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GOVERNOR'S STATEMENT

*Governor's Statement**

Shaktikanta Das

The Monetary Policy Committee met on 4th, 5th and 6th August for its second meeting of 2020-21, the 24th under its aegis, completing four years of its operation under the new monetary policy framework. The MPC sifted through domestic and global conditions and evaluated their unfolding impact on overall outlook for India and the world. At the end of its deliberations, the MPC voted unanimously to leave the policy repo rate unchanged at 4 per cent and continue with the accommodative stance of monetary policy as long as necessary to revive growth, mitigate the impact of COVID-19, 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 stands unchanged at 3.35 per cent. I thank the MPC members for their valuable contributions to the policy decision taken today.

The Reserve Bank of India (RBI) is perhaps the only central bank in the world to have set up a special quarantine facility with its officers, staff and service providers, numbering about 200, for critical operations to ensure business continuity in banking and financial market operations and payment systems. Other teams in the RBI have ensured availability of digital banking channels, ATMs, internet/ mobile banking, cyber security, redress of customer grievances, and carried out sustained campaigns about safe use of digital transactions through RBI *Kehta Hai.* Our teams have also provided logistical support, and engaged in analysis and research to back the conduct of financial and monetary policies. I am proud of all of them for their tireless commitment to public service. I would also like to applaud all employees of banks and other financial entities for ensuring uninterrupted operations in these trying times. Our gratitude also goes out **to** all COVID warriors – medical and health personnel, police and other law enforcement agencies, authorities at various levels and others.

* Governor's Statement – August 06, 2020.

Assessment

In the MPC's assessment, global economic activity has remained fragile and in retrenchment in the first half of 2020. A renewed surge in COVID-19 infections in major economies in July has subdued some early signs of revival that had appeared in May and June. Global financial markets, however, have been buoyant, with the return of risk-off sentiment inserting a disconnect from the underlying state of the real economy. Portfolio flows to emerging markets have resumed and their currencies have appreciated.

The global manufacturing purchasing managers' index (PMI) and the global services PMI rose to 50.3 and 50.5, respectively in July, moving back to the expansion zone. The World Trade Organisation (WTO) has estimated that the volume of merchandise trade shrank by 3.0 per cent year-on-year in Q1 and early estimates suggest a fall of 18.5 per cent in Q2. CPI inflation remains largely subdued across major AEs, primarily due to benign fuel prices and soft aggregate demand since March. In most EMEs, however, CPI inflation, after easing in April-May, rose in June amidst cost-push pressures. Domestic food inflation remains elevated across most economies since the onset of the pandemic.

The MPC noted that in India too, economic activity had started to recover from the lows of April-May; however, surges of fresh infections have forced re-clamping of lockdowns in several cities and states. Consequently, several high frequency indicators have levelled off. The agriculture sector's prospects are strengthened by the progress of the south-west monsoon and expansion in the total area sown under *kharif* crops by 13.9 per cent up to July 31 over last year. Industrial production remained in contraction *albeit* at a moderated pace in May. The manufacturing purchasing managers' index (PMI) shrank in July for the fourth consecutive month. The PMI services remained in contractionary zone in July, although the downturn eased, relative to the June reading.

Headline CPI inflation, which was at 5.8 per cent in March 2020, was placed at 6.1 per cent in the provisional estimates for June 2020. Inflation pressures were evident across all sub-groups. Households' one year ahead inflation expectations were lower than their three months ahead expectations in the July 2020 round of the Reserve Bank's survey, indicating their anticipation of lower inflation over the longer horizon. Producers' sentiments on input prices remained muted as their salary outgoes fell. Their selling prices contracted in Q1 in the April-June round of the Reserve Bank's industrial outlook survey.

India's merchandise exports contracted for the fourth successive month in June 2020, although the pace of fall moderated. Imports fell sharply in June in a broad-based manner, reflecting weak domestic demand and low international crude oil prices. The merchandise trade balance recorded a surplus in June (US$ 0.8 billion), after a gap of over 18 years.

On the financing side, net foreign direct investment moderated to US$ 4.4 billion in April-May 2020 from US$ 7.2 billion a year ago. In 2020-21 (April-July), net foreign portfolio investment (FPI) in equities at US$ 5.3 billion was higher than US$ 1.2 billion a year ago. In the debt segment, however, there were outflows of US$ 4.4 billion during the same period as against inflows of US$ 2.0 billion a year ago. Net investment under the voluntary retention route increased by US$ 0.9 billion during the same period. India's foreign exchange reserves have increased by US$ 56.8 billion in 2020-21 so far (April-July) to US$ 534.6 billion (as on July 31, 2020) – equivalent to 13.4 months of imports. The ratio of foreign exchange reserves to external debt has gone up from 76.0 per cent at the March 2019 to 85.5 per cent at the end of March 2020.

Outlook

Against this backdrop, the MPC was of the view that supply chain disruptions on account of COVID-19 persist, with implications for both food and non-food prices. A more favourable food inflation outlook may emerge as the bumper *rabi* harvest eases prices of cereals, especially if open market sales and public distribution offtake are expanded on the back of significantly higher procurement. Nonetheless, upside risks to food prices remain. The abatement of price pressure in key vegetables is delayed and remains contingent upon normalisation of supplies. Protein-based food items could also emerge as a pressure point. Higher domestic taxes on petroleum products have resulted in elevated domestic pump prices and will impart broad-based cost push pressures going forward. Taking into consideration all these factors, the MPC expects headline inflation to remain elevated in Q2:2020-21, but likely to ease in H2:2020-21, aided by favourable base effects.

As regards the outlook for growth, the MPC noted that the recovery of the rural economy is expected to be robust, buoyed by the progress in *kharif* sowing. Manufacturing firms expect domestic demand to recover gradually from Q2 and to sustain through Q1:2021-22. On the other hand, consumer confidence turned more pessimistic in July relative to the preceding round of the Reserve Bank's survey. External demand is expected to remain anaemic under the weight of the global recession and contraction in global trade. Taking into consideration the above factors, real GDP growth in the first half of the year is estimated to remain in the contraction zone. For the year 2020-21 as a whole, real GDP growth is also estimated to be negative. An early containment of the COVID-19 pandemic may impart an upside to the outlook. A more protracted spread of the pandemic, deviations from the forecast of a normal monsoon and global financial market volatility are the key downside risks.

The MPC noted that in an environment of unprecedented stress, supporting recovery of the economy assumes primacy in the conduct of monetary policy. While space for further monetary policy action is available, it is important to use it judiciously to maximise the beneficial effects for underlying economic activity. At the same time, the MPC is conscious of its medium term inflation target. The headline inflation prints of April-May 2020 are obscured by (a) the spike in food prices and (b) cost-push pressures. Meanwhile, the cumulative reduction of 250 basis points is working its way through the economy, lowering interest rates in money, bond and credit markets, and narrowing down spreads. Given the uncertainty surrounding the inflation outlook and extremely weak state of the economy in the midst of an unprecedented shock from the ongoing pandemic, the MPC decided to keep the policy rate on hold, while remaining watchful for a durable reduction in inflation to use available space to support the revival of the economy.

Living with the pandemic has improved the way we manage it – working from home; virtual meetings; and "contactless" transactions. Throughout this traumatic period, one thing has stood out – the indomitable spirit of humanity, the inner conviction that whatever be the challenge, we have the innate resilience to combat them, overcome them and emerge victorious. I continue to be an eternal optimist; Mahatma Gandhi should inspire us: "If our resolve is firm and our conviction clear, it would mean half the battle won…."[1]

[1] Mahatma Gandhi, Harijan, July 21, 1940.

Impact of the Monetary and Liquidity Measures taken by the RBI

Against this backdrop, let me turn to the impact of the monetary and liquidity measures so far taken by the RBI to mitigate the negative fallout of COVID-19.

It may be noted that transmission of the rate cuts by the MPC would not have been possible to the extent achieved so far without creating comfortable liquidity conditions. The overriding objective was to prevent financial markets from freezing up; ensure normal functioning of financial intermediaries; ease the stress faced by households and businesses; and keep the life blood of finance flowing. This is achieved by infusing large amounts of liquidity in and out of the system through injections and absorptions through the LAF. In the process, the easing of financial conditions has actually enhanced monetary transmission and, thereby, the effectiveness of the MPC's accommodative stance and actions. What is more, the injections of liquidity, including through open market operations, special operations and forex interventions, are being fully sterilised by absorptions through the reverse repo, while preventing a seizure of money markets under extreme risk aversion and uncertainty.

Another aspect that needs to be recognised is that RBI's open market purchases are aimed at reducing funding costs for private sector entities that issue instruments in the market which are usually priced off the G-sec yield as the benchmark. In fact, it is worthwhile to see who is benefiting from RBI's actions. Borrowing costs in financial markets have dropped to their lowest in a decade on the back of abundant liquidity. Interest rates on instruments like the 3-month Treasury bill, commercial paper (CP) and certificates of deposit have fully priced in the reduction in the policy rate and are, in fact, trading below it in the secondary market. CPs of NBFCs have softened to 3.80 per cent on July 31, 2020. Rates have fallen to 3.40 per cent on July 31, 2020 for non-NBFC borrowers.

With illiquidity premia dissipating under the impact of Operation Twist and TLTRO 1.0, spreads of 3-year AAA-rated corporate bonds over similar tenor government securities have also declined from 276 basis points on March 26, 2020 to 50 basis points on July 31, 2020. Spreads on AA+ rated bonds softened from 307 basis points to 104 basis points; spreads on AA bonds narrowed from 344 basis points to 142 basis points over the same period. Even for the lowest investment grade bonds (BBB-), spreads have come down by 125 basis points as on July 31, 2020.

Lower borrowing costs have led to record primary issuance of corporate bonds of ₹2.09 lakh crore in the first quarter of (April-June) 2020-21. In particular, market financing conditions for NBFCs, which had become challenging, have largely stabilised in the wake of targeted policy measures. For AA+ rated 3-year NBFC bonds, spreads over similar tenor G-secs have narrowed from 360 basis points on March 26 to 139 basis points on July 31, 2020.

Abundant liquidity has supported other segments of financial markets too. In particular, MFs have stabilised since the Franklin Templeton episode. Assets under management of Debt MFs, which fell to ₹12.20 lakh crore as on April 29, 2020, recovered and improved to ₹13.89 lakh crore as on July 31, 2020.

At the same time, financial conditions have improved in specific sectors. Although non-food bank credit has slowed to 5.6 per cent (As on July 17), credit to NBFCs is growing at 25.7 per cent in June, loans to services at 10.7 per cent, and to housing at 12.5 per cent. Monetary transmission has also improved considerably. The weighted average lending rate (WALR) on fresh rupee loans sanctioned by banks declined by 162 basis points during February 2019-June 2020, of which 91 basis points transmission was witnessed during March-June 2020.

Additional Measures

With COVID-19 infections rising unabated under fragile macroeconomic and financial conditions, we propose to undertake additional developmental and regulatory policy measures to (i) enhance liquidity support for financial markets and other stakeholders; (ii) further ease financial stress caused by COVID-19 disruptions while strengthening credit discipline; (iii) improve the flow of credit; (iv) deepen digital payment systems; (v) augment customer safety in cheque payments; and (vi) facilitate innovations across the financial sector by leveraging on technology.

In the worst peacetime health and economic crisis of the last 100 years that we face today, the regulatory response has to be dynamic, proactive and balanced. While designing the major announcements that I am making today, we have ensured that necessary safeguards are in place for preserving financial stability. We are fully mindful of RBI's responsibility to maintain stability of the financial sector. While I am outlining the main measures, the Statement on Developmental and Regulatory Measures addresses them in greater detail.

(i) Additional Special Liquidity Facility (ASLF)

Additional special liquidity facility of ₹10,000 crore will be provided at the policy repo rate consisting of : ₹5,000 crore to the National Housing Bank (NHB) to shield the housing sector from liquidity disruptions and augment the flow of finance to the sector through housing finance companies (HFCs); and ₹5,000 crore to the National Bank for Agriculture and Rural Development (NABARD) to ameliorate the stress being faced by smaller non-bank finance companies (NBFCs) and micro-finance institutions in obtaining access to liquidity.

(ii) Resolution Framework for COVID-19-related Stress

The "Prudential Framework on Resolution of Stressed Assets" dated June 7, 2019 provides a principle-based resolution framework for addressing borrower defaults. Any resolution plan implemented under the Prudential Framework, which involves granting of any concessions on account of financial difficulty of the borrower, entails an asset classification downgrade except when accompanied by a change in ownership, subject to prescribed conditions.

The disruptions caused by COVID-19 have led to heightened financial stress for borrowers across the board. A large number of firms that otherwise maintain a good track record under existing promoters face the challenge of their debt burden becoming disproportionate, relative to their cash flow generation abilities. This can potentially impact their long-term viability and pose significant financial stability risks if it becomes wide- spread. Accordingly, it has been decided to provide a window under the June 7th Prudential Framework to enable lenders to implement a resolution plan in respect of eligible corporate exposures - without change in ownership - as well as personal loans, while classifying such exposures as standard assets, subject to specified conditions.

In the light of past experience with regard to use of regulatory forbearance, necessary safeguards have been incorporated, including prudent entry norms, clearly defined boundary conditions, specific binding covenants, independent validation and strict post-implementation performance monitoring. The underlying theme of this resolution window is preservation of the soundness of the Indian banking sector.

The Reserve Bank is constituting an Expert Committee (Chairman: Shri K.V. Kamath) which shall make recommendations to the RBI on the required financial parameters, along with the sector specific benchmark ranges for such parameters, to be factored into resolution plans. The Expert Committee shall also undertake a process validation of resolution plans for borrowal accounts above a specified threshold. The details of the resolution framework are spelt out in Part 'B' of the MPC resolution and the circular, both of which will be issued immediately after this press statement.

(iii) Restructuring of MSME debt

A restructuring framework for MSMEs that were in default but 'standard' as on January 1, 2020 is already in place. The scheme has provided relief to a large number of MSMEs. With COVID-19 continuing to disrupt normal functioning and cash flows, the stress in the MSME sector has got accentuated, warranting further support. Accordingly, it has been decided that stressed MSME borrowers will be made eligible for restructuring their debt under the existing framework, provided their accounts with the concerned lender were classified as standard as on March 1, 2020. This restructuring will have to be implemented by March 31, 2021.

(iv) Advances against Gold Ornaments and Jewellery

As per extant guidelines, loans sanctioned by banks against pledge of gold ornaments and jewellery for non-agricultural purposes should not exceed 75 per cent of the value of gold ornaments and jewellery. With a view to mitigating the impact of COVID-19 on households, it has been decided to increase the permissible loan to value ratio (LTV) for such loans to 90 per cent. This relaxation shall be available till March 31, 2021.

(v) Banks' Investment in Debt Mutual Funds and Debt Exchange

Traded funds – Capital Charge for Market risk

As per RBI's extant Basel III guidelines, if a bank holds a debt instrument directly, it would have to allocate lower capital, as compared to holding the same debt instrument through a Mutual Fund (MF)/ Exchange Traded Fund (ETF). It has been decided to harmonise the differential treatment existing currently. This will result in substantial capital savings for banks and is expected to give a boost to the corporate bond market.

(vi) Review of Priority Sector Lending Guidelines

With a view to aligning the guidelines with emerging national priorities and bring sharper focus on inclusive development, the Priority Sector Lending (PSL) guidelines have been reviewed. An incentive framework is now being put in place for banks to address the regional disparities in the flow of priority sector credit. While higher weightage will be assigned for incremental priority sector credit in the identified districts having lower credit flow, a lower weightage would be assigned in identified districts where the credit flow is comparatively higher. PSL status is also being given to start-ups; and the limits for renewable energy, including solar power and compressed bio-gas plants, are being increased.

***(vii)* Other measures that are being announced today include:**

a) Introduction of an automated mechanism in e-Kuber system to provide banks more flexibility/ discretion in managing their liquidity and maintenance of cash reserve requirements.

(b) While permitting lenders to provide relief to the borrowers through various measures, it is also considered necessary to take appropriate measures for strengthening credit discipline. In view of the concerns emanating from use of multiple operating accounts by borrowers, both current accounts as well as cash credit (CC)/ overdraft (OD) accounts, it has been decided to put in place certain safeguards for opening of such accounts for borrowers availing credit facilities from multiple banks.

(c) The Reserve Bank has constantly endeavoured to encourage responsible innovation by entities in the financial services sector. In order to further promote and facilitate an environment that can accelerate innovation across the financial sector, Reserve Bank will set up an Innovation Hub in India. Further details about the Innovation Hub would be announced in due course.

(d) To enhance safety of cheque payments, it has been decided to introduce a mechanism of Positive Pay for all cheques of value ₹50,000 and above. This will cover approximately 20 per cent and 80 per cent of total cheques by volume and value, respectively. Operational guidelines in this regard will be issued separately.

(e) A scheme of retail payments in offline mode using cards and mobile devices, and a system of on online dispute resolution (ODR) mechanism for digital payments will also be introduced.

Concluding Remarks

At this juncture, the war against COVID-19 is most intense, and the world is bracing up for a second wave as it cautiously opens up. The pandemic poses a challenge of epic proportions, but our collective efforts, intrepid choices, innovations and true grit will eventually take us to victory. As Mahatma Gandhi had said, "Patience and perseverance, if we have them, overcome mountains of difficulties"[2]. The challenges of today will only strengthen our resilience and self-belief. We shall remain alert and watchful and collectively do whatever is necessary to revive the economy and preserve financial stability. Courage and conviction will conquer Covid-

Thank you.

[2] Mind of Mahatma Gandhi (Eds: Prabhu and Rao), 3rd Edition, 1968 pp. 365

MONETARY POLICY STATEMENT FOR 2020-21

Monetary Policy Statement, 2020-21

*Monetary Policy Statement, 2020-21 Resolution of the Monetary Policy Committee (MPC) August 4 to 6, 2020**

On the basis of an assessment of the current and evolving macroeconomic situation, the Monetary Policy Committee (MPC) at its meeting today (August 6, 2020) decided to:

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

Consequently, 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 it is necessary to revive growth and 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 met in May 2020, global economic activity has remained fragile and in retrenchment in several geographies. While the uneasy and differently-paced withdrawal of COVID-19 lockdown restrictions in some countries enabled a sequential improvement in high frequency indicators during May-July, a renewed surge in COVID-19 infections in major economies and threats of a second wave of infections appear to have weakened these early signs of revival. Contractions in economic activity have been more severe in Q2:2020 than in Q1, and the near-term outlook points to a slow, uneven and hesitant recovery pushed into the second half of the year, with risks steeply slanted to the downside. Among advanced economies (AEs), output in the US and the Euro area underwent a deeper contraction in Q2:2020 than in the preceding quarter. Emerging market economies (EMEs) are expected to shrink in Q2 as reflected in high frequency indicators.

3. Global financial markets have rebounded since end-March 2020 with intermittent pauses, shrugging off the volatility and sharp correction recorded in Q1:2020. Portfolio flows returned to EMEs in Q2 after a massive reversal, though there was moderation in July from the previous month's level. EME currencies have also appreciated in close co-movement, tracking weakening of the US dollar. Crude oil prices have remained supported on supply cuts by oil producing countries (OPEC *plus*) and improved demand prospects on the gradual easing of lockdown restrictions since May. Gold prices have rallied to an all-time high on August 5 on the back of safe haven demand. In AEs, benign fuel prices and soft aggregate demand have kept inflation subdued. In many EMEs, however, cost-push pressures arising from supply disruptions and demand revival have shown up in consumer prices in June 2020. Global food prices are elevated across the board.

Domestic Economy

4. On the domestic front, economic activity had started to recover from the lows of April-May following the uneven re-opening of some parts of the country in

* Released on August 06, 2020.

June; however, surges of fresh infections have forced re-clamping of lockdowns in several cities and states. Consequently, several high frequency indicators have levelled off.

5. The agricultural sector has emerged as a bright spot. Its prospects have strengthened on the back of good spatial and temporal progress of the south- west monsoon. The cumulative monsoon rainfall was 1 per cent below the long-period average (LPA) up to August 5, 2020. Spurred by the expanding precipitation, the total area sown under *kharif* crops on July 31 was 5.9 per cent higher than the normal area measured by the average over the period 2014-15 to 2018-19. As on July 30, 2020, the live storage in major reservoirs was 41 per cent of the full reservoir level (FRL), which bodes well for the *rabi* season. These developments have had a salutary effect on rural demand as reflected in fertiliser production and sales of tractors, motorcycles and fast- moving consumer goods.

6. The pace of contraction of industrial production, measured by the index of industrial production (IIP), moderated to (-) 34.7 per cent in May from (-) 57.6 per cent a month ago, with the easing of lockdowns in different parts of the country. All manufacturing sub-sectors, except pharmaceuticals, remained in negative territory. The output of core industries in June contracted for the fourth successive month though with a considerable moderation. The Reserve Bank's business assessment index (BAI) for Q1:2020-21 hit its lowest mark in the survey's history. The manufacturing PMI remained in contraction, shrinking further to 46.0 in July from 47.2 in the preceding month.

7. High frequency indicators of services sector activity for May-June indicate signs of a modest resumption of economic activity, especially in rural areas, although at levels lower than a year ago. Notably, the decline in passenger vehicle sales moderated to (-) 49.6 per cent in June from (-) 85.3 per cent in May, indicative of tentative urban demand, and faster recovery of sales in rural areas. On the other hand, domestic air passenger traffic and cargo traffic continued to post sharp contraction. Construction activity remained tepid – cement production fell and finished steel consumption moderated sharply in June. Imports of capital goods – a key indicator of investment activity – declined further in June. The services PMI continued in contractionary zone in July to 34.2, although the downturn eased relative to the May and June readings.

