are expected to be acquired, recovery will instantly strengthen banks' balance sheets. Further, by concentrating on legacy large value accounts of more than ₹500 crores, the NARCL may lead to faster resolution of overall stress[4].
- Government guarantee: The guarantee of up to ₹30,600 crores may be invoked to make good the shortfall between the face value of the SR and the actual realisation. The time-bound nature of the guarantee, valid for 5 years conditional on resolution or liquidation, and gradual increase in guarantee fee payable to the government by NARCL, are expected to disincentivise any delays in resolution. The structure, ownership pattern and the government guarantee backing the SRs is expected to impart credibility to the institution and allay fears of banks regarding scrutiny by various regulators about their sell-off decisions.
- Security Receipts: Apart from reducing upfront capitalisation requirements of the bad bank, guarantees by the government are bound to improve the liquidity and tradability of SRs, helping in development of a secondary market for them.
- Complementarity with existing ARCs: Under the proposed mechanism, NARCL is required to go for the "Swiss Challenge method", where the 28 existing ARCs in India will be invited to make a better offer for the stressed asset. Rather than being substitutes or rivals as buyers in the market of stressed assets, the nationalised entity will act as a complement to the existing companies. They will help in debt consolidation, minimising the time taken for aggregating the bad loans, and avoiding the inter-lender litigations.

[4] At the time of publishing of this article, assets worth ₹50,000 crores are scheduled to be transferred to the NARCL by end-March 2022. Accessed from *https://www.thehindubusinessline.com/* article dated January 28, 2022.

7. Conclusion

Creation of a bad bank at the current juncture may prove helpful in reducing banking stress and kick-start the credit cycle. The cross-country evidence suggests that if the logistical and financial challenges are carefully navigated, experiments of centralised bad bank can have more hits than misses. While it may be unfair to hail them as a universal antidote to deal with financial stress, they have proven to be a worthwhile exercise when armed with conducive institutional frameworks. Experience of international best practices suggests that the NARCL in India is likely to serve as a time-efficient mechanism, while reviving investor interest in primary as well as secondary markets for stressed assets and SRs, respectively. Going forward, continued commitment, professional staff and transparency in operation will help in making the exercise cost and time effective. At the same time, care needs to be taken to ensure that fresh slippages are arrested, and bank balance sheets are strengthened to avoid future build-up of stress.

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Annex I: Cross-Country Experience

Country	Background	Name of bad bank	Year	Structure	Comments
Sweden	A deflation in housing bubble in 1991-92 resulted in widespread bank insolvency.	Securum for Nordbanken and Gota	1992-1997	• Securum bought assets worth SEK 67 billion (a little over 4 per cent of GDP) from Nordbanken at SEK 50 billion and worth SEK 45 billion from Gota, (amounting to 3 per cent of the banking sector's assets). • The price of bad assets was determined by consultants and government examiners, as close to pure market value as possible.	• The model, combining recapitalisation, government guarantee, nationalisation of certain banks along with creation of a bad bank, was highly successful in ending the banking crisis. • The entire Securum exercise cost tax-payers SEK 35 billion, about SEK 15 billion less than initial estimates which amounted to 2.1 per cent of GDP at 1997 prices.
South Korea	Asian crisis	Korea Asset Management Corporation (KAMCO)	1997	• KAMCO is a centralized publicly owned asset management company (setup in 1962), also involved in corporate restructuring. • Its major shareholders are the government (42.8 per cent), the Korean Development Bank (28.6 per cent), and other financial institutions (28.6 per cent). • KAMCO purchased over 300,000 NPLs with a face value of won 110 trillion (approximately US$92 billion), representing 9 per cent of financial sector assets or about 20 per cent GDP from banks and non-bank financial institutions.	• Half of the loans were bought by financial institutions themselves by either selling off collateral or calling in loans, while KAMCO purchased the other half. • Successful in reducing NPLs but at a high net cost.
Malaysia	Asian currency crisis	Danaharta	1998-2005	• Danaharta was a public company, wholly owned by the Government, which had statutory backing. • Danaharta took over NPLs of more than MYR 5 million, amounting to around 70 per cent of the banking system's NPLs at a discount.	• Successfully stopped further slippage, repaid all its bonds as of March 2005, was wound up after seven years in December 2005. • Incurred a small loss for the government, on a cumulative basis.

(Contd.)

Country	Background	Name of bad bank	Year	Structure	Comments
				• Borrowers with viable loans were allowed to restructure and rehabilitate their loans while non-viable loans were recovered through sale of a borrower's business, assets or the underlying collateral.	
China	One AMC each was formed to acquire bad loans worth RMB 1.4 trillion from its big four state-owned commercial banks.	Big Four AMCs (Cinda, Huarong, China Orient, and Great Wall)	1999	• During the original process, the government required the AMCs to buy the assets at face value rather than at fair value, based on credit performance. • Government provided each AMC with an initial equity capital injection of RMB 10 billion (USD 1.2 billion). • The big four banks transferred their NPLs to their respective linked but independent AMCs.	• Bad banks, instead of closing down as initially planned, turned into financial conglomerates, picking up brokerage and real estate operations and even lending for takeovers.
Ireland	Irish financial crisis and Irish property bubble	National Asset Management Agency (NAMA)	2009	• The NAMA Bill applied to the six financial institutions which were covered by the Irish government's deposit guarantee scheme. • NAMA arranged and supervised the identification and valuation of property-backed loans on the books of qualifying financial institutions in Ireland, but the purchase and management of these loans were the responsibility of a SPV. • The privately funded SPV purchased assets from financial institutions by issuing securities, most of which were backed by a government guarantee.	• The assets were purchased by using government bonds, which led to a significant increase in Ireland's gross national debt.

(Contd.)

Country	Background	Name of bad bank	Year	Structure	Comments
Germany	Global financial crisis of 2008	Unwinding institute for WestLB	2009	• The bank got three billion euros in capital from WestLB and one billion euros in guarantees from shareholders to cover potential losses from the portfolio. • The savings and loan institutes of North Rhine-Westphalia provided guarantees worth one billion euros, while Berlin provided up to four billion euros.	• WestLB was split into three parts, one of which was the bad bank, Erste Abwicklungsanstalt (EAA), which was winding down bad assets worth around 51 billion euros as of the end of 2011. The EAA was also tasked with winding down about 100 billion euros of additional assets from WestLB's final breakup.
United Kingdom	Global financial crisis of 2008	UK Asset Resolution (UKAR)	2010	• Was set up to facilitate the orderly wind down of the government owned businesses of NRAM Limited and Bradford & Bingley plc (B&B), including its subsidiary Mortgage Express Managed by UK Government • Investments (UKGI) on behalf of HM Treasury.	• Sold off its final assets in February 2021.
Spain	Formed in the wake of systemic financial distress with the burst of a real-estate bubble.	SAREB	2012	• Private shareholders own 55 per cent of SAREB and the remaining 45 per cent is held by the Fund for Orderly Bank Restructuring (FOBR). • It received funding from the European Union *via* 1) capital injection into the FOBR from the European bailout fund and 2) acceptance of the bonds issued as payment for supposedly impaired assets by the ECB. • SAREB functions by acquiring property development loans from Spanish banks in return for government bonds. The Spanish central bank is responsible for asset price setting.	• SAREB aims to make a profit of 15per cent over its 15-year life. • However, SAREB is struggling, as a slump in Spanish real estate prices has depressed the value of loans and foreclosed assets it took on, despite buying them at the time at a substantial discount.

Source: Based on referred research papers.

*Impact of COVID-19 on Sentiments of Indian Manufacturers**

This article lists the key findings of the industrial outlook survey (IOS) for the manufacturing sector conducted during 2019-21. The sentiments of the respondents reflected that the slowdown in growth momentum was mainly due to weakening of demand for three consecutive years beginning 2017-18. Just when the manufacturers' outlook started looking up, the COVID-19-induced lockdown measures slowed down the revival process. The pandemic affected the producers' sentiments negatively by bringing down the survey parameters to historic lows. While the impact of the second wave has been less pronounced than the first one, and various macro parameters related to manufacturing sector may soon attain their pre-COVID levels, the process of attaining their long-term trend levels may take some time.

Introduction

In early 2020, the COVID-19 pandemic spread with alarming speed infecting millions and bringing economic activity to a near-standstill. The economic damage became evident and turned out to be the largest economic shock the world has experienced in decades. This posed tough challenges to policymakers. As the forward-looking surveys play a major role in supporting policy decisions, these were used by majority of the central banks to capture the sentiments of enterprises. The surveys helped to gauge the impact of the pandemic as well as to assess the timing and pace of the expected recovery process as perceived by the enterprises.

The Industrial Outlook Survey (IOS) conducted by the Reserve Bank plays an important role in supporting monetary policy decision. Being a forward-looking survey, IOS captures the sentiments of enterprises engaged in manufacturing activities. The perception includes the assessment of the current quarter and expectations for next quarter. In the wake of coronavirus outbreak in early 2020, along with other sectors, the manufacturing industries also got impacted adversely. After coping with the first wave, the economy showed some signs of recovery from Q3:2020-21. Although the second wave of the pandemic again worsened the economic conditions, the manufacturing sector quickly regained traction. Though the economic activities were impacted by sudden surge of omicron variant of the pandemic in end-December 2021, the impact is likely to be much lower.

Against this backdrop, the present article aims to extract the stylised facts emanating from various rounds of survey conducted since 2019. At the same time, the outlook on the recovery process as perceived by the manufacturers are also presented in this article. During this period, total 11 rounds of the survey were conducted by the Reserve Bank *i.e.*, round 86 (April-June 2019) to round 96 (October-December 2021).

This article also attempts to formulate a recovery path of major macroeconomic variables, namely Index of Industrial Production (IIP) and Gross Value Added (GVA), for the manufacturing sector using an analytical framework under specific assumed scenarios based on the information available from survey outlook.

The rest of the article is presented in four sections. In Section II, the underlying sentiments of the manufacturing units are presented. Section III focuses on the expected recovery process after the pandemic

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shock, as perceived by the manufacturers. Section IV attempts to study the pandemic impact on the macro variables as well as the subsequent recovery using an analytical framework and Section V concludes with some policy implications.

II: Stylised Facts 2019-21

II.1 Sample Frame, Survey Questionnaire and Survey Methodology

The survey questionnaire[1] is canvassed to a panel of manufacturing companies which undergoes periodic revision with addition of new companies and removal of closed/merged companies. The survey seeks qualitative responses from the senior management personnel or finance heads of manufacturing units. The questionnaire is structured in five blocks covering general information about the respondent companies; product details in order of sales; information on the size of few performance indicators; and assessment for current quarter and expectations for the next quarter. Owing to uncertainty on account of lockdown and restrictions imposed because of COVID-19 pandemic, an additional block was included since April-June 2020 quarter to capture expectations for two and three quarters ahead to get an outlook of the enterprises on the expected recovery process. The responses are collected on a three-point scale *i.e.*, increase, no change and decrease and are converted into single quantitative measure *viz.*, net response (NR)[2] for summarising the survey results. By construction, NR can take a value between -100 to +100 where a negative value represents contraction/pessimism and a positive NR signifies growth/optimism.

II.2 Key findings during 2019-21

The survey results are presented in terms of assessment (A) and expectations (E) of the companies on 'demand conditions', 'financing conditions', 'price situation' and 'overall business situation'. In this article, the net responses (NR) for assessment quarter is termed as assessment NR (NRA) and the NR for expectations quarter is described as expectations NR (NRE).

a. Demand conditions

The sentiments on demand conditions, as captured through production (PR), order book (OB), capacity utilisation (CU), inventory of raw materials (IRM), exports (EXP), imports (IMP) and employment (EMP), deteriorated in early 2019-20. The assessment NRs were low in Q2:2019-20 and Q3:2019-20 as compared to previous quarters. However, there were some signs of improvement in Q4:2019-20 as demand started firming up. The resolution of the Monetary Policy Committee in March 2020 also mentioned that pick up in manufacturing in January 2020 pulled the industrial production in positive territory after contraction over the past five months. But the COVID-induced lockdown impacted the economic activity adversely and brought down the NRs to a historic low in Q1:2020-21.

With the easing of lockdown in a phased manner, a pickup in demand was seen, which was indicated through an upward movement in survey parameters. The sentiments of manufacturers started improving after a sharp decline in Q1:2020-21. But the demand condition again deteriorated in Q1:2021-22 due to second wave of the pandemic, but it triggered a comparatively lower reduction in production which, in fact, quickly reversed in Q2:2021-22.

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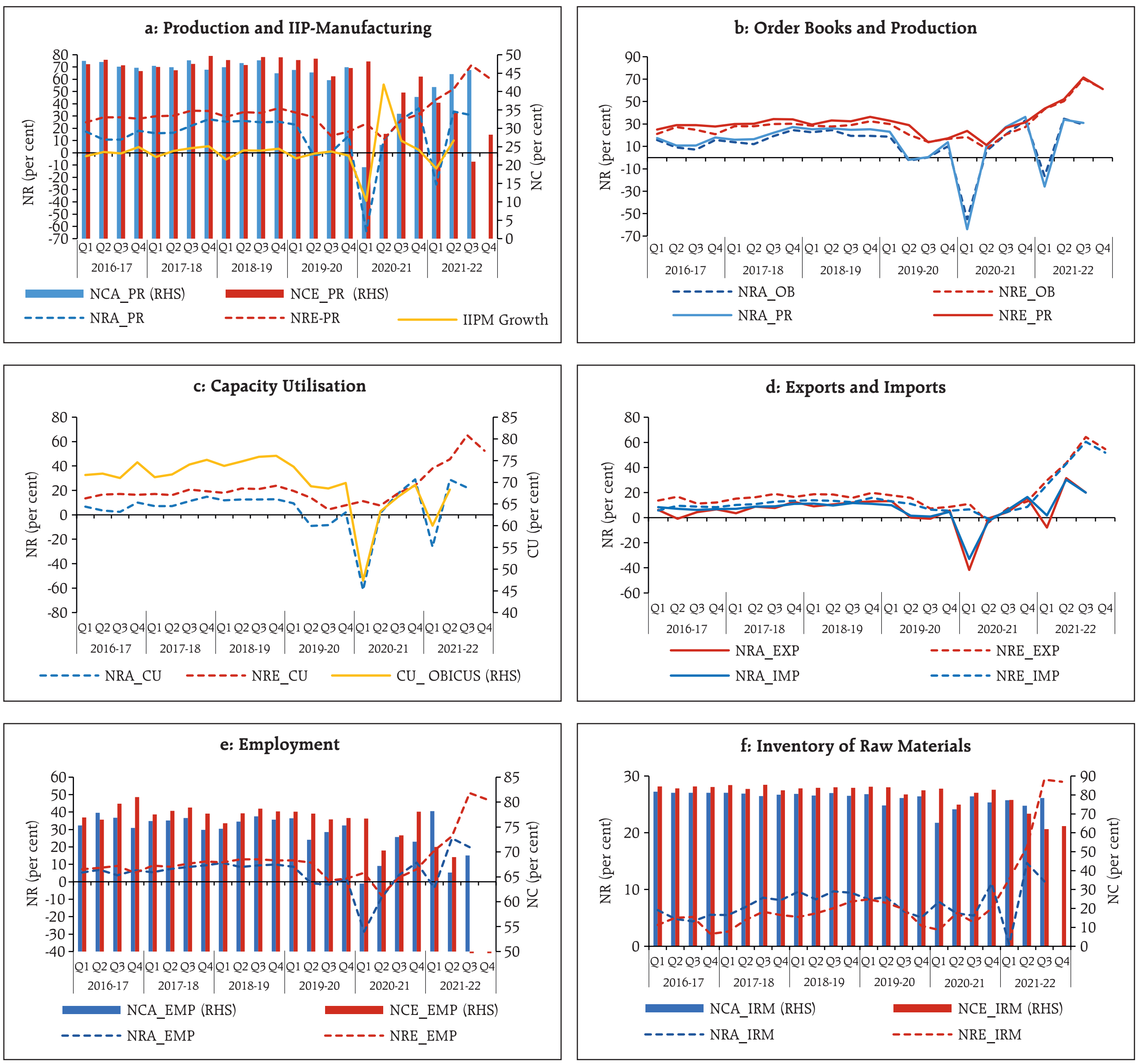
[1] The questionnaire can be accessed at the link: *https://www.rbi.org.in/Scripts/BS_ViewForms.aspx?FCId=40*

[2] If I, N and D correspond to proportion of 'increase', 'no change' and 'decrease', respectively for the response to the question on a particular parameter, the NR is calculated as, NR=100* (I-D) and no change (NC) or status quo is presented as NC=100*N. Usually the NR is calculated as proportion of optimistic responses minus proportions of pessimistic responses; considering an increase as an optimistic response for all parameters, except the cost related parameters; such as cost of raw materials, cost of finance etc., where, the decrease option signifies optimism from the viewpoint of a respondent company. However, NRs have been calculated as 100* (I-D) for all parameters in this article, to maintain uniformity and also directly linking with the macro variables.

Both the NRs on production for assessment quarter (NRA_PR) and expectations quarter (NRE_PR) broadly tracked the quarter-over-quarter (q-o-q) movement of index of industrial production in manufacturing (IIPM) during the period under study. However, the NRA_PR reflects the severity of COVID related lockdown better than NRE_PR, as the manufacturers could not anticipate the collapse in demand due to the sudden onset of the first and second wave of the pandemic (Chart 1a). The proportion of no change (NC) in responses as measured by NCA_PR and NCE_PR, which was at around 50 per cent throughout the study period, witnessed a sharp deterioration during pandemic. The perception of the manufacturers on production is also reflected by other demand parameters covered in this survey, *e.g.* order book, both in terms of assessment (NRA_OB) and expectations (NRE_OB) (Chart 1b). Although the assessment NR

Chart 1: Demand Parameters



Sources: RBI, National Statistical Office (NSO).

reached below (-) 50 per cent due to sudden lockdown in Q1:2020-21, the impact was much less in second wave. However, the expectations NR remained in positive zone throughout the period under study.

An alternate demand parameter canvased in IOS is the capacity utilisation (CU) which is defined as the proportion of the actual capacity utilised by a manufacturing company to its installed capacity. The assessment and expectations NR for CU (NRA_CU and NRE_CU respectively), as captured in IOS, provided an early indication in the movement of CU which was later estimated based on another survey conducted by the Reserve Bank *viz.*, order books, inventories and capacity utilisation survey (OBICUS)[3] which collects the actual quantitative information on manufacturing CU. The NRA-CU tracked the actual CU (CU_OBICUS) better even during COVID-19 period when the economy experienced an unprecedented demand shock (Chart 1c). After witnessing a sharp fall in Q1:2020-21, respondents' sentiments on exports and imports started recovering, which again dropped in Q1:2021-22 during second wave of the pandemic. It is also evident that, with the strengthening of demand conditions, the expectations on exports and imports improved significantly since the second half of the year 2020-21.

The proportion of respondents indicating no change (both NCA_EMP and NCE_EMP) usually dominate the responses on the slow-moving employment parameter.[4] Although the job landscape started recovering in Q4:2019-20 after gradual decline in past one year, it collapsed in Q1:2020-21 due to pandemic. The optimism started firming up in subsequent quarters with abated effect of the pandemic (Chart 1e) but witnessed another shock during the second wave. IRM is considered another slow-moving demand parameter as companies target to maintain a fixed level of IRM except when large changes are anticipated in demand or price. The responses on IRM are dominated by NC which remained around 80 per cent throughout the period under study, but sentiments were adversely impacted by the pandemic in past one and a half year (Chart 1f).

b. Financing Conditions

Sound financing conditions give impetus to companies to strengthen their businesses. The respondents expressed positive sentiments on overall financial situation (OFS) in pre-COVID period except Q2:2019-20. Sentiments for Q3:2019-20 were also positive but very low. Although the manufacturers' sentiments dipped in Q1:2020-21, it was boosted immediately by several relief measures announced by the government to revive the business environment (Chart 2a). However, the second wave again clouded the sentiments of manufacturers. The cost of external finance (CoF) started showing some respite since 2019-20 signifying better avenues for the manufacturers to run their businesses (Chart 2b) which started edging up again since Q4:2020-21.

c. Price Situation

The price situation is assessed based on parameters like cost of raw materials (CRM), salary outgo and selling prices (SP) of enterprises as collected in IOS. It is important to evaluate how the demand conditions coupled with financial situation are factored into the business for deciding the profitability of the companies under the prevailing input cost pressure and market uncertainty.

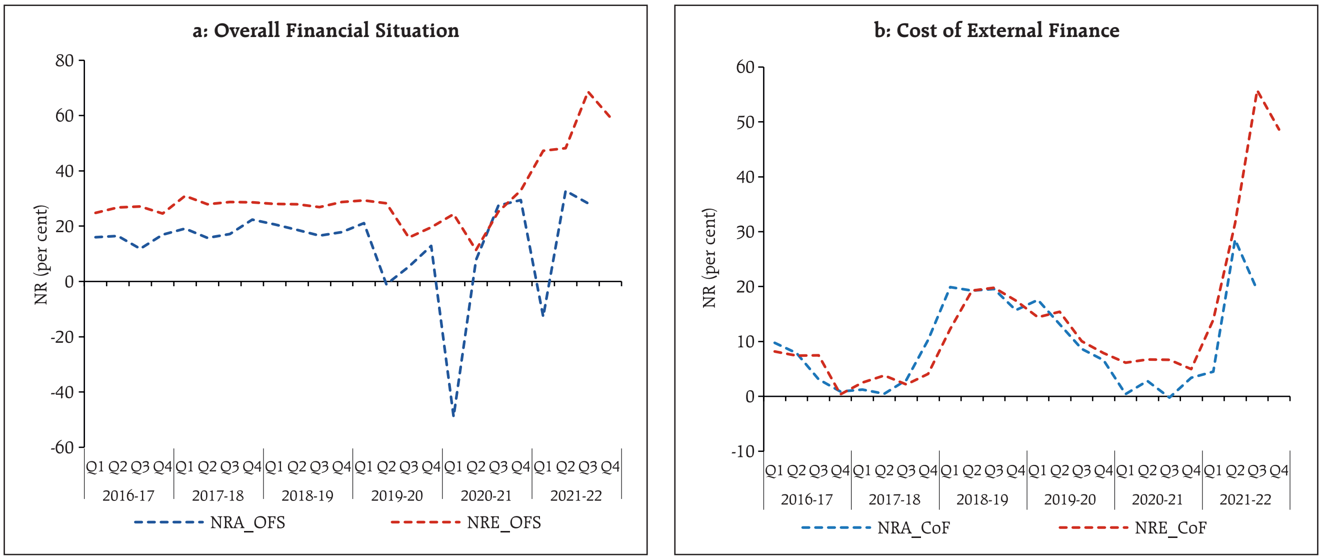
The CRM, which captures the movement in WPI inflation of industrial raw materials[5], remained an abiding concern for the manufacturers through Q1:2018-19 and softened thereafter. Yet, the cost again spiked up in Q2:2020-21 due to supply chain

3 The OBICUS data are released quarterly on RBI website and the latest such data release can be accessed through the link: *https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=21000*

4 The employment parameter includes both full-time and part-time employees including casual labourers.

5 Comprises specific items from WPI with total weight being 18.1 per cent.

Chart 2: Financial Situation



Source: RBI.

disruption and transportation delays (Chart 3a). As a result, the selling price also started hardening since Q2:2020-21 passing the input cost pressure to the consumers (Chart 3b). Although the selling price moved in tandem with the WPI inflation in manufactured products (weight: 64.2 per cent) during the entire period under study, the unprecedented supply shock impacted the survey sentiments much more than was actually reflected in the movement in the wholesale inflation in early 2020-21. The outlook on profit margins[6] (NRE_PM) remained passive since Q3:2019-20 on the back of persistent input cost pressures, which turned positive in Q1:2021-22 (Chart 3c).

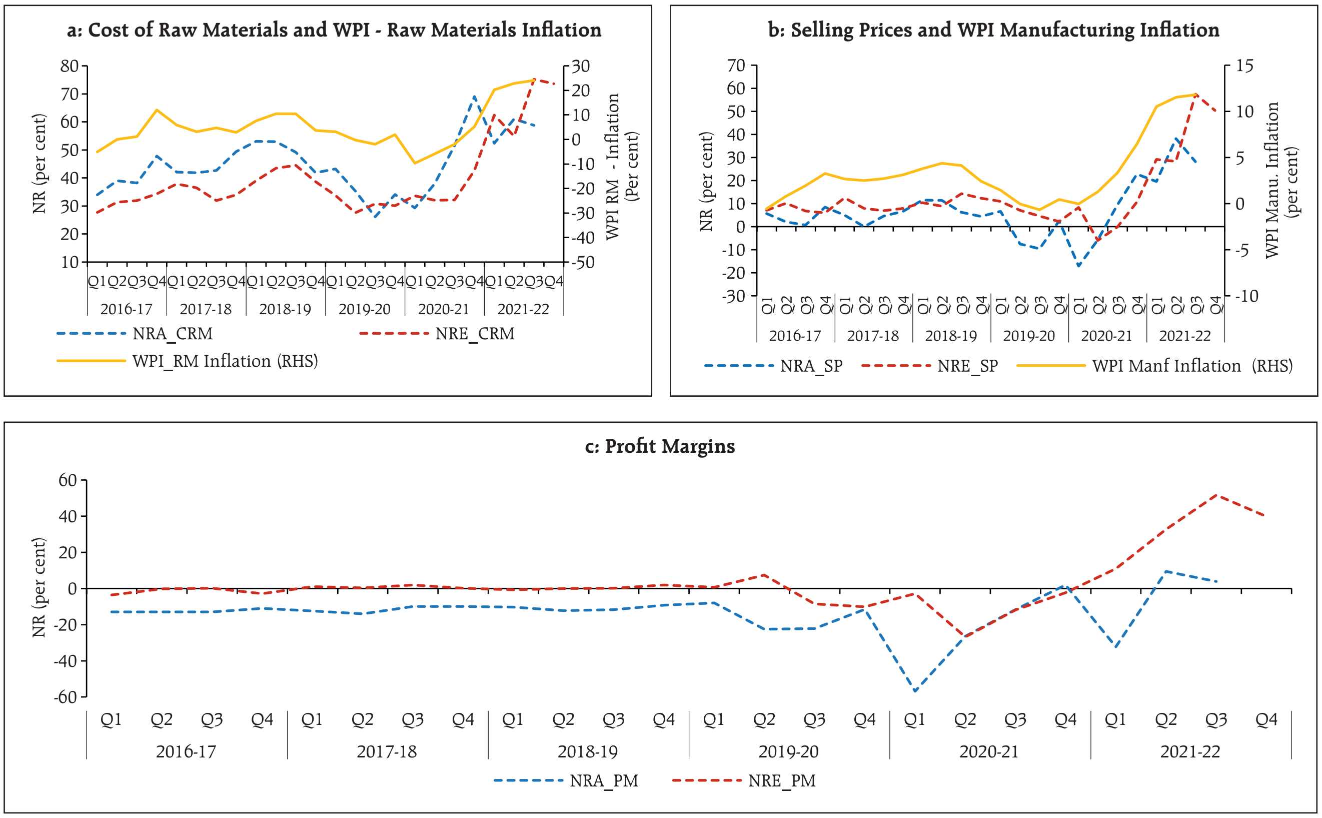
d. Overall Business Situation

The NC response for overall business situation (OBS), which remained around 50 per cent till 2019-20, reduced substantially in 2020-21 as the perception changed due to the pandemic as indicated by 60 per cent negative sentiments in NR in Q1:2020-21. The opinion started firming up in subsequent quarters which again turned passive during the second wave in Q1:2021-22 (Chart 4a). Based on the NRs calculated for various survey parameters, a composite index is calculated separately for business assessment (BAI) and expectations (BEI)[7]. The BAI remained in contraction zone in Q2 and Q3 of 2019-20 as slowdown in economy was observed in most of the demand parameters. The summary index started improving and entered in expansion zone in Q4:2019-20. However, the COVID-related lockdown pushed the BAI to the historically lowest value in Q1:2020-21 at 56.5 per cent (second lowest being in Q4:2008-09 during global financial crisis (GFC) as 82.6 per cent). The BEI also declined notably in Q2:2020-21 although remained in expansion zone. However, both BAI and BEI improved immediately in Q3:2020-21 and

6 Defined as gross profits as percentage of net sales.

7 BAI and BEI are composite indicators calculated as simple average of nine business parameters for assessment and expectations respectively, where each parameter is derived as a weighted net response, weights being the share of industry groups in gross value added (GVA). The nine parameters considered are: (1) overall business situation; (2) production; (3) order books; (4) inventory of raw material; (5) inventory of finished goods; (6) profit margins; (7) employment; (8) exports; and (9) capacity utilisation. By construction, the indices range from 0 to 200 with the 100 mark separating expansion (>100) from contraction (<100).

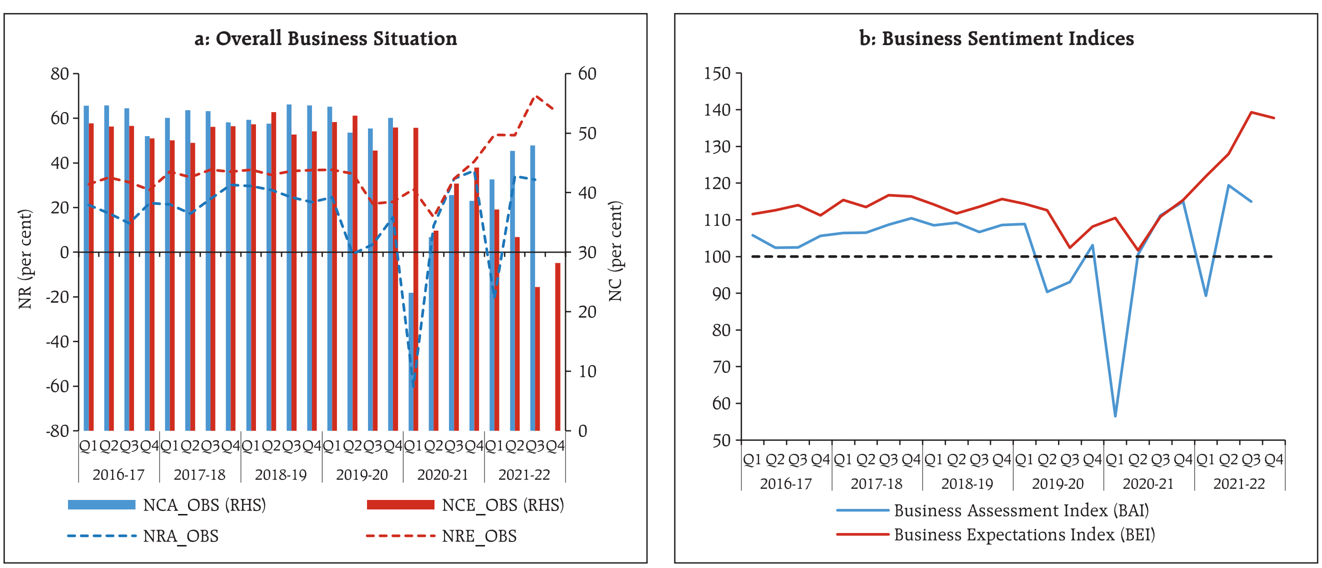
Chart 3: Price Situation



Sources: RBI, Ministry of Commerce and Industry.

strengthened further in subsequent quarters. Though, in the wake of the second wave, the BAI contracted again in Q1:2021-22, it promptly recovered in the next quarter. BEI continued to expand (Chart 4b).

Chart 4: Overall Business Situation



Source: RBI.

III: Perception of Manufacturers on Post-COVID Recovery Process

As most of the economies worldwide were impacted severely by the outbreak of COVID-19, majority of the central banks felt it critical to study its effect and the expected recovery process thereafter, on the response pattern of the outlook surveys conducted by them.

III.1 Cross-Country Experiences

As the forward-looking surveys play an important role to support policy decisions, major economies[8] used these surveys as instruments to capture the outlook of the enterprises on the COVID-19 impact. Adhoc survey conducted by the Federal Reserve Bank of New York during March 2 to 10, 2020 with only a few specific questions indicated downbeat sentiments of the manufacturing as well as services firms. The March round of the Empire State Manufacturing Survey, conducted by Federal Reserve Bank of New York, indicated declined business activity in New York State. Further, the optimism about the six-month outlook also fell sharply, with firms less optimistic than they had been since 2009. To capture the impact more specifically, supplemental questions were included in the Empire State Manufacturing Survey and Business Leaders Survey of March 2020 which were focused on observed effects of the novel corona virus on various aspects of business.

To understand the COVID-19 impact and expected recovery path, the Kansas City FED included specific relevant questions in their monthly surveys on manufacturing in 2020. The Bank of Canada, as part of their business outlook surveys in 2020, also had consultations with a small, targeted sample of Canadian businesses and associations to better understand the economic impacts and the post-pandemic recovery. The monthly Manufacturing Business Outlook Survey of FED Reserve Philadelphia, in its October 2020 survey round, asked special questions on current capacity utilisation rates compared with the same time last year. Manufacturers were also asked about the impact of economic policy uncertainty and the effects of COVID-19 on their total capital spending plans for next year. Special questions about firms' current capacity utilisation reflected sizable impact of the pandemic, where most of the firms reported to operate at significantly lower levels of capacity than a year ago.

III.2 The Indian Context

As the usual surveys were conducted much before the lockdown was imposed, the respondents did not anticipate the contraction in advance as they could not foresee the full impact of the severe and sudden nature of the pandemic which was witnessed later[9]. Therefore, in the Q4:2019-20, when COVID-19 cases started increasing in India, a quick survey[10] was conducted on a few critical parameters during March 18-20, 2020. The quick survey indicated severe pessimistic sentiments. Further, in addition, to capture future expectations through the usual questionnaire, a block was introduced since Q1:2020-21 for assessing the business outlook of the corporate sector on critical parameters for two more subsequent quarters.

The survey results indicated initial persistence in the sentiments of the companies, which generally remain optimistic about the future. They chose to wait and watch before changing their outlook. But as the adverse situation prolonged, the sentiments were significantly affected. All such additional information was useful for taking policy decisions during the highly uncertain times. The survey results of the additional

8 Details are presented in reference list.

9 The usual Jan-March 2020 round of the survey was launched on January 30, 2020 and results were compiled with data received till March 18, 2020.

10 The results are available in RBI website in the link: *https://www.rbi.org.in/Scripts/PublicationsView.aspx?id=19437*

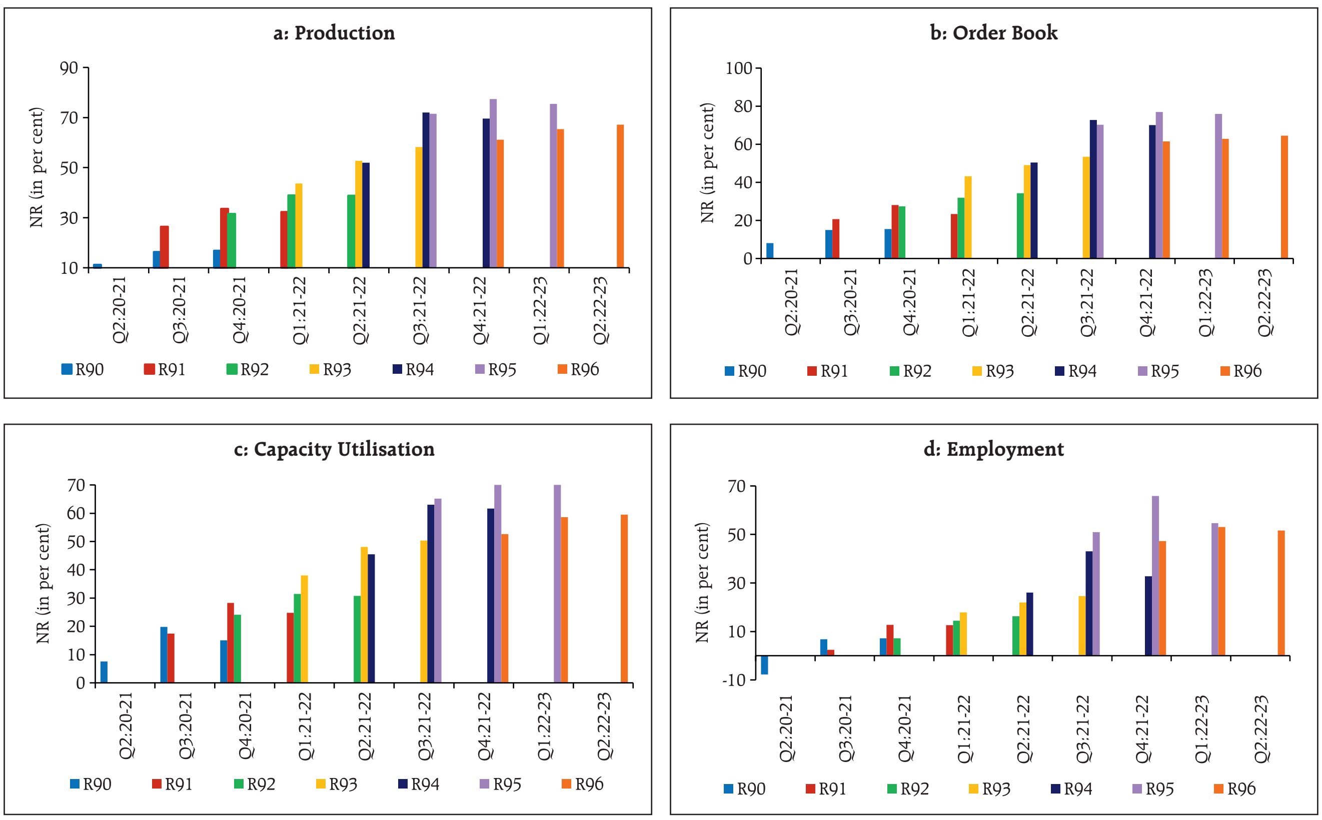
block were also disseminated by the Reserve Bank in its quarterly data releases since April 2020.

Including two additional quarters, a total of three expectations quarters were covered in the survey rounds[11] since 2020-21. Therefore, for certain common quarters, expectations are captured through different survey rounds. The parameters covered in the additional block include PR, OB, CU and employment from demand side, CRM and SP on price dynamics and the OBS.

Demand Conditions

With various stimulus packages and measures announced by the Government and the Reserve Bank, the manufacturers' business confidence somewhat recovered. Though the expectations started firming up after the first wave, sentiments were again clouded due to the second wave, though it reverted quickly (Charts 5a and 5b)[12]. Similar patterns were observed for CU and employment (Charts 5c and 5d). The job landscape started improving, but at a slower

Chart 5: Sentiments on Recovery Process: Demand Parameters

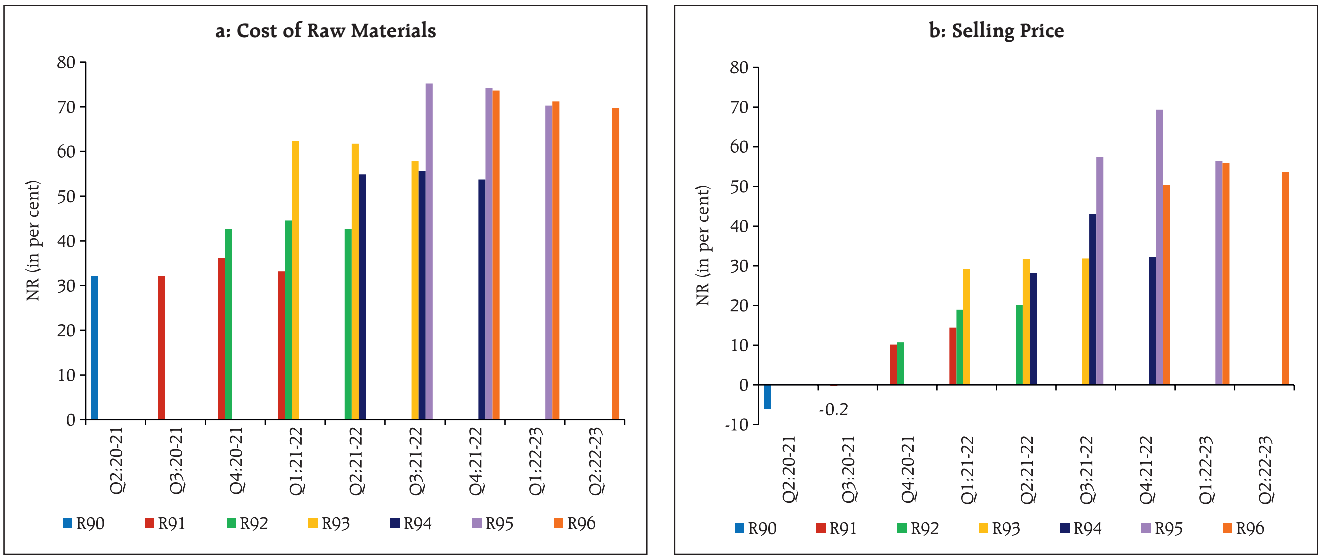


Source: RBI.

[11] The surveys conducted during Q1:2020-21 to Q3:2021-22 correspond to IOS rounds 90-96. These are represented as R90, R91, R92, R93, R94, R95 and R96 respectively. For example, in the April-June 2020 round survey (R90), with the assessment of Q1:2020-21, the respondents conveyed their expectations for Q2-Q4:2020-21.

[12] Charts 5 to 7 represents the expectations only.

Chart 6: Sentiments on Recovery Process: Price Situation



Source: RBI.

pace due to social distancing at the factory level and owing to transportation issues, but improved in the latest survey rounds reflecting confidence over vaccination drive.

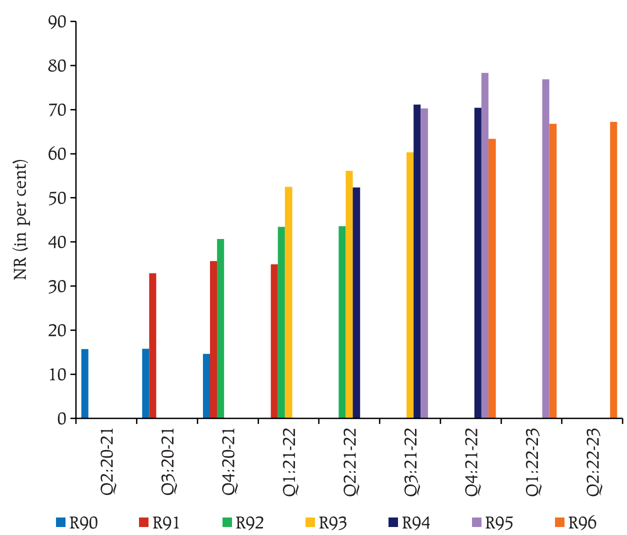
Price Situation[13]

The input cost pressures intensified over the quarters, as expected by the manufacturers. Following the slow recovery in demand, the manufacturers passed on the cost pressure to the consumers leading to an increase in SP. Respondents expected input cost pressures to continue and SP to harden gradually (Chart 6).

Overall Business Situation

Manufacturers were seen to be optimistic about the future as was reflected from their expectations. Although they were less optimistic in 90th round about the future due to the initial impact of the first wave of the pandemic, the confidence recovered with proactive policy supports. The measures taken by the government to create better opportunities for the enterprises to run their businesses led to higher business optimism as reflected in the survey results (Chart 7).

Chart 7: Sentiments on Recovery Process: Overall Business Situation



Source: RBI.

[13] The questions on prices were included in the additional block in R91; however, to keep uniformity in charts, the response on price situation for only one expectation quarter for R90 is included as asked in usual survey rounds.

III.3 Challenges faced by the Manufacturers during COVID period

The comments/suggestions received from the manufacturers reflected distress in their business in April-June 2020 round of survey (R90) as most of the factories were closed. Manufacturers of essential commodities also faced challenges due to shortage of raw materials, supply chain disruptions and transportation delays. As consumers were purchasing only essential commodities, higher inventory of finished goods became a worry for manufacturers. Sentiments improved over subsequent survey rounds, but companies reported unavailability of raw materials, working capital requirement along with labour shortage as major constraints. Although the moratorium announced by the Reserve Bank brought some respite to the manufacturers, their optimism was again clouded by the second wave which hampered their repayment capacity. They also sought express vaccinations so that the firms could run at full capacity.

Although the lack of domestic and overseas demand, the economic uncertainty, and higher input cost were the major concerns, manufacturers are seen to be optimistic about restoring their businesses to the pre-pandemic level in near future with prompt sector-specific relief provided by the government, proactive monetary policy measures by the Reserve Bank and rapid vaccinations.

IV: Outlook on the Recovery

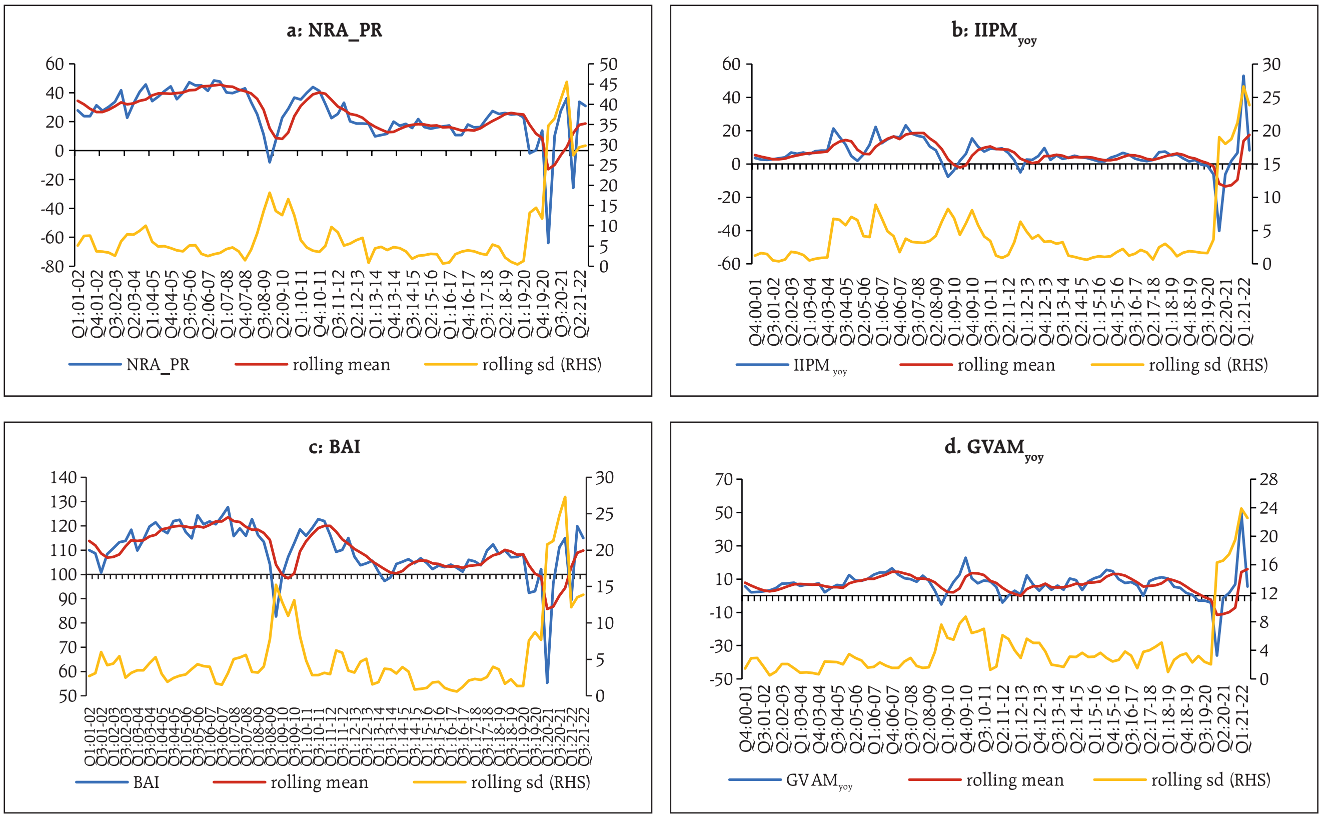
In this section, an attempt has been made to estimate the post-COVID recovery based on the survey sentiments. A longer time series covering 20 years' span has been considered for analysis from Q1:2000-01 onwards. This article focused on the demand parameters captured in IOS (mainly NRA_PR and BAI) and the related macroeconomic series. It is observed that NRA_PR and BAI have a strong contemporaneous relationship with Y-o-Y growth in IIPM ($IIPM_{yoy}$) and that in GVA manufacturing ($GVAM_{yoy}$) respectively. However, such correlations of macro variables with the expectations parameters, i.e., NREs and BEI are much lower than that with assessment parameters *i.e.*, NRAs and BAI (Annex Table 1). Moreover, the assessment parameters detect the signals of the macro variables over the expectations parameters more efficiently (Annex Table 2). The NREs are seen to be higher due to lower sentiments of the manufacturers in the current quarter in the pandemic-hit years. However, being available for only one quarter, the assessment is useful to provide prior information only for the current quarter. This is supplemented by the information on expectations for subsequent three quarters, which are especially captured through the survey since round 90. The information on expectations for some more quarters may give a better idea about the expected recovery process perceived by the manufacturers.

The first investigation relates to whether COVID-19 has led to a permanent shift in economic activity adopting a new normal or a short-term shock from where the economy will soon recover. The Bai-Perron test for structural break point and subsequent Chow test suggested a structural break in $IIPM_{yoy}$ in 2008-09, but for NRA_PR, BAI and $GVAM_{yoy}$, the breakpoints are at different time points (Annex Table 3, 4, 5, 6). The evidence of the GFC in 2008 suggests a structural break in $IIPM_{yoy}$ in 2008, as seen from the permanent shift in rolling mean and standard deviation, but a pure shock to the NRA_PR as the series returned to its normal pace after few quarters. Similar difference is visible for $GVAM_{yoy}$ and BAI. Charts 8a to 8d present the respective series along with its rolling[14] mean and rolling standard deviation.

The above charts suggest that the COVID pandemic impacted the economy more severely than the global financial crisis. Further investigation about the full impact and structural changes due to the

[14] The rolling window for four quarters is considered *i.e.* for a particular quarter, the 'mean' and 'sd' are average and standard deviation of that quarter and previous three quarters.

Chart 8: Rolling Mean and Standard Deviation of Survey Parameters *vis-à-vis* Macro Variables



Sources: RBI, NSO, Authors' calculations.

COVID-19 episode will be better captured once the economy recovers completely and become stable.