8. The National Statistical Office (NSO) released data on headline CPI for the month of June 2020 on July 13, 2020, along with imputed back prints of the index for April and May 2020. This resulted in a sharp upward revision of food inflation for the month of April and May. During Q1:2020-21 food inflation moderated from 10.5 per cent in April to 7.3 per cent in June 2020. Meanwhile, fuel inflation edged up as international kerosene and LPG prices firmed up. Inflation excluding food and fuel was at 5.4 per cent in June, reflecting a spike in prices across most sub-groups. Inflation in transport and communication, personal care and effects, pan-tobacco and education registered significant increases in June. Headline CPI inflation, which was at 5.8 per cent in March 2020 was placed at 6.1 per cent in the provisional estimates for June 2020.

9. For the second successive round, households' three months ahead expectations remained above their one year ahead expectations, indicating their anticipation of lower inflation over the longer horizon. Producers' sentiments on input prices remained muted as their salary outgoes fell. Their selling prices contracted in Q1 in the April-June round of the Reserve Bank's industrial outlook survey. The contraction in output prices is also corroborated by firms participating in the manufacturing PMI survey.

10. Domestic financial conditions have eased substantially and systemic liquidity remains in large surplus, due to the conventional and unconventional

measures by the Reserve Bank since February 2020. Cumulatively, these measures assured liquidity of the order of ₹9.57 lakh crore or 4.7 per cent of GDP. Reflecting these developments, reserve money (RM) increased by 15.4 per cent on a year-on-year basis (as on July 31, 2020), driven by a surge in currency demand (23.1 per cent). Growth in money supply (M3), however, was contained at 12.4 per cent as on July 17, 2020. Average daily net absorptions under the liquidity adjustment facility (LAF) moderated from ₹5.3 lakh crore in May 2020 to ₹4.1 lakh crore in June as government spending slowed. In July, average daily net absorptions under the LAF moderated further to ₹4.0 lakh crore, as government spending remained subdued. During 2020-21 (up to July 31), ₹1,24,154 crore was injected through open market operation (OMO) purchases. In order to distribute liquidity more evenly across the term structure and improve transmission, the Reserve Bank conducted 'operation twist' auctions involving the simultaneous sale and purchase of government securities for ₹10,000 crore on July 2, 2020. Furthermore, the utilisation of refinance provided by the Reserve Bank to the National Bank for Agriculture and Rural Development (NABARD), Small Industries Development Bank of India (SIDBI) and the National Housing Bank (NHB) increased to ₹34,566 crore on July 31, 2020 from ₹22,334 crore during the May policy.

11. The transmission to bank lending rates has improved further, with the weighted average lending rate (WALR) on fresh rupee loans declining by 91 bps during March-June 2020. The spreads of 3-year AAA rated corporate bonds over G-Secs of similar maturity declined from 276 bps on March 26, 2020 to 50 bps by end-July 2020. Even for the lowest investment grade bonds (BBB-), spreads have come down by 125 bps by end-July 2020. Lower borrowing costs have led to record primary issuance of corporate bonds of ₹2.1 lakh crore in the first quarter of 2020-21.

12. India's merchandise exports contracted for the fourth successive month in June 2020, although the pace of fall moderated on improving shipments of agriculture and pharmaceutical products. Imports fell sharply in June in a broad-based manner, reflecting weak domestic demand and low international crude oil prices. The merchandise trade balance recorded a surplus in June (US$ 0.8 billion), after a gap of over 18 years. The current account balance turned into a marginal surplus of 0.1 per cent of GDP in Q4 of 2019-20 as against a deficit of 0.7 per cent a year ago. On the financing side, net foreign direct investment moderated to US$ 4.4 billion in April-May 2020 from US$ 7.2 billion a year ago. In 2020-21 (till July 31), net foreign portfolio investment (FPI) in equities at US$ 5.3 billion was higher than US$ 1.2 billion a year ago. In the debt segment, however, there were outflows of US$ 4.4 billion during the same period as against inflows of US$ 2.0 billion a year ago. Net investment under the voluntary retention route increased by US$ 0.9 billion during the same period. India's foreign exchange reserves have increased by US$ 56.8 billion in 2020-21 so far (up to July 31) to US$ 534.6 billion – equivalent to 13.4 months of imports.

Outlook

13. Supply chain disruptions on account of COVID-19 persist, with implications for both food and non-food prices. A more favourable food inflation outlook may emerge as the bumper *rabi* harvest eases prices of cereals, especially if open market sales and public distribution offtake are expanded on the back of significantly higher procurement. The relatively moderate increases in minimum support prices (MSP) for the *kharif* crops and monsoon are also supportive of benign inflation prospects. Nonetheless, upside risks to food prices remain. The abatement of price pressure in key vegetables is delayed and remains contingent upon normalisation of supplies. Protein

based food items could also emerge as a pressure point, given the tight demand-supply balance in the case of pulses. The inflation outlook of non-food categories is, however, fraught with uncertainty. Higher domestic taxes on petroleum products have resulted in elevated domestic pump prices and will impart broad-based cost-push pressures going forward. Volatility in financial markets and rising asset prices also pose upside risks to the outlook. Taking into consideration all these factors, headline inflation may remain elevated in Q2:2020-21, but may moderate in H2:2020-21 aided by large favourable base effects.

14. Turning to the growth outlook, the recovery in the rural economy is expected to be robust, buoyed by the progress in *kharif* sowing. Manufacturing firms responding to the Reserve Bank's industrial outlook survey expect domestic demand to recover gradually from Q2 and to sustain through Q1:2021-22. On the other hand, consumer confidence turned more pessimistic in July relative to the preceding round of the Reserve Bank's survey. External demand is expected to remain anaemic under the weight of the global recession and contraction in global trade. Taking into consideration the above factors, real GDP growth in Q2-Q4 is expected to evolve along the lines noted in the May resolution. For the year 2020-21, as a whole, real GDP growth is expected to be negative. An early containment of the COVID-19 pandemic may impart an upside to the outlook. A more protracted spread of the pandemic, deviations from the forecast of a normal monsoon and global financial market volatility are the key downside risks.

15. The June release of headline inflation after a gap of two months and imputed prints of the CPI for April-May have added uncertainty to the inflation outlook. The NSO has adopted best practices in producing these imputations for the purpose of business continuity in the face of challenges to data collection due to the nation-wide lockdown. The NSO has, however, not provided inflation rates for April and May. For the purpose of monetary formulation and conduct, therefore, the MPC is of the view that CPI prints for April and May can be regarded as a break in the CPI series.

16. The MPC noted that the economy is experiencing unprecedented stress in an austere global environment. Extreme uncertainty characterises the outlook, which is heavily contingent upon the intensity, spread and duration of the pandemic – particularly the heightened risks associated with a second wave of infections – and the discovery of the vaccine. In these conditions, supporting the recovery of the economy assumes primacy in the conduct of monetary policy. In pursuit of this objective, the stance of monetary policy remains accommodative as long as it is necessary to revive growth and mitigate the impact of COVID-19 on the economy. While space for further monetary policy action in support of this stance is available, it is important to use it judiciously and opportunistically to maximise the beneficial effects for underlying economic activity.

17. At the same time, the MPC is conscious that its primary mandate is to achieve the medium-term target for CPI inflation of 4 per cent within a band of +/- 2 per cent. It also recognises that the headline CPI prints of April-May, 2020 require more clarity. At the current juncture, the inflation objective itself is further obscured by (a) the spike in food prices because of floods in eastern India and ongoing lockdown related disruptions; and (b) cost-push pressures in the form of high taxes on petroleum products, hikes in telecom charges, rising raw material costs reflected in upward revisions in steel prices and rise in gold prices on safe haven demand. Given the uncertainty surrounding the inflation outlook and taking into consideration the extremely weak state of the economy in the midst of an unprecedented shock from the ongoing pandemic, it is prudent to pause and remain watchful of incoming data as to how the outlook unravels.

18. Meanwhile, the cumulative reduction of 250 basis points since February 2019 is working its way through the economy, lowering interest rates in money, bond and credit markets, and narrowing down spreads. Financing conditions have eased considerably, enabling financial flows *via* financial markets, especially at a time when banks remain highly risk averse. Accordingly, the MPC decides to stay on hold with regard to the policy rate and remain watchful for a durable reduction in inflation to use the available space to support the revival of the economy.

19. All members of the MPC – Dr. Chetan Ghate, Dr. Pami Dua, Dr. Ravindra H. Dholakia, Dr. Mridul K. Saggar, Dr. Michael Debabrata Patra and Shri Shaktikanta Das – unanimously voted for keeping the policy repo rate unchanged and continue with the accommodative stance as long as necessary to revive growth and mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target going forward.

20. The minutes of the MPC's meeting will be published by August 20, 2020.

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 to enhance liquidity support for financial markets and other stakeholders; further easing of financial stress caused by COVID-19 disruptions while strengthening credit discipline; improve the flow of credit; deepen digital payments; augment customer safety in cheque payments; and facilitate innovation across the financial sector by leveraging on technology through an Innovation Hub.

I. Liquidity Management and Financial Markets

1. Additional Liquidity Facility for National Housing Bank

Special refinance facilities for a total amount of ₹65,000 crore were provided to all India financial institutions (AIFIs) – the National Bank for Agriculture and Rural Development (NABARD); the Small Industries Development Bank of India (SIDBI); the National Housing Bank (NHB); and EXIM Bank – in order to support their role in meeting funding requirements of various sectors. In order to shield the housing sector from liquidity disruptions under the prevailing conditions and augment the flow of finance to the sector, it has been decided to provide an additional standing liquidity facility (ASLF) of ₹5,000 crore to NHB – over and above ₹10,000 crore already provided – for supporting housing finance companies (HFCs). The facility will be for a period of one year and will be charged at the RBI's repo rate.

2. Additional Liquidity Facility for NABARD

Liquidity support of ₹25,000 crore was extended to the National Bank for Agriculture and Rural Development (NABARD) in April 2020 to back agricultural operations in the wake of challenges posed by COVID-19 and in view of the brightening prospects of the farm sector, its capacity to provide employment in these trying times, and its backward and forward linkages. In order to ameliorate the stress being faced by smaller non-bank finance companies (NBFCs) and micro-finance institutions in obtaining access to liquidity, it has now been decided to provide an additional special liquidity facility (ASLF) of ₹5,000 crore to NABARD for a period of one year at the RBI's policy repo rate for refinancing NBFC-MFIs and other smaller NBFCs of asset size of ₹ 500 crore and less to support agriculture and allied activities and the rural non-farm sector.

3. Introduction of a Flexible Automated Option for Managing CRR Balances

The Reserve Bank will introduce an optional facility to provide banks more flexibility/discretion to manage their day end cash reserve ratio (CRR) balances. Using this facility in e-Kuber system, banks will be able to set the amount (specific or range) that they wish to keep as balance in their current account with RBI at the end of the day. Depending upon this pre-set amount, marginal standing facility (MSF) and reverse repo bids, as the case may be, will be auto- generated at the end of the day.

Detailed guidelines are being issued separately.

II. Regulation and Supervision

Measures Aimed at Mitigating the Economic Fallout of COVID-19

The regulatory focus over the past few months has been to frame appropriate policy responses to mitigate the immediate impact of COVID-19 on the financial institutions and their constituents. These measures were aimed at providing temporary reprieve to borrowers affected by the pandemic, as well as address the liquidity needs of various segments of the financial system, while maintaining its resilience. RBI remains committed to take any further measures felt necessary in this direction while at the same time remaining fully committed to maintaining financial stability. Going forward, as the process for normalisation of economic activity gathers pace, the need to address the deeper cash flow/balance sheet stress that many of the viable entities may have been exposed to on account of the pandemic and the consequent impact on the financial institutions is also recognised.

4. Resolution Framework for COVID-19-related Stress

The "Prudential Framework on Resolution of Stressed Assets" dated June 7, 2019 provides a principle-based resolution framework for addressing borrower defaults under a normal scenario. Any resolution plan implemented under the Prudential Framework which involves granting of any concessions on account of financial difficulty of the borrower entails an asset classification downgrade, except when it is accompanied by a change in ownership, which allows the asset classification to be retained or upgraded to Standard, subject to the prescribed conditions.

The economic fallout on account of the COVID-19 pandemic has led to significant financial stress for a number of borrowers across the board. The resultant stress can potentially impact the long-term viability of a large number of firms, otherwise having a good track record under the existing promoters, due to their debt burden becoming disproportionate, relative to their cash flow generation abilities. Such wide spread impact could impair the entire recovery process, posing significant financial stability risks.

Considering the above, with the intent to facilitate revival of real sector activities and mitigate the impact on the ultimate borrowers, it has been decided to provide a window under the Prudential Framework to enable the lenders to implement a resolution plan in respect of eligible corporate exposures without change in ownership, and personal loans, while classifying such exposures as Standard subject to specified conditions. Such conditions are considered necessary to ensure that the facility of this resolution window is available only to the COVID-19 related stressed assets. Besides, the crucial aspect of maintaining financial stability has also been suitably factored in.

In light of past experiences with regard to use of regulatory forbearances, necessary safeguards are being incorporated, including prudent entry norms, clearly defined boundary conditions, specific binding covenants, independent validation and strict post-implementation performance monitoring. Given the intent to facilitate revival of real sector activities and mitigate the impact on the ultimate borrowers, the framework shall not be available for exposures to financial sector entities as well as Central and State Governments, Local Government bodies (e.g. Municipal Corporations) and any body corporate established by an Act of Parliament or State Legislature.

The key features of the resolution framework for exposures other than personal loans are as under:

i. Only those borrower accounts shall be eligible for resolution under this framework which were classified as standard, but not in default for more than 30 days with any lending institution as on March 1, 2020. Further, the accounts should continue to remain standard till the date of invocation. All other accounts, as hitherto, may be considered for resolution under the June 7th Prudential Framework, or the relevant instructions as applicable to specific category of lending institutions where the Prudential Framework is not applicable.

ii. The resolution plan may be invoked anytime till December 31, 2020 and shall have to be implemented within 180 days from the date of invocation.

iii. Lenders shall have to keep additional provisions of 10 per cent on the post-resolution debt.

iv. In order to enforce collective action, specific voting thresholds are being prescribed even for invocation of the resolution plan; and those lending institutions not signing the inter-creditor agreement (ICA) within 30 days from the date of invocation shall attract higher provisions of 20.

v. Post-implementation, the asset classification of the account shall be retained as standard, or if the account had slipped into NPA after invocation but before implementation, the asset classification shall be restored upon implementation.

vi. The Reserve Bank is constituting an Expert Committee (Chairman: Shri K.V. Kamath) which shall make recommendations to the RBI on the required financial parameters, along with the sector specific benchmark ranges for such parameters, to be factored into each resolution plans. The final notification in this regard shall be issued by the Reserve Bank after considering the recommendations.

vii. The Expert Committee shall also undertake a process validation of resolution plans for accounts above a specified threshold.

viii. The lending institutions may allow extension of the residual tenor of the loan, with or without payment moratorium, by a period not more than two years.

ix. Wherever the resolution plans involve conversion of a portion of debt into equity and other debt instruments, the debt instruments with terms similar to the loan shall be counted as part of the post-resolution debt, whereas the portion converted into other non-equity instruments shall be fully written down.

x. In respect of accounts involving consortium or multiple banking arrangements, all receipts by the borrower; all repayments by the borrower to the lending institutions; as well as all additional disbursements, if any, to the borrower by the lending institutions as part of the resolution plan, shall be routed through an escrow account maintained with one of the lending institutions.

With respect to personal loans, a separate framework is being prescribed. The resolution plan for personal loans under this framework may be invoked till December 31, 2020 and shall be implemented within 90 days thereafter. The lending institutions are, however, encouraged to strive for early invocation in eligible cases. The timelines for implementation of resolution plan in case of personal loans are assessed to be adequate since, unlike larger corporate exposures, there will not be any requirement for third party validation by the Expert Committee, or by credit rating agencies, or need for ICA. The contours of the plan may be decided based on the Board approved policies of the lenders subject to extension of the residual tenor of the loan, with or without payment moratorium, by a period not more than two years.

Guidelines in this regard are being issued today.

5. Restructuring of MSME debt

With regard to MSMEs, a restructuring framework is already in place for MSMEs that were in default but 'standard' as on January 1, 2020, subject to the restructuring being implemented upto December 31, 2020. The scheme has provided relief to a large number of MSMEs. However, the stress in the MSME sector has got accentuated on account of the fallout of COVID-19.

Recognising the need for continued support to MSMEs' meaningful restructuring, it has been decided that, in respect of MSME borrowers facing stress on account of the economic fallout of the pandemic, lending institutions may restructure the debt under the existing framework, provided the borrower's account was classified as standard with the lender as on March 1, 2020. This restructuring shall be implemented by March 31, 2021.

Guidelines in this regard are being issued separately today.

6. Advances against Gold Ornaments and Jewellery

As per the extant guidelines, loans sanctioned by banks against pledge of gold ornaments and jewellery for non-agricultural purposes should not exceed 75 per cent of the value of gold ornaments and jewellery. With a view to further mitigate the economic impact of the COVID-19 pandemic on households, entrepreneurs and small businesses, it has been decided to increase the permissible loan to value ratio (LTV) for loans against pledge of gold ornaments and jewellery for non-agricultural purposes from 75 per cent to 90 per cent. This relaxation shall be available till March 31, 2021.

Guidelines in this regard are being issued today.

7. Streamlining the Use of Multiple Operating Accounts by Large Borrowers

While permitting the lending institutions to provide necessary relief to the borrowers through various measures, it is also considered necessary to take appropriate measures for strengthening credit discipline. Use of multiple operating accounts by borrowers, both current accounts as well as cash credit (CC)/overdraft (OD) accounts, has been observed to be prone to vitiating credit discipline. The checks and balances put in place in the extant framework, for opening of current accounts, are found to be inadequate.

As such, it has been decided to address the above concerns through appropriate safeguards for opening of current accounts and CC/OD accounts for customers availing credit facilities from multiple banks.

Detailed instructions are being issued in this regard.

The above measures are also expected to bring in the requisite discipline in collective actions by the creditors for speedier resolution of stress in the accounts of borrowers, which will be critical in implementation of the Resolution Framework for COVID-19- related Stress, as mentioned earlier.

8. Investment by Banks in Debt Mutual Funds and Debt Exchange Traded funds – Capital Charge for Market risk

As per RBI's extant Basel III guidelines, if a bank holds a debt instrument directly, it would have to allocate lower capital as compared to holding the same debt instrument through a Mutual Fund (MF)/Exchange Traded Fund (ETF). This is because specific risk capital charge as applicable to equities is applied to investments in MFs/ETFs; whereas if the bank was to hold the debt instrument directly, specific risk capital charge is applied depending on the nature and rating of debt instrument. It has therefore been decided to harmonise the differential treatment existing currently. At the same time, it is observed that a debt MF/ETF also has features akin to equity, since in the event of default of even one of the debt securities in the MF/ETF basket, there is often severe redemption pressure on the fund notwithstanding the fact that the other debt securities in the basket are of high quality. Hence, it has been decided that the general market risk charge of 9 per cent will continue to be applied. Thus, computation of total capital charge for market risk shall incorporate elements of both debt and equity instruments. This will result in substantial capital savings for banks and is expected to give a boost to the bond market.

The circular in this regard is being issued separately.

III. Financial Inclusion

9. Review of Priority Sector Lending Guidelines

The Priority Sector Lending (PSL) guidelines issued by Reserve Bank of India were last reviewed in April 2015. With a view to align the guidelines with emerging national priorities and bring sharper focus on inclusive development, the guidelines have been reviewed after wide ranging consultations with all stakeholders. The revised guidelines also aim to encourage and support environment friendly lending policies to help achieve Sustainable Development Goals (SDGs).

With a view to address the regional disparities in the flow of priority sector credit, an incentive framework has been put in place for banks. While higher weight will be assigned for incremental priority sector credit in the identified districts where credit flow is comparatively lower, a lower weight would be assigned to incremental priority sector credit in identified districts where the credit flow is comparatively higher.

Other changes include broadening the scope of PSL to include start-ups; increasing the limits for renewable energy, including solar power and compressed bio gas plants; and, increasing the targets for lending to 'Small and Marginal Farmers' and 'Weaker Sections'.

Detailed guidelines in this regard will be issued shortly.

IV. Payment and Settlement Systems

10. Scheme of Offline Retail Payments Using Cards and Mobile Devices

There has been considerable growth in digital payments using mobile phones, cards, wallets, etc. Lack of internet connectivity or low speed of internet, especially in remote areas, is a major impediment in adoption of digital payments. Against this backdrop, providing an option of off-line payments through cards, wallets and mobile devices is expected to further the adoption of digital payments. The Reserve Bank has been encouraging entities to develop offline payment solutions. It is, therefore, proposed to allow a pilot scheme for small value payments in off-line mode with built-in features for safeguarding interest of users, liability protection, etc.

The instructions in this regard will be issued shortly. Based on experience gained, detailed guidelines for roll-out of the scheme will be announced in due course.

11. Online Dispute Resolution (ODR) for Digital Payments

As the number of digital transactions rise significantly, there is a concomitant increase in the number of disputes and grievances. Recourse to technology-driven redressal mechanisms that are rule-based, transparent and involve minimum (or no) manual intervention is necessary to deal with them in a timely and effective manner. Accordingly, the Reserve Bank shall require Payment System Operators (PSOs) to introduce Online Dispute Resolution (ODR) Systems in a phased manner. To begin with, authorised PSOs shall be required to implement ODR systems for failed transactions in their respective Payment Systems. Based on the experience gained, ODR arrangements will be extended to other types of disputes and grievances. Instructions in this regard will be issued today.

12. Positive Pay Mechanism for Cheques

The Cheque Truncation System (CTS) for clearing cheques is operational pan- India and presently covers 2 per cent and 15 per cent of total retail payments in terms of volume and value respectively; the average value of a cheque cleared in CTS presently is ₹82,000. The CTS-2010 standard specifying minimum-security features on cheque leaves acts as a deterrent against cheque frauds, while standardisation of field placements on cheque forms enables straight-through-processing by use of optical / image character recognition technology. To further augment customer safety in cheque payments and reduce instances of fraud occurring on account of tampering of cheque leaves, it has been decided to introduce a mechanism of Positive Pay for all cheques of value ₹50,000 and above. Under this mechanism, cheques will be processed for payment by the drawee bank based on information passed on by its customer at the time of issuance of cheque. This measure will cover approximately 20 per cent and 80 per cent of total cheques issued in the country by volume and value, respectively.