Recovery from COVID-19 Shock: A Scenario Analysis

An attempt has been made to outline the expected recovery path for IIPM and GVAM based on manufacturer's outlook collected from the survey. As IOS captures current quarter assessment and subsequent three quarters expectations, it can be used to envisage the macro variables in next one-year horizon. The Hidden Markov Model Regression (HMMR) technique was employed to estimate the recovery path of the macro variables following existing literature (Goldfeld and Quandt, 1973; Hamilton, 1989; Diebold *et.al.*, 1994; Diebold and Rudebusch, 1996; Filardo and Gordon, 1998; Bellone Saint Martin, 2003; Bardaji, 2009; Camacho et.al., 2012; Bernardelli, 2015; Bhowmick and Majumdar, 2020; and Samanta and Bhowmick, 2022). The estimated models are as under:

For IIPM, the estimated models are:

1. $IIPM_{yoy_t} = \alpha_{0s} + \beta_{1s} IIPMyoy_{(-1)} + \beta_{2s} APR(I)_t + \beta_{3s} APR(D)_t + \beta_{4s} D_t + \varepsilon_t \qquad s \in S = \{1,2\}$

2. $IIPM_{yoy_t} = \alpha_{0s} + \beta_{1s} IIPMyoy_{(-1)} + \beta_{2s} NRA\_PR_t + \beta_{4s} D_t + \varepsilon_t \qquad s \in S = \{1,2\}$

3. $IIPM_{yoy_t} = \alpha_{0s} + \beta_{1s} IIPMyoy_{(-1)} + \beta_{2s} EPR(I)_t + \beta_{3s} EPR(D)_t + \beta_{4s} D_t + \varepsilon_t \qquad s \in S = \{1,2\}$

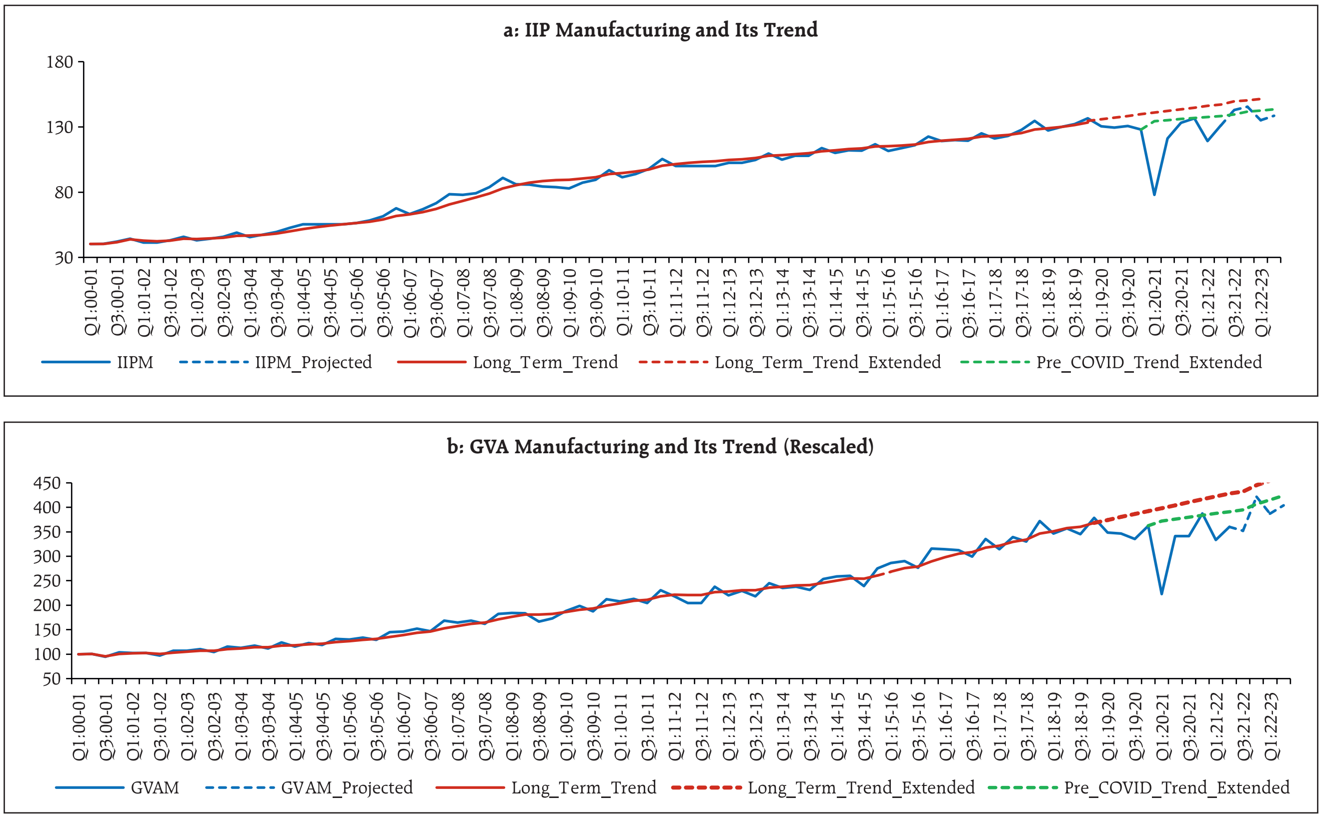
4. $IIPM_{yoy_t} = \alpha_{0s} + \beta_{1s} IIPMyoy_{(-1)} + \beta_{2s} NRE\_PR_t + \beta_{4s} D_t + \varepsilon_t \qquad s \in S = \{1,2\}$

And similarly for GVAM, the estimated equations are:

5. $GVAM_{yoy_t} = \alpha_{0s} + \beta_{1s} GVAMyoy_{(-1)} + \beta_{2s} BAI_t + \beta_{4s} D_t + \varepsilon_t \qquad s \in S = \{1,2\}$

6. $GVAM_{yoy_t} = \alpha_{0s} + \beta_{1s} GVAMyoy_{(-1)} + \beta_{2s} BEI_t + \beta_{4s} D_t + \varepsilon_t \qquad s \in S = \{1,2\}$

Chart 9: Estimated Recovery Path for Macro Variables related to Manufacturing Sector



Sources: RBI, NSO, Authors' calculations.

where, APR(I) and APR(D) stands for Increase and Decrease in Assessment for Production parameter; EPR(I) and EPR(D) stands for Increase and Decrease in Expectations for Production parameter; and D is a dummy used to take care of the COVID shock. Results for the model estimation are presented in Annex Table 7 and 8.

Following the literature, the long-term trends for IIPM and GVAM are calculated by using one-sided Hodrick-Prescott (HP) filter, first for the period Q1:2000-01 to Q4:2018-19 and second being the pre-COVID trend calculated for Q1:2000-01 to Q4:2019-20. Both the trends have been extended under two different scenarios based on quarterly averages of past five years; first scenario following long-term trend, whereas, the second being with slowdown in the economy before 2019-20 but excluding COVID-19 impact as the yardstick. Projections for macro variables in subsequent four quarters (Q3:2021-22 to Q2:2022-23) are estimated using IOS sentiments (Chart 9)[15].

The results may be viewed as hypothetical constructs with assumptions under different scenarios, not a traditional forecast. The above charts exhibit that, although both IIPM and GVAM reached the pre-COVID trend path in Q4:2020-21, the second wave impacted the recovery process adversely by disrupting the growth momentum. However, both are projected to reach the pre-pandemic trend path in near-term, but likely to take some more time to attain the long-term trend path.

V. Conclusion

The 11 rounds of IOS conducted during Q1:2019-20 to Q3:2021-22 point to three different phases of the

[15] GVAM is rescaled by taking Q1:2000-01 as 100 for simpler representation.

Indian economy. In 2019-20, the survey parameters reflected slowdown in the overall economy in terms of sentiments of the manufacturers. The first and second waves of the pandemic slowed down the economic activity, and the perception of the manufacturers was impacted adversely. The conditions improved with gradual resumption of normalcy. Going forward, this analysis can be further extended to understand the structural changes in macro variables, once the recovery materialises fully. At the same time, although the major macroeconomic variables are supposed to achieve their pre-COVID trend in near-term with improvement in demand conditions, they are expected to take time to return to their long-term trend path. Concurrently, the subsequent waves of the pandemic and the re-imposition of virus containment measures may dampen the manufacturers' sentiments and slow down the recovery process. However, the accelerated rollout of vaccines, an inclusive growth-oriented Union Budget 2022-23 with fiscal and other reforms and enhanced infrastructure spending and sector-specific support, investment-oriented stimulus under various tranches of Aatma Nirbhar Bharat, easy financial conditions, *etc.* are expected to provide a strong impetus for revival of the economy and will facilitate regaining of the growth potential over the medium-term. Continued policy support in future may make the recovery smoother and faster.

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Annex

Table 1: Contemporaneous Correlation Between Survey Parameters and Macro Variables

	NRA_PR	NRE_PR	BAI	BEI
$IIPM_{yoy}$	0.70	0.64		
$GVAM_{yoy}$			0.49	0.38

Note: Correlation has been calculated excluding the COVID-19 pandemic period

Table 2: Signal Detected by Assessment and Expectations Parameters for Macro Variables

In per cent	NRA_PR/IIPM	NRE_PR/IIPM	BAI/GVAM	BEI/GVAM
TRUE	64	59	52	49
FALSE	36	41	48	51

Table 3: Detecting Structural Break in NRA_PR

Break type: **Bai-Perron tests** of L+1 vs. L sequentially determined breaks Break: 2012Q2 Selection: Trimming 0.15, , Sig. level 0.05		
	t-Statistics	**Prob**
2000Q2 - 2012Q1 -- 48 obs	17.94709	0.0000
2012Q2 - 2021Q1 -- 36 obs	7.031145	0.0000
Chow Breakpoint Test: 2012Q2	**F-Statistics**	**Prob**
Null Hypothesis: No breaks at specified breakpoints	42.89050	0.0000

Table 4: Detecting Structural Break in $IIPM_{yoy}$

Break type: **Bai-Perron tests** of L+1 vs. L sequentially determined breaks Break: 2005Q4, 2008Q4 Selection: Trimming 0.15, , Sig. level 0.05		
	t-Statistics	**Prob**
2000Q2 - 2005Q3 -- 22 obs	4.787717	0.0000
2005Q4 - 2008Q3 -- 12 obs	8.166848	0.0000
2008Q4 - 2020Q4 -- 49 obs	2.667591	0.0000
Chow Breakpoint Test:	**F-Statistics**	**Prob**
For 2005Q4: Null Hypothesis: No breaks at specified breakpoints	0.644799	0.4244
For 2008Q4: Null Hypothesis: No breaks at specified breakpoints	20.84616	0.0000

Table 5: Detecting Structural Break in BAI

Break type: **Bai-Perron tests** of L+1 vs. L sequentially determined breaks Break: 2012Q2 Selection: Trimming 0.15, , Sig. level 0.05		
	t-Statistics	**Prob**
2000Q2 - 2012Q1 -- 48 obs	94.34883	0.0000
2012Q2 - 2021Q1 -- 36 obs	73.16671	0.0000
Chow Breakpoint Test: 2012Q2	**F-Statistics**	**Prob**
Null Hypothesis: No breaks at specified breakpoints	40.88216	0.0000

Table 6: Detecting Structural Break in $GVAM_{yoy}$

Break type: **Bai-Perron tests** of L+1 vs. L sequentially determined breaks Break: 2017Q2 Selection: Trimming 0.15, , Sig. level 0.05		
	t-Statistics	**Prob**
2000Q2 - 2017Q1 -- 68 obs	9.546114	0.0000
2017Q2 - 2020Q4 -- 15 obs	0.465348	0.6429
Chow Breakpoint Test: 2017Q2	**F-Statistics**	**Prob**
Null Hypothesis: No breaks at specified breakpoints	12.39505	0.0007

Table 7: Regression Results for HMM

Equation 1	Intercept	$IIPM_{yoy}$(-1)	APR(I)	APR(D)	D	sd
St1 St2	-3.269 -3.763	0.932 0.878	0.062 0.059	0.006 -0.173	2.046 10.498	0.734 2.608
Equation 2	Intercept	$IIPM_{yoy}$ (-1)	NRA_PR		D	sd
St1 St2	-5.774 -18.256	0.904 0.869	0.042 0.113		1.98 10.46	0.751 2.632
Equation 3	Intercept	$IIPM_{yoy}$ (-1)	EPR(I)	EPR(D)	D	sd
St1 St2	-8.055 47.952	0.485 1.014	0.238 -0.822	-0.138 -1.41	3.159 12.32	1.345 2.590
Equation 4	Intercept	$IIPM_{yoy}$ (-1)	NRE_PR		D	sd
St1 St2	-4.751 -23.732	0.933 0.934	0.03 0.136		2.202 12.114	0.827 2.695
Equation 5	Intercept	$GVAM_{yoy}$ (-1)	BAI		D	sd
St1 St2	-11.808 -16.888	0.866 0.773	0.099 0.133		2.648 8.656	0.918 2.823
Equation 6	Intercept	$GVAM_{yoy}$ (-1)	BEI		D	sd
St1 St2	-7.417 -6.534	0.946 0.848	0.049 0.014		3.531 11.902	1.284 2.863

Table 8: Transition Probability Matrices for IIPM and GVAM

IIPM			GVAM		
Equation 1	to St1	to St2	Equation 5	to St1	to St2
from St1	0.823	0.177	from St1	0.791	0.209
from St2	0.197	0.803	from St2	0.183	0.817
Equation 2	to St1	to St2	Equation 6	to St1	to St2
from St1	0.823	0.177	from St1	0.826	0.174
from St2	0.196	0.804	from St2	0.337	0.663
Equation 3	to St1	to St2			
from St1	0.820	0.180			
from St2	0.445	0.555			
Equation 4	to St1	to St2			
from St1	0.825	0.175			
from St2	0.213	0.787			

Note: State 1 is associated with period of lower growth and State 2 denotes period of higher growth.
Initial state probabilities assumed State 1 as certain, *i.e.*, probability=1.

CURRENT STATISTICS

Contents

Notes: .. = Not available.
– = Nil/Negligible.
P = Preliminary/Provisional. PR = Partially Revised.

No. 1: Select Economic Indicators

Item	2020-21	2020-21 Q1	2020-21 Q2	2021-22 Q1	2021-22 Q2
	1	2	3	4	5
1 Real Sector (% Change)					
1.1 GVA at Basic Prices	-4.8	-22.4	-7.3	18.8	8.5
1.1.1 Agriculture	3.3	3.5	3.0	4.5	4.5
1.1.2 Industry	-1.8	-31.0	-1.6	40.4	6.7
1.1.3 Services	-7.8	-24.9	-11.0	16.1	9.9
1.1a Final Consumption Expenditure	-4.5	-19.9	-13.4	13.8	8.6
1.1b Gross Fixed Capital Formation	-10.4	-46.6	-8.6	55.3	11.0

Item	2020-21	2020 Nov.	2020 Dec.	2021 Nov.	2021 Dec.
	1	2	3	4	5
1.2 Index of Industrial Production	-8.4	-1.6	2.2	1.3	0.4
2 Money and Banking (% Change)					
2.1 Scheduled Commercial Banks					
2.1.1 Deposits	11.4	10.7	10.8	8.9	10.3
2.1.2 Credit	5.6	5.9	6.2	6.9	9.1
2.1.2.1 Non-food Credit	5.5	5.9	6.2	7.1	9.3
2.1.3 Investment in Govt. Securities	19.3	19.3	17.3	3.6	2.8
2.2 Money Stock Measures					
2.2.1 Reserve Money (M0)	18.8	15.3	14.9	12.8	14.7
2.2.2 Broad Money (M3)	12.2	12.5	12.4	9.5	11.4
3 Ratios (%)					
3.1 Cash Reserve Ratio	3.50	3.00	3.00	4.00	4.00
3.2 Statutory Liquidity Ratio	18.00	18.00	18.00	18.00	18.00
3.3 Cash-Deposit Ratio	4.2	3.8	3.7	4.8	5.0
3.4 Credit-Deposit Ratio	72.4	72.2	73.1	71.0	71.9
3.5 Incremental Credit-Deposit Ratio	37.4	11.0	23.5	37.3	64.8
3.6 Investment-Deposit Ratio	29.5	30.5	30.4	29.0	28.4
3.7 Incremental Investment-Deposit Ratio	46.8	73.6	72.0	17.7	12.9
4 Interest Rates (%)					
4.1 Policy Repo Rate	4.00	4.00	4.00	4.00	4.00
4.2 Reverse Repo Rate	3.35	3.35	3.35	3.35	3.35
4.3 Marginal Standing Facility (MSF) Rate	4.25	4.25	4.25	4.25	4.25
4.4 Bank Rate	4.25	4.25	4.25	4.25	4.25
4.5 Base Rate	7.40/8.80	7.40/8.80	7.30/8.80	7.30/8.80	7.25/8.80
4.6 MCLR (Overnight)	6.55/7.05	6.60/7.10	6.55/7.10	6.50/7.00	6.50/7.00
4.7 Term Deposit Rate >1 Year	4.90/5.50	4.90/5.50	4.90/5.50	4.90/5.50	4.90/5.60
4.8 Savings Deposit Rate	2.70/3.00	2.70/3.00	2.70/3.00	2.70/3.00	2.70/3.00
4.9 Call Money Rate (Weighted Average)	3.25	3.10	3.24	3.35	3.32
4.10 91-Day Treasury Bill (Primary) Yield	3.32	2.93	3.08	3.53	3.66
4.11 182-Day Treasury Bill (Primary) Yield	3.47	3.26	3.34	3.83	3.97
4.12 364-Day Treasury Bill (Primary) Yield	3.83	3.39	3.46	4.13	4.27
4.13 10-Year G-Sec Par Yield (FBIL)	6.34	5.84	5.89	6.33	6.47
5 Reference Rate and Forward Premia					
5.1 INR-US$ Spot Rate (Rs. Per Foreign Currency)	72.40	73.80	73.58	74.71	74.30
5.2 INR-Euro Spot Rate (Rs. Per Foreign Currency)	85.31	88.02	89.81	83.85	84.05
5.3 Forward Premia of US$ 1-month (%)	6.80	3.36	3.84	3.69	3.96
3-month (%)	5.64	3.52	3.75	3.80	4.15
6-month (%)	5.47	4.23	4.35	4.71	4.71
6 Inflation (%)					
6.1 All India Consumer Price Index	6.18	6.9	4.6	4.9	5.6
6.2 Consumer Price Index for Industrial Workers	5.03	5.3	3.7	4.8	5.6
6.3 Wholesale Price Index	1.29	2.3	2.0	14.9	13.6
6.3.1 Primary Articles	1.71	3.8	-0.6	10.2	13.4
6.3.2 Fuel and Power	-7.99	-7.0	-6.1	44.4	32.3
6.3.3 Manufactured Products	2.75	3.2	4.5	12.3	10.6
7 Foreign Trade (% Change)					
7.1 Imports	-16.91	-12.2	8.4	56.4	38.5
7.2 Exports	-6.88	-8.3	0.4	34.4	38.9

Note : Financial Benchmark India Pvt. Ltd. (FBIL) has commenced publication of the G-Sec benchmarks with effect from March 31, 2018 as per RBI circular FMRD.DIRD.7/14.03.025/2017-18 dated March 31, 2018. FBIL has started dissemination of reference rates w.e.f. July 10, 2018.

Reserve Bank of India

No. 2: RBI - Liabilities and Assets *

(₹ Crore)

Item	As on the Last Friday/ Friday						
	2020-21	2021		2022			
		Jan.	Dec. 31	Jan. 7	Jan. 14	Jan. 21	Jan. 28
	1	2	3	4	5	6	7
1 Issue Department							
1.1 Liabilities							
1.1.1 Notes in Circulation	2831727	2780045	2959237	2989898	3006151	3008989	3004604
1.1.2 Notes held in Banking Department	11	13	13	16	14	16	16
1.1/1.2 Total Liabilities (Total Notes Issued) or Assets	**2831738**	**2780058**	**2959250**	**2989914**	**3006165**	**3009004**	**3004619**
1.2 Assets							
1.2.1 Gold	106555	114391	113486	112475	114143	116293	114864
1.2.2 Foreign Securities	2724437	2664788	2845196	2876892	2891494	2892200	2889257
1.2.3 Rupee Coin	746	879	567	546	528	512	498
1.2.4 Government of India Rupee Securities	–	–	–	–	–	–	–
2 Banking Department							
2.1 Liabilities							
2.1.1 Deposits	1504697	1512883	1991453	1969320	1914602	1985921	1929291
2.1.1.1 Central Government	100	101	100	100	101	101	100
2.1.1.2 Market Stabilisation Scheme							
2.1.1.3 State Governments	42	42	42	42	42	42	42
2.1.1.4 Scheduled Commercial Banks	542693	476349	716432	644326	683105	658094	681336
2.1.1.5 Scheduled State Co-operative Banks	6529	6536	7631	7036	7400	6939	7560
2.1.1.6 Non-Scheduled State Co-operative Banks	3204	2619	3416	3788	4002	3696	3766
2.1.1.7 Other Banks	31820	26397	37349	37240	36699	37648	36681
2.1.1.8 Others	895440	987112	1180276	1215308	1147216	1232104	1139410
2.1.1.9 Financial Institution Outside India	24868	13726	46206	61480	36038	47297	60395
2.1.2 Other Liabilities	1343670	1440272	1313545	1289986	1308879	1306804	1300073
2.1/2.2 Total Liabilities or Assets	**2848367**	**2953154**	**3304998**	**3259306**	**3223482**	**3292725**	**3229365**
2.2 Assets							
2.2.1 Notes and Coins	11	13	13	17	14	16	16
2.2.2 Balances held Abroad	1204135	1357052	1412900	1378487	1366456	1372901	1387051
2.2.3 Loans and Advances							
2.2.3.1 Central Government	–	–	–	–	–	–	–
2.2.3.2 State Governments	1674	4769	6677	13016	13975	2899	716
2.2.3.3 Scheduled Commercial Banks	90275	84597	102489	94323	94732	169843	94286
2.2.3.4 Scheduled State Co-op.Banks	–	–	–	–	–	–	–
2.2.3.5 Industrial Dev. Bank of India	–	–	–	–	–	–	–
2.2.3.6 NABARD	26422	26181	24770	24770	24770	24770	24770
2.2.3.7 EXIM Bank	–	–	–	–	–	–	–
2.2.3.8 Others	6678	6643	77	77	3077	1459	811
2.2.3.9 Financial Institution Outside India	24858	6521	46227	49829	20966	22993	30404
2.2.4 Bills Purchased and Discounted							
2.2.4.1 Internal	–	–	–	–	–	–	–
2.2.4.2 Government Treasury Bills	–	–	–	–	–	–	–
2.2.5 Investments	1331671	1308808	1521572	1510000	1507414	1502486	1497144
2.2.6 Other Assets	162643	158570	190274	188789	192078	195359	194167
2.2.6.1 Gold	146572	150412	179293	177696	180696	183856	181597

* Data are provisional

No. 3: Liquidity Operations by RBI

(₹ Crore)

Date	Liquidity Adjustment Facility				MSF	Standing Liquidity Facilities	Market Stabilisation Scheme	OMO (Outright)		Long Term Repo Operations &	Targeted Long Term Repo Operations #	Special Long-Term Repo Operations for Small Finance Banks	Special Reverse Repo £	Net Injection (+)/ Absorption (-) (1+3+5+6+9+10+ 11+12-2-4-7-8-13)
	Repo	Reverse Repo	Variable Rate Repo	Variable Rate Reverse Repo				Sale	Purchase					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Dec. 1, 2021	-	242239	-	-	2	–	-	835	-	-	-	-	-	-243072
Dec. 2, 2021	-	268334	-	-	100	–	-	100	-	-	-	-	-	-268334
Dec. 3, 2021	-	227557	-	469737	0	–	-	115	-	-	-	-	-	-697409
Dec. 4, 2021	-	34814	-	-	129	–	-	-	-	-	-	-	-	-34685
Dec. 5, 2021	-	4998	-	-	8	–	-	-	-	-	-	-	-	-4990
Dec. 6, 2021	-	220915	-	-	1	–	-	10	-	-	-	-	-	-220924
Dec. 7, 2021	-	229680	-	200012	10	–	-	365	-	-	-	-	-	-430047
Dec. 8, 2021	-	212608	-	-	8	–	-	150	-	-	-	-	-	-212750
Dec. 9, 2021	-	219375	-	-	255	–	-	485	-	-	-	-	-	-219605
Dec. 10, 2021	-	205465	-	-	0	–	-	370	-	-	-	-	-	-205835
Dec. 11, 2021	-	3489	-	-	207	–	-	-	-	-	-	-	-	-3282
Dec. 12, 2021	-	2455	-	-	13	–	-	-	-	-	-	-	-	-2442
Dec. 13, 2021	-	211943	-	-	56	–	-	160	-	-	-	150	-	-211897
Dec. 14, 2021	-	210008	-	200010	0	–	-	200	-	-	-	-	-	-410218
Dec. 15, 2021	-	168446	-	-	1259	–	-	815	-	-	-	-	-	-168002
Dec. 16, 2021	-	87551	-	-	263	1000	-	155	-	-	-	-	-	-86443
Dec. 17, 2021	-	167019	-	312876	122	-1000	-	705	-	-	-	-	-	-481478
Dec. 18, 2021	-	49249	-	-	116	–	-	-	-	-	-	-	-	-49133
Dec. 19, 2021	-	2807	-	-	368	–	-	-	-	-	-	-	-	-2439
Dec. 20, 2021	-	97266	-	81160	104	–	-	330	-	-	-	100	-	-178552
Dec. 21, 2021	-	116282	-	155438	304	4399	-	225	-	-	-1281	-	-	-268523
Dec. 22, 2021	-	113494	-	-	570	–	-	255	-	-	-1153	-	-	-114332
Dec. 23, 2021	-	93518	-	133332	272	–	-	765	-	-	-	-	-	-227343
Dec. 24, 2021	-	93955	-	-	6508	–	-	570	-	-	-	-	-	-88017
Dec. 25, 2021	-	3829	-	-	55	–	-	-	-	-	-	-	-	-3774
Dec. 26, 2021	-	1981	-	-	199	–	-	-	-	-	-	-	-	-1782
Dec. 27, 2021	-	95412	-	129567	501	–	-	230	-	-	2275	255	-	-222178
Dec. 28, 2021	-	135747	-	174412	0	–	-	340	-	-	-	-	-	-310499
Dec. 29, 2021	-	162196	-	-	15	–	-	540	-	-	-	-	-	-162721
Dec. 30, 2021	-	184315	-	142729	3913	–	-	1995	-	-	-	-	-	-325126
Dec. 31, 2021	-	208070	-	267022	8176	–	-	1415	-	-	-	-	-	-468331

Notes: #Includes Targeted Long Term Repo Operations (TLTRO), Targeted Long Term Repo Operations 2.0 (TLTRO 2.0) and On Tap Targeted Long Term Repo Operations. Negative (-) sign indicates repayments done by Banks.
& Negative (-) sign indicates repayments done by Banks.
£ As per Press Release No. 2021-2022/177 dated May 07, 2021. From June 18, 2021, the data also includes the amount absorbed as per the Press Release No. 2021-2022/323 dated June 04, 2021.

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

i) Operations in onshore / offshore OTC segment

Item	2020-21	2020	2021	
		Dec.	Nov.	Dec.
	1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US $ Million) (1.1–1.2)	68315	3991	0	-2917
1.1 Purchase (+)	162479	10014	8489	7475
1.2 Sale (–)	94164	6023	8489	10392
2 ₹ equivalent at contract rate (₹ Crores)	510516	29439	1669	-20809
3 Cumulative (over end-March) (US $ Million)	68315	72379	40330	37413
(₹ Crores)	510516	538628	306805	285996
4 Outstanding Net Forward Sales (–)/ Purchase (+) at the end of month (US $ Million)	72751	39792	49106	49106

ii) Operations in currency futures segment

Item	2020-21	2020	2021	
		Dec.	Nov.	Dec.
	1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US $ Million) (1.1–1.2)	0	0	0	0
1.1 Purchase (+)	12118	3985	0	0
1.2 Sale (–)	12118	3985	0	0
2 Outstanding Net Currency Futures Sales (–)/ Purchase (+) at the end of month (US $ Million)	690	1962	0	0

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

Item	As on December 31, 2021		
	Long (+)	Short (-)	Net (1-2)
	1	2	3
1. Upto 1 month	6548	5849	699
2. More than 1 month and upto 3 months	9011	7816	1195
3. More than 3 months and upto 1 year	52212	5000	47212
4. More than 1 year	0	0	0
Total (1+2+3+4)	**67771**	**18665**	**49106**

No. 5: RBI's Standing Facilities

(₹ Crore)

Item	As on the Last Reporting Friday							
	2020-21	2021						2022
		Jan. 29	Aug. 27	Sep. 24	Oct. 22	Nov. 19	Dec. 31	Jan. 28
	1	2	3	4	5	6	7	8
1 MSF	182	0	2	152	461	7201	8176	38
2 Export Credit Refinance for Scheduled Banks								
2.1 Limit	–	-	-	-	-	-	-	-
2.2 Outstanding	–	-	-	-	-	-	-	-
3 Liquidity Facility for PDs								
3.1 Limit	4900	4900	4900	4900	4900	4900	4900	4900
3.2 Outstanding	–	0	0	0	0	0	0	734
4 Others								
4.1 Limit	75000	75000	76000	76000	76000	76000	76000	76000
4.2 Outstanding	32387	32205	23296	25396	21696	24196	24401	24401
5 Total Outstanding (1+2.2+3.2+4.2)	32569	32205	23298	25548	22157	31397	32577	25173

Note :1.Special refinance facility to Others, i.e. to the EXIM Bank, is reopened since May 22, 2020
2.Refinance facility to Others, i.e. to the NABARD/SIDBI/NHB U/S 17(4H) of RBI ACT,1934, since, April 17, 2020.