Operational guidelines for the purpose will be issued separately.

13. Creation of Reserve Bank Innovation Hub

The Reserve Bank has constantly endeavoured to encourage responsible innovation by entities in the financial services sector. The Regulatory Sandbox framework was one such recent initiative in which Digital Payments were the first cohort. Six proposals were accepted under the Sandbox, the pilot studies / trials of which have been delayed on account of the present COVID-19 situation. Areas such as cyber security, data analytics, delivery platforms, payments services, etc., remain in the forefront when we think of innovation in the financial sector. To promote innovation across the financial sector by leveraging on technology and create an environment which would facilitate and foster innovation, Reserve Bank will set up an Innovation Hub in India. The Innovation Hub will act as a centre for ideation and incubation of new capabilities which can be leveraged to create innovative and viable financial products and / or services to help achieve the wider objectives of deepening financial inclusion, efficient banking services, business continuity in times of emergency, strengthening consumer protection, etc. The Innovation Hub will support, promote and hand-hold cross-thinking spanning regulatory remits and national boundaries.

SPEECHES

*Are Dynamic Shifts Underway in The Indian Economy?**

Shaktikanta Das

Thank you for having me in this interaction with members of the National Council of the Confederation of Indian Industry (CII). I am pleased to note that the CII has realigned its functioning and thought processes around a new theme for 2020-21 – Building India for New World: Lives, Livelihood, Growth – under the able and visionary leadership of Shri Uday Kotak, Shri T V Narendran, Shri Sanjiv Bajaj, Shri Chandrajit Banerjee and other eminent members.

Currently, COVID-19 is the compelling theme in all conversations. Questions abound about flattening of the Covid curve; arrival of the elusive vaccine; protection of lives and livelihood; and the shape of economic recovery. These questions haunt us day in and day out. There are no credible answers as yet; the only thing that is certain for now is that, we must fight on relentlessly against this invisible enemy and eventually win.

Today, I thought I should move away from this preoccupation with the uncertain present and reflect on some dynamic shifts that are underway in the Indian economy. They may escape our attention in this all-consuming engrossment with the pandemic, but they could be nursing the potential to repair, to rebuild and to renew our tryst with developmental aspirations. These dynamic shifts have been taking place incipiently for some time. In order to recognise and evaluate these shifts for their potential in shaping our future, one needs to step back a bit and take a more medium-term perspective. In my address today, I propose to touch upon five such major dynamic shifts: (i) fortunes shifting in favour of the farm sector; (ii) changing energy mix in favour of renewables; (iii) leveraging information and communication technology (ICT), and start-ups to power growth; (iv) shifts in supply/value chains, both domestic and global; and (v) infrastructure as the force multiplier of growth.

I. Fortunes Shifting in favour of the Farm Sector

Indian agriculture has witnessed a distinct transformation. The total production of food grains reached a record 296 million tonnes in 2019-20, registering an annual average growth of 3.6 percent over the last decade. Total horticulture production also reached an all-time high of 320 million tonnes, growing at an annual average rate of 4.4 percent over the last 10 years. India is now one of the leading producers of milk, cereals, pulses, vegetables, fruits, cotton, sugarcane, fish, poultry and livestock in the world. Buffer stocks in cereals currently stand at 91.6 million tonnes or 2.2 times the buffer norm. These achievements represent, in my view, the most vivid silver lining in the current environment.

Shifting the terms of trade in favour of agriculture is the key to sustaining this dynamic change and generating positive supply responses in agriculture. Experience shows that in periods when terms of trade remained favourable to agriculture, the annual average growth in agricultural gross value added (GVA) exceeds 3 per cent. Hitherto, the main instrument has been minimum support prices, but the experience has been that price incentives have been costly, inefficient and even distortive. India has now reached a stage in which surplus management has become a major challenge. We need to move now to policy strategies that ensure a sustained increase in farmers' income alongside reasonable food prices for consumers.

An efficient domestic supply chain becomes critical here. Accordingly, the focus must now turn to capitalising on the major reforms that are underway to facilitate domestic free trade in agriculture. First,

* Shri Shaktikanta Das, Governor, Reserve Bank of India – Address to CII National Council, Mumbai on July 27, 2020.

the amendment of the Essential Commodities Act (ECA) is expected to encourage private investment in supply chain infrastructure, including warehouses, cold storages and marketplaces. Second, the Farmers' Produce Trade and Commerce (Promotion and Facilitation) Ordinance, 2020 is aimed at facilitating barrier-free trade in agriculture produce. Third, the Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance, 2020 will empower farmers to engage with processors, aggregators, wholesalers, large retailers, and exporters in an effective and transparent manner. With this enabling legislative framework, the focus must turn to (a) crop diversification, de-emphasising water-guzzlers; (b) food processing that enhances shelf life of farm produce and minimises post-harvest wastes; (c) agricultural exports which enable the Indian farmer take advantage of international terms of trade and technology; and (d) public and private capital formation in the farm sector. The Committee on Doubling Farmers Income expects the total quantum of private investment in agriculture to increase from ₹61,000 crore in 2015-16 to ₹139,424 crore by 2022-23. All these initiatives have opened a whole new world of opportunities for industry and businesses. The consequential creation of jobs and augmentation of farmers' income can indeed be enormous.

II. Changing Pattern of Energy Production in favour of Renewables

A similar opportunity space now exists in the energy sector, especially renewables. India's progress in addressing the demand-supply imbalance in electricity has been remarkable. It has now become a power surplus country, exporting electricity to neighbouring countries. While the demand for electricity grew at an average rate of 3.9 per cent in India during 2015-16 to 2019-20, supply grew at an average rate of 4.5 per cent and installed capacity increased at an average rate of 6.7 per cent during the same period.

What is particularly striking is the role of renewable energy. The share of renewable energy in overall installed capacity has doubled to 23.4 per cent at end-March 2020 from 11.8 per cent at end-March 2015. As much as 66.6 per cent of the addition to total installed capacity during the last five years has been in the form of renewable energy, which contributed 33.6 per cent of the incremental generation of electricity. About 90 per cent of this jump stems from solar and wind energy. This spectacular progress has set the stage for India targeting to scale up the share of renewable energy in total electricity generation to 40 per cent by 2030. The shift to greener energy will reduce the coal import bill, create employment opportunities, ensure sustained inflow of new investments and promote ecologically sustainable growth.

A major factor driving this shift in energy mix has been the steep fall in the generation cost of renewable energy. As a result, renewable power generation technologies have become the least-cost option for new capacity creation in almost all parts of the world. The weighted-average cost of addition to renewable capacity in India was one of the lowest in the world in 2019. This has started exerting significant downward pressures on spot prices of electricity.

Going forward, this landmark progress could result in a significant overhaul of the power sector, encompassing deregulation, decentralisation and efficient price discovery. Policy interventions in the form of renewable purchase obligations (RPO) for distribution companies (DISCOMs), accelerated depreciation benefits and fiscal incentives such as viability gap funding and interest rate subvention will have to go through a rethink/need review. Reforming retail distribution of electricity while reducing commercial, technical and transmission losses remains a key challenge. The end of cross subsidisation by industry for other sectors, and closing the gap between average cost of supply (ACS) and average revenue realised (ARR) will require speedier/

accelerated DISCOM reforms (including privatisation and competition). A nationwide Grid integration that can take supply from renewable sources as and when generated is needed to take care of daily/seasonal peaks and troughs associated with renewable sources. These dynamic shifts in renewables could help increase India's per capita electricity consumption, currently among the lowest in the world. Here too, Indian industry has a crucial role to play.

III. Leveraging Information and Communication Technology (ICT) and Start-ups to Power Growth

Information and communication technology (ICT) has been an engine of India's economic progress for more than two decades now. Last year, the ICT industry accounted for about 8 per cent of country's GDP and was the largest private sector job creator across both urban and rural areas. In 2019-20, software exports at US$ 93 billion contributed 44 per cent of India's total services exports and financed 51 per cent of India's merchandise trade deficit during the last five years.

These headline numbers, however, understate the contribution of the sector to the economy. IT has revolutionised work processes across sectors and has generated productivity gains all around. The ICT revolution has placed India on the global map as a competent, reliable, and low-cost supplier of knowledge-based solutions. Indian IT firms are now at the forefront of developing applications using artificial intelligence (AI), machine learning (ML), robotics, and blockchain technology. This has also helped to strengthen India's position as an innovation hub, with several start-ups attaining unicorn status (US$ 1 billion valuation). India added 7 new unicorns in 2019, taking the total count to 24, the third largest in the world[1].

The 'Start-up India' campaign recognises the potential of young entrepreneurs of the country and aims at providing them a conducive ecosystem. According to Traxcn database, funding for Indian tech start- ups touched US$ 16.3 billion in 2019, over 40 per cent increase over the level a year ago. While Healthtech and Fintech are the leading segments, entrepreneurs are leveraging opportunities across sectors and markets, and increasing the depth and breadth of this ecosystem. Interestingly, a significant proportion of start-ups in India are serving small and medium businesses, and low and middle income groups.

COVID-19 has impacted the outlook for startups, particularly availability of funding due to the generalised atmosphere of risk aversion. Even before COVID-19, a global technological churn was underway, with lower spending by firms on legacy hardware and software systems, but with rapid advances in digital technologies and computing/analytical capabilities. Fierce competition from other developing economies with the potential to provide cost-effective IT services, is rapidly emerging as a challenge to India's position as the leading outsourcing hub of the world. Globally, regulatory uncertainty relating to work permits and immigration policies may also amplify challenges. The sector has to also deal with concerns relating to data privacy and data security.

Creative destruction is an integral feature of a robust dynamic economy. The IT sector is best placed to drive this process and also manage its consequences. There is a significant association between the count of new firms born in a district and the gross domestic product of that district[2]. Promoting young firms and start-ups will be critical for greater employment generation and higher productivity-led economic growth in India. It would be essential to reorient

[1] NASSCOM: Indian Start-up Ecosystem, 2019 (November).

[2] Economic Survey 2019-20, Chapters 2 and 3, Government of India.

resources and policy focus in this direction. Innovation and ability to nurture ideas into actualisation would be the key challenge. In this context, private enterprise and investment have a game-changing role.

IV. Shifts in Supply/ Value Chains – Domestic and Global

In a competitive market economy, an efficient supply chain can enhance economic welfare. Investment in sectors with strong forward and backward linkages in the supply chain can generate higher production, income and employment. Consequently, identification of such sectors becomes critical for strategic policy interventions. Stronger inter-sectoral interdependence can help enhance efficiency of domestic value chains.

Strengthening the position of a country in the global value chain (GVC) can help maximise the benefits of openness. GVC encompasses the full range of activities starting from the conception stage of a product to its designing, production, marketing, distribution and post-sale support services performed by multiple firms and workers located in different countries. The higher the GVC participation of a country, the greater are the gains from trade as it allows participating countries to benefit from the comparative advantage of others in the GVC. More than two-thirds of world trade occurs through GVCs.

World Bank (2020)[3] research findings suggest that one per cent increase in GVC participation can boost per capita income level of a country by more than one per cent. India's GVC integration, as measured by the GVC participation index, has been low (34.0 per cent, as a ratio of total gross exports) relative to the ASEAN countries (45.9 per cent, as a ratio to total gross exports). This needs to change.

Global shifts in GVCs in response to COVID-19 and other developments will create opportunities for India. Besides focusing on diversifying sources of imports, it may also be necessary to focus on greater strategic trade integration, including in the form of early completion of bilateral free trade agreements with the United States, European Union and United Kingdom.

V. Infrastructure as Force Multiplier for Growth

In India, the progress made on physical infrastructure in the country in the last five years needs to be viewed as no less than a dynamic shift. Road construction, the primary mode of transportation in India, has increased from 17 kms per day in 2015-16 to close to about 29 kms per day in the last two years. India is the third largest domestic market for civil aviation in the world with 142 airports. On airport connectivity, India ranked 4th among 141 countries in the Global Competitiveness Report, 2019 of the World Economic Forum. In telecommunication, the overall tele-density (number of telephone connections per 100 persons) in India at end of February 2020 was 87.7 per cent. Growth of internet and broadband penetration in India has increased at a rapid pace. Total broadband connections rose almost ten times – from 610 lakh in 2014 to 6811 lakh in February 2020 – enabling large expansion in internet traffic. India is now the global leader in monthly data consumption, with average consumption per subscriber per month increasing 168 times from 62 MB in 2014 to 10.4 GB at end-2019. The cost of data has also declined to one of the lowest globally, enabling affordable internet access for millions of citizens.

The shipping industry is the backbone for external merchandise trade as around 95 per cent of trading volume is transported through ships by sea routes. The average turnaround time of ships in Indian ports – which is an indicator of efficiency of ports – improved from 102.0 hours in 2012-13 to 59.5 hours in 2018-19. As regards the power sector, I have already mentioned the achievements. With regard to the railways, Eastern and Western dedicated freight corridors are being developed at a fast pace and are

[2] World Development Report (2020), "Trading for Development in the Age of Value Chains", World Bank.

expected to bring down freight charges significantly. A total of 15 critical projects covering around 562 km track length were completed in 2019-20 and railway electrification work of total 5782 route kms was also completed in 2019-20. India has also recorded an impressive growth in metro rail projects for urban mass transportation.

Notwithstanding this progress, the infrastructure gap remains large. According to estimates of NITI Aayog, the country would need around US $4.5 trillion for investment in infrastructure by 2030. On financing options for infrastructure, we are just recovering from the consequences of excessive exposure of banks to infrastructure projects. Non-performing assets (NPAs) relating to infrastructure lending by banks has remained at elevated levels. There is clearly a need for diversifying financing options. The setting up of the National Investment and Infrastructure Fund (NIIF) in 2015 is a major strategic policy response in this direction. Promotion of the corporate bond market, securitisation to enhance market-based solutions to the problem of stressed assets, and appropriate pricing and collection of user charges should continue to receive priority in policy attention.

As in the case of the golden quadrilateral, a big push to certain targeted mega infrastructure projects can reignite the economy. This could begin in the form of a north-south and east-west expressway together with high speed rail corridors, both of which would generate large forward and backward linkages for several other sectors of the economy and regions around the rail/road networks. Both public and private investment would be key to financing our infrastructure investments. CII can play a creative role in this regard.

In my address today, I have tried to move away from an outlook overcast by the morbidity of the pandemic to one of optimism. These dynamic shifts in our economy need to be converted into structural transformations which yield sizable benefits for our economy and help to position India as a leader in the league of nations. They involve testing challenges but also the reaping of significant rewards. Indian industry will have the pivotal role in what could be a silent revolution. Can the CII be its spearhead? I leave you with these ideas and dare you to dream.

Thank you.

*Indian Economy at a Crossroad: A view from Financial Stability Angle**

Shaktikanta Das

A very warm good morning to you all. I wish to thank the State Bank of India for inviting me to deliver the keynote address today. I sincerely appreciate the efforts of the organising team in putting together this virtual conference which has now become a new normal. Banks and other financial entities are today at the forefront of the country's counter measures against the economic impact of COVID-19. They are the transmission channels for Reserve Bank's monetary, regulatory and other policy measures. They are the implementation vehicles for the financial backstop measures announced by the government.

The outbreak of COVID-19 pandemic is unambiguously the worst health and economic crisis in the last 100 years during peace time with unprecedented negative consequences for output, jobs and well-being. It has dented the existing world order, global value chains, labour and capital movements across globe and needless to say, the socio-economic conditions of large section of world population.

The COVID-19 pandemic, perhaps, represents so-far the biggest test of the robustness and resilience of our economic and financial system. In the extraordinary circumstances that we face today, history could provide us with some useful guidance with respect to the role of central banks. Guided by the age-old wisdom summarised in Bagehot's dictum[1] that ascribes the role of Lender of Last Resort (LOLR) to the central bank, the Reserve Bank of India has taken a number of important historic measures to protect our financial system and support the real economy in the current crisis. While the eventual success of our policy responses will be known only after some time, they appear to have worked so far. While reiterating our intent and dedication to steer the economy through the crisis, I would like to highlight certain key aspects of our policy measures.

I. Monetary Policy Measures

Monetary policy was already in an accommodative mode before the outbreak of COVID-19, with a cumulative repo rate cut of 135 basis points between February 2019 and the onset of the pandemic. Reversing the slowdown in growth momentum was the key rationale for this distinct shift in the stance of monetary policy, even as unseasonal rains caused temporary spikes in food inflation in the second half of 2019-20. Consistent with this policy stance, liquidity conditions were also kept in ample surplus all through since June 2019. The lagged impact of these measures was about to propel a cyclical turnaround in economic activity when COVID-19 brought with it calamitous misery, endangering both life and livelihood of people.

Given the uncertainty regarding the evolution of the COVID curve, it was absolutely critical to anticipate the emerging economic risks and take pro-active monetary policy actions of sizable magnitude, using a comprehensive range of policy instruments to optimise policy traction. The fast-changing macroeconomic environment and the deteriorating outlook for growth necessitated off-cycle meetings of the Monetary Policy Committee (MPC) – first in March and then again in May 2020. The MPC decided to cumulatively cut the policy repo rate by 115 basis points over these two meetings, resulting in a total policy rate reduction of 250 basis points since February 2019.

* Address by Shri Shaktikanta Das, Governor, Reserve Bank of India at the 7th SBI Banking & Economics Conclave organised by the State Bank of India on July 11, 2020.

1 Walter Bagehot (1873), *Lombard Street: A Description of the Money Market* (New York: Charles Scribner's Sons)

Liquidity Measures

The conventional and unconventional monetary policy and liquidity measures by the Reserve Bank have been aimed at restoring market confidence, alleviating liquidity stress, easing financial conditions, unfreezing credit markets and augmenting the flow of financial resources to those in need for productive purposes. The broader objective was to mitigate risks to the growth outlook while preserving financial stability. The liquidity measures announced by the Reserve Bank since February 2020 aggregate to about ₹9.57 lakh crore (equivalent to about 4.7 per cent of 2019-20 nominal GDP).

II. Financial Stability and Developmental Measures

Heading into the pandemic, the financial system of the country was in a much improved position, owing mainly to various regulatory and supervisory initiatives of the Reserve Bank. We had put in place a framework for resolution of stressed assets in addition to implementing multiple measures to strengthen credit discipline and to reduce credit concentration. For the five years between 2015-16 and 2019-20, the Government had infused a total of ₹3.08 lakh crore in public sector banks (PSBs). As a result of the efforts by both the Reserve Bank and the Government, the overhang of stressed assets in the banking system had declined and capital position had improved. As per available numbers (some of which are provisional) at this point of time, the overall capital adequacy ratio for scheduled commercial banks (SCBs) stood at 14.8 per cent as in March 2020, compared to 14.3 per cent in March 2019. The capital to risk weighted assets ratio (CRAR) of PSBs had improved from 12.2 per cent in March 2019 to 13.0 per cent in March 2020. The gross non-performing asset (NPA) ratio and net NPA ratio of SCBs stood at 8.3 per cent and 2.9 per cent in March 2020, compared to 9.1 per cent and 3.7 per cent as in March 2019, respectively. The Provision Coverage Ratio (PCR) improved from 60.5 per cent in March 2019 to 65.4 per cent in March 2020, indicating higher resiliency in terms of risk absorption capacity. The profitability of SCBs had also improved during the year. The gross and net NPAs of nonbank financial companies (NBFCs) stood at 6.4 per cent and 3.2 per cent as on March 31, 2020 as against 6.1 per cent and 3.3 per cent as on March 31, 2019. Their CRAR declined marginally from 20.1 per cent to 19.6 per cent during 2019-20.

Supervisory and Regulatory Initiatives

An important objective of the Reserve Bank's supervisory initiative has been to put in place systems and structures to identify, assess and proactively mitigate or manage the vulnerabilities amongst financial institutions. During the last one year, based on the assessment of events which had the potential to pose a threat to the financial stability, the Reserve Bank has reorganised its regulatory and supervisory functions with an objective of establishing a holistic approach to regulation and supervision. The unified approach is aimed at addressing the growing size, complexities, and inter-connectedness amongst banks and NBFCs. It is also aimed at effectively addressing potential systemic risks that could arise due to possible supervisory or regulatory arbitrage and information asymmetry. Further, a calibrated approach has been designed to provide the required modularity and scalability to the supervision function to ensure a better focus on the risky institutions and practices; to deploy appropriate range of tools and technology to achieve the supervisory objectives; and to enhance capability to conduct horizontal or thematic studies across supervised entities on identified areas of concern. As a fulcrum of the calibrated supervisory approach, the Reserve Bank has strengthened its off-site surveillance mechanism to identity emerging risks and assess the vulnerabilities across the supervised entities for timely action. We are also working towards strengthening the supervisory market intelligence capabilities, with the help of both personal and technological intelligence.

Specialised handling of weak institutions at the Reserve Bank now helps in closer monitoring and successful resolution of such entities in a non-disruptive manner. The timely and successful resolution of Yes Bank is an example. After exhausting all possible options and with a view to safeguard the interest of the depositors and ensure stability of financial system, we decided to intervene at an appropriate time when the net worth of the bank was still positive. The Yes Bank reconstruction scheme forged a unique public-private partnership between leading financial entities of India, and it was implemented in a very quick time, which helped the bank's revival, successfully safeguarded the interest of the bank's depositors and ensured financial stability. I wish to compliment the State Bank of India for providing leadership to this initiative. With regard to the Punjab & Maharashtra Co-operative Bank, the Reserve Bank is engaged with all stakeholders to find out a workable solution, as losses are very high, eroding deposits by more than 50 per cent.