Money and Banking

No. 6: Money Stock Measures

(₹ Crore)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2020-21	2020	2021		
		Dec. 18	Nov. 19	Dec. 17	Dec. 31
	1	2	3	4	5
1 Currency with the Public (1.1 + 1.2 + 1.3 – 1.4)	2751828	2681512	2878246	2894325	2881115
1.1 Notes in Circulation	2826851	2749859	2961030	2970938	2959237
1.2 Circulation of Rupee Coin	26170	25875	26698	26796	26921
1.3 Circulation of Small Coins	743	743	743	743	743
1.4 Cash on Hand with Banks	101935	94965	110225	104152	105786
2 Deposit Money of the Public	2042471	1728417	2005116	2042731	2257098
2.1 Demand Deposits with Banks	1995120	1686628	1957254	1994275	2206052
2.2 'Other' Deposits with Reserve Bank	47351	41788	47861	48456	51045
3 M_1 (1 + 2)	**4794299**	**4409929**	**4883362**	**4937057**	**5138213**
4 Post Office Saving Bank Deposits	170025	164567	170025	170025	170025
5 M_2 (3 + 4)	**4964324**	**4574496**	**5053387**	**5107082**	**5308238**
6 Time Deposits with Banks	14050278	13645443	14762272	14804346	14975823
7 M_3 (3 + 6)	**18844578**	**18055372**	**19645634**	**19741403**	**20114036**
8 Total Post Office Deposits	509544	489323	509544	509544	509544
9 M_4 (7 + 8)	**19354122**	**18544695**	**20155178**	**20250947**	**20623580**

No. 7: Sources of Money Stock (M_3)

(₹ Crore)

Sources	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2020-21	2020	2021		
		Dec. 18	Nov. 19	Dec. 17	Dec. 31
	1	2	3	4	5
1 Net Bank Credit to Government	**5850374**	**5637236**	**6075285**	**6024478**	**6100716**
1.1 RBI's net credit to Government (1.1.1–1.1.2)	1099686	980473	1193964	1127230	1194335
1.1.1 Claims on Government	1337300	1290946	1555163	1546804	1526753
1.1.1.1 Central Government	1333917	1284643	1546532	1533230	1520076
1.1.1.2 State Governments	3383	6303	8631	13574	6677
1.1.2 Government deposits with RBI	237615	310473	361199	419574	332418
1.1.2.1 Central Government	237572	310431	361156	419531	332375
1.1.2.2 State Governments	42	42	42	42	42
1.2 Other Banks' Credit to Government	4750689	4656763	4881321	4897248	4906381
2 Bank Credit to Commercial Sector	**11668466**	**11204826**	**11869926**	**12022917**	**12389335**
2.1 RBI's credit to commercial sector	8709	11205	4634	1945	2094
2.2 Other banks' credit to commercial sector	11659757	11193621	11865291	12020972	12387240
2.2.1 Bank credit by commercial banks	10949509	10547037	11162194	11313933	11680480
2.2.2 Bank credit by co-operative banks	694758	636368	684429	688730	688991
2.2.3 Investments by commercial and co-operative banks in other securities	15490	10216	18669	18308	17769
3 Net Foreign Exchange Assets of Banking Sector (3.1 + 3.2)	**4578846**	**4597615**	**4960354**	**5038744**	**4924971**
3.1 RBI's net foreign exchange assets (3.1.1–3.1.2)	4199400	4267681	4586034	4664425	4550652
3.1.1 Gross foreign assets	4199637	4267926	4586275	4664665	4550897
3.1.2 Foreign liabilities	237	245	241	241	245
3.2 Other banks' net foreign exchange assets	379446	329934	374319	374319	374319
4 Government's Currency Liabilities to the Public	**26913**	**26618**	**27441**	**27539**	**27664**
5 Banking Sector's Net Non-monetary Liabilities	**3280021**	**3410924**	**3287371**	**3372275**	**3328650**
5.1 Net non-monetary liabilities of RBI	1356660	1478577	1327908	1417697	1307042
5.2 Net non-monetary liabilities of other banks (residual)	1923362	1932347	1959464	1954578	2021608
M_3 (1+2+3+4–5)	**18844578**	**18055372**	**19645634**	**19741403**	**20114036**

No. 8: Monetary Survey

(₹ Crore)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2020-21	2020	2021		
		Dec. 18	Nov. 19	Dec. 17	Dec. 31
	1	2	3	4	5
Monetary Aggregates					
NM_1 (1.1 + 1.2.1+1.3)	4794299	4409929	4883362	4937057	5138213
NM_2 (NM_1+ 1.2.2.1)	11048277	10476477	11461215	11532850	11814892
NM_3 (NM_2 + 1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	18936051	18142693	19761139	19864680	20245248
1 Components					
1.1 Currency with the Public	2751828	2681512	2878246	2894325	2881115
1.2 Aggregate Deposits of Residents	15892848	15167847	16574706	16651595	17043116
1.2.1 Demand Deposits	1995121	1686628	1957254	1994275	2206052
1.2.2 Time Deposits of Residents	13897727	13481219	14617452	14657319	14837063
1.2.2.1 Short-term Time Deposits	6253977	6066549	6577853	6595794	6676679
1.2.2.1.1 Certificates of Deposit (CDs)	78702	67260	56026	73916	84894
1.2.2.2 Long-term Time Deposits	7643750	7414671	8039598	8061526	8160385
1.3 ‘Other’ Deposits with RBI	47351	41788	47861	48456	51045
1.4 Call/Term Funding from Financial Institutions	244025	251545	260325	270304	269971
2 Sources					
2.1 Domestic Credit	18518950	17794755	18949988	19042687	19479623
2.1.1 Net Bank Credit to the Government	5850374	5637236	6075285	6024478	6100716
2.1.1.1 Net RBI credit to the Government	1099686	980473	1193964	1127230	1194335
2.1.1.2 Credit to the Government by the Banking System	4750689	4656763	4881321	4897248	4906381
2.1.2 Bank Credit to the Commercial Sector	12668575	12157519	12874703	13018209	13378907
2.1.2.1 RBI Credit to the Commercial Sector	34134	37338	26610	22242	26864
2.1.2.2 Credit to the Commercial Sector by the Banking System	12634441	12120181	12848093	12995967	13352043
2.1.2.2.1 Other Investments (Non-SLR Securities)	951313	917177	973791	967331	958477
2.2 Government’s Currency Liabilities to the Public	26913	26618	27441	27539	27664
2.3 Net Foreign Exchange Assets of the Banking Sector	4438202	4461072	4825536	4878329	4755068
2.3.1 Net Foreign Exchange Assets of the RBI	4199400	4267681	4586034	4664425	4550652
2.3.2 Net Foreign Currency Assets of the Banking System	238802	193391	239502	213904	204416
2.4 Capital Account	2775245	2872234	2994318	3077536	2976588
2.5 Other items (net)	1272767	1267519	1047508	1006339	1040519

No. 9: Liquidity Aggregates

(₹ Crore)

Aggregates	2020-21	2020	2021		
		Dec.	Oct.	Nov.	Dec.
	1	2	3	4	5
1 NM_3	**18936051**	**18142693**	**19634678**	**19761139**	**20245248**
2 Postal Deposits	509544	489323	509544	509544	509544
3 L_1 (1 + 2)	**19445595**	**18632016**	**20144222**	**20270683**	**20754792**
4 Liabilities of Financial Institutions	33179	34795	26662	26861	24644
4.1 Term Money Borrowings	2645	2645	3627	3631	1984
4.2 Certificates of Deposit	25550	28865	18175	18175	15360
4.3 Term Deposits	4984	3285	4860	5054	7299
5 L_2 (3 + 4)	**19478774**	**18666811**	**20170884**	**20297544**	**20779435**
6 Public Deposits with Non-Banking Financial Companies	31905	31905	..	..	31905
7 L_3 (5 + 6)	**19510679**	**18698716**	..	..	**20811340**

Note : 1. Figures in the columns might not add up to the total due to rounding off of numbers.

No. 10: Reserve Bank of India Survey

(₹ Crore)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2020-21	2020	2021		
		Dec. 18	Nov. 19	Dec. 17	Dec. 31
	1	2	3	4	5
1 Components					
1.1 Currency in Circulation	2853763	2776477	2988471	2998477	2986901
1.2 Bankers' Deposits with the RBI	698867	522176	731562	741305	764828
1.2.1 Scheduled Commercial Banks	651748	488262	683604	693730	716432
1.3 'Other' Deposits with the RBI	47351	41788	47861	48456	51045
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	3599981	3340442	3767894	3788238	3802775
2 Sources					
2.1 RBI's Domestic Credit	730328	524719	482327	513971	531501
2.1.1 Net RBI credit to the Government	1099686	980473	1193964	1127230	1194335
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)	1096345	974212	1185376	1113698	1187700
2.1.1.1.1 Loans and Advances to the Central Government	–	–	–	–	–
2.1.1.1.2 Investments in Treasury Bills	–	–	–	–	–
2.1.1.1.3 Investments in dated Government Securities	1333174	1283889	1545839	1532614	1519509
2.1.1.1.3.1 Central Government Securities	1333174	1283889	1545839	1532614	1519509
2.1.1.1.4 Rupee Coins	743	754	693	616	567
2.1.1.1.5 Deposits of the Central Government	237572	310431	361156	419531	332375
2.1.1.2 Net RBI credit to State Governments	3340	6261	8588	13532	6634
2.1.2 RBI's Claims on Banks	-403492	-493092	-738247	-635502	-689698
2.1.2.1 Loans and Advances to Scheduled Commercial Banks	-378066	-466959	-716272	-615205	-664928
2.1.3 RBI's Credit to Commercial Sector	34134	37338	26610	22242	26864
2.1.3.1 Loans and Advances to Primary Dealers	–	–	–	–	–
2.1.3.2 Loans and Advances to NABARD	25426	26133	21976	20297	24770
2.2 Government's Currency Liabilities to the Public	26913	26618	27441	27539	27664
2.3 Net Foreign Exchange Assets of the RBI	4199400	4267681	4586034	4664425	4550652
2.3.1 Gold	247723	272328	300065	298092	292779
2.3.2 Foreign Currency Assets	3951694	3995371	4285987	4366350	4257890
2.4 Capital Account	1173033	1292910	1235252	1319795	1221533
2.5 Other Items (net)	183626	185667	92656	97901	85509

No. 11: Reserve Money - Components and Sources

(₹ Crore)

Item	2020-21	Outstanding as on March 31/ last Fridays of the month/ Fridays						
		2021						
		Jan. 1	Nov. 26	Dec. 3	Dec. 10	Dec. 17	Dec. 24	Dec. 31
	1	2	3	4	5	6	7	8
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 + 2.4 + 2.5 – 2.6)	3599981	3322152	3736107	3764934	3742918	3788238	3744266	3802775
1 Components								
1.1 Currency in Circulation	2853763	2770377	2983295	2984193	3000647	2998477	2996038	2986901
1.2 Bankers' Deposits with RBI	698867	509365	704368	732507	693849	741305	697251	764828
1.3 'Other' Deposits with RBI	47351	42410	48443	48235	48423	48456	50977	51045
2 Sources								
2.1 Net Reserve Bank Credit to Government	1099686	1102053	1177312	1309946	1266149	1127230	1091480	1194335
2.2 Reserve Bank Credit to Banks	-378066	-630217	-726053	-832999	-810981	-615205	-622634	-664928
2.3 Reserve Bank Credit to Commercial Sector	8709	11496	2135	2067	2140	1945	2130	2094
2.4 Net Foreign Exchange Assets of RBI	4199400	4269569	4597067	4605630	4642680	4664425	4595536	4550652
2.5 Government's Currency Liabilities to the Public	26913	26681	27539	27539	27539	27539	27539	27664
2.6 Net Non- Monetary Liabilities of RBI	1356660	1457429	1341893	1347249	1384610	1417697	1349785	1307042

No. 12: Commercial Bank Survey

(₹ Crore)

Item	Outstanding as on last reporting Fridays of the month/ reporting Fridays of the month				
	2020-21	2020	2021		
		Dec. 18	Nov. 19	Dec. 17	Dec. 31
	1	2	3	4	5
1 Components					
1.1 Aggregate Deposits of Residents	14960961	14314736	15634295	15720406	16103094
1.1.1 Demand Deposits	1861193	1564598	1820862	1857984	2066651
1.1.2 Time Deposits of Residents	13099768	12750138	13813433	13862422	14036443
1.1.2.1 Short-term Time Deposits	5894896	5737562	6216045	6238090	6316400
1.1.2.1.1 Certificates of Deposits (CDs)	78702	67260	56026	73916	84894
1.1.2.2 Long-term Time Deposits	7204873	7012576	7597388	7624332	7720044
1.2 Call/Term Funding from Financial Institutions	244025	251545	260325	270304	269971
2 Sources					
2.1 Domestic Credit	16378019	15878502	16720791	16880922	17244818
2.1.1 Credit to the Government	4461632	4411845	4582873	4599330	4607365
2.1.2 Credit to the Commercial Sector	11916387	11466657	12137918	12281592	12637453
2.1.2.1 Bank Credit	10949509	10547037	11162194	11313933	11680480
2.1.2.1.1 Non-food Credit	10888255	10453884	11079778	11228353	11591800
2.1.2.2 Net Credit to Primary Dealers	23633	9647	9273	7927	6589
2.1.2.3 Investments in Other Approved Securities	894	1759	1622	1363	869
2.1.2.4 Other Investments (in non-SLR Securities)	942351	908214	964828	958369	949514
2.2 Net Foreign Currency Assets of Commercial Banks (2.2.1–2.2.2–2.2.3)	238802	193391	239502	213904	204416
2.2.1 Foreign Currency Assets	454866	418715	456666	436485	418116
2.2.2 Non-resident Foreign Currency Repatriable Fixed Deposits	152552	164224	144821	147027	138760
2.2.3 Overseas Foreign Currency Borrowings	63512	61101	72344	75554	74940
2.3 Net Bank Reserves (2.3.1+2.3.2–2.3.3)	1010202	1040155	1498308	1401403	1475543
2.3.1 Balances with the RBI	542693	488262	683604	693730	716432
2.3.2 Cash in Hand	90748	84934	98432	92469	94182
2.3.3 Loans and Advances from the RBI	-376761	-466959	-716272	-615205	-664928
2.4 Capital Account	1578041	1555153	1734895	1733570	1730885
2.5 Other items (net) (2.1+2.2+2.3–2.4–1.1–1.2)	843995	990613	829084	771949	820827
2.5.1 Other Demand and Time Liabilities (net of 2.2.3)	593095	553551	536420	547007	559684
2.5.2 Net Inter-Bank Liabilities (other than to PDs)	80681	69404	32065	34218	29767

No. 13: Scheduled Commercial Banks' Investments

(₹ Crore)

Item	As on March 26, 2021	2020	2021		
		Dec. 18	Nov. 19	Dec. 17	Dec. 31
	1	2	3	4	5
1 SLR Securities	4462526	4413605	4584495	4600693	4608235
2 Commercial Paper	82584	75341	67080	57649	53140
3 Shares issued by					
3.1 PSUs	9840	11241	9778	8711	8397
3.2 Private Corporate Sector	64035	70834	70047	71928	73058
3.3 Others	5210	5409	5111	5007	5007
4 Bonds/Debentures issued by					
4.1 PSUs	121008	127646	116887	116484	115486
4.2 Private Corporate Sector	308904	313097	332529	334142	341692
4.3 Others	149325	142431	148190	146064	147470
5 Instruments issued by					
5.1 Mutual funds	31142	29618	52558	50667	38177
5.2 Financial institutions	167130	132419	162752	167716	167086

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			
	2020-21	2020	2021		2020-21	2020	2021	
		Dec.	Nov.	Dec.		Dec.	Nov.	Dec.
	1	2	3	4	5	6	7	8
Number of Reporting Banks	209	208	211	212	133	132	135	136
1 Liabilities to the Banking System	**259530**	**269495**	**240488**	**254662**	**254589**	**264487**	**235957**	**250071**
1.1 Demand and Time Deposits from Banks	200585	208104	180927	190557	195866	203319	176748	186316
1.2 Borrowings from Banks	40886	44060	37571	37900	40880	44058	37564	37883
1.3 Other Demand and Time Liabilities	18059	17331	21989	26204	17843	17110	21645	25873
2 Liabilities to Others	**16457782**	**15805240**	**17096687**	**17592142**	**16014145**	**15372567**	**16654491**	**17146449**
2.1 Aggregate Deposits	15540152	14904791	16212125	16670206	15113512	14488370	15784717	16241854
2.1.1 Demand	1899343	1601779	1880478	2109729	1861193	1565783	1840383	2066651
2.1.2 Time	13640809	13303012	14331647	14560478	13252320	12922587	13944334	14175203
2.2 Borrowings	248271	257321	267747	274394	244025	252891	263467	269971
2.3 Other Demand and Time Liabilities	669359	643127	616815	647542	656607	631306	606307	634624
3 Borrowings from Reserve Bank	**90275**	**77318**	**93677**	**102489**	**90275**	**77318**	**93677**	**102489**
3.1 Against Usance Bills /Promissory Notes	–	–	–	–	–	–	–	–
3.2 Others	90275	77318	93677	102489	90275	77318	93677	102489
4 Cash in Hand and Balances with Reserve Bank	650745	557529	777305	830773	633440	542590	757991	810615
4.1 Cash in Hand	92793	86836	103870	96489	90748	84872	101328	94182
4.2 Balances with Reserve Bank	557951	470693	673435	734284	542693	457719	656663	716432
5 Assets with the Banking System	**265729**	**264863**	**268815**	**288252**	**197541**	**204254**	**213515**	**226894**
5.1 Balances with Other Banks	179430	180945	185698	192589	143294	147352	151303	156132
5.1.1 In Current Account	16796	17423	15520	19253	14226	15174	12961	16055
5.1.2 In Other Accounts	162634	163522	170178	173336	129068	132178	138342	140077
5.2 Money at Call and Short Notice	36716	31389	27208	32082	10654	8512	9590	12048
5.3 Advances to Banks	19908	21271	24033	30207	16764	20573	23599	28574
5.4 Other Assets	29675	31259	31876	33373	26829	27817	29024	30139
6 Investment	**4598924**	**4537040**	**4728243**	**4752753**	**4462526**	**4403341**	**4582167**	**4608235**
6.1 Government Securities	4591896	4528809	4720370	4745686	4461632	4401696	4580669	4607365
6.2 Other Approved Securities	7029	8231	7873	7067	894	1645	1499	869
7 Bank Credit	**11297014**	**10926301**	**11548488**	**12037369**	**10949509**	**10587475**	**11199939**	**11680480**
7a Food Credit	91653	126156	121828	124497	61254	95754	86011	88680
7.1 Loans, Cash-credits and Overdrafts	11081668	10752941	11337403	11812259	10736491	10416107	10990885	11457609
7.2 Inland Bills-Purchased	30896	22894	31807	34268	30531	22629	31793	34255
7.3 Inland Bills-Discounted	128831	101639	127812	136359	127883	100728	126685	135027
7.4 Foreign Bills-Purchased	20762	18020	18228	20865	20394	17727	17978	20446
7.5 Foreign Bills-Discounted	34857	30808	33240	33619	34210	30285	32598	33143

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

(₹ Crore)

Sector	Outstanding as on				Growth (%)	
	Mar.26, 2021	2020	2021		Financial year so far	Y-o-Y
		Dec.18	Nov.19	Dec.31	2021-22	2021
	1	2	3	4	%	%
I. Gross Bank Credit (II+III)	**10949509**	**10702596**	**11162247**	**11683413**	**6.7**	**9.2**
II. Food Credit	**61254**	**92545**	**82415**	**88680**	**44.8**	**-4.2**
III. Non-food Credit	**10888255**	**10610052**	**11079831**	**11594733**	**6.5**	**9.3**
1. Agriculture & Allied Activities	**1280240**	**1237957**	**1344129**	**1417969**	**10.8**	**14.5**
2. Industry (Micro and Small, Medium and Large)	**2899531**	**2774549**	**2865403**	**2985278**	**3.0**	**7.6**
2.1 Micro and Small [1]	387220	371463	410646	447566	15.6	20.5
2.2 Medium	136108	120242	183668	224255	64.8	86.5
2.3 Large	2376203	2282844	2271089	2313458	-2.6	1.3
3. Services	**2673753**	**2569512**	**2626577**	**2848108**	**6.5**	**10.8**
3.1 Transport Operators	137405	134191	132364	141056	2.7	5.1
3.2 Computer Software	19219	17594	18720	19712	2.6	12.0
3.3 Tourism, Hotels & Restaurants	49085	49614	50282	52760	7.5	6.3
3.4 Shipping	7188	7217	7469	7026	-2.3	-2.6
3.5 Aviation	25643	23436	26771	12229	-52.3	-47.8
3.6 Professional Services	105333	103760	101363	105280	-0.1	1.5
3.7 Trade	599158	561052	588738	644771	7.6	14.9
3.7.1 Wholesale Trade	310377	269945	303758	329918	6.3	22.2
3.7.2 Retail Trade	288780	291108	284979	314853	9.0	8.2
3.8 Commercial Real Estate	264889	260768	260262	270860	2.3	3.9
3.9 Non-Banking Financial Companies (NBFCs)[2] *of which,*	940205	883392	920630	1002081	6.6	13.4
3.9.1 Housing Finance Companies (HFCs)	215617	179730	220855	229942	6.6	27.9
3.9.2 Public Financial Institutions (PFIs)	78442	57491	90751	108035	37.7	87.9
3.10 Other Services [3]	525628	528488	519979	592334	12.7	12.1
4. Personal Loans	**2857789**	**2701738**	**2985430**	**3087845**	**8.1**	**14.3**
4.1 Consumer Durables	8812	8435	12313	13115	48.8	55.5
4.2 Housing	1460091	1392259	1490157	1521439	4.2	9.3
4.3 Advances against Fixed Deposits	63676	58829	64797	73011	14.7	24.1
4.4 Advances to Individuals against share & bonds	4419	4705	4714	4820	9.1	2.5
4.5 Credit Card Outstanding	116549	110350	122111	124743	7.0	13.0
4.6 Education	63969	64843	63452	63213	-1.2	-2.5
4.7 Vehicle Loans	269706	258062	275249	279485	3.6	8.3
4.8 Loan against gold jewellery	60849	48859	65630	70871	16.5	45.1
4.9 Other Personal Loans	809718	755397	887007	937148	15.7	24.1
5. Priority Sector *(Memo)*						
5.1 Agriculture & Allied Activities [4]	1244276	1201642	1283063	1346408	8.2	12.0
5.2 Micro & Small Enterprises [5]	1134976	1148883	1099438	1253505	10.4	9.1
5.3 Medium Enterprises [6]	207870	183825	242069	276485	33.0	50.4
5.4 Housing	470325	468365	444762	468623	-0.4	0.1
5.5 Education Loans	48201	50574	47039	46884	-2.7	-7.3
5.6 Renewable Energy	1171	1481	1244	1764	50.7	19.2
5.7 Social Infrastructure	2448	1909	2331	2333	-4.7	22.2
5.8 Export Credit	19028	15322	16969	31545	65.8	105.9
5.9 Others	10726	9627	17303	19273	79.7	100.2
5.10 Weaker Sections including net PSLC- SF/MF	816816	794582	862276	897351	9.9	12.9

Note 1: Data are provisional. Gross bank 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 90 per cent of total non-food credit extended by all SCBs.

Note 2: With effect from January 2021, sectoral credit data are based on revised format due to which values and growth rates of some of the existing components published earlier have undergone some changes.

Note 3: For the serial numbers I, II and III, Y-o-Y growth rates were calculated based on the outstanding credit as on December 31, 2021, over January 1, 2021. However, since the SIBC data is available only for the fortnight of December 18, 2020, the growth rate for the sectoral credit is calculated on December 31, 2021, over December 18, 2020.

1 Micro & Small includes credit to micro & small industries in the manufacturing sector.

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 also include priority sector lending certificates (PSLCs).

5 Micro and Small Enterprises include credit to micro and small enterprises in manufacturing and services sector and also include PSLCs.

6 Medium Enterprises include credit to medium enterprises in the manufacturing and services sector.

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

(₹ Crore)

Industry	Outstanding as on				Growth (%)	
	Mar. 26, 2021	2020	2021		Financial year so far	Y-o-Y
		Dec. 18	Nov.19	Dec. 31	2021-22	2021
	1	2	3	4	%	%
2 Industries (2.1 to 2.19)	2899531	2774549	2865403	2985278	3.0	7.6
2.1 Mining & Quarrying (incl. Coal)	46185	44820	51080	52100	12.8	16.2
2.2 Food Processing	153382	155377	143214	164290	7.1	5.7
2.2.1 Sugar	25519	26816	16763	20748	–18.7	–22.6
2.2.2 Edible Oils & Vanaspati	18972	18194	17251	19369	2.1	6.5
2.2.3 Tea	4273	4375	4933	5155	20.6	17.8
2.2.4 Others	104619	105993	104267	119017	13.8	12.3
2.3 Beverage & Tobacco	15978	14518	15760	15794	–1.1	8.8
2.4 Textiles	200810	190465	200578	212884	6.0	11.8
2.4.1 Cotton Textiles	90549	86597	85002	91792	1.4	6.0
2.4.2 Jute Textiles	2726	2541	2769	2995	9.9	17.9
2.4.3 Man-Made Textiles	38861	35282	41555	42667	9.8	20.9
2.4.4 Other Textiles	68674	66046	71252	75430	9.8	14.2
2.5 Leather & Leather Products	10467	10364	10330	10868	3.8	4.9
2.6 Wood & Wood Products	13533	13110	13363	14259	5.4	8.8
2.7 Paper & Paper Products	35507	34397	36849	38234	7.7	11.2
2.8 Petroleum, Coal Products & Nuclear Fuels	66909	56502	67963	86527	29.3	53.1
2.9 Chemicals & Chemical Products	192444	175873	191240	198293	3.0	12.7
2.9.1 Fertiliser	32241	37885	29327	30236	–6.2	–20.2
2.9.2 Drugs & Pharmaceuticals	51754	49261	52133	54700	5.7	11.0
2.9.3 Petro Chemicals	45621	34977	43178	42497	–6.8	21.5
2.9.4 Others	62827	53749	66602	70860	12.8	31.8
2.10 Rubber, Plastic & their Products	54483	51302	61748	65349	19.9	27.4
2.11 Glass & Glassware	6344	6802	5714	5810	–8.4	–14.6
2.12 Cement & Cement Products	54291	58864	44765	46586	–14.2	–20.9
2.13 Basic Metal & Metal Product	329047	329824	277870	286405	–13.0	–13.2
2.13.1 Iron & Steel	232988	242265	186191	187331	–19.6	–22.7
2.13.2 Other Metal & Metal Product	96059	87558	91678	99074	3.1	13.2
2.14 All Engineering	148152	144210	149368	155875	5.2	8.1
2.14.1 Electronics	34013	33532	36359	37587	10.5	12.1
2.14.2 Others	114138	110677	113009	118289	3.6	6.9
2.15 Vehicles, Vehicle Parts & Transport Equipment	83188	84260	84872	84887	2.0	0.7
2.16 Gems & Jewellery	63448	70108	70141	67881	7.0	–3.2
2.17 Construction	94565	101230	95881	95644	1.1	–5.5
2.18 Infrastructure	1092611	1023831	1115313	1135536	3.9	10.9
2.18.1 Power	567584	553919	576805	591639	4.2	6.8
2.18.2 Telecommunications	112120	101195	110269	114040	1.7	12.7
2.18.3 Roads	237095	201322	246836	248869	5.0	23.6
2.18.4 Airports	7327	6179	7570	7510	2.5	21.5
2.18.5 Ports	7363	8461	7546	7268	–1.3	–14.1
2.18.6 Railways	11261	12287	13790	10079	–10.5	–18.0
2.18.7 Other Infrastructure	149861	140466	152497	156131	4.2	11.2
2.19 Other Industries	238189	208691	229353	248056	4.1	18.9

Note : With effect from January 2021, sectoral credit data are based on revised format due to which values and growth rates of some of the existing components published earlier have undergone some changes.