For NBFCs, active engagement with stakeholders was useful to identify emerging risks and take prompt action. Considering their increasing size and interconnectedness, the Reserve Bank has taken steps to strengthen the risk management and liquidity management framework of NBFCs. As you may be aware, NBFCs with a size of more than ₹5,000 crore have been advised to appoint a functionally independent Chief Risk Officer (CRO) with clearly specified role and responsibilities. Also, government-owned NBFCs have been brought under the Reserve Bank's on-site inspection framework and off-site surveillance. The amendment to the Reserve Bank of India Act, 1934 effective from August 1, 2019 has strengthened the ability of Reserve Bank to better regulate and supervise the NBFCs. Besides, some large NBFCs and NBFCs with certain weaknesses are monitored closely on an ongoing basis.

In case of the Urban Co-operative Banks (UCBs), special efforts are being made to move towards a risk-based and pro-active supervisory approach to identify weaknesses in their operations early. An early warning system with a stress-testing framework has been formed for timely recognition of weak banks for appropriate action. Formation of an 'umbrella organisation', has been approved to provide liquidity, capital, IT and capacity building support to UCBs. The exposure limits of the UCBs have been brought down to reduce credit concentration and the priority sector targets have been revised substantially upwards so that UCBs remain focused on their core segment - *i.e.,* micro and small borrowers. The recent amendments in the Reserve Bank of India Act, 1934 and the Banking Regulation Act, 1949 will facilitate our supervision processes with respect to NBFCs and UCBs, respectively.

Response to the Pandemic

As a part of response to the pandemic, the Reserve Bank has undertaken a series of measures which are already in the public domain. Besides, the Reserve Bank's focus was also to ensure that the contingency response to COVID-19 was implemented by all regulated entities swiftly to minimise disruptions. Accordingly, right from the onset of the crisis, the policy measures were aimed at operational issues, and in particular, ensuring business continuity and unhindered operations of the financial market infrastructure. The Reserve Bank activated an elaborate business continuity plan for its own operations as well as ensured that banks also activate their own business continuity plans. We advised all banks on 16th March, 2020 to take stock of critical processes and revisit their Business Continuity Plan (BCP). All entities were also advised to assess the impact of COVID-19 on their balance sheet, asset quality and liquidity, and take immediate contingency measures to manage their risks.

As the lock-down has obstructed our on-site supervisory examination to an extent, we are further enhancing our off-site surveillance mechanism. The objective of the off-site surveillance system would be to 'smell the distress', if any, and be able to initiate pre-emptive actions. This requires use of market intelligence inputs and on-going engagements with financial institutions on potential vulnerabilities. The off-site assessment framework, which takes into account macro and micro variables, is more analytical and forward looking and aimed at identifying vulnerable sectors, borrowers as well as supervised entities.

While the multipronged approach adopted by the Reserve Bank has provided a cushion from the immediate impact of the pandemic on banks, the medium-term outlook is uncertain and depends on the COVID-19 curve. Policy action for the medium-term would require a careful assessment of how the crisis unfolds. Building buffers and raising capital will be crucial not only to ensure credit flow but also to build resilience in the financial system. We have recently (19th June and 1st July, 2020) advised all banks, non-deposit taking NBFCs (with an asset size of ₹5,000 crore) and all deposit-taking NBFCs to assess the impact of COVID-19 on their balance sheet, asset quality, liquidity, profitability and capital adequacy for the financial year 2020-21. Based on the outcome of such stress testing, banks and non-banking financial companies (NBFCs) have been advised to work out possible mitigating measures including capital planning, capital raising, and contingency liquidity planning, among others. The idea is to ensure continued credit supply to different sectors of the economy and maintain financial stability.

III. Major Challenges

Going forward, there are certain stress points in the financial system, which would require constant regulatory and policy attention to mitigate the risks. The economic impact of the pandemic - due to lock-down and anticipated post lock-down compression in economic growth - may result in higher non-performing assets (NPAs) and capital erosion of banks. A recapitalisation plan for PSBs and private banks (PVBs) has, therefore, become necessary. While the NBFC sector as a whole may still look resilient, the redemption pressure on NBFCs and mutual funds need close monitoring. Mutual funds have emerged as major investors in market instruments issued by NBFCs, which is why the development of an adverse feedback loop and the associated systemic risk warrants timely and targeted policy interventions. Increasing share of bank lending to NBFCs and the continuing crunch in market-based financing faced by the NBFCs and Housing Finance Companies (HFCs) also need to be watched carefully.

The global financial crisis of 2008-09 and the COVID-19 pandemic have dispelled the notion that tail risks to the financial system will materialise only rarely. The probability distribution of risk events has much fatter tails than we think. Shocks to the financial system dubbed as 'once in a lifetime events' seem to be more frequent than even 'once in a decade'. Accordingly, the minimum capital requirements of banks, which are calibrated based on historical loss events, may no longer be considered sufficient enough to absorb the losses. Meeting the minimum capital requirement is necessary, but not a sufficient condition for financial stability. Hence, it is imperative that the approach to risk management in banks should be in tune with the realisation of more frequent, varied and bigger risk events than in the past. Banks have to remember the old saying that care and diligence bring luck. To paraphrase Oscar Wilde, being caught unprepared in the face of a shock may be regarded as a misfortune, but to be caught unawares more than once may be a sign of carelessness[2].

[2] The original quote comes from a play titled *the Importance of Being Earnest* written by Oscar Wilde.

Notwithstanding the numerous steps already taken, there is always room for improvement to address several issues that may emerge in the medium to long-term. These issues are as common to NBFCs and other financial intermediaries as they are to banks. The supervisory approach of the Reserve Bank is to further strengthen its focus on developing financial institutions' ability to identify, measure, and mitigate the risks. The new supervisory approach will be two-pronged - first, strengthening the internal defenses of the supervised entities; and second, greater focus on identifying the early warning signals and initiate corrective action.

To strengthen the internal defenses, higher emphasis is now being given on causes of weaknesses than on symptoms. The symptoms of weak banks are usually poor asset quality, lack of profitability, loss of capital, excessive leverage, excessive risk exposure, poor conduct, and liquidity concerns. These different symptoms often emerge together. The causes of weak financial institutions can usually be traced to one or more of the following conditions: inappropriate business model, given the business environment; poor or inappropriate governance and assurance functions; poor decision making by senior management; and misalignment of internal incentive structures with external stakeholder interests[3].

We are placing special emphasis on the assessment of business model, governance and assurance functions (compliance, risk management and internal audit functions), as these have been the areas of heightened supervisory concern. Supervised entities generally tend to focus more on business aspects even to the detriment of governance aspects and assurance functions. There was also an apparent disconnect between their articulated business strategy and actual business operations. The thrust of the approach, therefore is, to improve the risk, compliance, and governance culture amongst the financial institutions. In this regard, the Reserve Bank has released a discussion paper on 'Governance in Commercial Banks in India' with the objective to align the current regulatory framework with global best practices while being mindful of the context of the domestic financial system. The main emphasis of the discussion paper is to encourage separation of ownership from management - while owners focus on the return on their investment, the management should focus on protecting the interest of all stakeholders. The Board, on its part, should set the culture and values of the organisation; recognise and manage conflicts of interest; set the appetite for risk and manage risks within that appetite; exercise oversight of senior management; and empower the oversight and assurance functions through various interventions. The Reserve Bank will extend these principles of good governance to large-sized NBFCs in due course.

IV. The Way Forward

Despite the substantial impact of pandemic in our daily lives, the financial system of the country, including all the payment systems and financial markets, are functioning without any hindrance. The Indian economy has started showing signs of getting back to normalcy in response to the staggered easing of restrictions. It is, however, still uncertain when supply chains will be restored fully; how long will it take for demand conditions to normalise; and what kind of durable effects the pandemic will leave behind on our potential growth. Targeted and comprehensive reform measures already announced by the Government should help in supporting the country's potential growth. Possibly in a vastly different post-COVID global environment, reallocation of factors of productions within the economy and innovative ways of expanding economic activity

[3] Basel Committee on Banking Supervision (July 2015): Guidelines for identifying and dealing with weak banks.

could lead to some rebalancing and emergence of new growth drivers. The policy measures, *i.e.,* monetary, fiscal, regulatory and structural reforms, provide the enabling conditions for a speedier recovery in economy activity while minimising near-term disruptions.

The need of the hour is to restore confidence, preserve financial stability, revive growth and recover stronger. At the central bank, we strive to maintain the balance between preserving financial stability, maintaining banking system soundness and sustaining economic activity. Post containment of COVID-19, a very careful trajectory has to be followed in orderly unwinding of counter-cyclical regulatory measures and the financial sector should return to normal functioning without relying on the regulatory relaxations as the new norm. The Reserve Bank is making continuous assessment of the changing trajectory of financial stability risks and upgrading its own supervisory framework to ensure that financial stability is preserved. Banks and financial intermediaries have to be ever vigilant and substantially upgrade their capabilities with respect to governance, assurance functions and risk culture.

It is true that the pandemic poses a challenge of epic proportions; however, human grit - manifesting through collective efforts, intelligent choices, and innovation - will tremendously help us to come out of the present crisis. Mahatma Gandhi had said, "*… the future depends on what you do today*". I have presented a bird's eye view of the resolutions that the Reserve Bank has taken currently to combat this unprecedented situation. I am confident that these will complement the measures undertaken by the Government in achieving our policy objectives. Along with the tireless efforts of thousands of people and the undying spirit of our populace, I am optimistic that these policy actions will yield desired results. These trying times will only strengthen world's faith in the resilience of our economy. We shall prove this together.

Thank you.

ARTICLES

*Onshoring the Offshore**

Currency internationalisation seems to have evolved as a natural corollary of globalisation. Several currencies, particularly those of emerging market economies (EMEs), have emerged as candidates for internationalisation. In 2019, the Reserve Bank set up a Task Force on Offshore Rupee Markets, which has spurred a number of measures on its recommendations. The regulatory framework adopted will facilitate the shift to domestic markets for hedging Indian Rupee (INR) exposures. Measures aimed at liberalising and further developing the domestic foreign exchange market will provide a conducive environment for a fuller internationalisation of the INR in consonance with India's rising profile in the global economy.

Introduction

Currency internationalisation – the phenomenon of a national currency trading beyond its borders and actively used in the invoicing of trade and financial transactions, commodities, and foreign exchange reserves – seems to have evolved as a natural corollary of globalisation. A large body of work in the literature has shown that the internationalisation of a currency confers an exorbitant privilege (Eichengreen, 2011), it imposes, responsibilities as well - deep and liquid financial markets; strong macroeconomic fundamentals; absence of restrictions on international transactions; reserve currency status (Kenen, 2011). Over the last 100 years, currency internationalisation has been unipolar – the dominance of the pound sterling being supplanted by the US Dollar. The currencies of other advanced economies have failed to gain traction in spite of becoming convertible currencies satisfying the responsibilities referred to earlier. In recent years, however, a silent revolution has been underway. Several currencies, particularly those of emerging market economies, have emerged as candidates for internationalisation in spite of being 'non-convertible'. These developments have challenged the orthodoxy and have shown that convertibility may be a necessary but not a sufficient condition for internationalisation. The circuit breaker has been the non-deliverable forward (NDF) market. Over the last three years, global turnover in foreign exchange markets rose by 33 per cent, but, EME currencies' turnover expanded by close to 60 per cent boosting their global share to 23 per cent from 15 per cent in 2013. Among its drivers is the Indian Rupee (INR) in which trading has almost doubled, in sharp contrast to the Mexican Peso (MXN), the South African Rand (ZAR), the Malaysian Ringgit (MYR) and even the Singapore Dollar (SGD). The INR NDF market is the second largest globally in terms of average daily turnover and is larger than the onshore forward market (BIS, 2019). Volumes in the offshore NDF markets have also grown on account of various factors, *viz.*, ease of access, market-making by global banks, availability of large participants like hedge funds, intermediation services like prime brokerage[1], favorable tax treatment, convenience of time zones and electronification (Patel and Xia, 2019).

An NDF is a foreign exchange derivative contract, which allows investors to trade in non-convertible currencies, with contract settlement in a convertible currency (mostly US Dollars). NDFs trade principally beyond the borders of the currency's home jurisdiction ('offshore'), enabling investors to transact outside the regulatory framework of the home market ('onshore') (McCauley *et al*, 2014). Recognising the existence of bidirectional price linkages between onshore and offshore rates (RBI, 2019), the possibility of volatility

* This article is prepared by Abhishek Kumar and Rituraj of Financial Markets Regulation Department, Reserve Bank of India. The views expressed in this article are those of the authors and do not represent the views of the Reserve Bank of India.

1 Foreign exchange prime brokerage allows clients to access liquidity from multiple dealers while maintaining a relationship for funding, clearing and settlement with a single entity, usually a large bank or an investment company, referred to as the prime broker.

spillovers from offshore markets, segmentation between onshore and offshore markets impairing the efficiency of price discovery, and undermining the regulatory framework, the Reserve Bank has engaged in developing a deep and liquid onshore foreign exchange market. Its efforts have largely focused on improving access to the onshore markets by residents and non-residents and product innovations, including the introduction of exchange traded currency futures and options in 2008 and 2010, respectively. In 2019, the Reserve Bank set up a Task Force on Offshore Rupee Markets, which has also spurred a number of measures on its recommendations.

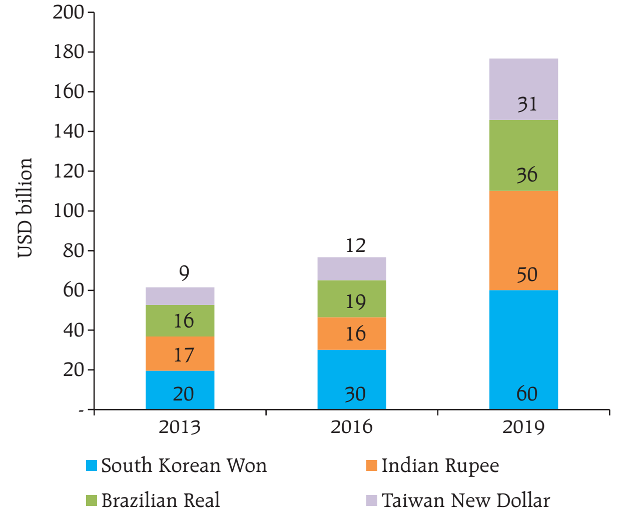
Against this backdrop this article reflects on the recent efforts made in onshoring the offshore. Section II provides a comparative overview of NDF markets globally, and hones its focus to some insights into the microstructure of the Rupee NDF market in Section III. Section IV discusses cross country approaches to the NDF market and the efforts undertaken by the Reserve Bank in the context of the INR NDF markets. Section V concludes, with perspectives on what lies ahead.

II. Global NDF Market

Historically, NDF markets evolved for non-convertible currencies, beginning with Mexico and Brazil and moved on to emerging Asian economies, including India. The most recent development is the possibility of an offshore Turkish Lira (TRY) market in the wake of recent regulatory measures limiting speculation on TRY[2].

The average daily turnover in the global NDF market stood at about USD 259 billion in April, 2019[3], with NDFs for South Korean Won (KRW), INR, Brazilian Real (BRL) and Taiwan New Dollar (TWD) accounting for 70 per cent of the total NDF turnover. These four

Chart 1: Average Daily Turnover of Top 4 NDF Currencies

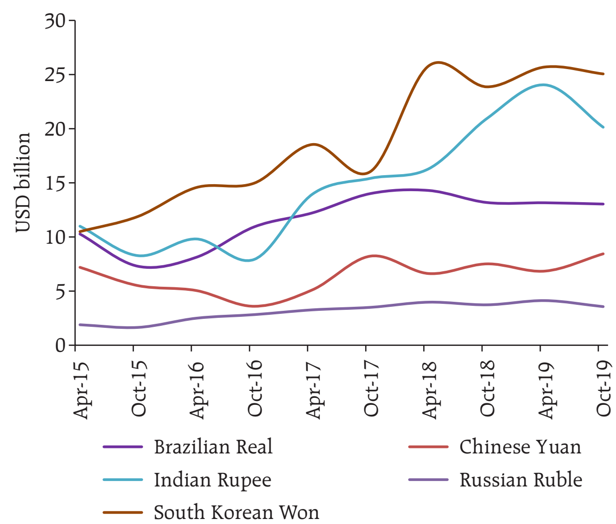


Source: BIS Triennial Central Bank Survey, 2019

currencies saw a marked increase in turnover between April 2016 and April 2019 (Chart 1).

Globally, NDFs are traded only in a handful of locations with the maximum turnover in London followed by New York, Singapore and Hong Kong SAR (Patel and Xia, 2019). KRW and INR are the most widely traded NDFs in London (Chart 2).

Chart 2: NDF Average Daily Turnover in London

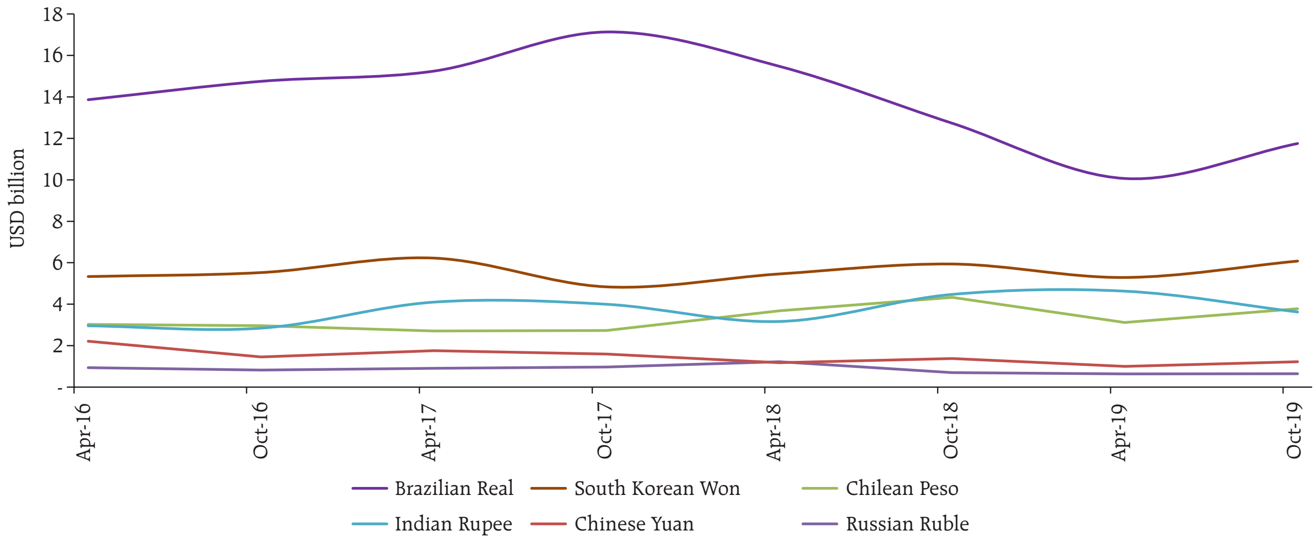


Source: London Foreign Exchange Joint Standing Committee semi-annual foreign exchange turnover surveys.

2 *https://www.risk.net/derivatives/7551741/turkey-turmoil-opens-door-to-offshore-ndf-market.*

3 BIS Triennial Central Bank Survey, 2019.

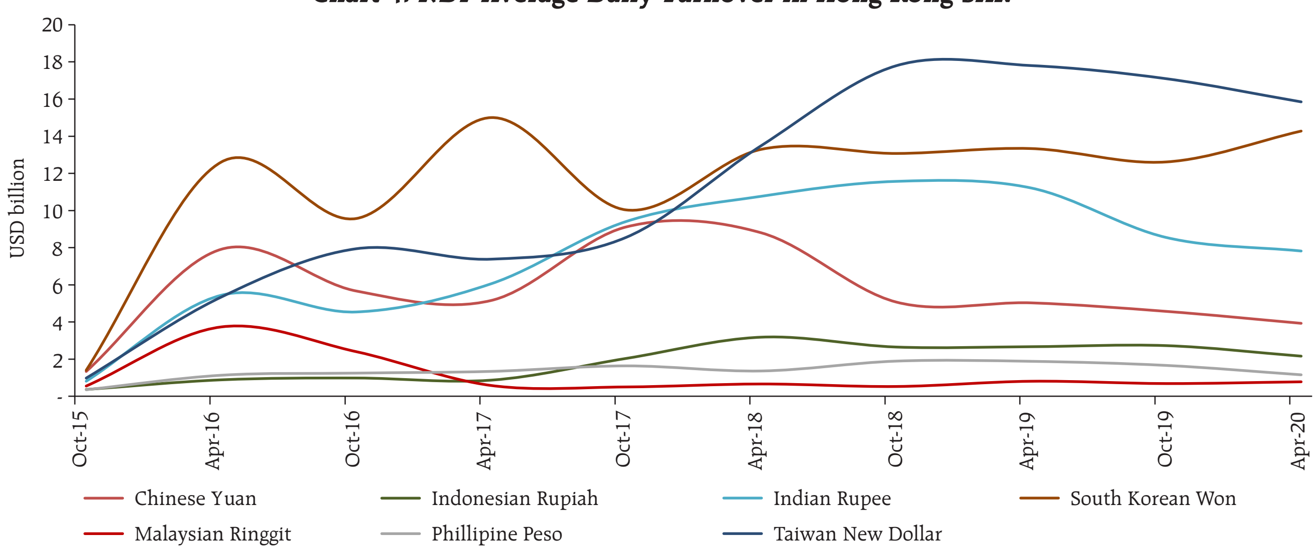
Chart 3: NDF Average Daily Turnover in New York



Source: New York Fed FX Volume Survey.

In New York, the NDFs of BRL have the highest turnover followe d by KRW, Chilean Peso (CLP) and INR (Chart 3). In Hong Kong SAR, TWD, KRW and INR are the most traded NDFs (Chart 4). INR NDFs are amongst the most traded contracts[4] in all major centres. The average daily INR NDF turnover in these centres has, however, been declining after peaking in April 2019.