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								
	2020-21	2020	2021						
		Nov, 27	Sep, 24	Oct, 08	Oct, 22	Oct, 29	Nov, 05	Nov, 19	Nov, 26
	1	2	3	4	5	6	7	8	9
Number of Reporting Banks	32	32	33	33	33	33	33	33	33
1 Aggregate Deposits (2.1.1.2+2.2.1.2)	**125859.6**	**124549.5**	**125238.2**	**126845.4**	**127303.3**	**128013.9**	**127248.2**	**126843.4**	**126631.3**
2 Demand and Time Liabilities									
2.1 Demand Liabilities	**23736.9**	**22922.9**	**26961.0**	**25556.0**	**25393.8**	**25243.2**	**26361.0**	**24421.0**	**23568.9**
2.1.1 Deposits									
2.1.1.1 Inter-Bank	4896.9	3926.9	5734.8	5387.3	5285.9	5539.9	6114.8	5879.7	5294.8
2.1.1.2 Others	13,899.4	13488.9	14619.8	14657.9	14799.4	14672.8	14884.2	13527.1	13473.5
2.1.2 Borrowings from Banks	0.0	0.0	999.7	749.8	279.9	80.0	309.8	174.9	150.0
2.1.3 Other Demand Liabilities	4940.6	5507.1	5606.6	4761.0	5028.6	4950.5	5052.1	4839.4	4650.6
2.2 Time Liabilities	**179957.5**	**170541.9**	**168977.8**	**170167.9**	**171836.3**	**171867.5**	**172989.1**	**174852.8**	**175629.1**
2.2.1 Deposits									
2.2.1.1 Inter-Bank	65333.7	57870.7	56505.0	56018.2	57474.2	56659.6	58734.0	58455.0	59386.8
2.2.1.2 Others	111960.2	111060.7	110618.4	112187.5	112503.9	113341.1	112364.0	113316.3	113157.7
2.2.2 Borrowings from Banks	630.0	629.9	911.0	985.1	910.1	927.5	910.1	910.1	910.1
2.2.3 Other Time Liabilities	2033.7	980.6	943.3	977.1	948.0	939.3	980.9	2171.4	2174.4
3 Borrowing from Reserve Bank	0.0	0.0	35.0	0.0	0.0	0.0	0.0	0.0	0.0
4 Borrowings from a notified bank / Government	63559.8	58609.1	54926.2	55750.0	57812.6	58096.5	57950.6	60487.7	62398.8
4.1 Demand	15691.8	14440.6	12031.5	12308.4	12150.6	12222.9	11745.3	12210.4	12380.4
4.2 Time	47868.0	44168.5	42894.6	43441.6	45661.9	45873.6	46205.3	48277.2	50018.4
5 Cash in Hand and Balances with Reserve Bank	**8151.1**	**7139.8**	**8940.2**	**9036.9**	**8911.0**	**9282.9**	**9058.6**	**9268.7**	**9075.7**
5.1 Cash in Hand	570.3	554.2	640.7	633.1	672.7	722.8	631.3	722.6	691.6
5.2 Balance with Reserve Bank	7580.8	6585.6	8299.5	8403.8	8238.2	8560.1	8427.3	8546.1	8384.1
6 Balances with Other Banks in Current Account	**1148.1**	**947.3**	**1223.7**	**1165.1**	**1217.3**	**1299.6**	**1283.3**	**1280.3**	**1215.4**
7 Investments in Government Securities	**64455.2**	**60795.8**	**70603.5**	**70631.0**	**70288.0**	**71010.3**	**71104.6**	**71886.2**	**73814.2**
8 Money at Call and Short Notice	**28835.7**	**24696.5**	**20170.1**	**19721.6**	**20940.3**	**20265.8**	**20550.8**	**22786.2**	**21853.7**
9 Bank Credit (10.1+11)	**114631.6**	**110586.0**	**106670.5**	**107983.1**	**107964.4**	**107241.8**	**107467.1**	**107529.9**	**107879.4**
10 Advances									
10.1 Loans, Cash-Credits and Overdrafts	**114612.1**	**110566.8**	**106650.9**	**107962.5**	**107943.9**	**107221.4**	**107446.6**	**107509.4**	**107858.5**
10.2 Due from Banks	89429.1	84270.3	88508.1	91408.2	94217.9	95223.9	95541.5	97554.3	99264.9
11 Bills Purchased and Discounted	19.5	19.1	19.6	20.6	20.5	20.4	20.5	20.5	20.8

Prices and Production

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

Group/Sub group	2020-21			Rural			Urban			Combined		
	Rural	Urban	Combined	Dec. 20	Nov. 21	Dec 21(P)	Dec. 20	Nov. 21	Dec 21(P)	Dec. 20	Nov. 21	Dec 21(P)
	1	2	3	4	5	6	7	8	9	10	11	12
1 Food and beverages	**156.7**	**161.1**	**158.3**	**159.6**	**167.5**	**165.8**	**163.4**	**173.5**	**172.2**	**161.0**	**169.7**	**168.2**
1.1 Cereals and products	145.4	149.9	146.8	143.4	146.9	147.4	148.0	151.0	151.6	144.9	148.2	148.7
1.2 Meat and fish	185.2	192.4	187.7	187.5	199.8	197.0	194.8	204.9	202.2	190.1	201.6	198.8
1.3 Egg	160.3	164.8	162.0	173.4	171.5	176.5	178.4	175.4	180.0	175.3	173.0	177.9
1.4 Milk and products	154.1	154.4	154.2	154.0	159.1	159.8	154.4	159.6	160.0	154.1	159.3	159.9
1.5 Oils and fats	148.2	139.9	145.2	154.8	198.4	195.8	144.1	175.8	173.5	150.9	190.1	187.6
1.6 Fruits	146.9	153.4	149.9	147.0	153.2	152.0	152.6	160.3	158.3	149.6	156.5	154.9
1.7 Vegetables	174.2	196.2	181.7	187.8	183.9	172.4	206.8	229.1	219.5	194.2	199.2	188.4
1.8 Pulses and products	154.4	156.0	154.9	159.5	165.4	164.4	162.1	165.1	164.2	160.4	165.3	164.3
1.9 Sugar and confectionery	114.4	117.0	115.3	113.8	122.1	120.6	116.3	123.1	121.9	114.6	122.4	121.0
1.10 Spices	161.9	160.4	161.4	164.5	170.8	171.7	163.0	167.2	168.2	164.0	169.6	170.5
1.11 Non-alcoholic beverages	149.8	141.3	146.3	156.1	169.1	169.7	145.9	156.1	156.5	151.8	163.7	164.2
1.12 Prepared meals, snacks, sweets	163.2	165.5	164.3	164.3	174.3	175.1	167.2	176.8	178.1	165.6	175.5	176.5
2 Pan, tobacco and intoxicants	**181.8**	**188.7**	**183.6**	**184.6**	**191.4**	**190.9**	**191.8**	**197.0**	**196.8**	**186.5**	**192.9**	**192.5**
3 Clothing and footwear	**155.6**	**149.7**	**153.3**	**156.8**	**169.8**	**171.2**	**150.2**	**159.7**	**160.7**	**154.2**	**165.8**	**167.0**
3.1 Clothing	156.4	152.0	154.7	157.5	170.4	171.9	152.5	162.3	163.3	155.5	167.2	168.5
3.2 Footwear	151.1	137.2	145.3	152.4	166.0	167.3	137.3	145.3	146.7	146.1	157.4	158.7
4 Housing	-	**157.2**	**157.2**	-	-	-	**157.7**	**164.2**	**163.4**	**157.7**	**164.2**	**163.4**
5 Fuel and light	**149.1**	**140.9**	**146.0**	**150.9**	**165.3**	**165.6**	**142.9**	**161.6**	**161.7**	**147.9**	**163.9**	**164.1**
6 Miscellaneous	**153.9**	**146.1**	**150.2**	**155.9**	**165.2**	**166.0**	**147.6**	**157.3**	**157.8**	**151.9**	**161.4**	**162.0**
6.1 Household goods and services	152.9	145.2	149.3	153.9	162.9	163.9	145.7	155.2	156.0	150.0	159.3	160.2
6.2 Health	160.3	151.3	156.9	162.5	173.4	174.0	154.1	164.2	165.1	159.3	169.9	170.6
6.3 Transport and communication	144.9	135.0	139.7	147.5	158.9	160.1	136.9	151.2	151.6	141.9	154.8	155.6
6.4 Recreation and amusement	154.0	144.3	148.5	155.1	163.8	164.5	145.4	156.7	157.6	149.6	159.8	160.6
6.5 Education	162.5	156.2	158.9	163.5	169.3	169.7	156.1	160.8	160.6	159.2	164.3	164.4
6.6 Personal care and effects	153.7	155.8	154.5	156.2	162.4	162.8	157.7	161.8	162.4	156.8	162.2	162.6
General Index (All Groups)	**156.1**	**154.4**	**155.3**	**158.5**	**167.6**	**167.0**	**156.0**	**165.6**	**165.1**	**157.3**	**166.7**	**166.1**

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	2020-21	2020	2021	
				Dec.	Nov.	Dec.
	1	2	3	4	5	6
1 Consumer Price Index for Industrial Workers	2016	2.88	-	118.8	125.7	125.4
2 Consumer Price Index for Agricultural Labourers	1986-87	5.89	1034	1047	1092	1097
3 Consumer Price Index for Rural Labourers	1986-87	–	1040	1053	1101	1106

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

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

Item	2020-21	2020	2021	
		Dec.	Nov.	Dec.
	1	2	3	4
1 Standard Gold (₹ per 10 grams)	48723	49444	48193	47890
2 Silver (₹ per kilogram)	59283	64757	64667	61280

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	2020-21	2020	2021		
			Dec.	Oct.	Nov. (P)	Dec. (P)
	1	2	3	4	5	6
1 ALL COMMODITIES	**100.000**	**123.4**	**125.4**	**140.7**	**142.9**	**142.4**
1.1 PRIMARY ARTICLES	**22.618**	**145.7**	**148.0**	**163.0**	**168.6**	**167.8**
1.1.1 FOOD ARTICLES	**15.256**	**160.7**	**161.1**	**171.6**	**178.4**	**176.5**
1.1.1.1 Food Grains (Cereals+Pulses)	3.462	159.3	157.4	163.7	164.8	165.1
1.1.1.2 Fruits & Vegetables	3.475	179.2	180.7	208.2	235.1	227.0
1.1.1.3 Milk	4.440	153.4	154.1	157.3	157.5	157.3
1.1.1.4 Eggs,Meat & Fish	2.402	151.2	151.2	161.4	163.4	161.3
1.1.1.5 Condiments & Spices	0.529	149.5	153.2	161.6	161.6	165.8
1.1.1.6 Other Food Articles	0.948	162.0	164.4	164.5	166.1	167.0
1.1.2 NON-FOOD ARTICLES	**4.119**	**130.5**	**138.0**	**153.7**	**157.0**	**164.2**
1.1.2.1 Fibres	0.839	119.8	123.5	156.1	164.2	166.8
1.1.2.2 Oil Seeds	1.115	161.7	164.4	199.7	202.3	210.1
1.1.2.3 Other non-food Articles	1.960	109.0	113.8	119.9	120.7	121.9
1.1.2.4 Floriculture	0.204	210.0	285.0	217.9	228.7	309.8
1.1.3 MINERALS	**0.833**	**164.9**	**172.2**	**178.7**	**190.3**	**178.7**
1.1.3.1 Metallic Minerals	0.648	159.8	168.2	169.4	183.8	169.4
1.1.3.2 Other Minerals	0.185	183.1	186.3	211.2	213.0	211.2
1.1.4 CRUDE PETROLEUM & NATURAL GAS	**2.410**	**70.4**	**74.1**	**118.9**	**119.2**	**115.4**
1.2 FUEL & POWER	**13.152**	**94.0**	**96.9**	**126.0**	**131.7**	**128.2**
1.2.1 COAL	**2.138**	**126.6**	**127.0**	**128.9**	**130.4**	**130.9**
1.2.1.1 Coking Coal	0.647	141.8	141.9	143.4	143.4	143.4
1.2.1.2 Non-Coking Coal	1.401	119.3	119.8	119.8	119.8	119.8
1.2.1.3 Lignite	0.090	130.9	131.1	166.0	200.5	212.6
1.2.2 MINERAL OILS	**7.950**	**79.2**	**81.1**	**128.9**	**137.8**	**131.9**
1.2.3 ELECTRICITY	**3.064**	**109.6**	**116.9**	**116.7**	**116.7**	**116.7**
1.3 MANUFACTURED PRODUCTS	**64.231**	**121.5**	**123.3**	**135.9**	**136.1**	**136.4**
1.3.1 MANUFACTURE OF FOOD PRODUCTS	**9.122**	**141.4**	**144.0**	**158.5**	**157.0**	**156.6**
1.3.1.1 Processing and Preserving of meat	0.134	137.2	137.6	142.4	142.4	143.8
1.3.1.2 Processing and Preserving of fish, Crustaceans, Molluscs and products thereof	0.204	139.0	135.4	146.5	144.9	143.6
1.3.1.3 Processing and Preserving of fruit and Vegetables	0.138	120.2	121.8	122.1	121.9	121.7
1.3.1.4 Vegetable and Animal oils and Fats	2.643	143.5	155.0	187.3	182.4	181.1
1.3.1.5 Dairy products	1.165	146.9	146.6	148.8	147.9	147.8
1.3.1.6 Grain mill products	2.010	143.5	141.6	146.0	147.3	146.6
1.3.1.7 Starches and Starch products	0.110	115.9	119.1	130.3	135.1	138.1
1.3.1.8 Bakery products	0.215	138.1	138.9	145.6	147.2	149.2
1.3.1.9 Sugar, Molasses & honey	1.163	118.4	118.2	127.9	125.7	125.2
1.3.1.10 Cocoa, Chocolate and Sugar confectionery	0.175	128.0	128.1	131.3	130.1	133.0
1.3.1.11 Macaroni, Noodles, Couscous and Similar farinaceous products	0.026	132.3	131.6	139.0	133.4	131.4
1.3.1.12 Tea & Coffee products	0.371	166.5	161.1	168.4	170.3	172.8
1.3.1.13 Processed condiments & salt	0.163	147.0	149.1	155.9	154.8	157.7
1.3.1.14 Processed ready to eat food	0.024	132.2	133.2	135.4	135.3	136.4
1.3.1.15 Health supplements	0.225	142.9	137.9	154.6	154.3	153.1
1.3.1.16 Prepared animal feeds	0.356	170.5	171.4	201.0	198.6	197.6
1.3.2 MANUFACTURE OF BEVERAGES	**0.909**	**124.5**	**123.0**	**127.4**	**127.5**	**127.2**
1.3.2.1 Wines & spirits	0.408	120.2	119.3	123.7	124.0	123.8
1.3.2.2 Malt liquors and Malt	0.225	126.5	124.3	131.6	131.4	131.7
1.3.2.3 Soft drinks; Production of mineral waters and Other bottled waters	0.275	129.4	127.6	129.4	129.4	128.5
1.3.3 MANUFACTURE OF TOBACCO PRODUCTS	**0.514**	**157.2**	**157.2**	**160.2**	**160.7**	**161.5**
1.3.3.1 Tobacco products	0.514	157.2	157.2	160.2	160.7	161.5

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities		Weight	2020-21	2020	2021		
				Dec.	Oct.	Nov. (P)	Dec. (P)
1.3.4	**MANUFACTURE OF TEXTILES**	**4.881**	**117.6**	**119.1**	**134.8**	**137.1**	**139.1**
1.3.4.1	Preparation and Spinning of textile fibres	2.582	106.6	108.5	127.1	130.8	133.4
1.3.4.2	Weaving & Finishing of textiles	1.509	131.7	133.3	147.0	147.7	149.6
1.3.4.3	Knitted and Crocheted fabrics	0.193	115.2	114.2	124.1	126.8	127.0
1.3.4.4	Made-up textile articles, Except apparel	0.299	132.3	132.5	138.9	139.8	141.1
1.3.4.5	Cordage, Rope, Twine and Netting	0.098	155.6	159.4	169.9	170.5	167.1
1.3.4.6	Other textiles	0.201	116.3	115.1	127.8	127.9	128.2
1.3.5	**MANUFACTURE OF WEARING APPAREL**	**0.814**	**138.6**	**139.2**	**144.2**	**144.6**	**144.0**
1.3.5.1	Manufacture of Wearing Apparel (woven), Except fur Apparel	0.593	138.1	138.0	142.9	143.3	142.4
1.3.5.2	Knitted and Crocheted apparel	0.221	139.8	142.2	147.8	147.9	148.5
1.3.6	**MANUFACTURE OF LEATHER AND RELATED PRODUCTS**	**0.535**	**117.9**	**118.6**	**119.0**	**118.7**	**119.3**
1.3.6.1	Tanning and Dressing of leather; Dressing and Dyeing of fur	0.142	101.1	100.9	104.4	103.1	102.5
1.3.6.2	Luggage, HandbAgs, Saddlery and Harness	0.075	138.6	138.6	140.0	141.9	142.5
1.3.6.3	Footwear	0.318	120.6	121.8	120.5	120.2	121.3
1.3.7	**MANUFACTURE OF WOOD AND PRODUCTS OF WOOD AND CORK**	**0.772**	**134.6**	**135.3**	**141.4**	**142.6**	**143.0**
1.3.7.1	Saw milling and Planing of wood	0.124	120.7	121.1	130.8	131.4	131.6
1.3.7.2	Veneer sheets; Manufacture of plywood, Laminboard, Particle board and Other panels and Boards	0.493	136.6	137.1	141.9	142.5	144.1
1.3.7.3	Builder's carpentry and Joinery	0.036	185.8	188.5	194.5	194.4	194.5
1.3.7.4	Wooden containers	0.119	125.7	126.6	134.2	139.0	134.4
1.3.8	**MANUFACTURE OF PAPER AND PAPER PRODUCTS**	**1.113**	**121.7**	**121.3**	**137.2**	**139.0**	**140.8**
1.3.8.1	Pulp, Paper and Paperboard	0.493	124.1	123.1	141.4	143.8	145.3
1.3.8.2	Corrugated paper and Paperboard and Containers of paper and Paperboard	0.314	122.2	124.1	139.5	137.9	138.2
1.3.8.3	Other articles of paper and Paperboard	0.306	117.4	115.5	128.0	132.4	136.2
1.3.9	**PRINTING AND REPRODUCTION OF RECORDED MEDIA**	**0.676**	**153.8**	**155.5**	**157.0**	**156.4**	**161.5**
1.3.9.1	Printing	0.676	153.8	155.5	157.0	156.4	161.5
1.3.10	**MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS**	**6.465**	**118.2**	**119.7**	**134.3**	**135.6**	**136.9**
1.3.10.1	Basic chemicals	1.433	118.6	119.8	146.5	148.5	149.5
1.3.10.2	Fertilizers and Nitrogen compounds	1.485	123.6	123.7	128.3	129.6	131.1
1.3.10.3	Plastic and Synthetic rubber in primary form	1.001	116.7	121.7	141.9	143.0	142.3
1.3.10.4	Pesticides and Other agrochemical products	0.454	124.4	125.8	131.6	132.4	133.9
1.3.10.5	Paints, Varnishes and Similar coatings, Printing ink and Mastics	0.491	114.9	115.7	131.0	132.4	137.0
1.3.10.6	Soap and Detergents, Cleaning and Polishing preparations, Perfumes and Toilet preparations	0.612	120.6	121.7	129.0	129.7	130.8
1.3.10.7	Other chemical products	0.692	115.1	115.1	131.0	132.5	134.0
1.3.10.8	Man-made fibres	0.296	93.7	95.7	108.3	108.8	109.2
1.3.11	**MANUFACTURE OF PHARMACEUTICALS, MEDICINAL CHEMICAL AND BOTANICAL PRODUCTS**	**1.993**	**130.9**	**131.9**	**136.0**	**136.0**	**137.3**
1.3.11.1	Pharmaceuticals, Medicinal chemical and Botanical products	1.993	130.9	131.9	136.0	136.0	137.3
1.3.12	**MANUFACTURE OF RUBBER AND PLASTICS PRODUCTS**	**2.299**	**111.3**	**114.4**	**126.7**	**127.0**	**127.0**
1.3.12.1	Rubber Tyres and Tubes; Retreading and Rebuilding of Rubber Tyres	0.609	98.3	98.7	104.1	104.8	106.5
1.3.12.2	Other Rubber Products	0.272	93.3	93.3	102.2	102.0	104.8
1.3.12.3	Plastics products	1.418	120.3	125.2	141.2	141.4	140.0
1.3.13	**MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS**	**3.202**	**117.6**	**117.4**	**123.8**	**124.6**	**125.1**
1.3.13.1	Glass and Glass products	0.295	127.2	127.8	137.2	136.5	141.1
1.3.13.2	Refractory products	0.223	109.5	109.7	115.4	116.2	118.8
1.3.13.3	Clay Building Materials	0.121	109.3	110.8	124.3	117.5	120.9
1.3.13.4	Other Porcelain and Ceramic Products	0.222	109.5	109.7	111.6	112.2	114.3
1.3.13.5	Cement, Lime and Plaster	1.645	120.9	119.7	126.5	128.7	127.7

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2020-21	2020	2021		
			Dec.	Oct.	Nov. (P)	Dec. (P)
1.3.13.6 Articles of Concrete, Cement and Plaster	0.292	125.3	127.1	128.4	129.3	129.5
1.3.13.7 Cutting, Shaping and Finishing of Stone	0.234	121.1	121.0	123.4	123.3	120.4
1.3.13.8 Other Non-Metallic Mineral Products	0.169	78.9	81.3	92.4	89.2	96.6
1.3.14 MANUFACTURE OF BASIC METALS	**9.646**	**111.4**	**115.8**	**143.9**	**143.9**	**141.5**
1.3.14.1 Inputs into steel making	1.411	109.2	116.2	161.6	162.6	153.3
1.3.14.2 Metallic Iron	0.653	113.3	120.8	151.2	150.4	145.2
1.3.14.3 Mild Steel - Semi Finished Steel	1.274	99.8	103.2	120.9	119.4	118.3
1.3.14.4 Mild Steel -Long Products	1.081	112.0	118.2	140.8	140.0	139.1
1.3.14.5 Mild Steel - Flat products	1.144	117.2	123.5	159.7	163.4	160.6
1.3.14.6 Alloy steel other than Stainless Steel- Shapes	0.067	108.3	113.5	136.1	133.6	131.1
1.3.14.7 Stainless Steel - Semi Finished	0.924	108.7	107.7	147.2	147.8	142.7
1.3.14.8 Pipes & tubes	0.205	127.9	129.8	159.9	159.7	161.8
1.3.14.9 Non-ferrous metals incl. precious metals	1.693	112.3	117.7	142.9	141.3	142.8
1.3.14.10 Castings	0.925	109.1	109.2	119.0	118.5	119.2
1.3.14.11 Forgings of steel	0.271	145.7	146.5	157.6	160.2	160.6
1.3.15 MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENT	**3.155**	**115.9**	**117.9**	**130.9**	**131.6**	**133.6**
1.3.15.1 Structural Metal Products	1.031	114.1	116.3	123.5	123.9	126.9
1.3.15.2 Tanks, Reservoirs and Containers of Metal	0.660	127.8	132.8	157.6	158.6	161.4
1.3.15.3 Steam generators, Except Central Heating Hot Water Boilers	0.145	98.9	97.2	97.1	97.5	97.6
1.3.15.4 Forging, Pressing, Stamping and Roll-Forming of Metal; Powder Metallurgy	0.383	96.7	95.1	117.9	120.1	120.0
1.3.15.5 Cutlery, Hand Tools and General Hardware	0.208	102.9	103.6	108.7	109.7	109.7
1.3.15.6 Other Fabricated Metal Products	0.728	125.0	126.8	136.9	137.0	139.2
1.3.16 MANUFACTURE OF COMPUTER, ELECTRONIC AND OPTICAL PRODUCTS	**2.009**	**109.8**	**109.7**	**113.4**	**113.6**	**113.2**
1.3.16.1 Electronic Components	0.402	99.1	99.9	105.7	106.2	106.7
1.3.16.2 Computers and Peripheral Equipment	0.336	134.8	134.4	134.7	134.9	134.9
1.3.16.3 Communication Equipment	0.310	114.9	114.6	119.3	119.8	119.8
1.3.16.4 Consumer Electronics	0.641	98.5	97.5	102.8	103.3	100.9
1.3.16.5 Measuring, Testing, Navigating and Control equipment	0.181	107.7	109.6	107.1	107.1	108.5
1.3.16.6 Watches and Clocks	0.076	141.8	141.7	145.4	145.9	146.5
1.3.16.7 Irradiation, Electromedical and Electrotherapeutic equipment	0.055	102.8	102.8	108.6	102.9	107.1
1.3.16.8 Optical instruments and Photographic equipment	0.008	102.7	95.2	98.5	98.5	98.4
1.3.17 MANUFACTURE OF ELECTRICAL EQUIPMENT	**2.930**	**113.6**	**115.1**	**123.2**	**121.9**	**123.5**
1.3.17.1 Electric motors, Generators, Transformers and Electricity distribution and Control apparatus	1.298	113.2	114.9	120.6	117.7	121.0
1.3.17.2 Batteries and Accumulators	0.236	117.1	115.4	123.8	123.7	124.1
1.3.17.3 Fibre optic cables for data transmission or live transmission of images	0.133	98.1	100.2	103.7	102.4	100.6
1.3.17.4 Other electronic and Electric wires and Cables	0.428	115.9	119.5	141.9	141.8	141.7
1.3.17.5 Wiring devices, Electric lighting & display equipment	0.263	111.1	111.6	114.9	114.6	115.5
1.3.17.6 Domestic appliances	0.366	119.7	120.4	128.7	129.4	130.4
1.3.17.7 Other electrical equipment	0.206	109.5	111.6	113.2	113.2	113.4
1.3.18 MANUFACTURE OF MACHINERY AND EQUIPMENT	**4.789**	**114.0**	**114.6**	**120.4**	**120.7**	**120.8**
1.3.18.1 Engines and Turbines, Except aircraft, Vehicle and Two wheeler engines	0.638	106.3	107.4	120.6	120.5	121.5
1.3.18.2 Fluid power equipment	0.162	119.4	120.8	121.4	121.7	122.1
1.3.18.3 Other pumps, Compressors, Taps and Valves	0.552	111.6	111.5	115.0	116.0	116.0
1.3.18.4 Bearings, Gears, Gearing and Driving elements	0.340	111.8	113.5	118.3	118.7	118.0
1.3.18.5 Ovens, Furnaces and Furnace burners	0.008	80.2	83.6	73.2	73.1	73.0
1.3.18.6 Lifting and Handling equipment	0.285	113.4	114.4	120.0	119.9	121.3

No. 21: Wholesale Price Index (Concld.)

(Base: 2011-12 = 100)

Commodities	Weight	2020-21	2020	2021		
			Dec.	Oct.	Nov. (P)	Dec. (P)
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	128.7	127.3	133.0	132.9	130.6
1.3.18.9 Agricultural and Forestry machinery	0.833	121.6	121.3	129.4	129.7	130.1
1.3.18.10 Metal-forming machinery and Machine tools	0.224	108.4	107.6	116.0	116.0	115.8
1.3.18.11 Machinery for mining, Quarrying and Construction	0.371	75.7	75.8	78.3	78.7	78.7
1.3.18.12 Machinery for food, Beverage and Tobacco processing	0.228	128.0	131.9	131.9	132.6	131.0
1.3.18.13 Machinery for textile, Apparel and Leather production	0.192	121.9	123.4	123.7	124.0	126.2
1.3.18.14 Other special-purpose machinery	0.468	128.7	130.4	134.2	134.6	135.7
1.3.18.15 Renewable electricity generating equipment	0.046	65.2	65.7	66.7	66.3	66.8
1.3.19 MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS	**4.969**	**117.8**	**118.4**	**122.9**	**123.2**	**123.9**
1.3.19.1 Motor vehicles	2.600	119.4	120.6	122.3	123.2	123.8
1.3.19.2 Parts and Accessories for motor vehicles	2.368	116.1	116.1	123.6	123.1	124.1
1.3.20 MANUFACTURE OF OTHER TRANSPORT EQUIPMENT	**1.648**	**126.2**	**127.5**	**132.4**	**132.6**	**133.0**
1.3.20.1 Building of ships and Floating structures	0.117	158.8	158.8	158.9	158.9	158.9
1.3.20.2 Railway locomotives and Rolling stock	0.110	105.0	104.8	105.1	104.5	103.8
1.3.20.3 Motor cycles	1.302	124.7	126.1	131.8	132.2	132.6
1.3.20.4 Bicycles and Invalid carriages	0.117	130.3	132.7	137.3	137.9	138.0
1.3.20.5 Other transport equipment	0.002	128.5	129.3	136.9	136.6	137.4
1.3.21 MANUFACTURE OF FURNITURE	**0.727**	**133.2**	**135.1**	**151.0**	**150.6**	**151.4**
1.3.21.1 Furniture	0.727	133.2	135.1	151.0	150.6	151.4
1.3.22 OTHER MANUFACTURING	**1.064**	**132.4**	**134.4**	**138.1**	**136.6**	**137.1**
1.3.22.1 Jewellery and Related articles	0.996	130.5	132.7	136.2	134.6	135.2
1.3.22.2 Musical instruments	0.001	173.7	164.3	190.5	192.6	195.7
1.3.22.3 Sports goods	0.012	132.0	131.9	141.1	142.1	142.6
1.3.22.4 Games and Toys	0.005	142.4	143.1	149.6	151.6	151.1
1.3.22.5 Medical and Dental instruments and Supplies	0.049	167.4	168.1	172.9	172.9	171.1
2 FOOD INDEX	**24.378**	**153.4**	**154.7**	**166.7**	**170.4**	**169.0**

Source: Office of the Economic Adviser, Ministry of Commerce and Industry, Government of India.

No. 22: Index of Industrial Production (Base:2011-12=100)

Industry	Weight	2019-20	2020-21	April-November		November	
				2020-21	2021-22	2020	2021
	1	2	3	4	5	6	7
General Index	100.00	129.0	118.1	108.5	127.4	126.7	128.5
1 Sectoral Classification							
1.1 Mining	14.37	109.6	101.0	89.5	105.8	106.6	111.9
1.2 Manufacturing	77.63	129.6	117.2	107.2	127.0	128.5	129.6
1.3 Electricity	7.99	158.4	157.6	154.4	170.2	144.8	147.9
2 Use-Based Classification							
2.1 Primary Goods	34.05	127.0	118.1	110.4	125.0	122.2	126.5
2.2 Capital Goods	8.22	93.3	75.9	64.9	83.7	84.3	81.2
2.3 Intermediate Goods	17.22	137.7	124.7	113.0	139.8	138.4	141.8
2.4 Infrastructure/ Construction Goods	12.34	136.6	124.7	112.1	142.9	137.3	142.5
2.5 Consumer Durables	12.84	119.0	101.2	88.5	109.7	113.0	106.7
2.6 Consumer Non-Durables	15.33	145.3	142.1	136.3	145.0	149.1	150.3

Source : National Statistical 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 - December			
	2021-22 (Revised Estimates)	2021-22 (Actuals)	2020-21 (Actuals)	Percentage to Revised Estimates	
				2021-22	2020-21
	1	2	3	4	5
1 Revenue Receipts	**2078936**	**1733223**	**1088580**	**83.4**	**70.0**
1.1 Tax Revenue (Net)	1765145	1473809	962399	83.5	71.6
1.2 Non-Tax Revenue	313791	259414	126181	82.7	59.9
2 Non-Debt Capital Receipt	**99975**	**28469**	**33098**	**28.5**	**71.2**
2.1 Recovery of Loans	21975	19105	14202	86.9	98.0
2.2 Other Receipts	78000	9364	18896	12.0	59.1
3 Total Receipts (excluding borrowings) (1+2)	**2178911**	**1761692**	**1121678**	**80.9**	**70.0**
4 Revenue Expenditure	3167289	2129414	1971173	67.2	65.5
4.1 Interest Payments	813791	564414	472171	69.4	68.1
5 Capital Expenditure	602711	391644	308974	65.0	70.4
6 Total Expenditure (4+5)	**3770000**	**2521058**	**2280147**	**66.9**	**66.1**
7 Revenue Deficit (4-1)	**1088352**	**396191**	**882593**	**36.4**	**60.6**
8 Fiscal Deficit (6-3)	**1591089**	**759366**	**1158469**	**47.7**	**62.7**
9 Gross Primary Deficit (8-4.1)	**777298**	**194952**	**686298**	**25.1**	**59.4**

Source: Controller General of Accounts (CGA), Ministry of Finance, Government of India and Union Budget 2022-23.

No. 24: Treasury Bills – Ownership Pattern

(₹ Crore)

Item	2020-21	2021						
		Jan. 1	Nov. 26	Dec. 3	Dec. 10	Dec. 17	Dec. 24	Dec. 31
	1	2	3	4	5	6	7	8
1 91-day								
1.1 Banks	5676	2499	11133	11166	11984	12039	12767	9354
1.2 Primary Dealers	16740	15783	31737	29783	26984	33326	29687	26882
1.3 State Governments	13347	90891	86665	91665	95565	98315	102016	103016
1.4 Others	52802	116333	100079	103154	102100	96703	100679	106541
2 182-day								
2.1 Banks	67473	101471	63455	61466	59320	57654	58141	56154
2.2 Primary Dealers	30966	27744	47832	44432	40691	39262	34421	32988
2.3 State Governments	9436	4271	8318	6318	6318	6318	6318	6458
2.4 Others	31800	67852	57109	49895	43067	34218	27631	19711
3 364-day								
3.1 Banks	119024	150120	110185	117220	119024	115639	119885	115964
3.2 Primary Dealers	154197	122449	107891	104078	105426	110194	111859	117965
3.3 State Governments	18510	16302	19553	21643	21643	21643	17843	21643
3.4 Others	174501	127373	97489	97258	97677	100389	97357	99125
4 14-day Intermediate								
4.1 Banks								
4.2 Primary Dealers								
4.3 State Governments	220351	131696	200002	142369	113524	103528	156242	139739
4.4 Others	747	183	726	851	444	754	60	761
Total Treasury Bills (Excluding 14 day Intermediate T Bills) #	694471	843088	741446	738079	729798	725698	718603	715802

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

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										
2021-22										
Dec. 1	10000	108	46007	9501	38	9999	9501	19500	99.13	3.5243
Dec. 8	10000	103	51182	6801	15	9999	6801	16800	99.14	3.4945
Dec. 15	10000	84	26541	11202	48	9998	11202	21200	99.13	3.5296
Dec. 22	10000	131	36123	13737	52	9999	13737	23736	99.09	3.7023
Dec. 29	10000	149	66767	5051	32	9949	5051	15000	99.10	3.6570
182-day Treasury Bills										
2021-22										
Dec. 1	3000	75	12006	0	22	3000	0	3000	98.13	3.8217
Dec. 8	3000	86	12209	0	35	3000	0	3000	98.13	3.8197
Dec. 15	3000	65	7797	0	39	3000	0	3000	98.11	3.8738
Dec. 22	3000	90	11891	0	15	3000	0	3000	98.05	3.9795
Dec. 29	3000	100	12645	1029	29	3000	1029	4028	98.06	3.9699
364-day Treasury Bills										
2021-22										
Dec. 1	7000	124	16184	2092	88	6998	2092	9090	96.03	4.1482
Dec. 8	7000	117	16737	0	60	7000	0	7000	96.03	4.1490
Dec. 15	7000	106	19050	0	56	7000	0	7000	96.00	4.1750
Dec. 22	7000	123	21735	1	49	6999	1	7000	95.93	4.2598
Dec. 29	7000	116	22770	3800	46	7000	3800	10800	95.92	4.2650

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
December 1, 2021	2.00-3.50	3.27
December 2, 2021	2.20-3.50	3.26
December 3, 2021	2.00-3.60	3.28
December 4, 2021	2.70-3.25	2.99
December 6, 2021	2.00-3.45	3.26
December 7, 2021	2.00-3.50	3.29
December 8, 2021	2.00-3.55	3.26
December 9, 2021	2.00-3.45	3.28
December 10, 2021	2.00-3.45	3.28
December 13, 2021	2.00-3.50	3.28
December 14, 2021	2.00-3.45	3.29
December 15, 2021	2.00-3.60	3.33
December 16, 2021	2.00-4.50	3.53
December 17, 2021	2.00-4.25	3.61
December 18, 2021	2.70-3.50	3.31
December 20, 2021	2.00-3.99	3.38
December 21, 2021	1.50-4.00	3.52
December 22, 2021	2.00-3.75	3.38
December 23, 2021	2.00-3.90	3.43
December 24, 2021	2.00-3.80	3.41
December 27, 2021	2.00-3.95	3.26
December 28, 2021	2.00-4.15	3.27
December 29, 2021	2.00-3.55	3.28
December 30, 2021	2.00-3.60	3.33
December 31, 2021	2.00-3.80	3.45
January 1, 2022	2.70-3.70	3.27
January 3, 2022	2.00-3.50	3.29
January 4, 2022	2.00-3.50	3.28
January 5, 2022	2.00-3.45	3.21
January 6, 2022	2.00-3.45	3.21
January 7, 2022	2.10-3.65	3.26
January 10, 2022	2.10-3.60	3.31
January 11, 2022	2.10-3.65	3.36
January 12, 2022	2.10-3.55	3.33
January 13, 2022	2.10-3.45	3.27
January 14, 2022	2.10-4.10	3.41
January 15, 2022	2.65-3.60	3.07

Note: Includes Notice Money.

No. 27: Certificates of Deposit

Item	2020	2021			
	Dec. 18	Nov. 19	Dec. 3	Dec. 17	Dec. 31
	1	2	3	4	5
1 Amount Outstanding (₹ Crore)	67960.05	55596.33	63365.56	73298.30	84702.40
1.1 Issued during the fortnight (₹ Crore)	8003.34	2272.75	13977.84	12506.20	17497.20
2 Rate of Interest (per cent)	3.08-4.44	3.59-4.22	3.59-4.83	3.53-4.72	3.74-5.31

No. 28: Commercial Paper

Item	2020	2021			
	Dec. 31	Nov. 15	Nov. 30	Dec. 15	Dec. 31
	1	2	3	4	5
1 Amount Outstanding (₹ Crore)	365185.05	450890.70	388363.05	446975.40	350068.65
1.1 Reported during the fortnight (₹ Crore)	87488.25	172504.00	115234.25	161701.60	87182.55
2 Rate of Interest (per cent)	3.06-12.73	3.38-10.44	3.38-12.76	3.38-12.34	3.50-12.31

No. 29: Average Daily Turnover in Select Financial Markets

(₹ Crore)

Item	2020-21	2021						
		Jan. 1	Nov. 26	Dec. 3	Dec. 10	Dec. 17	Dec. 24	Dec. 31
	1	2	3	4	5	6	7	8
1 Call Money	17461	18634	15488	14651	16764	15776	17695	13822
2 Notice Money	2604	4281	912	3983	539	3653	616	3125
3 Term Money	757	370	358	437	277	1003	735	640
4 Triparty Repo	421118	648949	652602	829105	624321	741834	665034	834645
5 Market Repo	337341	376407	402681	507154	370923	459449	337263	402671
6 Repo in Corporate Bond	2990	1090	6203	2953	5502	1057	234	0
7 Forex (US $ million)	67793	62266	73584	91112	65486	72374	70064	75085
8 Govt. of India Dated Securities	62490	38420	51839	58113	50991	33208	48074	37640
9 State Govt. Securities	5080	7724	5137	3846	3926	4692	5237	6397
10 Treasury Bills								
10.1 91-Day	4970	5734	4211	2872	4649	3810	5688	4503
10.2 182-Day	4870	5985	2282	676	1778	1418	1149	1706
10.3 364-Day	4010	4851	2083	1986	1869	1884	2815	2120
10.4 Cash Management Bills	1490							
11 Total Govt. Securities (8+9+10)	82910	62714	65552	67494	63213	45012	62963	52366
11.1 RBI	–	4053	873	633	458	702	892	1662

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

(Amount in ₹ Crore)

Security & Type of Issue	2020-21		2020-21 (Apr.-Dec.)		2021-22 (Apr.-Dec.) *		Dec. 2020		Dec. 2021 *	
	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	**74**	**102062**	**47**	**89390**	**124**	**130083**	**4**	**1652**	**30**	**18258**
1A Premium	73	97648	47	85708	117	128289	4	1487	28	17906
1.1 Public	53	38004	31	28483	96	104870	3	1353	20	15681
1.1.1 Premium	53	34848	31	25576	95	103725	3	1199	20	15444
1.2 Rights	21	64059	16	60907	28	25212	1	299	10	2577
1.2.1 Premium	20	62800	16	60132	22	24563	1	288	8	2462
2 Preference Shares	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
2.1 Public	–	–	–	–	–	–	–	–	–	–
2.2 Rights	–	–	–	–	–	–	–	–	–	–
3 Bonds & Debentures	**16**	**5806**	**10**	**3871**	**21**	**9589**	**–**	**–**	**1**	**456**
3.1 Convertible	–	–	–	–	–	–	–	–	–	–
3.1.1 Public	–	–	–	–	–	–	–	–	–	–
3.1.2 Rights	–	–	–	–	–	–	–	–	–	–
3.2 Non-Convertible	16	5806	10	3871	21	9589	–	–	1	456
3.2.1 Public	16	5806	10	3871	21	9589	–	–	1	456
3.2.2 Rights	–	–	–	–	–	–	–	–	–	–
4 Total(1+2+3)	**90**	**107868**	**57**	**93261**	**145**	**139671**	**4**	**1652**	**31**	**18714**
4.1 Public	69	43809	41	32354	117	114459	3	1353	21	16137
4.2 Rights	21	64059	16	60907	28	25212	1	299	10	2577

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 of numbers.

Source : Securities and Exchange Board of India.

* : Data is Provisional

External Sector

No. 31: Foreign Trade

Item	Unit	2020-21	2020	2021				
			Dec.	Aug.	Sep.	Oct.	Nov.	Dec.
		1	2	3	4	5	6	7
1 Exports	₹ Crore	2159043	200295	247603	248767	267667	236501	284961
	US $ Million	291808	27216	33377	33817	35729	31747	37807
1.1 Oil	₹ Crore	190896	17196	34535	38219	40219	41272	44377
	US $ Million	25804	2337	4655	5195	5369	5540	5888
1.2 Non-oil	₹ Crore	1968147	183098	213068	210548	227447	195229	240584
	US $ Million	266004	24880	28721	28621	30361	26206	31919
2 Imports	₹ Crore	2915958	315971	336112	415494	400640	394020	448353
	US $ Million	394436	42935	45307	56481	53479	52891	59485
2.1 Oil	₹ Crore	611353	70863	71805	125101	93949	109327	121847
	US $ Million	82684	9629	9679	17006	12541	14675	16166
2.2 Non-oil	₹ Crore	2304605	245107	264307	290394	306691	284693	326506
	US $ Million	311752	33306	35628	39475	40938	38216	43319
3 Trade Balance	₹ Crore	-756914	-115676	-88509	-166727	-132973	-157519	-163392
	US $ Million	-102627	-15718	-11931	-22664	-17750	-21144	-21678
3.1 Oil	₹ Crore	-420457	-53667	-37270	-86881	-53729	-68055	-77470
	US $ Million	-56880	-7292	-5024	-11810	-7172	-9135	-10278
3.2 Non-oil	₹ Crore	-336458	-62009	-51238	-79846	-79244	-89464	-85922
	US $ Million	-45748	-8426	-6907	-10854	-10578	-12009	-11400

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

No. 32: Foreign Exchange Reserves

Item	Unit	2021			2022			
		Jan. 29	Dec. 24	Dec. 31	Jan. 7	Jan. 14	Jan. 21	Jan. 28
		1	2	3	4	5	6	7
1 Total Reserves	**₹ Crore**	**4306005**	**4765329**	**4707812**	**4702360**	**4707359**	**4719835**	**4727298**
	US $ Million	**590185**	**635080**	**633614**	**632736**	**634965**	**634287**	**629755**
1.1 Foreign Currency Assets	₹ Crore	3992516	4287220	4234327	4231613	4231207	4238297	4249350
	US $ Million	547218	571369	569889	569392	570737	569582	566077
1.2 Gold	₹ Crore	264803	295562	292779	290171	294839	300149	296461
	US $ Million	36294	39390	39405	39044	39770	40337	39493
	Volume (Metric Tonnes)	676.65	754.1	754.1	754.1	755.03	755.42	755.42
1.3 SDRs	SDRs Million	1049	13657	13657	13657	13657	13657	13657
	₹ Crore	11006	143418	142017	141930	142491	142511	142706
	US $ Million	1508	19114	19114	19098	19220	19152	19011
1.4 Reserve Tranche Position in IMF	₹ Crore	37679	39129	38690	38646	38822	38878	38780
	US $ Million	5165	5207	5207	5202	5238	5216	5174

* Difference,if any, is due to rounding off.

No. 33: Non-Resident Deposits

(US$ Million)

Scheme	Outstanding				Flows	
	2020-21	2020	2021		2020-21	2021-22
		Dec.	Nov.	Dec.	Apr.-Dec.	Apr.-Dec.
	1	2	3	4	5	6
1 NRI Deposits	**141,895**	**140,496**	**140,745**	**142,797**	**7,903**	**3,951**
1.1 FCNR(B)	20,473	22,128	18,673	18,155	–2,116	–2,318
1.2 NR(E)RA	102,579	100,849	101,794	103,062	8,759	3,069
1.3 NRO	18,842	17,520	20,279	21,581	1,260	3,200

No. 34: Foreign Investment Inflows

(US$ Million)

Item	2020-21	2020-21	2021-22	2020	2021	
		Apr.-Dec.	Apr.-Dec.	Dec.	Nov.	Dec.
	1	2	3	4	5	6
1.1 Net Foreign Direct Investment (1.1.1–1.1.2)	**43,955**	**41,277**	**25,298**	**6,239**	**1,604**	**625**
1.1.1 Direct Investment to India (1.1.1.1–1. 1.1.2)	**54,927**	**49,177**	**37,774**	**7,130**	**2,675**	**1,839**
1.1.1.1 Gross Inflows/Gross Investments	**81,973**	**68,294**	**60,338**	**9,441**	**6,107**	**6,260**
1.1.1.1.1 Equity	61,088	52,535	44,239	7,747	4,515	4,037
1.1.1.1.1.1 Government (SIA/FIPB)	948	320	1,574	55	112	25
1.1.1.1.1.2 RBI	51,597	45,638	30,646	7,039	3,894	3,044
1.1.1.1.1.3 Acquisition of shares	7,091	5,512	10,953	527	384	842
1.1.1.1.1.4 Equity capital of unincorporated bodies	1,452	1,065	1,065	126	126	126
1.1.1.1.2 Reinvested earnings	16,935	12,417	13,129	1,464	1,464	1,464
1.1.1.1.3 Other capital	3,950	3,343	2,970	230	128	759
1.1.1.2 Repatriation/Disinvestment	**27,046**	**19,117**	**22,564**	**2,311**	**3,432**	**4,421**
1.1.1.2.1 Equity	26,983	19,089	22,003	2,306	3,326	4,314
1.1.1.2.2 Other capital	63	28	561	4	106	107
1.1.2 Foreign Direct Investment by India (1.1.2.1+1.1.2.2+1.1.2.3–1.1.2.4)	**10,972**	**7,900**	**12,476**	**891**	**1,072**	**1,215**
1.1.2.1 Equity capital	5,583	4,386	6,544	642	772	755
1.1.2.2 Reinvested Earnings	3,013	2,260	2,316	251	251	251
1.1.2.3 Other Capital	6,688	3,853	5,900	491	201	381
1.1.2.4 Repatriation/Disinvestment	4,313	2,598	2,285	493	153	172
1.2 Net Portfolio Investment (1.2.1+1.2.2+1.2.3–1.2.4)	**36,137**	**28,857**	**–2,039**	**8,551**	**–42**	**–3,613**
1.2.1 GDRs/ADRs	–	–	–	–	–	–
1.2.2 FIIs	38,725	30,536	–737	8,713	–255	–3,275
1.2.3 Offshore funds and others	–	–	–	–	–	–
1.2.4 Portfolio investment by India	2,589	1,679	1,302	162	–213	338
1 Foreign Investment Inflows	**80,092**	**70,133**	**23,259**	**14,791**	**1,561**	**–2,989**

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

(US$ Million)

Item	2020-21	2020	2021		
		Dec.	Oct.	Nov.	Dec.
	1	2	3	4	5
1 Outward Remittances under the LRS	**12684.40**	**1149.17**	**1564.90**	**1547.41**	**1773.56**
1.1 Deposit	680.37	35.33	46.58	50.40	56.64
1.2 Purchase of immovable property	62.75	5.05	7.43	11.01	10.77
1.3 Investment in equity/debt	471.80	38.76	55.20	57.68	54.30
1.4 Gift	1586.24	145.15	172.06	206.21	214.59
1.5 Donations	12.59	0.67	0.83	0.94	2.69
1.6 Travel	3239.67	322.25	464.59	456.31	884.10
1.7 Maintenance of close relatives	2680.10	217.30	221.56	267.22	281.46
1.8 Medical Treatment	29.75	2.82	3.11	3.30	3.33
1.9 Studies Abroad	3836.12	373.32	579.84	482.35	253.69
1.10 Others	85.03	8.54	13.71	11.99	11.99

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

	2019-20	2020-21	2021		2022
			January	December	January
Item	1	2	3	4	5
40-Currency Basket (Base: 2015-16=100)					
1 Trade-weighted					
1.1 NEER	98.00	93.92	93.71	93.49	94.51
1.2 REER	103.20	103.46	103.00	104.53	104.61
2 Export-weighted					
2.1 NEER	97.38	93.59	93.30	93.69	94.67
2.2 REER	102.88	102.96	102.57	104.15	104.15
6-Currency Basket (Trade-weighted)					
1 Base: 2015-16 = 100					
1.1 NEER	94.92	88.47	87.34	86.64	87.58
1.2 REER	103.62	101.88	100.74	102.70	103.42
2 Base: 2018-19 = 100					
2.1 NEER	100.78	93.93	92.73	91.98	92.99
2.2 REER	103.32	101.59	100.45	102.41	103.12

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

(Amount in US$ Million)

Item	2020-21	2020	2021	2021
		Dec-20	Nov-21	Dec-21
	1	2	3	4
1 Automatic Route				
1.1 Number	1063	95	90	139
1.2 Amount	26799	2994	1694	4374
2 Approval Route				
2.1 Number	13	0	3	1
2.2 Amount	8456	0	705	1175
3 Total (1+2)				
3.1 Number	1076	95	93	140
3.2 Amount	35255	2994	2399	5549
4 Weighted Average Maturity (in years)	6.03	4.59	4.37	5.30
5 Interest Rate (per cent)				
5.1 Weighted Average Margin over 6-month LIBOR or reference rate for Floating Rate Loans	1.93	1.65	2.79	1.01
5.2 Interest rate range for Fixed Rate Loans	0.00-13.00	0.00-13.00	0.00-10.60	0.00-10.25
Borrower Category				
I. Corporate Manufacturing	12827	1868	401	442
II. Corporate-Infrastructure	9985	916	1110	2584
a.) Transport	636	338	0	109
b.) Energy	2713	219	1106	959
c.) Water and Sanitation	151	0	0	0
d.) Communication	757	1	1	5
e.) Social and Commercial Infrastructure	1761	0	0	0
f.) Exploration,Mining and Refinery	1346	17	0	1100
g.) Other Sub-Sectors	2622	342	3	411
III. Corporate Service-Sector	1894	122	48	291
IV. Other Entities	1026	0	100	500
a.) units in SEZ	26	0	0	0
b.) SIDBI	0			
c.) Exim Bank	1000	0	100	500
V. Banks	0	0	0	0
VI. Financial Institution (Other than NBFC)	2110	0	4	0
VII. NBFCs	6934	80	724	1690
a). NBFC- IFC/AFC	6024	10	550	1275
b). NBFC-MFI	84	15	1	17
c). NBFC-Others	827	55	173	398
VIII. Non-Government Organization (NGO)	0	0	0	0
IX. Micro Finance Institution (MFI)	8	0	0	0
X. Others	470	8	12	42