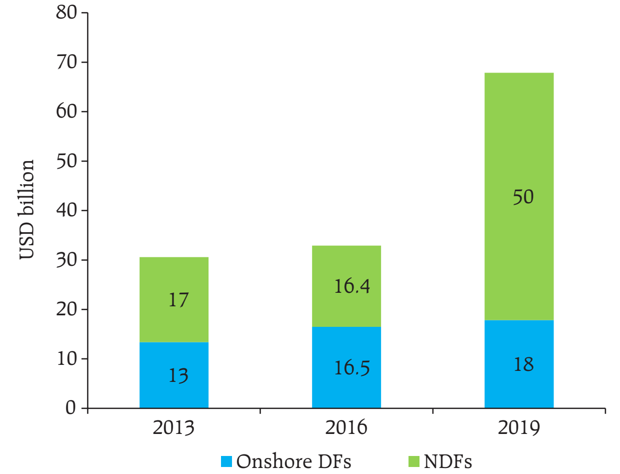
Chart 4: NDF Average Daily Turnover in Hong Kong SAR



Source: Hong Kong Trade Repository. RBI staff calculation.

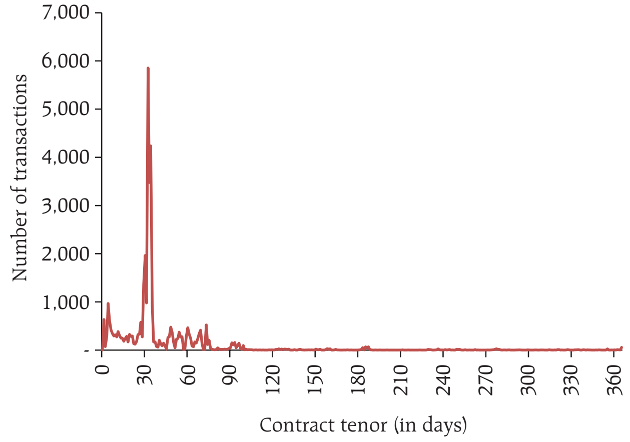
4 While currency wise NDF turnover data was not available for Singapore, the BIS Triennial Surveys and discussion with market participants indicate high INR NDF trading in Singapore.

Chart 5: Indian Rupee: Average Daily Turnover in Onshore Deliverable Forwards vs NDFs



Note: Deliverable forwards include outright forwards and FX swaps.
Source: BIS Triennial Central Bank Survey, 2019

Chart 6: Distribution of Contract Tenors (in Days) for Rupee NDF Trades



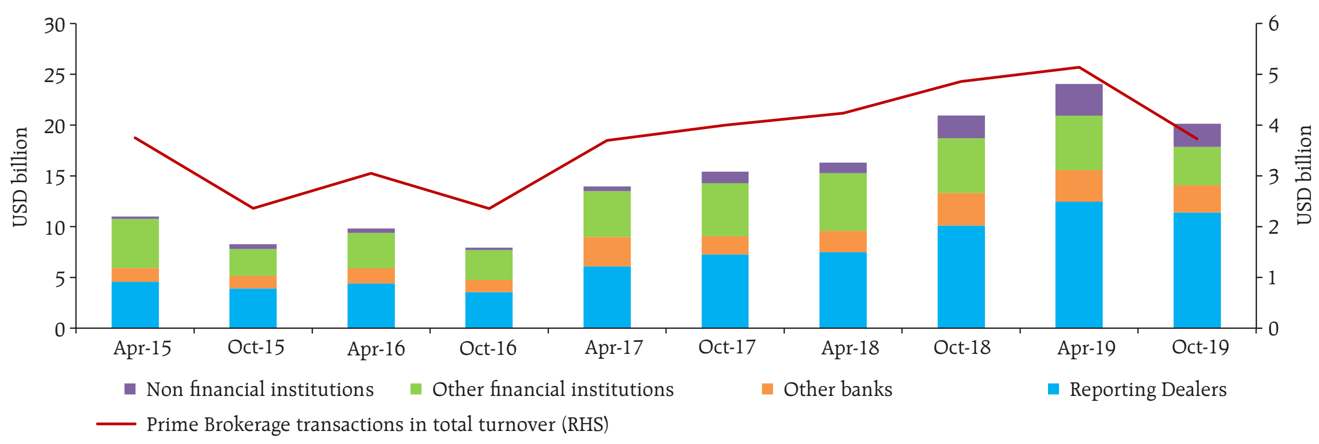
Note: Data for the month of April, 2020. Some trades beyond 1-year maturity have been excluded.
Source: DTCC and Bloomberg. RBI staff calculation.

III. Insights into Rupee NDFs

The Rupee NDF market was comparable in size to the onshore deliverable forward market, according to the BIS Triennial Surveys for April 2013 and April 2016. The 2019 Survey, however, suggests that the size of the market has increased to become almost thrice as large as the onshore market (Chart 5). Contracts with one-month or less maturity are the most liquid in the INR NDF market[5] accounting for close to 70 per cent of total contracts, presumably reflecting short term speculative positions (Chart 6).

Participants' data for London indicate that transactions among reporting dealers (relatively larger banks) may have contributed the most to the increase in INR NDF turnover (Chart 7). Prime brokerage transactions accounted for close to a quarter of

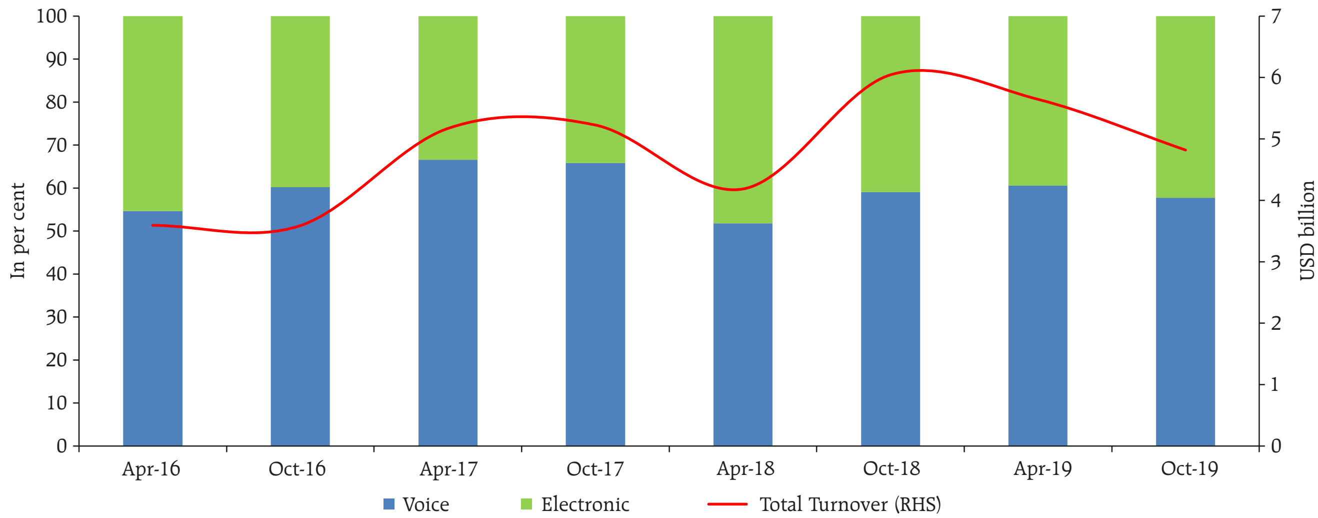
Chart 7: Rupee NDF: Participants in London



Source: London Foreign Exchange Joint Standing Committee semi-annual foreign exchange turnover surveys

5 Standard tenors (1 month, 2 months etc.) are generally more liquid than non-standard tenors. Liquidity generally declines as tenor increases (Hau et al, 2019).

Chart 8: Rupee NDF in New York: Execution Method



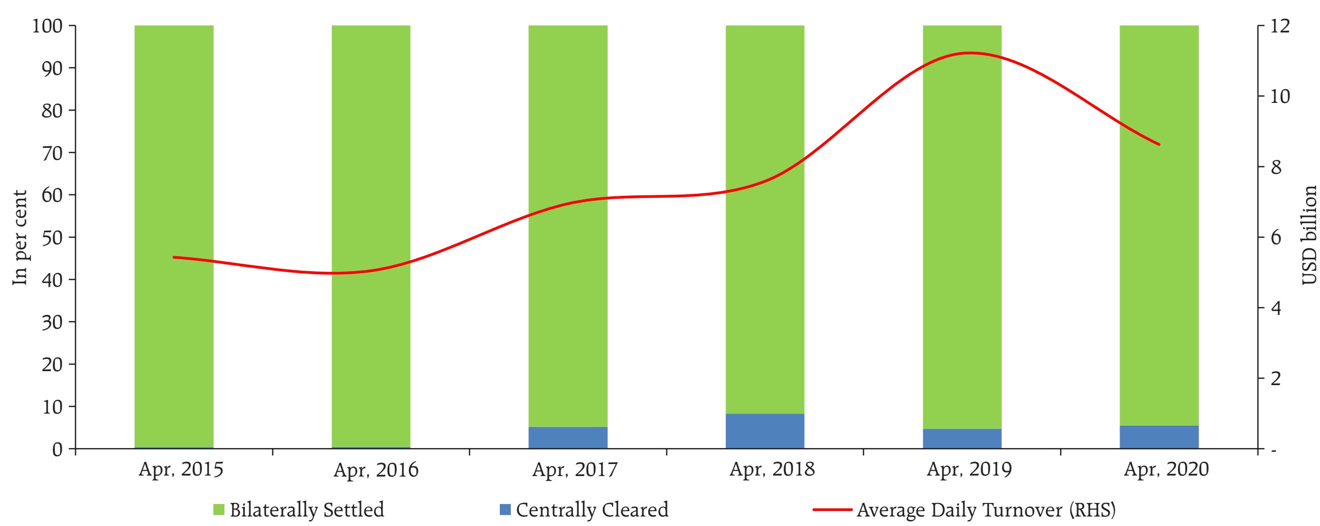
Note: Data includes other INR derivative contracts such as options.

Source: New York Fed FX Volume Survey. RBI staff calculation.

this turnover. In New York, the only centre which disseminates data on execution method, roughly half the trades have been contracted by using electronic methods (Chart 8).

INR NDF trades, like most NDF trades, are over the counter (OTC) and bilaterally settled. In recent years, however, global legal and regulatory reforms for derivatives markets are transforming NDF market microstructure from a decentralised, bilateral market to one characterised by centralised trading, disclosure and clearing (McCauley and Shu, 2016). INR NDF transactions have started being centrally cleared through a derivatives clearing organisation (DCO). However, bilaterally settled transactions still account for 94 per cent of trades in gross notional terms (Chart 9).

Chart 9: Rupee NDFs: Centrally Cleared *vs.* Bilaterally Settled Transactions



Source: DTCC and Bloomberg. RBI staff calculation.

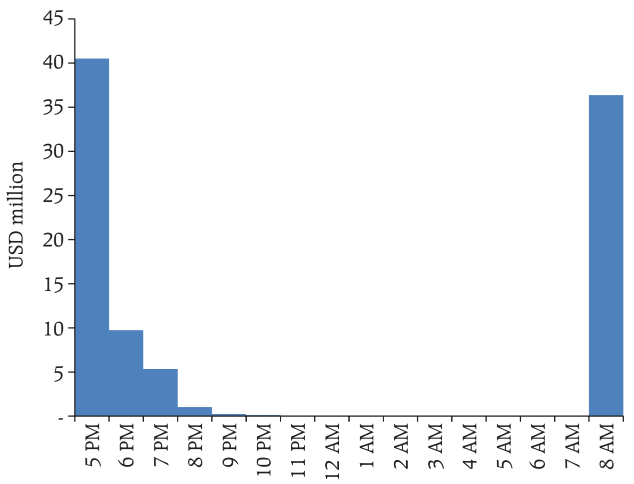
IV. Policy Responses

Concerns about growing NDF volumes have led authorities in different jurisdictions deploying distinct strategies. Korea permitted participation of local banks in the NDF market as a result of which KRW NDF got closely integrated with the onshore markets. The Korean authorities also liberalised the onshore KRW market with measures, which abolished approval requirements for some capital account transactions. With the liberalisation of the onshore FX market and the development of a deliverable offshore market (CNH), volumes in the Chinese Yuan (CNY) NDF market have tapered off considerably. Although, Taiwanese authorities undertook measures to restrict trading in NDF markets, the central bank allowed overseas branches of domestic banks to transact in New Taiwan Dollar (TWD) NDF in 2014. Bank Negara Malaysia banned trading of Ringgit offshore and asked international banks operating within its jurisdiction to avoid the NDF market. Bank Indonesia, established the domestic non-deliverable forward (DNDF) market for Indonesian Rupiah (IDR), in 2018, to serve as a parallel market to NDF, settling in the onshore market and providing an alternative to foreign investors to hedge their IDR exposure without exchange of principal while at the same time enhancing the central bank's oversight and access to the NDF market.

In the Indian context, a number of measures have been taken by the Reserve Bank in recent months to improve ease of access to the onshore markets especially for non-residents.

From January 2020, AD Category-I banks have been permitted to offer foreign exchange prices to users at all times out of their Indian books, either by a domestic sales team or through their overseas branches, in order to obviate time zone hinderances to trading. This also provided opportunities for domestic banks to access a larger international clientele, including by leveraging on their overseas branch networks. Transaction data indicate that liquidity was starting to build up in specific time buckets in the onshore market, especially before opening and post market closure, before COVID-19 struck (Charts 10 and 11).

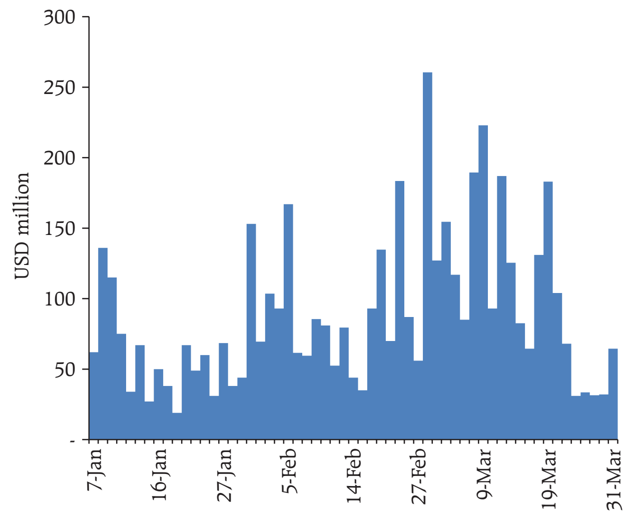
Chart 10: Average Daily Turnover in Interbank Spot Market (extended market hours)



Observation Period: January 7, 2020 to March 31, 2020.

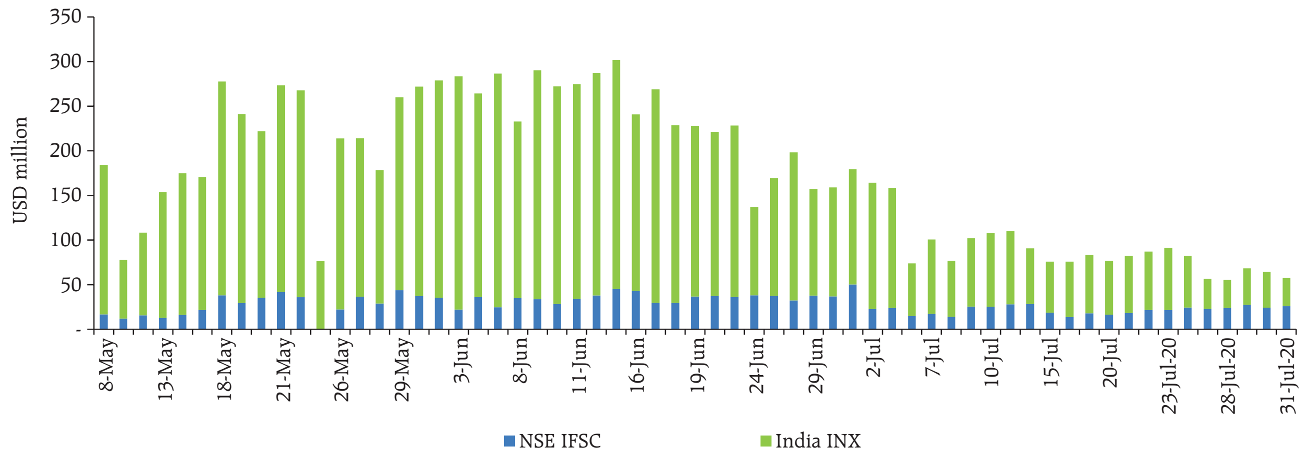
Source: Refinitiv Matching and CCIL FX-Clear Platforms. RBI staff calculation

Chart 11: Daily Turnover in Interbank Spot Market (extended market hours)



Source: Refinitiv Matching and CCIL FX-Clear Platforms. RBI staff calculation.

Chart 12: Daily Turnover of Rupee Derivatives at IFSC Exchanges

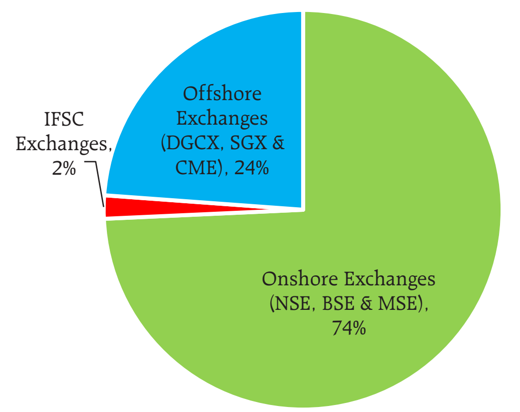


Source: Data from exchanges and RBI staff calculation.

In January 2020, the Reserve Bank permitted exchanges in the GIFT City International Financial Services Centre (IFSC) to offer INR derivative contracts with settlement in foreign currency. On May 8, 2020 the two IFSC Exchanges, India International Exchange Limited (India INX)[6] and NSE IFSC Limited (NSE IFSC)[7], launched INR derivative contracts. Since then, the average daily turnover in Rupee derivatives at IFSC exchanges has been USD 172 million with trading volume touching a high of USD 300 million on June 15. India INX has, on an average, accounted for about 80 per cent of the turnover in INR derivatives at IFSC (Chart 12). The share of INR derivatives at IFSC exchanges in total exchange traded INR derivatives turnover, globally, remains small at 2 per cent (Chart 13).

Banks in India which operate IFSC Banking Units (IBUs) were permitted to participate in the NDF market with effect from June 1, 2020. Several banks have started participating in the INR NDF markets since then. The average daily turnover by banks in India[8] in the non-deliverable derivative contracts (forwards and options) currently stands at USD 1.1 billion[9], with the highest volume of USD 2.97 billion

Chart 13: Relative Share of Turnover in Exchange Traded Rupee Derivatives



Note: DGCX is Dubai Gold and Commodities Exchange; SGX is Singapore Exchange Limited; CME is CME Group Inc; and MSE is Metropolitan Stock Exchange.

Source: Website of respective exchange. RBI staff calculation.

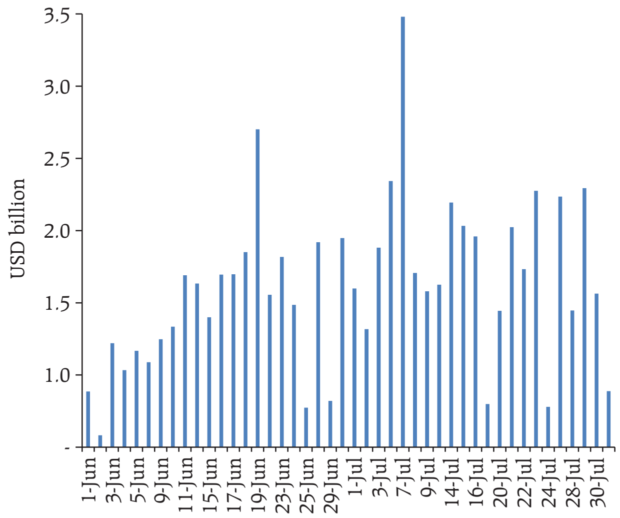
6 Subsidiary of Bombay Stock Exchange (BSE).

7 Subsidiary of National Stock Exchange (NSE).

8 Banks can undertake such transactions through their branches in India, through their IBUs or through their foreign branches (in case of foreign banks operating in India, through any branch of the parent bank).

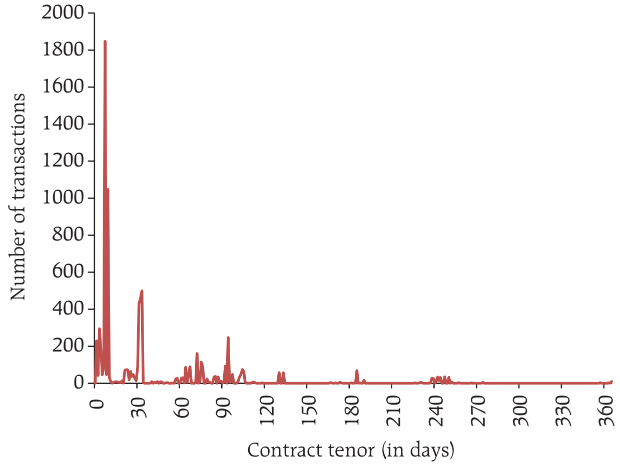
9 Including back-to-back transactions between bank branches.

Chart 14: Trading Volume in USD/INR Non-Deliverable Derivative Contracts



Source: CCIL and RBI staff calculations.