No. 38: India's Overall Balance of Payments

(US $ Million)

Item	Jul-Sep 2020			Jul-Sep 2021(P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance of Payments(1+2+3)	**296176**	**264608**	**31568**	**404597**	**373408**	**31189**
1 CURRENT ACCOUNT (1.1+ 1.2)	**150791**	**135541**	**15250**	**194275**	**203886**	**-9611**
1.1 MERCHANDISE	**75591**	**90407**	**-14816**	**104842**	**149265**	**-44423**
1.2 INVISIBLES (1.2.1+1.2.2+1.2.3)	**75200**	**45134**	**30066**	**89434**	**54621**	**34813**
1.2.1 Services	49793	28707	21086	61421	35836	25585
1.2.1.1 Travel	2138	2764	-626	2147	3919	-1772
1.2.1.2 Transportation	5368	4759	609	7584	8181	-597
1.2.1.3 Insurance	590	537	53	796	575	220
1.2.1.4 G.n.i.e.	144	190	-46	217	198	19
1.2.1.5 Miscellaneous	41554	20458	21096	50678	22962	27716
1.2.1.5.1 Software Services	24791	2769	22021	29965	3184	26781
1.2.1.5.2 Business Services	11624	12354	-730	13858	12457	1401
1.2.1.5.3 Financial Services	1003	1107	-104	1303	1463	-160
1.2.1.5.4 Communication Services	661	355	306	766	275	491
1.2.2 Transfers	20421	2035	18386	21154	2239	18915
1.2.2.1 Official	36	270	-233	18	315	-297
1.2.2.2 Private	20385	1766	18619	21135	1924	19212
1.2.3 Income	4986	14391	-9405	6859	16546	-9688
1.2.3.1 Investment Income	3541	13695	-10154	5362	15792	-10430
1.2.3.2 Compensation of Employees	1445	696	749	1497	754	743
2 CAPITAL ACCOUNT (2.1+2.2+2.3+2.4+2.5)	**145010**	**129067**	**15943**	**209579**	**169522**	**40057**
2.1 Foreign Investment (2.1.1+2.1.2)	**97296**	**65874**	**31422**	**132378**	**119040**	**13338**
2.1.1 Foreign Direct Investment	30502	6077	24424	20447	10987	9461
2.1.1.1 In India	29527	2450	27078	19281	6475	12806
2.1.1.1.1 Equity	23794	2445	21350	13940	6259	7681
2.1.1.1.2 Reinvested Earnings	4117		4117	4482	0	4482
2.1.1.1.3 Other Capital	1617	5	1611	859	216	643
2.1.1.2 Abroad	974	3627	-2653	1167	4512	-3345
2.1.1.2.1 Equity	974	1202	-228	1167	2060	-894
2.1.1.2.2 Reinvested Earnings	0	753	-753	0	781	-781
2.1.1.2.3 Other Capital	0	1672	-1672	0	1670	-1670
2.1.2 Portfolio Investment	66794	59796	6998	111931	108054	3877
2.1.2.1 In India	66420	58684	7736	110448	105904	4544
2.1.2.1.1 FIIs	66420	58684	7736	110448	105904	4544
2.1.2.1.1.1 Equity	55007	48183	6824	95335	94718	618
2.1.2.1.1.2 Debt	11413	10501	912	15112	11186	3926
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	375	1113	-738	1483	2150	-666
2.2 Loans (2.2.1+2.2.2+2.2.3)	**20645**	**24532**	**-3887**	**25555**	**17965**	**7590**
2.2.1 External Assistance	3209	1323	1886	2420	1303	1117
2.2.1.1 By India	10	21	-11	14	30	-15
2.2.1.2 To India	3199	1302	1897	2406	1273	1132
2.2.2 Commercial Borrowings	8775	12731	-3956	9114	5004	4110
2.2.2.1 By India	769	1005	-235	282	249	33
2.2.2.2 To India	8005	11726	-3721	8832	4755	4077
2.2.3 Short Term to India	8662	10479	-1817	14021	11658	2364
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	8662	9770	-1108	9615	11658	-2043
2.2.3.2 Suppliers' Credit up to 180 days	0	709	-709	4407	0	4407
2.3 Banking Capital (2.3.1+2.3.2)	**18762**	**30025**	**-11263**	**20817**	**20457**	**360**
2.3.1 Commercial Banks	18749	30025	-11276	20473	20457	17
2.3.1.1 Assets	7207	16747	-9539	10097	9858	239
2.3.1.2 Liabilities	11541	13279	-1737	10376	10598	-222
2.3.1.2.1 Non-Resident Deposits	10311	8377	1934	8574	9357	-783
2.3.2 Others	13	0	13	344	0	344
2.4 Rupee Debt Service	0	2	-2	0	2	-2
2.5 Other Capital	8307	8633	-327	30829	12059	18770
3 Errors & Omissions	**375**		**375**	**742**	0	**742**
4 Monetary Movements (4.1+ 4.2)	0	**31568**	**-31568**	0	**31189**	**-31189**
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)		31568	-31568	0	31189	-31189

Note : P : Preliminary

No. 39: India's Overall Balance of Payments

(₹ Crore)

Item	Jul-Sep 2020			Jul-Sep 2021(P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance of Payments(1+2+3)	**2203029**	**1968215**	**234814**	**2997726**	**2766643**	**231083**
1 CURRENT ACCOUNT (1.1+ 1.2)	**1121622**	**1008187**	**113435**	**1439417**	**1510625**	**-71208**
1.1 MERCHANDISE	**562264**	**672468**	**-110205**	**776788**	**1105928**	**-329140**
1.2 INVISIBLES (1.2.1+1.2.2+1.2.3)	**559358**	**335719**	**223639**	**662629**	**404696**	**257932**
1.2.1 Services	370373	213533	156840	455079	265514	189566
1.2.1.1 Travel	15903	20559	-4657	15905	29037	-13132
1.2.1.2 Transportation	39926	35397	4528	56188	60613	-4425
1.2.1.3 Insurance	4385	3994	391	5896	4263	1633
1.2.1.4 G.n.i.e.	1074	1414	-339	1607	1467	141
1.2.1.5 Miscellaneous	309085	152168	156917	375483	170133	205350
1.2.1.5.1 Software Services	184399	20598	163801	222016	23589	198426
1.2.1.5.2 Business Services	86464	91890	-5426	102675	92295	10380
1.2.1.5.3 Financial Services	7462	8233	-771	9652	10836	-1184
1.2.1.5.4 Communication Services	4914	2638	2275	5676	2035	3641
1.2.2 Transfers	151896	15140	136756	156732	16588	140144
1.2.2.1 Official	269	2006	-1737	137	2334	-2198
1.2.2.2 Private	151627	13134	138492	156596	14254	142342
1.2.3 Income	37089	107046	-69956	50817	122594	-71777
1.2.3.1 Investment Income	26339	101868	-75528	39725	117005	-77280
1.2.3.2 Compensation of Employees	10750	5178	5572	11092	5589	5503
2 CAPITAL ACCOUNT (2.1+2.2+2.3+2.4+2.5)	**1078616**	**960028**	**118588**	**1552809**	**1256019**	**296790**
2.1 Foreign Investment (2.1.1+2.1.2)	**723708**	**489983**	**233725**	**980814**	**881990**	**98824**
2.1.1 Foreign Direct Investment	226877	45202	181675	151499	81403	70095
2.1.1.1 In India	219632	18223	201410	142854	47973	94880
2.1.1.1.1 Equity	176987	18184	158803	103281	46371	56909
2.1.1.1.2 Reinvested Earnings	30620	0	30620	33210	0	33210
2.1.1.1.3 Other Capital	12025	39	11987	6364	1602	4761
2.1.1.2 Abroad	7245	26980	-19735	8645	33430	-24785
2.1.1.2.1 Equity	7245	8940	-1695	8645	15265	-6620
2.1.1.2.2 Reinvested Earnings	0	5603	-5603	0	5789	-5789
2.1.1.2.3 Other Capital	0	12437	-12437	0	12375	-12375
2.1.2 Portfolio Investment	496831	444780	52050	829315	800587	28729
2.1.2.1 In India	494044	436504	57540	818325	784660	33664
2.1.2.1.1 FIIs	494044	436504	57540	818325	784660	33664
2.1.2.1.1.1 Equity	409153	358396	50757	706356	701779	4577
2.1.2.1.1.2 Debt	84891	78108	6783	111968	82881	29087
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	2786	8276	-5490	10991	15927	-4936
2.2 Loans (2.2.1+2.2.2+2.2.3)	**153564**	**182478**	**-28914**	**189343**	**133104**	**56239**
2.2.1 External Assistance	23866	9840	14026	17930	9654	8276
2.2.1.1 By India	71	153	-82	106	220	-114
2.2.1.2 To India	23795	9687	14108	17824	9434	8390
2.2.2 Commercial Borrowings	65268	94694	-29426	67525	37075	30451
2.2.2.1 By India	5722	7473	-1751	2087	1844	242
2.2.2.2 To India	59545	87221	-27675	65439	35231	30208
2.2.3 Short Term to India	64430	77945	-13515	103887	86375	17512
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	64430	72671	-8241	71239	86375	-15136
2.2.3.2 Suppliers' Credit up to 180 days	0	5273	-5273	32649	0	32649
2.3 Banking Capital (2.3.1+2.3.2)	**139558**	**223336**	**-83778**	**154236**	**151566**	**2670**
2.3.1 Commercial Banks	139459	223336	-83877	151690	151566	124
2.3.1.1 Assets	53611	124564	-70953	74810	73041	1769
2.3.1.2 Liabilities	85848	98771	-12923	76881	78525	-1645
2.3.1.2.1 Non-Resident Deposits	76699	62311	14387	63530	69328	-5798
2.3.2 Others	99	0	99	2545	0	2545
2.4 Rupee Debt Service	0	15	-15	0	15	-15
2.5 Other Capital	61787	64217	-2430	228416	89344	139073
3 Errors & Omissions	**2791**	0	**2791**	**5500**	0	**5500**
4 Monetary Movements (4.1+ 4.2)	0	**234814**	**-234814**	0	**231083**	**-231083**
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	234814	-234814	0	231083	-231083

Note : P: Preliminary

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

(US $ Million)

Item	Jul-Sep 2020			Jul-Sep 2021(P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	**150790**	**135515**	**15275**	**194275**	**203856**	**-9581**
1.A Goods and Services (1.A.a+1.A.b)	**125384**	**119114**	**6270**	**166263**	**185101**	**-18838**
1.A.a Goods (1.A.a.1 to 1.A.a.3)	**75591**	**90407**	**-14816**	**104842**	**149265**	**-44423**
1.A.a.1 General merchandise on a BOP basis	75243	84319	-9076	104327	133243	-28916
1.A.a.2 Net exports of goods under merchanting	348	0	348	515	0	515
1.A.a.3 Nonmonetary gold		6088	-6088		16022	-16022
1.A.b Services (1.A.b.1 to 1.A.b.13)	**49793**	**28707**	**21086**	**61421**	**35836**	**25585**
1.A.b.1 Manufacturing services on physical inputs owned by others	68	11	56	75	16	59
1.A.b.2 Maintenance and repair services n.i.e.	35	204	-169	74	418	-345
1.A.b.3 Transport	5368	4759	609	7584	8181	-597
1.A.b.4 Travel	2138	2764	-626	2147	3919	-1772
1.A.b.5 Construction	589	563	26	716	715	0
1.A.b.6 Insurance and pension services	590	537	53	796	575	220
1.A.b.7 Financial services	1003	1107	-104	1303	1463	-160
1.A.b.8 Charges for the use of intellectual property n.i.e.	313	1456	-1143	202	2189	-1987
1.A.b.9 Telecommunications, computer, and information services	25515	3290	22225	30823	3651	27172
1.A.b.10 Other business services	11624	12354	-730	13858	12457	1401
1.A.b.11 Personal, cultural, and recreational services	530	817	-287	713	1243	-530
1.A.b.12 Government goods and services n.i.e.	144	190	-46	217	198	19
1.A.b.13 Others n.i.e.	1875	655	1220	2915	811	2105
1.B Primary Income (1.B.1 to 1.B.3)	**4986**	**14391**	**-9405**	**6859**	**16546**	**-9688**
1.B.1 Compensation of employees	1445	696	749	1497	754	743
1.B.2 Investment income	2753	13394	-10641	4349	15572	-11223
1.B.2.1 Direct investment	1272	8131	-6859	1983	9630	-7647
1.B.2.2 Portfolio investment	49	2126	-2076	111	2859	-2748
1.B.2.3 Other investment	78	3137	-3059	62	3082	-3020
1.B.2.4 Reserve assets	1354	1	1353	2193	1	2193
1.B.3 Other primary income	788	301	487	1012	220	792
1.C Secondary Income (1.C.1+1.C.2)	**20419**	**2009**	**18410**	**21153**	**2209**	**18944**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	20385	1766	18619	21135	1924	19212
1.C.1.1 Personal transfers (Current transfers between resident and/ non-resident households)	19711	1287	18424	20237	1356	18881
1.C.1.2 Other current transfers	674	479	195	899	568	331
1.C.2 General government	35	243	-209	18	285	-267
2 Capital Account (2.1+2.2)	**109**	**198**	**-88**	**189**	**210**	**-20**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	8	100	-92	62	132	-71
2.2 Capital transfers	101	97	4	128	77	50
3 Financial Account (3.1 to 3.5)	**144902**	**160464**	**-15562**	**209391**	**200531**	**8859**
3.1 Direct Investment (3.1A+3.1B)	**30502**	**6077**	**24424**	**20447**	**10987**	**9461**
3.1.A Direct Investment in India	29527	2450	27078	19281	6475	12806
3.1.A.1 Equity and investment fund shares	27911	2445	25466	18422	6259	12163
3.1.A.1.1 Equity other than reinvestment of earnings	23794	2445	21350	13940	6259	7681
3.1.A.1.2 Reinvestment of earnings	4117		4117	4482		4482
3.1.A.2 Debt instruments	1617	5	1611	859	216	643
3.1.A.2.1 Direct investor in direct investment enterprises	1617	5	1611	859	216	643
3.1.B Direct Investment by India	974	3627	-2653	1167	4512	-3345
3.1.B.1 Equity and investment fund shares	974	1955	-981	1167	2842	-1675
3.1.B.1.1 Equity other than reinvestment of earnings	974	1202	-228	1167	2060	-894
3.1.B.1.2 Reinvestment of earnings		753	-753		781	-781
3.1.B.2 Debt instruments	0	1672	-1672		1670	-1670
3.1.B.2.1 Direct investor in direct investment enterprises		1672	-1672		1670	-1670
3.2 Portfolio Investment	**66794**	**59796**	**6998**	**111931**	**108054**	**3877**
3.2.A Portfolio Investment in India	66420	58684	7736	110448	105904	4544
3.2.1 Equity and investment fund shares	55007	48183	6824	95335	94718	618
3.2.2 Debt securities	11413	10501	912	15112	11186	3926
3.2.B Portfolio Investment by India	375	1113	-738	1483	2150	-666
3.3 Financial derivatives (other than reserves) and employee stock options	**2858**	**3936**	**-1078**	**5367**	**5806**	**-439**
3.4 Other investment	**44749**	**59086**	**-14337**	**71646**	**44496**	**27150**
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	10325	8377	1948	8918	9357	-439
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	13	0	13	344	0	344
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	10311	8377	1934	8574	9357	-783
3.4.2.3 General government			0			
3.4.2.4 Other sectors			0			
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	20421	35702	-15281	23433	17406	6026
3.4.3.A Loans to India	19642	34677	-15035	23137	17128	6009
3.4.3.B Loans by India	779	1025	-246	296	279	17
3.4.4 Insurance, pension, and standardized guarantee schemes	78	62	16	55	13	42
3.4.5 Trade credit and advances	8662	10479	-1817	14021	11658	2364
3.4.6 Other accounts receivable/payable - other	5263	4466	797	7356	6062	1295
3.4.7 Special drawing rights			0	17862		17862
3.5 Reserve assets	0	**31568**	**-31568**	0	**31189**	**-31189**
3.5.1 Monetary gold			0			
3.5.2 Special drawing rights n.a.			0		17862	-17862
3.5.3 Reserve position in the IMF n.a.			0			
3.5.4 Other reserve assets (Foreign Currency Assets)	0	31568	-31568	0	13326	-13326
4 Total assets/liabilities	**144902**	**160464**	**-15562**	**209391**	**200531**	**8859**
4.1 Equity and investment fund shares	87202	57694	29508	121829	111787	10042
4.2 Debt instruments	52437	66736	-14299	62343	51494	10849
4.3 Other financial assets and liabilities	5263	36034	-30771	25219	37251	-12032
5 Net errors and omissions	**375**		**375**	**742**		**742**

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

(₹ Crore)

Item	Jul-Sep 2020			Jul-Sep 2021(P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	**1121609**	**1007991**	**113618**	**1439413**	**1510403**	**-70990**
1.A Goods and Services (1.A.a+1.A.b)	**932637**	**886001**	**46635**	**1231868**	**1371442**	**-139574**
1.A.a Goods (1.A.a.1 to 1.A.a.3)	**562264**	**672468**	**-110205**	**776788**	**1105928**	**-329140**
1.A.a.1 General merchandise on a BOP basis	559675	627181	-67506	772976	987218	-214242
1.A.a.2 Net exports of goods under merchanting	2588	0	2588	3812	0	3812
1.A.a.3 Nonmonetary gold	0	45287	-45287	0	118711	-118711
1.A.b Services (1.A.b.1 to 1.A.b.13)	**370373**	**213533**	**156840**	**455079**	**265514**	**189566**
1.A.b.1 Manufacturing services on physical inputs owned by others	505	85	420	558	118	440
1.A.b.2 Maintenance and repair services n.i.e.	263	1519	-1256	546	3100	-2554
1.A.b.3 Transport	39926	35397	4528	56188	60613	-4425
1.A.b.4 Travel	15903	20559	-4657	15905	29037	-13132
1.A.b.5 Construction	4383	4186	197	5302	5299	3
1.A.b.6 Insurance and pension services	4385	3994	391	5896	4263	1633
1.A.b.7 Financial services	7462	8233	-771	9652	10836	-1184
1.A.b.8 Charges for the use of intellectual property n.i.e.	2330	10833	-8503	1499	16220	-14721
1.A.b.9 Telecommunications, computer, and information services	189787	24472	165315	228370	27051	201318
1.A.b.10 Other business services	86464	91890	-5426	102675	92295	10380
1.A.b.11 Personal, cultural, and recreational services	3944	6078	-2135	5279	9207	-3928
1.A.b.12 Government goods and services n.i.e.	1074	1414	-339	1607	1467	141
1.A.b.13 Others n.i.e.	13948	4871	9077	21601	6006	15595
1.B Primary Income (1.B.1 to 1.B.3)	**37089**	**107046**	**-69956**	**50817**	**122594**	**-71777**
1.B.1 Compensation of employees	10750	5178	5572	11092	5589	5503
1.B.2 Investment income	20478	99630	-79152	32225	115376	-83151
1.B.2.1 Direct investment	9463	60481	-51018	14692	71350	-56658
1.B.2.2 Portfolio investment	366	15810	-15445	820	21184	-20364
1.B.2.3 Other investment	579	23331	-22752	461	22836	-22375
1.B.2.4 Reserve assets	10070	7	10063	16251	5	16246
1.B.3 Other primary income	5861	2238	3623	7500	1629	5871
1.C Secondary Income (1.C.1+1.C.2)	**151883**	**14944**	**136939**	**156729**	**16367**	**140361**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	151627	13134	138492	156596	14254	142342
1.C.1.1 Personal transfers (Current transfers between resident and/ non-resident households)	146616	9573	137043	149936	10045	139891
1.C.1.2 Other current transfers	5011	3561	1450	6659	4209	2451
1.C.2 General government	257	1810	-1553	133	2113	-1980
2 Capital Account (2.1+2.2)	**813**	**1471**	**-658**	**1402**	**1553**	**-151**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	62	747	-685	457	981	-524
2.2 Capital transfers	751	725	27	946	572	374
3 Financial Account (3.1 to 3.5)	**1077815**	**1193566**	**-115751**	**1551410**	**1485770**	**65641**
3.1 Direct Investment (3.1A+3.1B)	**226877**	**45202**	**181675**	**151499**	**81403**	**70095**
3.1.A Direct Investment in India	219632	18223	201410	142854	47973	94880
3.1.A.1 Equity and investment fund shares	207607	18184	189423	136490	46371	90119
3.1.A.1.1 Equity other than reinvestment of earnings	176987	18184	158803	103281	46371	56909
3.1.A.1.2 Reinvestment of earnings	30620	0	30620	33210	0	33210
3.1.A.2 Debt instruments	12025	39	11987	6364	1602	4761
3.1.A.2.1 Direct investor in direct investment enterprises	12025	39	11987	6364	1602	4761
3.1.B Direct Investment by India	7245	26980	-19735	8645	33430	-24785
3.1.B.1 Equity and investment fund shares	7245	14543	-7298	8645	21055	-12410
3.1.B.1.1 Equity other than reinvestment of earnings	7245	8940	-1695	8645	15265	-6620
3.1.B.1.2 Reinvestment of earnings	0	5603	-5603	0	5789	-5789
3.1.B.2 Debt instruments	0	12437	-12437	0	12375	-12375
3.1.B.2.1 Direct investor in direct investment enterprises	0	12437	-12437	0	12375	-12375
3.2 Portfolio Investment	**496831**	**444780**	**52050**	**829315**	**800587**	**28729**
3.2.A Portfolio Investment in India	494044	436504	57540	818325	784660	33664
3.2.1 Equity and investment fund shares	409153	358396	50757	706356	701779	4577
3.2.2 Debt securities	84891	78108	6783	111968	82881	29087
3.2.B Portfolio Investment by India	2786	8276	-5490	10991	15927	-4936
3.3 Financial derivatives (other than reserves) and employee stock options	**21257**	**29276**	**-8019**	**39762**	**43017**	**-3256**
3.4 Other investment	**332850**	**439493**	**-106643**	**530835**	**329679**	**201155**
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	76798	62311	14486	66075	69328	-3253
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	99	0	99	2545	0	2545
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	76699	62311	14387	63530	69328	-5798
3.4.2.3 General government	0	0	0			
3.4.2.4 Other sectors	0	0	0			
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	151894	265558	-113664	173616	128967	44649
3.4.3.A Loans to India	146100	257932	-111832	171423	126903	44520
3.4.3.B Loans by India	5793	7626	-1833	2193	2064	128
3.4.4 Insurance, pension, and standardized guarantee schemes	580	462	117	405	97	308
3.4.5 Trade credit and advances	64430	77945	-13515	103887	86375	17512
3.4.6 Other accounts receivable/payable - other	39149	33218	5932	54505	44912	9592
3.4.7 Special drawing rights	0	0	0	132346	0	132346
3.5 Reserve assets	**0**	**234814**	**-234814**	**0**	**231083**	**-231083**
3.5.1 Monetary gold	0	0	0			
3.5.2 Special drawing rights n.a.	0	0	0	0	132346	-132346
3.5.3 Reserve position in the IMF n.a.	0	0	0			
3.5.4 Other reserve assets (Foreign Currency Assets)	0	234814	-234814	0	98737	-98737
4 Total assets/liabilities	**1077815**	**1193566**	**-115751**	**1551410**	**1485770**	**65641**
4.1 Equity and investment fund shares	648628	429138	219490	902649	828246	74403
4.2 Debt instruments	390038	496397	-106359	461910	381529	80382
4.3 Other financial assets and liabilities	39149	268031	-228882	186851	275995	-89145
5 Net errors and omissions	**2791**	**0**	**2791**	**5500**	**0**	**5500**

Note : P: Preliminary

No. 42: International Investment Position

(US$ Million)

Item	As on Financial Year /Quarter End							
	2020-21		2020		2021			
			Sep.		Jun.		Sep.	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	1	2	3	4	5	6	7	8
1 Direct Investment Abroad/in India	193929	482226	188243	455981	199440	493763	202785	506723
1.1 Equity Capital and Reinvested Earnings	122726	456947	121267	430714	125397	467990	127072	480697
1.2 Other Capital	71203	25278	66976	25267	74043	25773	75713	26026
2 Portfolio Investment	7936	274104	5041	244308	7912	272859	8578	276375
2.1 Equity	2340	177278	1906	149095	3146	176203	4590	177034
2.2 Debt	5596	96826	3136	95213	4766	96657	3988	99341
3 Other Investment	80606	454253	64785	440252	76828	455000	80317	475775
3.1 Trade Credit	5644	100337	2792	102187	7875	102117	11879	100267
3.2 Loan	13335	197773	9038	189705	13622	197443	10131	201213
3.3 Currency and Deposits	42436	143760	34864	138822	35904	143096	41102	142904
3.4 Other Assets/Liabilities	19191	12384	18092	9538	19427	12344	17205	31391
4 Reserves	576984		544687		611075		635363	
5 Total Assets/ Liabilities	859454	1210583	802757	1140541	895254	1221622	927043	1258873
6 IIP (Assets - Liabilities)		-351129		-337784		-326368		-331830