Chart 15: Distribution of Contract Tenors (in Days) for Rupee NDF Trades by Banks in India



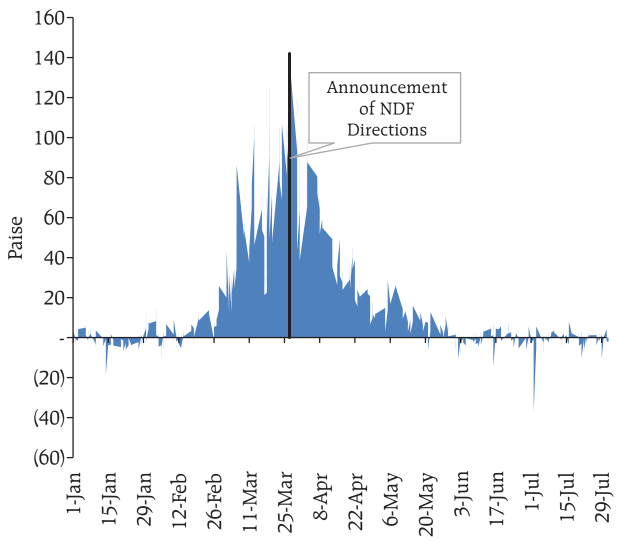
Observation Period: June 1 to July 31, 2020
Note: Few trades beyond 1-year maturity have been excluded.
Source: CCIL and RBI staff calculation.

recorded on July 7, 2020 (Chart 14). While Indian banks transact in both non-deliverable forward and option contracts, forward contracts so far dominate with a share of 97 per cent in total turnover, most contracts being short tenure contracts of maturity of about a week (Chart 15). This is a reflection of the market microstructure - greater liquidity in shorter tenors - as also the fact that Indian banks are still finding their way around unchartered territory, setting up counterparty lines and putting in place internal risk management systems.

The participation of Indian banks in the NDF market appears to have positively impacted the price differential between offshore and onshore rates (Chart 16). Spreads have gradually normalised both on reduced volatility and on announcement effects of the NDF Directions dated March 27, 2020. From more than 100 paise in March 2020, spreads have come down to zero / near zero (negative on a few occasions), since June 1, with banks arbitraging away the pricing differentials between onshore and offshore markets.

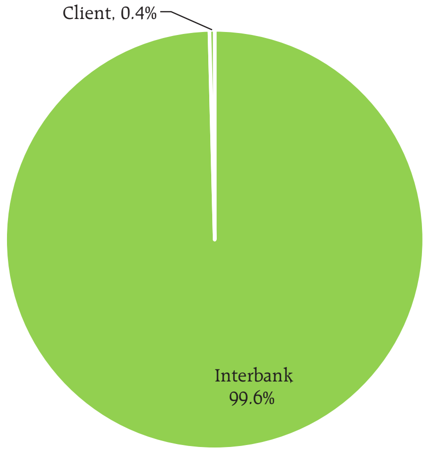
Almost all trades have so far taken place in the USD/INR currency pair. The volumes have been almost entirely concentrated in the interbank segment, although there are indications that interest from global funds and corporates is slowly growing (Chart 17). More than half of the turnover has been

Chart 16: Spread (1 month NDF over Onshore)



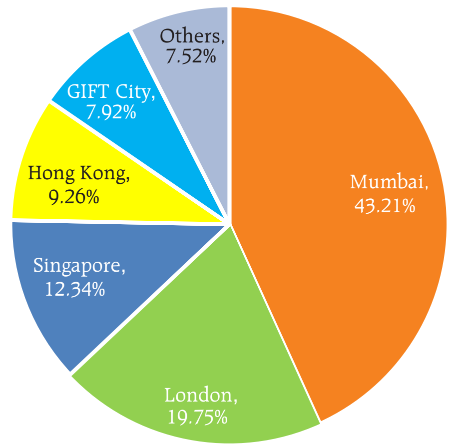
Note: Chart is based on half hourly prices.
Source: Reuters Eikon

Chart 17: Interbank *vs* Client Segments' Share in NDF transactions (by Banks in India)



Observation Period: June 1 to July 31, 2020.
Note: Data for interbank segment include back-to-back transactions between bank branches and transactions with offshore banks.
Source: CCIL and RBI staff calculation.

Chart 18: Participants' Location for Interbank NDF Transactions (by Banks in India)



Observation Period: June 1 to July 31, 2020.
Note: This data include back-to-back transactions between bank branches and transactions with offshore banks.
Source: CCIL and RBI staff calculation.

transacted by Indian bank branches in Mumbai or IBUs (Chart 18). Offshore participants were primarily located in London, Singapore and Hong Kong.

Importantly, an onshore interbank NDF market has emerged wherein local banks transact with each other. The participation of Indian banks in the NDF market has increased avenues for interbank risk management and, going forward, could help bring down hedging cost for customers.

The regulatory framework for hedging of foreign exchange risk has evolved in line with this growing internationalisation. A revised regulatory framework for hedging of foreign exchange risks was introduced on April 7. The guidelines will come into effect from September 1. Their main features are:

- Merging facilities for residents and non-residents into a single unified facility for all users;
- User classification framework has been introduced, which not only provides protection to small users, but also facilitates product innovation for more sophisticated customers;
- Allowing users having valid exposures to hedge the same by using any available instrument;
- Free cancellation and rebooking of contracts;
- Introducing facility to hedge anticipated exposures; and
- Simplifying procedures for authorised dealers to offer foreign exchange derivatives.

V. Conclusion

With onshore foreign exchange market being permitted to function round-the-clock, liquidity in INR is now developing beyond normal market hours, *albeit*, in a limited manner, but setting the stage for wider access for non-residents to domestic markets. Indian banks are now well placed to reach out to offshore clients which have, hitherto, preferred the NDF market. Initial volumes in the NDF markets have been almost entirely in the interbank segment and with restricted counterparties. This was not unexpected as banks in India have counterparty limits in place with only a few overseas entities. Client inertia in moving from offshore to onshore markets is gradually waning and some interest from global corporates and funds is already visible. As a larger number of Indian banks start participating actively in the NDF market, they may also provide an impetus for INR trades to move out of offshore centres both to the onshore market as well as to the IFSC. The regulatory framework adopted will facilitate the shift to domestic markets for hedging INR exposures. Other initiatives, including revisions in interest rate derivative guidelines to enable easier access to non-residents, the Voluntary Retention Route (VRR), introduced to attract portfolio investors with longer investment horizons and the recent Fully Accessible Route (FAR) permitting non-residents to increase their exposure to the sovereign debt securities will increase INR exposures and hedging needs. Concomitantly, recent measures aimed at liberalising and further developing the domestic foreign exchange market will provide a conducive environment for a fuller internationalisation of the INR in consonance with India's rising profile in the global economy.

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*Monetary Policy and Financial Markets: Twist and Tango**

This article analyses two sets of special market operations recently undertaken by the Reserve Bank of India (RBI) – Operation Twist (OT) and Long-Term Repo Operations (LTRO) – designed to ensure comfortable liquidity and to facilitate monetary policy transmission. We use Overnight Indexed Swap (OIS) rates to separate out expected and unexpected components of monetary policy announcements and analyse the impact of monetary policy surprises and the special operations on government bond yields. Event study analysis around announcement days indicates that (i) Government Security (GSEC) yields generally react to monetary policy surprises, and (ii) OT and LTRO had significant impact on GSEC yields of some maturities.

Introduction

The key channel of transmission of monetary policy impulses to the real economy is the financial market spectrum, others being the balance sheet channel, exchange rate channel, asset prices channel and the confidence channel (Mishkin, 2012). In a typical sequence, changes in the policy rate are immediately reflected in the full continuum of money market rates. To the extent that these short-term rates serve as benchmarks, changes in the policy rate find their way to longer term rates such as GSEC yields and bank lending rates. In turn, GSEC yields are used as benchmarks for pricing corporate bonds and other fixed income instruments while bank lending rates provide reference points for interest rates charged by other financial intermediaries.

While this synoptic view of the monetary policy propagation process appears intuitively logical and appropriate in the text book sense, it never obtains in real life. In practice, there are several impediments which render monetary policy transmission delayed, incomplete and sometimes broken, a subject on which there has been a proliferation of literature (Romer, 1989; and Romer, 2015; Bernanke and Gertler, 1995; Kahsyap et al., 1993), including in India (Mitra and Chattaphadhay, 2020). Consequently, monetary authorities frequently engage in smoothing, fixing and circumventing these impediments to transmission. Quantitative Easing (QE) is a recent, highly telegraphed illustration of such activities of central banks whereby, they seek to directly influence term premia and longer-term interest rates in the economy. Yield curve management policy of the Bank of Japan is another widely watched move belonging to the same genre of measures aimed at increasing the efficiency of monetary transmission. Against this backdrop, the motivation of this article is to study two sets of special market operations undertaken recently by the Reserve Bank of India (RBI) – OT and LTRO.

OT involves buying of GSECs with longer term maturities (*e.g.* ten years and five years) and selling of shorter term GSECs of original/ residual maturities of one and three years. LTROs are repurchase agreements collateralised by government securities, by which the central bank lends money to the banks for one to three years at the policy repo rate. As such, they would facilitate monetary transmission by reducing the cost of funds (in case of LTRO) and reducing the term premia (with OT). While the cost of funds channel may facilitate credit offtake, the reduction in the term premia may manifest through lower rates across the term structure of the financial market spectrum. In totality, the objectives of both these operations is to ensure that comfortable liquidity is available to the system to facilitate the transmission of monetary policy.

Accordingly, we analyse the relationship between the monetary policy stance and the overnight indexed swap (OIS) market, GSEC yields and GSEC-OIS spreads. Using OIS rates to filter out expected and unexpected

* This article is prepared by Satadru Das, Saurabh Ghosh, and Vidya Kamate of the Strategic Research Unit under the overall guidance of T. Rabi Shankar, ED, RBI. The views expressed in this article are those of the authors and do not necessarily represent the views of the Reserve Bank of India.

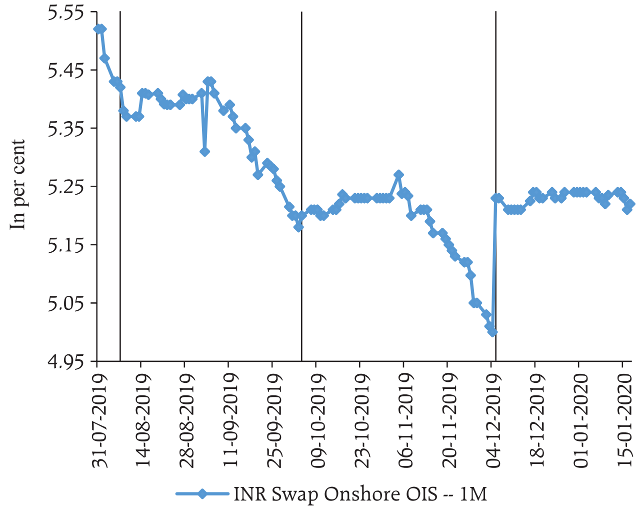
components of monetary policy announcements, we analyse the impact of monetary policy surprises and the special operations on government bond yields by estimating the observed 1-day impact, buttressed by model-based estimate of the dynamic impact of such special operations. In summary, our results indicate that (i) GSEC yields generally react to monetary policy surprises, and (ii) OT and LTRO had significant impact on GSEC yields of some maturities.

The rest of the article is divided into three sections. Section II provides evidence on the forward-looking nature of OIS contracts, enabling the use of OIS to measure the impact of monetary policy announcements on government bonds. Section III analyses the impact of RBI's special operations on bond yields. Section IV concludes with some policy perspectives.

II. OIS and the Effect of Monetary Policy on Government Securities

Overnight indexed swaps are one of the most commonly used tools for interest rate risk management by financial institutions around the world. The floating leg of the swap is linked to an overnight interest rate, *i.e.*, Mumbai Inter-Bank Offer Rate (MIBOR), which is compounded every day over the period of contract to obtain the fixed leg of the swap along with a term premium. Parties agree to exchange the difference in accrued interest computed on the notional principal amount according to fixed and floating interest rates at maturity.[1]

Chart 1: Effect of Expected and Unexpected Policy on the OIS Rate



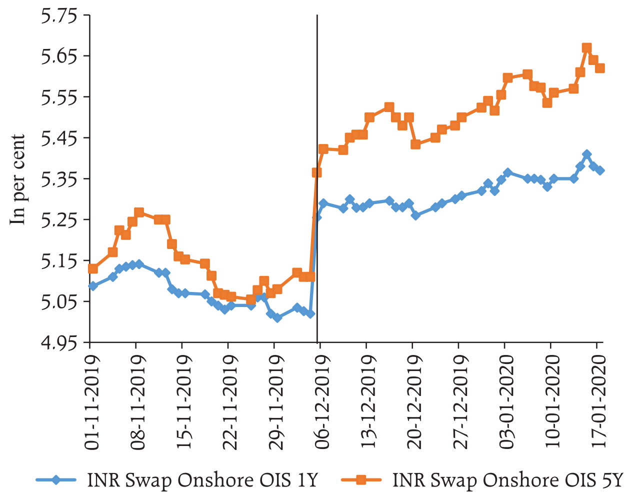
Source: Bloomberg; RBI

OIS contracts, by their design, act as a futures segment for the money market. The no-arbitrage condition ensures that the fixed leg of an OIS contract should be equal to the expected overnight rates compounded daily for the period of contract, plus a term premium. Therefore, if overnight rates are expected to increase (decrease) during the period of contract, the OIS rate should consequently move up (down). This feature of OIS is useful in isolating the "surprise" content of any announcement that can affect money market rates. Since all expected information is priced into the OIS rates, only an unexpected market sensitive news can affect it (Chart 1).

The vertical bars indicate dates of monetary policy announcements (Chart 1). OIS markets generally provide leading indications of rate decisions by the Monetary Policy Committee (MPC). The announcements of August 7, 2019 and October 4, 2019 had no perceived surprise element for the market and therefore, the OIS rate didn't move much on these days. However, after the December 5, 2019 MPC announcement of no rate cut, the 1-month OIS jumped 23 bps, indicating that the market was taken

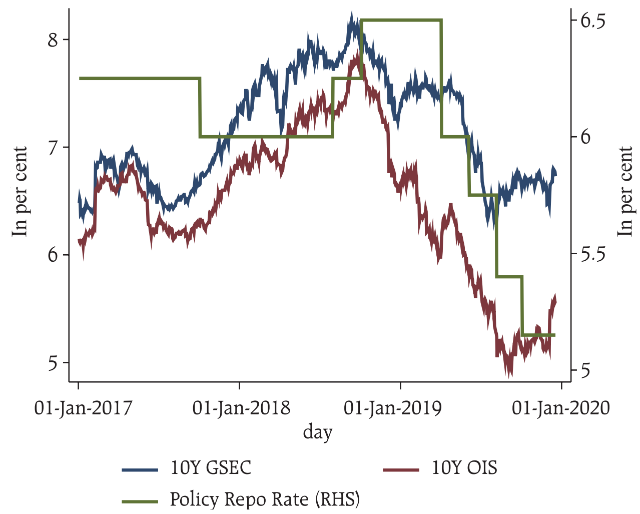
[1] For a detailed discussion on the OIS market in India refer to Ghosh & Acharya (2010). It may be mentioned that while the captioned article suggests that the GSEC rate is an important determinant of the OIS rate, we however find that GSEC market takes a cue from the unexpected or surprise component of monetary policy (using large changes in OIS rate during the policy dates as proxy) during the sample period. Our empirical strategy follows some recent studies (Lloyd, 2018; Kamber & Mohanty, 2018) and use the OIS rate as a proxy for futures of the policy rate. It may also be pointed out that in the sample under consideration in this article (May 2014 – December 2019), we do not find evidence of GSEC rate to be a determinant of OIS rate. The Granger causality test using our sample shows the opposite result, *i.e.*, OIS rate Granger cause GSEC rate and not the *vice-versa*.

Chart 2: Effect of December 5, 2019 Policy on 1Y and 5Y OIS Rate



Source: Bloomberg; RBI

Chart 3: OIS Rate Signals about Upcoming Monetary Policy



Source: Bloomberg; RBI

by surprise as it was expecting a rate cut. Thereafter, the 1-month OIS rate remained stable, indicating that the market was not expecting any rate change in the February 2020 meeting.

The 1-year and 5-year OIS rates factor in expectations about multiple policy rate announcements and, hence, provide for a market gauge of long-term policy rate expectations. We can see that both 1 and 5 Year OIS rates began gradually rising since the December 2019 announcement indicating an increase in future short-term rate expectations, after factoring in long-term inflationary expectations and anticipating bottoming out of GDP growth (Chart 2).

The OIS rate moves in anticipation of upcoming monetary policy decisions well before the actual policy is announced and the GSEC market takes a cue from the OIS market. It indicates that expected policy changes are priced into the GSEC yield well in advance of the actual policy decision (Chart 3).

This conjecture can be formally tested by regressing the 1-day change in the GSEC yield on the change in policy rate and 1-day change in OIS rate on the policy days.[2] If the GSEC yield adjusts to the anticipated rate decisions before the actual rate decision happens, then most monetary policy decisions will not affect the GSEC yield on the policy announcement days as such anticipated policies will already be priced in the GSEC market. The GSEC yield will only react to policy decisions, which were not anticipated *i.e.* "surprise", which can be captured by the change in OIS on the policy days. The OIS instruments, by their definition, are forward-looking and take into account all anticipated monetary policy decisions of the foreseeable future. In case of a "surprise" in monetary policy, the 1-day change in the OIS will give a measure of the surprise component of the policy as it will capture how far off the market expectations are from the actual policy. We consider the 33 policy days between the period May 2014 and December 2019. The result of the regression is presented in Table 1.

2 We follow the empirical model of Kenneth N. Kuttner (2001)

Table 1: Effect of Monetary Policy on GSEC

	10Y GSEC Yield	10Y GSEC Yield
Effect of Policy Rate	-0.0150 (0.0438)	0.0237 (0.0221)
Effect of 10Y OIS (Unexpected Component of Policy)		**0.4496***** (0.0631)
N	33	33

Standard errors in parentheses
$^{*}p < 0.10$, $^{**}p < 0.05$, $^{***}p < 0.01$

The regression reported in the table is the following

1. $\Delta Log(GSEC)_{t,t-1} = b * \Delta Log(Repo)_{t,t-1} + e_t$
2. $\Delta Log(GSEC)_{t,t-1} = b * \Delta Log(Repo)_{t,t-1} + c * \Delta Log(OIS)_{t,t-1} + e_t$

The sample consists of policy days from May 2014 to December 2019.

The first column shows that the GSEC yields do not seem to have a statistically significant relationship with policy decisions. However, if we regress the GSEC yield on the unexpected component of monetary policy or "surprise", which is captured by the change in the 10-year OIS rates on policy days, it shows that unexpected policy decisions do have a significant relationship with GSEC yields. This implies that policy decisions, which are anticipated ahead of the policy announcement days are already accounted for in the GSEC yield before the announcement and only policy surprises affect the GSEC yield on the policy days.

Next, we measure the magnitude and the persistence of the effect of such surprises on the GSEC yield. As indicated above, the OIS captures the effect of unanticipated events on the GSEC market. The empirical evidences indicate that larger the 1-day change in OIS, larger is the surprise factor of an event. Such events can be monetary policy surprises, unanticipated fiscal policy changes, unanticipated GDP growth rates, unanticipated inflation, and unanticipated revenue of the Government, *etc.*[3] We use a Local Linear Projection (LLP) method to measure the impact of large 1-day changes in OIS rates on the GSEC yield.

The Local Linear Projection Model is given by the following Equation:

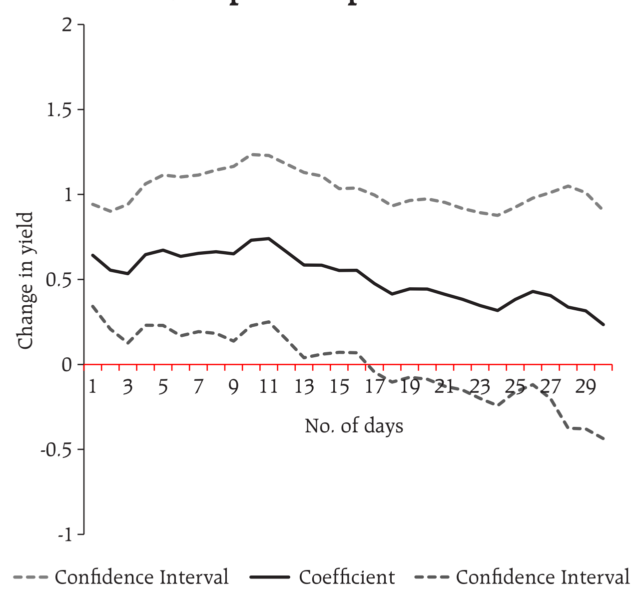
3. $\Delta Log(GSEC)_{t,t-1} = \beta_1 * Surprise + \theta_h * \Delta Log(GSEC)_{t-1,t-2} + \epsilon_t$, where $h = 1, 2,., 30$

Here the "Surprise" component is defined as large daily change in OIS rate. We consider the largest 2.0 per cent of such changes, which gives us 31 such "Surprise" events.

We consider the period between 2014 and 2019. The results are presented in the form of an impulse response function (Chart 4).

We can see that a large surprise has a large and persistent impact on the GSEC market. It affects the

Chart 4: Impulse Response Functions



[3] We are measuring the impact of 33 monetary policy announcements on the GSEC yield. As long as non-monetary surprises are not systematically correlated with MPC announcements, our estimates will not be affected by such announcements.

GSEC yield for the next 15-16 days, with a magnitude of above 0.5, throughout. The coefficients imply that a one per cent OIS rate change in a day will cause GSEC yields to be higher by 0.5 per cent, on average, for up to 16 days.

Spread between GSEC and OIS

It may be mentioned that the spread between 10-year GSEC yield and OIS rates started widening since January 2019 (Chart 3). Also, it shows that the GSEC market has seen decent transmission of monetary policy till August 2019, and thereafter rate cuts seem to have had muted impact on the GSEC yield and the spread has widened further.

To explain such a widening of spread in terms of demand and supply of securities, we analyse GSEC auctions and net open market operation (OMO) purchases. It may be observed that 2019 witnessed an increase in 10-year GSEC supply and a consequent upward pressure on GSEC yields. OMO purchases that increase demand for such securities were lower in 2019 compared to 2018. While supply and demand mismatches culminated in rather sticky GSEC yield, OIS rate followed the policy easing cycle and headed south, accentuating the spread (Chart 5).

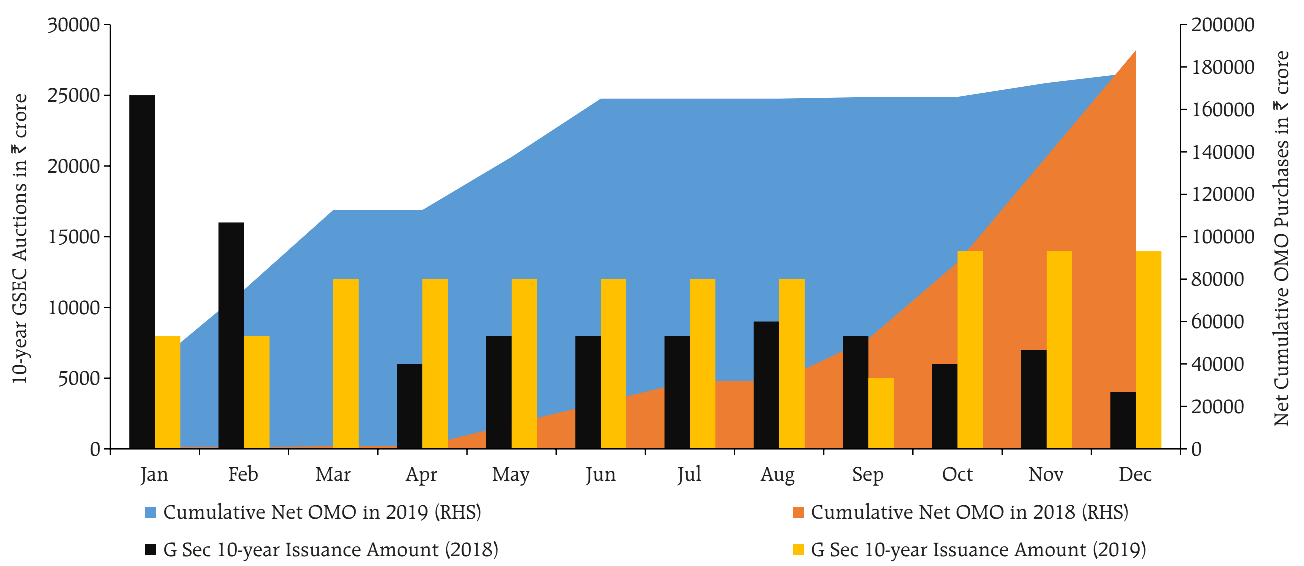
III. Effect of RBI's Special Market Operations

The Reserve Bank conducted two types of special market operations – OT and LTRO, to improve transmission and to assure banks about the availability of durable liquidity at a reasonable cost relative to prevailing market conditions. The objective of these operations is to encourage banks to undertake maturity transformation and augment credit flows to productive sectors.

A. Operation Twist

The Reserve Bank announced and conducted simultaneous purchase and sale of government securities under OMOs on four occasions in December 2019 and January 2020. The programme, popularly known as Operation Twist, involved purchasing GSEC of longer maturities and selling equal amount of GSEC of shorter maturities. The corporate bonds are benchmarked to the yields in the longer-term GSEC segment. The aim of OT is to improve transmission of the current accommodative policy stance to the corporate bond market by softening the yields on government securities at the longer end. The announcement date and security purchase/sale

Chart 5: GSEC-OIS Spread, Auctions and OMO Purchases



details of the Reserve Bank's OMOs are listed in the Annex (Table 1).

We conducted a high frequency event study analysis around the announcement day for these four special OMOs by the Reserve Bank (Swanson, *et al.* (2011) and Jones (1998)). Under the rational expectations hypothesis, asset prices should completely incorporate all information from a public announcement shortly after the announcement. Studying 1-day change in rates should provide an unbiased estimate of the effect of an announcement on asset returns in question.

We look at 1-day change in OIS rates after the announcements by the Reserve Bank. The announcement of all these four OMOs by the Reserve Bank came in the form of press releases that were posted on its website after the closure of financial markets. Hence, the 1-day change in rates is calculated as the change in OIS rates between the day of announcement and the next business day. For this analysis, we consider 1-month, 3-month, 6-month, 1-year, 5-year and 10-year OIS rates[4]. The statistical significance of each of these responses is measured relative to the unconditional standard deviation of the corresponding rates over similarly sized windows over a period of one year preceding the month of announcement of these special OMOs. The corresponding months of announcements are excluded from the calculation of standard deviation to avoid the standard deviations being unduly affected by the event itself.

The null hypothesis for this analysis is that OT announcements had no effect on OIS rates of any maturity. The alternative hypothesis suggests that announcements may provide an indication to financial markets on future course of monetary policy.

The event study results indicate that the impact of OT announcements on OIS rates is mixed and insignificant across all maturities (Table 2). The cumulative impact of announcement of all four OMO announcements on 10-year OIS rates is insignificant. This is on expected lines. The OIS rates capture market expectations about future course of monetary policy. Special OMOs are aimed at better transmission operating through GSEC yields and as such, have limited capacity to influence OIS markets. OIS rates are likely to be affected only to the extent of OT announcements acting as a signal for long-run expectations of future policy rate cuts and these effects are likely to be small.[5]

Further, we undertake an exercise similar to the one presented in Table 2 to measure the impact of the policy on the 10-year benchmark GSEC yield (Table 3).

The results indicate that there was a statistically significant 1-day impact of the OT on the GSEC yields

Table 2: Impact of Operation Twist Announcements on OIS Rates

1-day change	Maturity					
	1-month	3-month	6-month	1-year	5-year	10-year
	Estimated Responses to Announcements (in basis points)					
January 16, 2020 - January 17, 2020	1.00	0.00	-1.00	-1.00	-2.00	-8.00
January 2, 2020 - January 3, 2020	0.00	2.50	1.00	1.75	4.13	6.00
December 26, 2019 - December 27, 2019	1.00	2.00	1.00	0.87	2.00	2.00
December 19, 2019 - December 20, 2019	0.00	3.00	-1.00	-3.00	-6.63	-7.00
Cumulative, all four announcements (in bps)	2.00	7.50	0.00	-1.38	-2.50	-7.00
Unconditional Std. Dev of 1-day OIS rate changes	3.96	3.29	3.04	3.40	5.08	5.21

[4] Announcements before the outbreak of COVID-19 has been considered in an attempt to achieve a clean identification of the impact of these policies effectively filtering out the noise and volatility in the financial markets since end-March 2020.

[5] We also provide the results of a similar analysis on the effect of Federal Reserve's Operation Twist in 2011-12 on the US OIS rates. The results of the analysis show that the Fed policy had no impact on the OIS as well (Annex Table 2).

Table 3: Impact of Operation Twist Announcements on GSEC Yields on the Day of Announcement

1-day change	10 Year Benchmark
January 16, 2020 - January 17, 2020	0
January 2, 2020 - January 3, 2020	0
December 26, 2019 - December 27, 2019	-8*
December 19, 2019 - December 20, 2019	-13**
Cumulative, all four announcements (in bps)	-21**
Unconditional Standard Deviations of 1-day change in GSEC yield	4.56

*$p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

during the December 2019 announcements. The cumulative impact on the GSEC yield is about 21 basis points. We found an insignificant impact of OT announcements on 1-year GSEC yields, which hints at a flattening of the slope of GSEC yield curve.

We have already shown that OT had no significant announcement effect on OIS rates but had a statistically significant negative impact on 10-year GSEC yields (Table 2 and Table 3). Therefore, we expect to find a softening of the GSEC – OIS spread due to OT. We use the same event study technique to analyse the 1-day impact of OT related announcements on the GSEC – OIS spread of 10-year maturity (Table 4).

Overall, the cumulative impact of OT on the 10-year GSEC – OIS spread is 14 bps, which is statistically significant at 10 per cent[6].

Table 4: Impact of Operation Twist Announcements on Spreads between GSEC and OIS

1-day change	Effect on Spread between GSEC and OIS (10Y)
January 16, 2020 - January 17, 2020	8*
January 2, 2020 - January 3, 2020	-6
December 26, 2019 - December 27, 2019	-10**
December 19, 2019 - December 20, 2019	-6
Cumulative, all four announcements (in bps)	-14*
Unconditional Standard Deviations of 1-day change in GSEC yield	4.25

*$p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

6 The announcement on January 16, 2020 seemed to have a positive impact on the spread. This is because the announcement had negligible impact on the 10-year GSEC yield, while the OIS rate had softened on the day. Coincidentally, the RBI had announced Switch operations of GSECs on the same day, which might have counter-balanced the effect of the OT announcement.

B. *Long Term Repo Operations (LTRO)*

The Reserve Bank announced its intention to carry out LTRO in its Statement on Developmental and Regulatory Policies, which was released along with the Monetary Policy Statement on February 6, 2020. Under LTRO, the Reserve Bank announced that it would make repurchase contracts worth ₹ 1 lakh crore on GSECs of 1 year and 3 years maturities. The repurchase contracts were to be undertaken at the policy repo rate. As the policy repo rate is much lower than the GSEC yields of these maturities, such an announcement is likely to create arbitrage opportunities for banks and other financial institutions, which are holding excess government bonds. Such an arbitrage could bring down yields of government and corporate bonds of comparable maturities and reduce lending rates, which are benchmarked to government bonds.

The Statement released on February 6, 2020 specified the magnitude of the operation and the maturities, which are to be targeted. It did not, however, specify the amount of each security to be purchased, and the dates on which it will be done. The Statement was released to the public during the market hours, and therefore it is expected that bond markets would have reacted, at least partially on 6th February itself.

On February 7, 2020, the Reserve Bank announced the dates to carry out the first tranche of these transactions. As part of the first tranche, it was to purchase ₹ 25,000 crores of GSECs with residual maturity of 3 years on February 17,2020 and ₹ 25,000 crores of GSECs with residual maturity of 1 year on February 24, 2020. This announcement was made public at 5.30 PM (*i.e.*, after-market hours). Therefore, the full impact of this announcement could only be realised on the following trading day, which was February 10, 2020.

Given the staggering of LTRO announcements over two subsequent days, we analyse the 3-day change in the yield of the securities selected under LTRO, as well as the 3-day change in the spread of these securities over OIS of respective maturities.

Table 5: Impact of LTRO on GSEC and GSEC – OIS Spreads

Estimated Responses to Announcements (in basis points)	3-Year GSEC	GSEC - OIS Spread (3Y)	1-Year GSEC	GSEC - OIS Spread (1Y)
3-day change, February 5, 2020 - February 10, 2020 (February 8 and 9 weekends)	-27.9***	-9.65	-8.5	2.5
Standard Deviation (4-day)	7.1	6.1	5.7	5.8

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

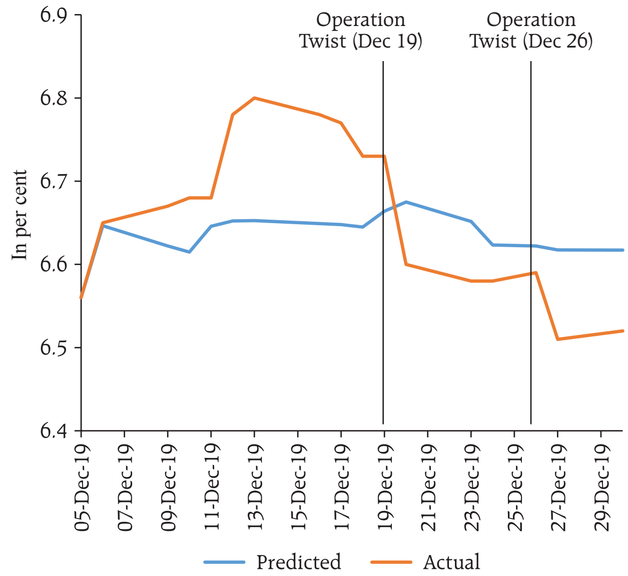
The results show that the announcement of LTRO had a statistically significant negative impact on the 3-Year GSEC but not on 1-Year GSEC or the spreads over the respective OIS rates (Table 5).

C. *Dynamic Impact of Special OMOs*

We have estimated the one-day impact of announcements related to OT in Table 2 and Table 3. However, our local linear projection model defined by equation 3 shows that a surprise announcement in monetary policy can affect the GSEC yield for up to next 16 business days (Chart 4). The surprise is defined in our model as 1-day change in OIS, which is among the top 2 per cent of all such changes. The decision to hold policy rates unchanged in the MPC decision of December 5, 2019 came as a large surprise to the OIS market and, as a result, the OIS of all maturities show a steep jump (Chart 1 and Chart 2). In fact, the one-day change in OIS on December 5, 2019 is the largest single day change in OIS in our sample. As discussed in Section II, any unanticipated change in OIS rate leads to a significant change in GSEC yields in the same direction. Therefore, it can be expected that the large rise in OIS would have led to an increase in GSEC after December 5, 2019. We use the model in Equation 3 to plot a predicted GSEC based on the surprise effect of December 5 policy announcement. We also plot the actual GSEC along with it (Chart 6).

The rise in actual 10-year GSEC yield was more than the model predicted one, though both rose after the December 5 policy announcement

Chart 6: Actual *Versus* Model Predicted Yields



(Chart 6). We also see that the two OT announcements on December 19 and 26, 2019 brought down the GSEC yields significantly. Since this model does not account for the special OMOs (our sample of analysis ends before the special OMOs begin), the model-predicted GSEC is not affected by the OT announcements. Our model shows that the two OMOs brought down the GSEC yield below levels predicted by the model in the absence of special OMOs.

IV. Conclusion

This article analyses the effect of monetary policy announcements and special market operations by the Reserve Bank on GSEC yields. We use the OIS rate to isolate surprise element of monetary policy announcements and show that for most of our sample period, GSEC market takes signal from the forward looking OIS market and adjusts yield even before the formal policy rate announcements are made. A surprise in policy decision, on the other hand, has an immediate and persistent impact on the GSEC yields. We also find that this mechanism of transmission of monetary policy to GSEC yields has weakened since the latter half of 2019-20, which could be due to excess supply and lack of demand in the GSEC market. The weakening of the transmission mechanism of monetary policy to GSEC yields has dampened the transmission of rate cuts into corporate bond yield and lending rates as GSEC yields act as a benchmark for these rates. This might have necessitated the Reserve Bank to intervene using special market operations, namely, OT and LTRO. We analyse the impact of these special interventions on GSEC yield and find that OT and LTRO had significant transmission that got reflected in select maturities of GSEC yields. Our analysis indicates that special operations such as OT and LTRO, which directly intervene in the bond market can be useful tools in facilitating transmission of monetary policy when the regular mechanism of transmission does not perform as expected.

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Annex

Table 1: Announcement of Special OMOs by the Reserve Bank

Announcement Date	Purchase/ Sale Date	Details of Securities Purchase				Details of Securities Sale			
		Sr. No	Security	Date of Maturity	Aggregate Amount	Sr. No	Security	Date of Maturity	Aggregate Amount
19-Dec-19	23-Dec-19	1	6.45% GS 2029	07-Oct-29	₹ 10,000 crores	1	6.65% GS 2020	09-Apr-20	₹10,000 crores (No security-wise notified amount)
						2	7.80% GS 2020	03-May-20	
						3	8.27% GS 2020	09-Jun-20	
						4	8.12% GS 2020	10-Dec-20	
26-Dec-19	30-Dec-19	1	6.45% GS 2029	07-Oct-29	₹ 10,000 crores	1	6.65% GS 2020	09-Apr-20	₹ 10,000 crores (No security-wise notified amount)
						2	7.80% GS 2020	03-May-20	
						3	8.27% GS 2020	09-Jun-20	
						4	8.12% GS 2020	10-Dec-20	
02-Jan-20	06-Jan-20	1	7.32% GS 2024	28-Jan-24	₹ 10,000 crores (No security-wise notified amount)	1	6.65% GS 2020	09-Apr-20	₹ 10,000 crores (No security-wise notified amount)
		2	7.27% GS 2026	08-Apr-26		2	7.80% GS 2020	03-May-20	
		3	6.45% GS 2029	07-Oct-29		3	8.27% GS 2020	09-Jun-20	
						4	8.12% GS 2020	10-Dec-20	
16-Jan-20	23-Jan-20	1	7.32% GS 2024	28-Jan-24	₹ 10,000 crores (No notified amount)	1	7.80% GS 2021	11-Apr-21	₹ 10,000 crores (No notified amount)
		2	6.45% GS 2029	07-Oct-29		2	7.94% GS 2021	24-May-21	

Annex Table 2: Impact of Fed's Operation Twist Announcements on US OIS rates

1-day change	Maturity		
	1-Year	5-years	10-years
	Estimated Responses to Announcements (in bps)		
1-day change, Sep 21, 2011 - Sep 20, 2011	-2	-3	-4
1-day change, Jun 20, 2012-Jun 19, 2012	-2	1	4
Unconditional Standard Deviations of 1-day OIS rate changes	1.92	4.22	5.54

*Policy Rate Expectations in Media**

Big data tools like text mining and natural language processing are relatively modern methods of information extraction from unconventional data sources, which help in providing additional policy inputs to central banks. This article analyses historical unstructured newsfeed from media on the Reserve Bank of India's (RBI) policy (repo) rate[1] to generate a Sign Success Ratio (SSR) to evaluate media sentiment with respect to the expected directional change in repo rate. Empirical analysis reveals that media sentiment appears to track the policy rate decisions reasonably well.

Introduction

As stated by Alan Greenspan, former Chairman of the Board of Governors of the Federal Reserve System, in 1987, although jokingly, "Since I've become a central banker, I've learned to mumble with great incoherence. If I seem unduly clear to you, you must have misunderstood what I said." (Murray, 1987, Subbarao, 2011). From the earlier era of secrecy, opacity and constructive ambiguity, preference for enhanced transparency to influence the expectations of economic agents has been a conscious shift.

Over the last few decades, central bank communication has significantly changed, recognising the role of expectations of agents in influencing macroeconomic outcomes, besides aiming to enhance public understanding of their work, and strategic communication can also influence the expectations channel of monetary policy transmission (Beyer *et al.*, 2017, Weidmann, 2018).

With the growing importance of central bank communication in market economies, the role of electronic and print media has gained importance. Media disseminates, explains and interprets news to the general public, and also conveys concerns, perceptions and opinions of various economic agents to the policy makers, either directly or indirectly. Traditionally, central banks have used various forwarding-looking surveys to elicit feedback on a wide range of macro-economic and financial variables from firms, households and professionals, to bridge data gaps and generate high frequency data for policy inputs. With deeper penetration of internet, new sources (newsfeeds, online portals, social media platforms) are transmitting news to the market as well as to the public, generating micro voluminous data at high frequency.

Against this backdrop, an attempt has been made to analyse media expectations/ perceptions on repo rate, prior to policy announcement date, to infer the expectations of public in general. This article analyses historical unstructured newsfeed from media on the Reserve Bank's policy (repo) rate. To the best of our knowledge, this is perhaps the first such study in India, on media sentiment about the Reserve Bank's policy (repo) rate decisions captured and compiled on a near real time basis.

Rest of the article is organised into five sections. Section II presents a brief review of literature, Section III describes the data and methodology used in the study. Section IV contains empirical results. Concluding remarks are presented in Section V.

II. Review of Literature

Central banks' monetary policy actions get wide coverage in media and are deliberated extensively. Media is an important channel of communication and acts as a bridge between a central bank and the wider public. News reported on a real time basis draws attention of general public, market, analysts, economists and academicians. Credible and effective

* This article is prepared by Geetha Giddi and Shweta Kumari, Big Data Analytics Division, Department of Statistics and Information Management (DSIM), Reserve Bank of India (RBI). The views expressed in this article are those of the authors and do not represent the views of the Bank. The authors gratefully acknowledge the guidance provided by Dr. Sasanka Sekhar Maiti. The errors, if any, are those of the authors.

[1] Policy rate and repo rate are used interchangeably in this article.

policy, alongwith clear communication, can help achieve central banks' objectives. In an ideal situation, policy stance and stakeholders' expectations/ perceptions should be aligned; yet, at times, they are not. There is ample literature on media reporting of monetary policy and also how media brings stakeholders' perception to the forefront. This aspect has been increasingly acknowledged in modern monetary policy frameworks. We briefly review some of the recent studies.

The coverage of monetary policy actions of the European Central Bank (ECB) reported in print media was analysed using a quantitative index on the extent of media coverage and a qualitative index measuring the favorableness and intensity of monetary policy discussions (Berger *et al.*, 2006). It was found that media critically discusses the ECB policy actions taking into account market expectations and current inflation dynamics. Also, media coverage on policy action was found to be highly receptive to the ECB communications.

On similar lines, a media expectation index was constructed based on media reports on ECB statements and it was observed that media communication added valuable information about the next policy decision (Lamla and Sturm, 2013).

The US Federal Open Market Committee (FOMC) statements and discussion of FOMC statements in news were analysed using semantic orientation scores, which were found to have significant association with policy rate decisions (Lucca and Trebbi, 2009).

Bank of Canada's (BOC) communication and its market commentary were analysed to examine the effects on volatility/ level of returns in short-term interest rates. Text mining tools were applied to extract topics and it was established that market stories had a significant effect on volatility and returns in short-term markets (Hendry, 2012).

In another study, a Hawkish-Dovish (HD) indicator was constructed on news articles post the ECB's press conference reflecting media's interpretation of the ECB's official communication and the empirical analysis suggests that such an indicator can help assess future monetary policy stance (Tobback *et al.*, 2017).

In a recent research work, machine learning technique was used to extract expectations of stakeholders on Bank of Indonesia's policy rate. An expectations index based on news was constructed a fortnight prior to policy meeting, and the analysis revealed its high degree of correlation with the policy rate (Zulen and Wibisono, 2018).