Payment and Settlement Systems

No.43: Payment System Indicators

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

System	Volume (Lakh)				Value (₹ Crore)			
	FY 2020-21	2020	2021		FY 2020-21	2020	2021	
		Dec.	Nov.	Dec.		Dec.	Nov.	Dec.
	1	2	3	4	5	6	7	8
A. Settlement Systems								
Financial Market Infrastructures (FMIs)								
1 CCIL Operated Systems (1.1 to 1.3)	27.97	2.62	2.56	3.13	161943141	15757032	17364381	20703988
1.1 Govt. Securities Clearing (1.1.1 to 1.1.3)	11.55	1.00	0.97	1.10	110634315	10816866	12229072	14801512
1.1.1 Outright	6.28	0.51	0.46	0.48	10032187	772886	617831	651103
1.1.2 Repo	2.84	0.25	0.26	0.30	43751173	4089804	4273958	5075401
1.1.3 Tri-party Repo	2.43	0.24	0.25	0.31	56850956	5954176	7337283	9075009
1.2 Forex Clearing	16.04	1.58	1.53	1.96	48903961	4651382	4816873	5516604
1.3 Rupee Derivatives @	0.38	0.04	0.06	0.07	2404865	288785	318437	385873
B. Payment Systems								
I Financial Market Infrastructures (FMIs)	–	–	–	–	–	–	–	–
1 Credit Transfers - RTGS (1.1 to 1.2)	1591.92	163.48	172.14	192.78	105599849	10659120	10981778	12966991
1.1 Customer Transactions	1573.47	161.72	170.95	191.50	91008367	9058136	9589985	11418233
1.2 Interbank Transactions	18.45	1.75	1.19	1.29	14591482	1600984	1391793	1548758
II Retail								
2 Credit Transfers - Retail (2.1 to 2.6)	317867.59	31735.79	51855.52	56422.79	33504168	3393355	3552986	4076395
2.1 AePS (Fund Transfers) @	11.31	1.03	0.62	0.65	623	61	35	36
2.2 APBS $	14372.99	1018.90	1119.16	1082.20	111001	8180	9750	14987
2.3 IMPS	32783.47	3556.93	4120.29	–	2941500	292325	364672	–
2.4 NACH Cr $	16465.29	1741.20	1356.65	1483.71	1216477	118309	95602	113132
2.5 NEFT	30927.89	3076.15	3394.00	3763.38	25130910	2558304	2314490	2724980
2.6 UPI @	223306.64	22341.58	41864.80	45662.99	4103658	416176	768436	826848
2.6.1 of which USSD @	10.45	0.88	1.00	1.12	172	14	15	16
3 Debit Transfers and Direct Debits (3.1 to 3.3)	10456.54	922.53	1031.91	1064.54	865520	81871	87212	91163
3.1 BHIM Aadhaar Pay @	160.84	8.90	19.78	19.59	2580	187	536	611
3.2 NACH Dr $	9645.75	840.43	900.10	937.92	862027	81576	86517	90426
3.3 NETC (linked to bank account) @	649.96	73.21	112.03	107.03	913	108	158	126
4 Card Payments (4.1 to 4.2)	57786.60	5502.88	5418.21	5701.80	1291799	128665	156325	161498
4.1 Credit Cards (4.1.1 to 4.1.2)	17641.06	1737.79	2011.16	2112.59	630414	63487	89217	93907
4.1.1 PoS based $	8688.81	914.20	1068.93	1093.48	280769	28961	37499	36713
4.1.2 Others $	8952.25	823.59	942.23	1019.10	349645	34526	51718	57195
4.2 Debit Cards (4.2.1 to 4.2.1)	40145.54	3765.09	3407.02	3589.21	661385	65178	67109	67591
4.2.1 PoS based $	20773.50	2165.50	2112.05	2292.51	377630	39437	43751	44162
4.2.2 Others $	19372.04	1599.59	1294.97	1296.71	283755	25741	23358	23429
5 Prepaid Payment Instruments (5.1 to 5.2)	49742.55	4372.11	6107.23	7008.24	197696	18153	25583	26896
5.1 Wallets	39987.01	3521.48	4870.19	5661.02	152065	13392	21041	21220
5.2 Cards (5.2.1 to 5.2.2)	9755.54	850.63	1237.04	1347.22	45631	4761	4542	5676
5.2.1 PoS based $	607.15	58.15	74.48	99.63	10690	1107	1287	1893
5.2.2 Others $	9148.39	792.48	1162.56	1247.59	34941	3654	3255	3784
6 Paper-based Instruments (6.1 to 6.2)	6703.70	719.40	577.00	660.33	5627190	618015	533223	640955
6.1 CTS (NPCI Managed)	6702.54	719.40	577.00	660.33	5625941	618015	533223	640955
6.2 Others	1.17	–	–	–	1249	–	–	–
Total - Retail Payments (2+3+4+5+6)	442557.14	43252.72	64989.85	70857.70	41486430	4240059	4355329	4996908
Total Payments (1+2+3+4+5+6)	444149.06	43416.20	65161.98	71050.48	147086278	14899180	15337107	17963898
Total Digital Payments (1+2+3+4+5)	437445.36	42696.80	64584.98	70390.15	141459089	14281164	14803884	17322943

PART II - Payment Modes and Channels

System	Volume (Lakh)				Value (₹ Crore)			
	FY 2020-21	2020	2021		FY 2020-21	2020	2021	
		Dec.	Nov.	Dec.		Dec.	Nov.	Dec.
	1	2	3	4	5	6	7	8
A. Other Payment Channels								
1 Mobile Payments (mobile app based) (1.1 to 1.2)	258033.70	25296.64	45548.53	49881.01	9201212	901655	1324008	1433624
1.1 Intra-bank $	25220.71	2183.03	3732.97	3927.18	1871390	174603	239989	254442
1.2 Inter-bank $	232812.99	23113.62	41815.57	45953.83	7329822	727052	1084018	1179182
2 Internet Payments (Netbanking / Internet Browser Based) @ (2.1 to 2.2)	32493.63	3147.85	2860.67	3102.24	41581497	4079472	3937877	4530694
2.1 Intra-bank @	6886.15	637.64	570.26	611.14	20601554	1934396	1788978	2082236
2.2 Inter-bank @	25607.48	2510.20	2290.41	2491.10	20979943	2145077	2148899	2448458
B. ATMs								
3 Cash Withdrawal at ATMs $ (3.1 to 3.3)	60905.81	5680.37	5691.73	5928.20	2889826	266709	271730	280372
3.1 Using Credit Cards $	51.41	5.01	5.45	5.90	2560	246	276	295
3.2 Using Debit Cards $	60602.23	5650.86	5657.83	5893.54	2878025	265569	270515	279100
3.3 Using Pre-paid Cards $	252.17	24.51	28.44	28.76	9240	893	939	977
4 Cash Withdrawal at PoS $ (4.1 to 4.2)	394.77	39.89	4.82	3.89	1533	149	63	42
4.1 Using Debit Cards $	353.50	34.53	4.14	3.71	1484	142	39	35
4.2 Using Pre-paid Cards $	41.27	5.37	0.68	0.18	49	6	24	7
5 Cash Withrawal at Micro ATMs @	9460.43	715.03	925.63	940.20	225420	19671	25112	25208
5.1 AePS @	9460.43	715.03	925.63	940.20	225420	19671	25112	25208

PART III - Payment Infrastructures (Lakh)

System	As on March 2021	2020	2021	
		Dec.	Nov.	Dec.
	1	2	3	4
Payment System Infrastructures				
1 Number of Cards (1.1 to 1.2)	9602.51	9460.57	10015.90	10066.90
1.1 Credit Cards	620.49	603.97	675.83	689.49
1.2 Debit Cards	8982.02	8856.60	9340.07	9377.42
2 Number of PPIs @ (2.1 to 2.2)	21952.60	20819.05	25918.94	26426.15
2.1 Wallets @	20052.10	19156.35	23408.81	23828.54
2.2 Cards @	1900.51	1662.70	2510.13	2597.62
3 Number of ATMs (3.1 to 3.2)	2.39	2.33	2.42	2.41
3.1 Bank owned ATMs $	2.14	2.08	2.13	2.11
3.2 White Label ATMs $	0.25	0.25	0.29	0.30
4 Number of Micro ATMs @	4.04	3.56	5.57	5.91
5 Number of PoS Terminals	47.20	45.85	52.92	54.98
6 Bharat QR @	35.70	32.00	45.41	46.47
7 UPI QR *	925.22	752.31	1373.33	1440.10

@: New inclusion w.e.f. November 2019
$: Inclusion separately initiated from November 2019 - would have been part of other items hitherto.
*: New inclusion w.e.f. September 2020; Includes only static UPI QR Code

Note : 1. Data is provisional.
2. ECS (Debit and Credit) has been merged with NACH with effect from January 31, 2020.
3. The data from November 2019 onwards for card payments (Debit/Credit cards) and Prepaid Payment Instruments (PPIs) may not be comparable with earlier months/ periods, as more granular data is being published along with revision in data definitions.
4. Only domestic financial transactions are considered. The new format captures e-commerce transactions; transactions using FASTags, digital bill payments and card-to-card transfer through ATMs, etc.. Also, failed transactions, chargebacks, reversals, expired cards/ wallets, are excluded.

Occasional Series

No. 44: Small Savings

(₹ Crore)

Scheme		2019-20	2020		2021	
			Feb.	Dec.	Jan.	Feb.
		1	2	3	4	5
1 Small Savings	**Receipts**	**159573**	**16911**	**16781**	**14261**	**14405**
	Outstanding	**1078535**	**1046766**	**1196084**	**1210379**	**1224772**
1.1 Total Deposits	**Receipts**	**116389**	**11460**	**12407**	**9820**	**10143**
	Outstanding	**734807**	**716363**	**827156**	**836976**	**847119**
1.1.1 Post Office Saving Bank Deposits	Receipts	25893	2690	3307	2049	2252
	Outstanding	166140	156258	190437	192486	194738
1.1.2 MGNREG	Receipts					
	Outstanding					
1.1.3 National Saving Scheme, 1987	Receipts	36	-20	-21	-26	-23
	Outstanding	3143	2939	3086	3060	3037
1.1.4 National Saving Scheme, 1992	Receipts	-1	-3	-3	0	57
	Outstanding	9	-23	-17	-17	40
1.1.5 Monthly Income Scheme	Receipts	16510	1887	1053	1162	1135
	Outstanding	209168	207059	217980	219142	220277
1.1.6 Senior Citizen Scheme 2004	Receipts	20334	2131	2014	1886	1950
	Outstanding	76042	73728	90914	92800	94750
1.1.7 Post Office Time Deposits	Receipts	41795	4494	4330	3952	3798
	Outstanding	166087	161115	195847	199799	203597
1.1.7.1 1 year Time Deposits	Outstanding	92618	90327	104601	105928	107099
1.1.7.2 2 year Time Deposits	Outstanding	7097	6970	7324	7375	7418
1.1.7.3 3 year Time Deposits	Outstanding	7536	7464	7330	7285	7267
1.1.7.4 5 year Time Deposits	Outstanding	58836	56354	76592	79211	81813
1.1.8 Post Office Recurring Deposits	Receipts	11821	281	1727	797	974
	Outstanding	114222	115291	128912	129709	130683
1.1.9 Post Office Cumulative Time Deposits	Receipts	1	0	0	0	0
	Outstanding	-25	-25	-24	-24	-24
1.1.10 Other Deposits	Receipts	0	0	0	0	0
	Outstanding	21	21	21	21	21
1.2 Saving Certificates	**Receipts**	**30170**	**3937**	**3941**	**3909**	**3647**
	Outstanding	**252190**	**248022**	**274905**	**278848**	**282483**
1.2.1 National Savings Certificate VIII issue	Receipts	19495	2619	1923	1903	1843
	Outstanding	117987	115127	129270	131173	133016
1.2.2 Indira Vikas Patras	Receipts	-101	1	-1	-1	0
	Outstanding	162	-288	158	157	157
1.2.3 Kisan Vikas Patras	Receipts	-18168	-1120	-669	-603	-470
	Outstanding	1135	3949	-5121	-5724	-6194
1.2.4 Kisan Vikas Patras - 2014	Receipts	28972	2452	2677	2610	2274
	Outstanding	122602	118507	140538	143148	145422
1.2.5 National Saving Certificate VI issue	Receipts	-4	0	8	0	0
	Outstanding	-155	-180	-147	-147	-147
1.2.6 National Saving Certificate VII issue	Receipts	-24	-15	3	0	0
	Outstanding	-106	-99	-103	-103	-103
1.2.7 Other Certificates	Outstanding	10565	11006	10310	10344	10332
1.3 Public Provident Fund	**Receipts**	**13014**	**1514**	**433**	**532**	**615**
	Outstanding	**91538**	**82381**	**94023**	**94555**	**95170**

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	2020		2021		
	Sep.	Dec.	Mar.	Jun.	Sep.
	1	2	3	4	5
(A) Total (in ₹. Crore)	**7137069**	**7357111**	**7635902**	**7882533**	**8235318**
1 Commercial Banks	38.55	37.81	37.77	35.99	37.82
2 Non-Bank PDs	0.34	0.25	0.27	0.34	0.35
3 Insurance Companies	25.33	25.64	25.30	25.83	24.18
4 Mutual Funds	2.42	2.62	2.94	2.82	2.91
5 Co-operative Banks	1.86	1.83	1.82	1.82	1.50
6 Financial Institutions	1.42	1.00	1.00	1.43	1.17
7 Corporates	0.94	1.05	1.06	1.39	0.72
8 Foreign Portfolio Investors	2.05	2.10	1.87	1.79	1.81
9 Provident Funds	4.77	4.61	4.44	4.04	3.77
10 RBI	15.00	15.71	16.20	17.11	16.98
11. Others	7.32	7.37	7.33	7.43	8.79
11.1 State Governments	1.86	1.76	1.69	1.67	1.67

State Governments Securities					
Category	2020		2021		
	Sep.	Dec.	Mar.	Jun.	Sep.
	1	2	3	4	5
(B) Total (in ₹. Crore)	**3564979**	**3721573**	**3879982**	**4028849**	**4153508**
1 Commercial Banks	34.60	34.19	33.69	33.75	35.94
2 Non-Bank PDs	0.54	0.36	0.48	0.39	0.44
3 Insurance Companies	30.26	30.25	30.04	29.67	27.50
4 Mutual Funds	1.96	1.92	1.82	1.74	1.97
5 Co-operative Banks	4.19	4.11	4.05	4.12	3.60
6 Financial Institutions	1.92	1.88	1.86	1.79	1.72
7 Corporates	0.39	0.45	0.49	1.45	1.32
8 Foreign Portfolio Investors	0.02	0.02	0.02	0.02	0.03
9 Provident Funds	21.31	21.20	22.00	21.09	18.27
10 RBI	0.00	0.81	0.77	0.88	0.85
11. Others	4.80	4.82	4.77	5.10	8.38
11.1 State Governments	0.18	0.18	0.18	0.18	0.18

Treasury Bills					
Category	2020		2021		
	Sep.	Dec.	Mar.	Jun.	Sep.
	1	2	3	4	5
(C) Total (in ₹. Crore)	**982286**	**839729**	**690646**	**901327**	**763582**
1 Commercial Banks	53.50	54.75	55.54	52.25	50.22
2 Non-Bank PDs	2.16	1.65	2.82	1.82	1.33
3 Insurance Companies	4.06	4.50	5.61	4.75	4.12
4 Mutual Funds	19.90	18.98	17.80	19.93	17.72
5 Co-operative Banks	1.63	1.61	2.43	1.60	1.32
6 Financial Institutions	1.34	1.11	1.24	2.56	2.12
7 Corporates	1.63	2.01	3.16	3.00	2.40
8 Foreign Portfolio Investors	0.00	0.00	0.00	0.00	0.15
9 Provident Funds	0.00	0.09	0.22	0.10	0.37
10 RBI	4.80	0.68	0.49	2.58	2.63
11. Others	10.99	14.63	10.70	11.42	17.62
11.1 State Governments	7.76	13.27	5.98	7.97	12.64

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

(₹ Crore)

Item	2016-17	2017-18	2018-19	2019-20	2020-21 RE	2021-22 BE
	1	2	3	4	5	6
1 Total Disbursements	**4265969**	**4515946**	**5040747**	**5410887**	**6523916**	**7160694**
1.1 Developmental	2537905	2635110	2882758	3074492	3906147	4254004
1.1.1 Revenue	1878417	2029044	2224367	2446605	3259401	3242247
1.1.2 Capital	501213	519356	596774	588233	636062	922982
1.1.3 Loans	158275	86710	61617	39654	10684	88775
1.2 Non-Developmental	1672646	1812455	2078276	2253027	2526514	2810847
1.2.1 Revenue	1555239	1741432	1965907	2109629	2334608	2602289
1.2.1.1 Interest Payments	724448	814757	894520	955801	1082302	1244457
1.2.2 Capital	115775	69370	111029	141457	189487	177328
1.2.3 Loans	1632	1654	1340	1941	2419	31230
1.3 Others	55417	68381	79713	83368	91255	95843
2 Total Receipts	**4288432**	**4528422**	**5023352**	**5734166**	**6489736**	**7039032**
2.1 Revenue Receipts	3132201	3376416	3797731	3851563	3834126	4682025
2.1.1 Tax Receipts	2622145	2978134	3278947	3231582	3175594	3829889
2.1.1.1 Taxes on commodities and services	1652377	1853859	2030050	2012578	2100982	2514708
2.1.1.2 Taxes on Income and Property	965622	1121189	1246083	1216203	1071552	1311449
2.1.1.3 Taxes of Union Territories (Without Legislature)	4146	3086	2814	2800	3060	3732
2.1.2 Non-Tax Receipts	510056	398282	518783	619981	658532	852135
2.1.2.1 Interest Receipts	33220	34224	36273	31137	39830	33198
2.2 Non-debt Capital Receipts	69063	142433	140287	110094	54861	201138
2.2.1 Recovery of Loans & Advances	20942	42213	44667	59515	21151	19581
2.2.2 Disinvestment proceeds	48122	100219	95621	50578	33710	181557
3 Gross Fiscal Deficit [1 - (2.1 + 2.2)]	**1064704**	**997097**	**1102729**	**1449230**	**2634928**	**2277532**
3A Sources of Financing: Institution-wise						
3A.1 Domestic Financing	1046708	989167	1097210	1440548	2580406	2276017
3A.1.1 Net Bank Credit to Government	617123	144792	387091	571872	890012	-----
3A.1.1.1 Net RBI Credit to Government	195816	-144847	325987	190241	107494	-----
3A.1.2 Non-Bank Credit to Government	429585	844375	710119	868676	1690394	-----
3A.2 External Financing	17997	7931	5519	8682	54522	1514
3B Sources of Financing: Instrument-wise						
3B.1 Domestic Financing	1046708	989167	1097210	1440548	2580406	2276017
3B.1.1 Market Borrowings (net)	689821	794856	795845	971378	1778062	1620936
3B.1.2 Small Savings (net)	35038	71222	88961	209232	455724	367863
3B.1.3 State Provident Funds (net)	45688	42351	51004	38280	47300	45504
3B.1.4 Reserve Funds	-6436	18423	-18298	10411	-3450	5051
3B.1.5 Deposits and Advances	17792	25138	66289	-14227	29050	28868
3B.1.6 Cash Balances	-22463	-12476	17395	-323279	34179	121663
3B.1.7 Others	287268	49653	96014	548753	239540	86132
3B.2 External Financing	17997	7931	5519	8682	54522	1514
4 Total Disbursements as per cent of GDP	*27.7*	*26.4*	*26.7*	*26.6*	*33.0*	*32.1*
5 Total Receipts as per cent of GDP	*27.9*	*26.5*	*26.6*	*28.2*	*32.9*	*31.6*
6 Revenue Receipts as per cent of GDP	*20.3*	*19.8*	*20.1*	*18.9*	*19.4*	*21.0*
7 Tax Receipts as per cent of GDP	*17.0*	*17.4*	*17.4*	*15.9*	*16.1*	*17.2*
8 Gross Fiscal Deficit as per cent of GDP	*6.9*	*5.8*	*5.8*	*7.1*	*13.3*	*10.2*

…: Not available. RE: Revised Estimates; BE: Budget Estimates

Source : Budget Documents of Central and State Governments.

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

(₹ Crore)

Sr. No	State/Union Territory	During December-2021					
		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	615	29	1996	29	1493	19
2	Arunachal Pradesh	-	-	-	-	-	-
3	Assam	-	-	-	-	-	-
4	Bihar	-	-	-	-	-	-
5	Chhattisgarh	-	-	-	-	-	-
6	Goa	107	13	75	12	-	-
7	Gujarat	-	-	-	-	-	-
8	Haryana	-	-	-	-	-	-
9	Himachal Pradesh	-	-	-	-	-	-
10	Jammu & Kashmir UT	-	-	1316	23	1013	17
11	Jharkhand	-	-	-	-	-	-
12	Karnataka	-	-	-	-	-	-
13	Kerala	-	-	-	-	-	-
14	Madhya Pradesh	-	-	-	-	-	-
15	Maharashtra	-	-	-	-	-	-
16	Manipur	-	-	307	31	202	28
17	Meghalaya	118	9	280	9	197	9
18	Mizoram	-	-	139	23	-	-
19	Nagaland	103	23	252	18	79	8
20	Odisha	-	-	-	-	-	-
21	Puducherry	-	-	-	-	-	-
22	Punjab	198	1	-	-	-	-
23	Rajasthan	1274	28	-	-	-	-
24	Tamil Nadu	-	-	-	-	-	-
25	Telangana	560	28	759	24	-	-
26	Tripura	-	-	-	-	-	-
27	Uttar Pradesh	-	-	-	-	-	-
28	Uttarakhand	-	-	-	-	-	-
29	West Bengal	-	-	-	-	-	-

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. 48: Investments by State Governments

(₹ Crore)

Sr. No	State/Union Territory	As on end of December 2021			
		Consolidated Sinking Fund (CSF)	Guarantee Redemption Fund (GRF)	Government Securities	Auction Treasury Bills (ATBs)
	1	2	3	4	5
1	Andhra Pradesh	9131	899	--	-
2	Arunachal Pradesh	1959	3	--	-
3	Assam	3971	60	--	-
4	Bihar	6168	--	--	-
5	Chhattisgarh	5307	--	1	4300
6	Goa	674	341	--	-
7	Gujarat	6926	528	--	2000
8	Haryana	856	1335	--	-
9	Himachal Pradesh	--	--	--	2500
10	Jammu & Kashmir UT	--	--	--	-
11	Jharkhand	496	--	--	-
12	Karnataka	7378	--	--	38500
13	Kerala	2362	--	--	-
14	Madhya Pradesh	--	1011	--	-
15	Maharashtra	48889	909	--	25000
16	Manipur	170	111	--	-
17	Meghalaya	799	46	9	-
18	Mizoram	387	52	--	-
19	Nagaland	1816	37	--	-
20	Odisha	12367	1605	93	36273
21	Puducherry	338	--	--	1280
22	Punjab	2017	--	8	-
23	Rajasthan	--	--	129	5200
24	Tamilnadu	7323	--	40	15165
25	Telangana	6250	1359	--	-
26	Tripura	573	10	--	900
27	Uttar Pradesh	1020	--	180	-
28	Uttarakhand	3798	150	--	-
29	West Bengal	9912	689	214	-
	Total	**140885**	**9143**	**673**	**131118**

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.

No. 49: Market Borrowings of State Governments

(₹ Crore)

Sr. No.	State	2019-20		2020-21		2021-22						Total amount raised, so far in 2021-22	
						October		November		December			
		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	42415	33444	50896	41915	5000	3840	2000	840	3250	3250	36000	27989
2	Arunachal Pradesh	1366	1287	767	767	-	-	-	-	-	-	400	400
3	Assam	12906	10996	15030	14230	1600	1600	1000	500	2800	1800	9300	7800
4	Bihar	25601	22601	27285	24685	4000	3000	4000	4000	3000	2281	23000	21281
5	Chhattisgarh	11680	10980	13000	10500	2000	1500	-	-1000	-	-	4000	2500
6	Goa	2600	2000	3354	3054	100	100	100	-100	400	300	1700	1200
7	Gujarat	38900	28600	44780	33280	5554	3554	-	-1000	-	-1500	17554	6054
8	Haryana	24677	20677	30000	25550	3000	2500	-	-500	-	-	16500	12200
9	Himachal Pradesh	6580	4460	6000	3755	-	-100	2000	1795	1000	800	4000	3495
10	Jammu & Kashmir UT	7869	6760	9328	6020	-	-	400	225	1800	1100	6400	4825
11	Jharkhand	7500	5656	9400	8900	1000	500	-	-	-	-	1500	500
12	Karnataka	48500	42500	69000	61900	6000	6000	4000	2500	12000	9500	22000	18000
13	Kerala	18073	12617	28566	23066	2000	1000	-	-	1000	-1000	20000	15000
14	Madhya Pradesh	22371	16550	45573	38773	2000	-1000	4000	4000	-	-	14000	11000
15	Maharashtra	48498	32998	69000	50022	2500	-1000	3000	3000	3000	1000	54750	42750
16	Manipur	1757	1254	1302	1044	140	90	200	200	90	90	1177	1027
17	Meghalaya	1344	1070	1777	1587	200	140	-	-50	328	328	1328	1118
18	Mizoram	900	745	944	677	104	104	-	-	-	-	434	184
19	Nagaland	1000	423	1721	1366	89	89	-	-	298	148	1287	1037
20	Odisha	7500	6500	3000	500	-	-1000	-	-500	-	-473	-	-3973
21	Puducherry	970	470	1390	790	-	-	125	125	250	250	499	499
22	Punjab	27355	18470	32995	23467	1162	862	-	-500	1500	1150	13782	3682
23	Rajasthan	39092	24686	57359	44273	5000	3730	1500	617	3669	2669	35769	28304
24	Sikkim	809	481	1292	1292	-	-	-	-	177	137	928	888
25	Tamil Nadu	62425	49826	87977	76796	4000	2740	4000	2260	5000	5000	52000	45000
26	Telangana	37109	30697	43784	37365	1500	660	3000	2160	5500	5500	33500	27711
27	Tripura	2928	2578	1916	1631	-	-	-	-	-	-	300	150
28	Uttar Pradesh	69703	52744	75500	59185	7500	5524	5000	2513	5000	2922	45000	29713
29	Uttarakhand	5100	4500	6200	5208	-	-	-	-	500	350	1700	700
30	West Bengal	56992	40882	59680	50180	5000	3500	3500	2500	9500	6950	47500	28777
	Grand Total	634521	487454	798816	651777	59449	37934	37825	23585	60062	42552	466308	339811

- : 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.

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 SWAP arrangement. 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 2018-19 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 revised table format since June 2016, incorporates the ownership pattern of State Governments Securities and Treasury Bills along with the Central Government Securities.

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

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

The category 'Others' comprises State Governments, Pension Funds, PSUs, Trusts, HUF/Individuals *etc.*

Table No. 46

GDP data is based on 2011-12 base. GDP data from 2019-20 pertains to the Provisional Estimates of National Income released by National Statistics Office on 29th May 2020. GDP for 2020-21 is from Union Budget 2020-21.

Data pertains to all States and Union Territories.

Total receipts and total expenditure exclude National Calamity Contingency Fund expenditure.

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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12. Perspectives on Central Banking Governors Speak (1935-2010) Platinum Jubilee	₹1400 per copy (over the counter)	US$ 50 per copy (inclusive of air mail courier charges)

Notes

1. Many of the above publications are available at the RBI website (www.rbi.org.in).
2. Time Series data are available at the Database on Indian Economy (http://dbie.rbi.org.in).
3. The Reserve Bank of India History 1935-1997 (4 Volumes), Challenges to Central Banking in the Context of Financial Crisis and the Regional Economy of India: Growth and Finance are available at leading book stores in India.

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