III. Data and Methodology

III.1 Data - Policy rate announced by the Reserve Bank is taken as the benchmark indicator in the study. Policy rate expectations in media form the main data source for this article, which is described below. We begin with collection of news in online print media. This step is crucial for creation of precise corpus (collection of news items) as news in general consists of information on multiple topics, which may be noisy and out of context. The data are suitably cleaned and pre-processed following the steps below.

a. Creation of Corpus - News articles used in this study are sourced from Meltwater[2]. Daily news related to policy rate from April 2015 to December 2019 was culled out from this source. April 2015 was chosen as the starting point in view of the start of the flexible inflation targeting (FIT) regime in India.

b. Language Based News Filtering - Information extraction and sentiment classification methodologies are fairly developed for English language and, therefore, we limit our scope to English news in the current study. One may think

[2] Media Intelligence Firm

of exploring and extracting sentiment from news in other Indian languages as well, to check possible variation in sentiment on account of language (if any). However, English being a widely used language across states/ regions in India, we believe that the sentiments extracted from news reported in English would be reasonably representative.

c. Keyword Based News Filtering - News articles discussing the topics related to the Reserve Bank's, repo rate, policy rate, MPC and name of the Reserve Bank's Governor are considered.

d. Date Based News Filtering - It is observed that media coverage on repo rate related news generally increases as the policy announcement day approaches. Therefore, news filtered following the previous step was filtered again to retain only news pertaining to six consecutive days prior to the date of announcement of monetary policy. However, it is also observed that in case there are any other major events (e.g. fiscal policy, major developments in other central banks), the media coverage on repo rate is comparatively lower. Therefore, the corpus keeps fluctuating from one period to another.

III.2 Methodology

Methodology for sentiment classification, aggregation of sentiments and validation is described in detail below.

III.2.1 Sentiment Classification

Big data tools like text mining and natural language processing are relatively modern methods of information extraction from unconventional data sources and could provide additional policy inputs to central banks.

Table 1: Semantic Orientation Keywords

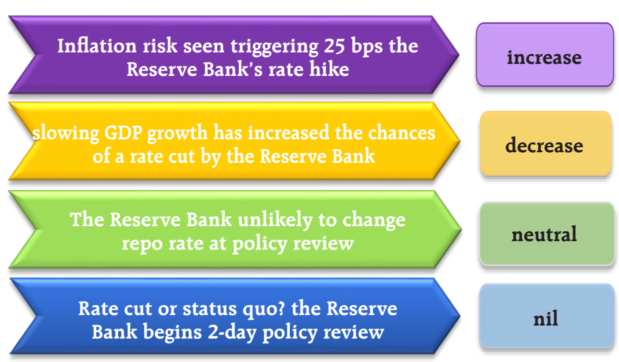
Increase	Decrease	Neutral
rise, increase, go up, hike, raise, hawkish, tighten	decline, decrease, ease, curtail, cut, slash, soften, dovish	status quo, hold, neutral, no change, stay put, remain, unchanged, maintain, pause

Each news item was classified into one of three sentiment classes, *viz,* increase, decrease, neutral based on the semantic orientation keyword present in the news. The keywords are chosen so as to represent similar semantic orientation, as indicated in Table 1.

Some news items were not assigned any sentiment, as clarity on sentiment could not be established. Sentiments were assigned to each of the news by thoroughly reading the news item[3]. In order to be objective and minimise human error, the sentiment assignment task was independently carried out by the authors and sentiments were reconciled / reassigned wherever required. Illustrations on the same are given below in Chart 1.

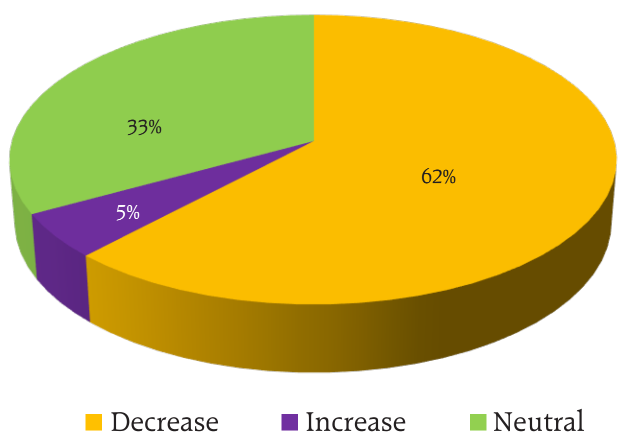
After pre-processing, cleaning and eliminating news with nil sentiment, news items were

Chart 1: Illustration of Sentiment on Policy Rate



[3] Big data tools such as machine learning and natural language processing may be applied for text mining and sentiment assignment. However, sentiment assigned by human experts is in practice (Beckers *et al.*, 2017, Lamla & Sturm, 2013).

Chart 2: News Distribution



assigned sentiments in one of the three classes, *viz,* increase, decrease, neutral during the period under consideration (April 2015 to December 2019). Sentiment class-wise proportion of news items is presented in Chart 2.

III.2.2 Aggregation of Sentiments

Post classification of documents (news items) under one of the sentiment classes, *viz,* "increase", "decrease" and "neutral", the next step is to aggregate the documents and derive overall sentiment for a given period. This is done in terms of Sentiment Concentration Class (SCC), which is derived in the following manner:

a. **Step 1 -** Each news item is assigned a sentiment score as indicated below-

- "increase" sentiment: score 1
- "decrease" sentiment: score 2
- "neutral" sentiment: score 3

This score is just a broad numeric representation for a sentiment class and does not indicate the exact magnitude of a sentiment class.

b. **Step 2 -** Any error on account of a particular day gets adjusted while arriving at the cumulative sentiment as of that day. However, individual day sentiments may also be considered, especially in situations wherein some important events precede the monetary policy announcement, which may have an influence on media sentiments.

News items are aggregated on the basis of individual day and cumulative days, as defined below.

$$P_{c,j\,|t} = \frac{n_{c,j\,|t}}{\sum_{c=1}^{3} n_{c,j\,|t}} \quad \ldots.. (1)$$

$$PP_{c,j\,|t} = \frac{nn_{c,j\,|t}}{\sum_{c=1}^{3} nn_{c,j\,|t}} \quad \ldots.. (2)$$

where,

$n_{c,j\,|t}$ = total number of news items with sentiment score c, on j^{th} day prior to policy announcement day t,

$nn_{c,j\,|t}$ = total number of news items with sentiment score c, upto j^{th} day prior to policy announcement day t,

$c = 1, 2, 3$

$j = 6, 5, 4, 3, 2, 1$

$t = 1, 2\ldots m$

m = number of time periods (policy announcement days) under consideration[4]

c. **Step 3** – Sentiment Concentration Class (SCC) is derived as below:

$$SCC_{i,j\,|t} = c, \text{for which } P_{c,j\,|t} = max_c(P_{c,j\,|t}) \ldots..(3)$$

$$SCC_{k,j\,|t} = c, \text{for which } PP_{c,j\,|t} = max_c(PP_{c,j\,|t}) \ldots(4)$$

Following the above steps, SCC can be derived for j^{th} day for every policy announcement day t, on

4 In India, policy review is at a bi-monthly frequency. Accordingly, the policy day t occurs every alternate month. In this article, it is indicated in discrete manner, with 1 period gap, for simplicity.

an individual day basis (i) as well as for cumulative day basis (k). SCC indicates the sentiment class for majority of responses, for a given policy window[5].

III.2.3 Validation Methodology

It is important to validate any indicator with a benchmark in order to examine its usefulness. We attempt to examine how well the media sentiment is associated with actual policy rate decisions taken by the Reserve Bank's, from time to time. Directional analysis is adopted to evaluate sentiment *vis-à-vis* actual policy rate.

For comparative analysis, the Reserve Bank's repo rate is converted into a qualitative indicator on the same lines as media sentiment, following the methodology below.

$$B_t = \begin{cases} 1, \text{ if repo rate}_t > \text{ repo rate}_{t-1} \\ 2, \text{ if repo rate}_t < \text{repo rate}_{t-1} \\ 3, \text{ if repo rate}_t = \text{ repo rate}_{t-1} \end{cases} \quad \ldots.. \quad (5)$$

where repo rate_t is actual repo rate for time period t.

In the next step, we define an indicator function for j[th] day as below.

$$I^{i}_{j,t} = \begin{cases} 1, \text{if } SCC_{i,j\,|t} = B_t \\ 0, \text{otherwise} \end{cases} \quad \ldots.. \ (6)$$

$$I^{k}_{j,t} = \begin{cases} 1, \text{if } SCC_{k,j\,|t} = B_t \\ 0, \text{otherwise} \end{cases} \quad \ldots.. \ (7)$$

Finally, we compute a measure, Sign Success Ratio (SSR)[6] to evaluate the sentiment *vis-à-vis* directional change in repo rate, as below.

$$SSR_{ms,i,j} = \frac{\sum_{t=1}^{m} I^{i}_{j,t}}{m} \quad \ldots.. \ (8)$$

$$SSR_{ms,k,j} = \frac{\sum_{t=1}^{m} I^{k}_{j,t}}{m} \quad \ldots.. \ (9)$$

SSR, as defined above, is a measure of proportion of time periods when the media sentiment matched with the actual change in repo rate (directionally). A large SSR indicates that media is able to gauge directional change in policy rate decision to a great extent.

IV. Empirical Results

The analysis reveals that for most of the time period under consideration, sentiment was noticeably concentrated in one of the sentiment classes (increase/decrease/neutral), indicating media's overall tilt towards a particular rate action. Proportion of news one day prior (cumulative) to policy announcement day is presented in Chart 3.

It is found that sentiment concentration was directionally in sync with the policy rate decision except on few occasions. Similar Charts for other days are presented in Annex I.

We computed SSR for various days as defined in Section III.2.3 and the same is presented in Table 2. It is observed that media sentiment was directionally in sync with the policy rate decision taken by Reserve Bank, except on few occasions, as evident from high value of the SSR.

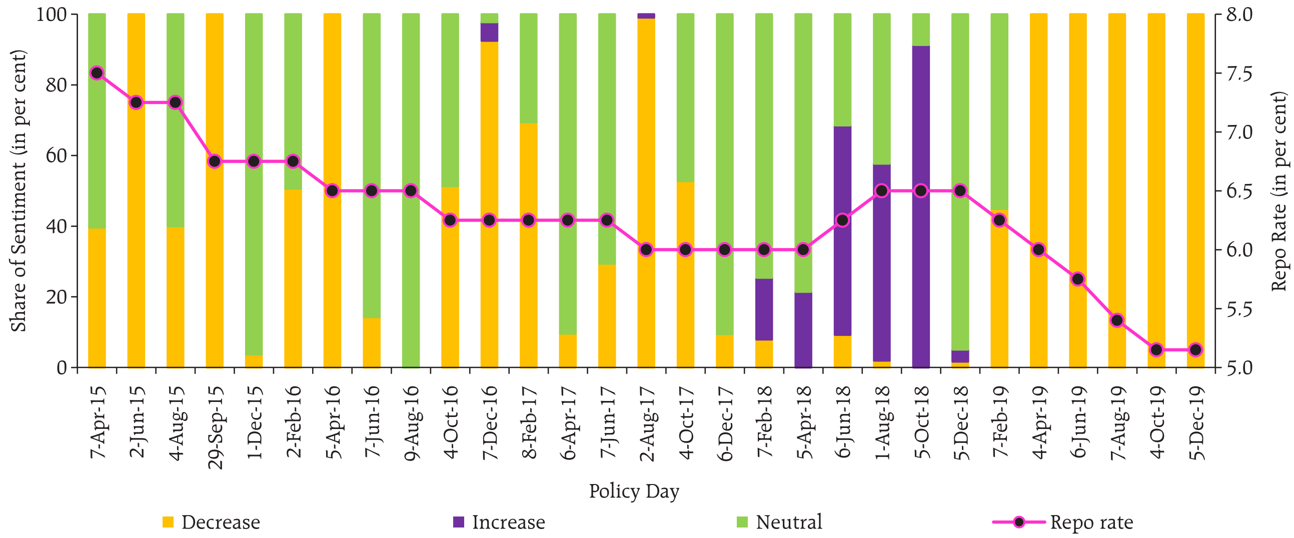
As the news coverage generally increases with the policy announcement date approaching, the sentiment also starts firming up, as reflected by the increase in SSR.

On a cumulative basis, the SSR turned out to be 68 per cent for six days prior to the policy day and 76 per cent for two days prior to the policy day. The sentiments were stronger even three days prior to the policy announcement day with a high SSR at 72 per cent.

5 Repo rate is a policy instrument, where past experience shows that status quo in repo rate is a frequent phenomenon and the change (increase or decrease), whenever occurs, is always in discrete terms. And, therefore, validation of media sentiment (increase, decrease, neutral) *vis-à-vis* change in repo rate has been done on directional basis.

6 This Sign Success Ratio has been defined in line with Buono *et al.*, 2018

Chart 3: Media Sentiment One Day Prior to Policy Day



Note: The solid line denotes the Reserve Bank's repo rate; the bars denote proportion of news in each sentiment class.

V. Conclusion

Over the last decade, many central banks have emphasised on increased communication and transparency to assist key stakeholders in the economy by explaining the intent behind policy changes and to anchor expectations, which in turn is believed to enhance the effectiveness of monetary policy.

Table 2: Media Sentiment v/s Policy Rate Decision

Reference day (j)	$SCC_{i,j}\|_t$ / $SCC_{k,j}\|_t$	Individual Day				Cumulative Days			
		B_t			$SSR_{ms.i.j}$	B_t			$SSR_{ms.k.j}$
		1	2	3		1	2	3	
6	1	2		2	68	2		2	68
	2		8	6			8	6	
	3			7				7	
5	1	1			70	2		1	71
	2		10	7			10	7	
	3	1		8				8	
4	1	2		1	69	2		2	69
	2		9	6			9	6	
	3		1	7			1	9	
3	1	1		2	69	2		2	72
	2		8	4			9	5	
	3	1	2	11			1	10	
2	1	2		1	72	2		1	76
	2		9	6			9	5	
	3		1	10			1	11	
1	1	1		1	76	2		1	76
	2		10	5			9	5	
	3	1		11			1	11	

Note: Total time periods considered to capture direction of change in repo rate are 29 (Apr 2015 to Dec 2019). However, for some days there were no relevant news items and, therefore, the count of time periods may not add up to 29.

The central bank's decision on policy rate is keenly awaited by various stakeholders in the economy and receives wide coverage in print and electronic media. In this article, we exploit the unstructured text contained in news items and build a sentiment indicator on policy rate decision. A measure Sign Success Ratio (SSR) is constructed to evaluate media sentiment *vis-à-vis* directional change in repo rate.

It is found that the SCC based on media sentiment captured ahead of the policy announcement date moves in sync with the actual direction of policy rate decision on most of the occasions during the study period. Thus, a measure like the SCC can be tracked to gauge media's expectations regarding the policy decision. The methodology has the potential to be extended to gauge media sentiments about key macroeconomic variables before their actual public release.

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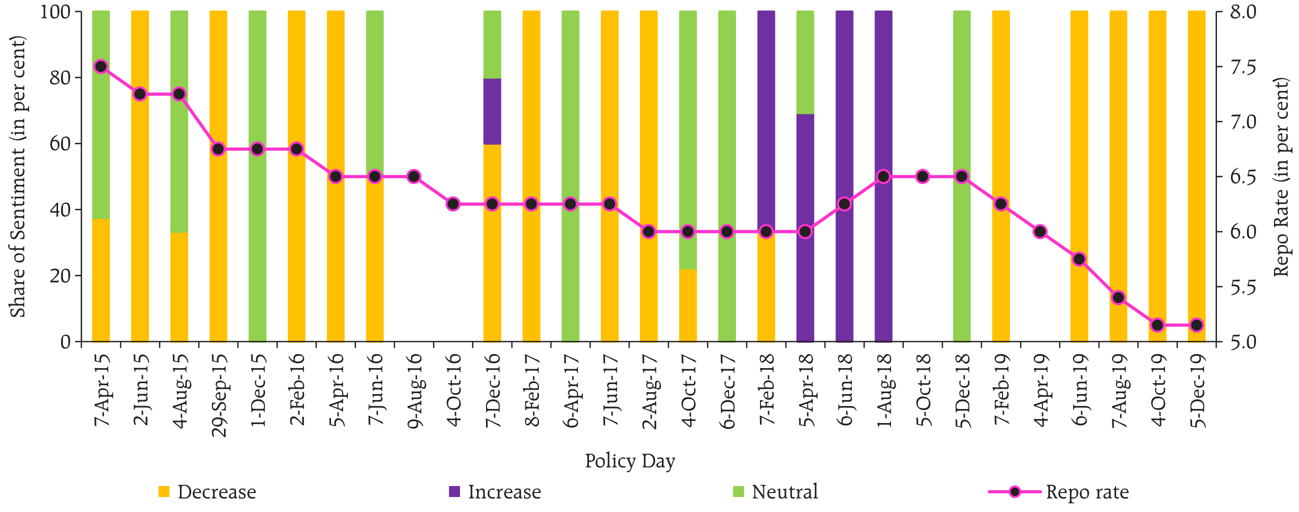
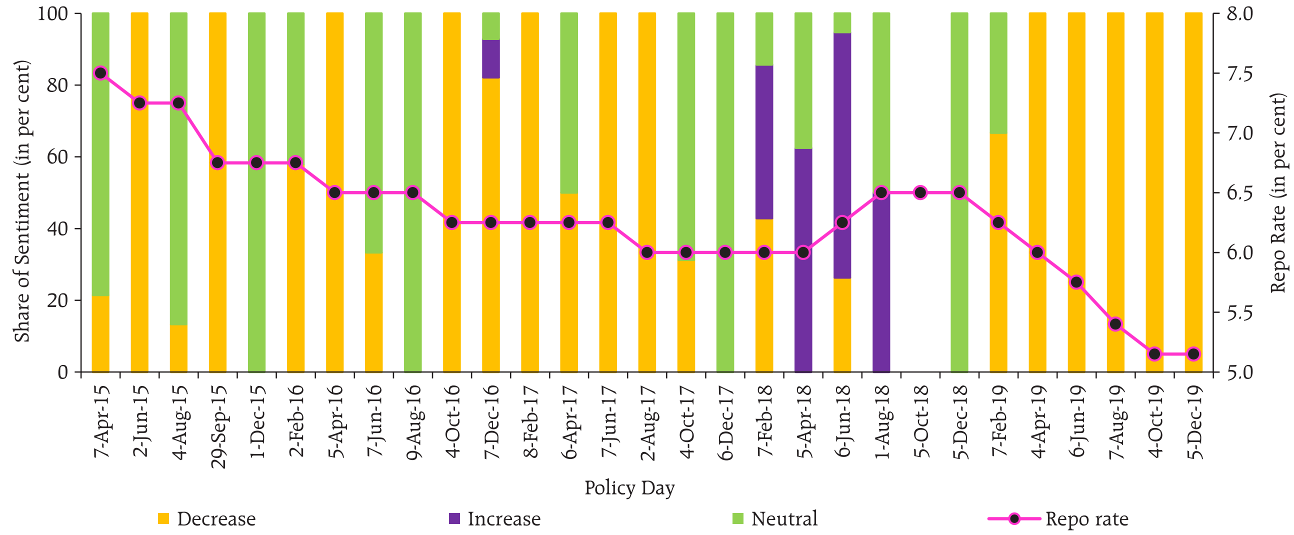
Annex I : Sentiment Proportion v/s Repo Rate *(Contd.)*

Chart 4: Media Sentiment Six Days Prior to Policy Day



Note: The solid line denotes the Reserve Bank's repo rate; the bars denote share of news in each sentiment class. Some days there were no relevant news items, resulting in missing bars.

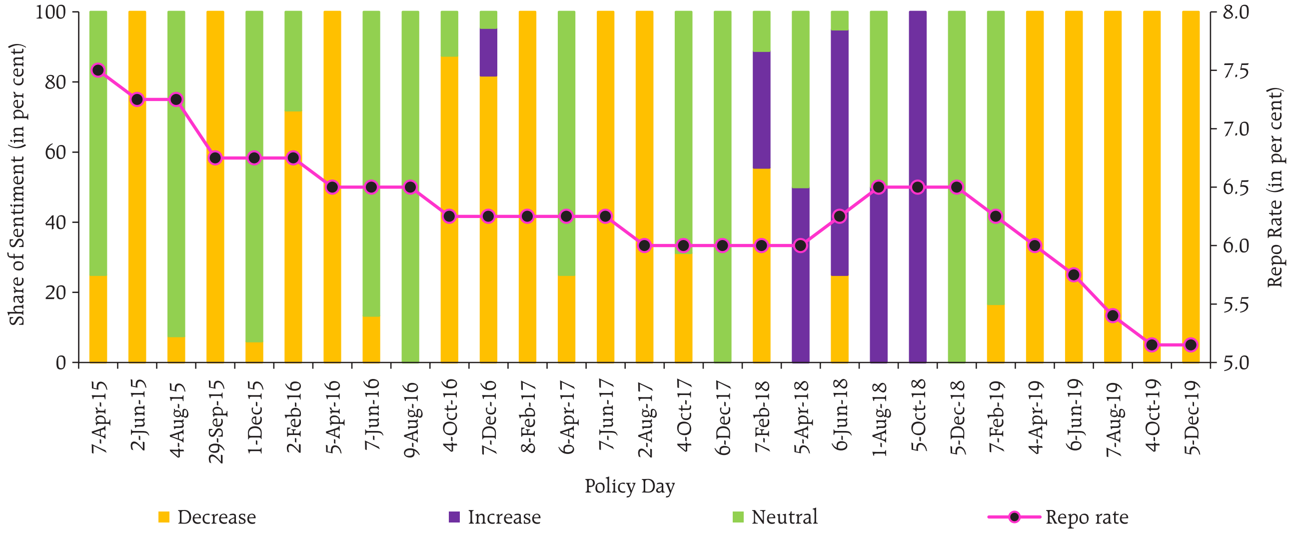
Chart 5: Media Sentiment Five Days Prior to Policy Day



Note: Same as Chart 4.

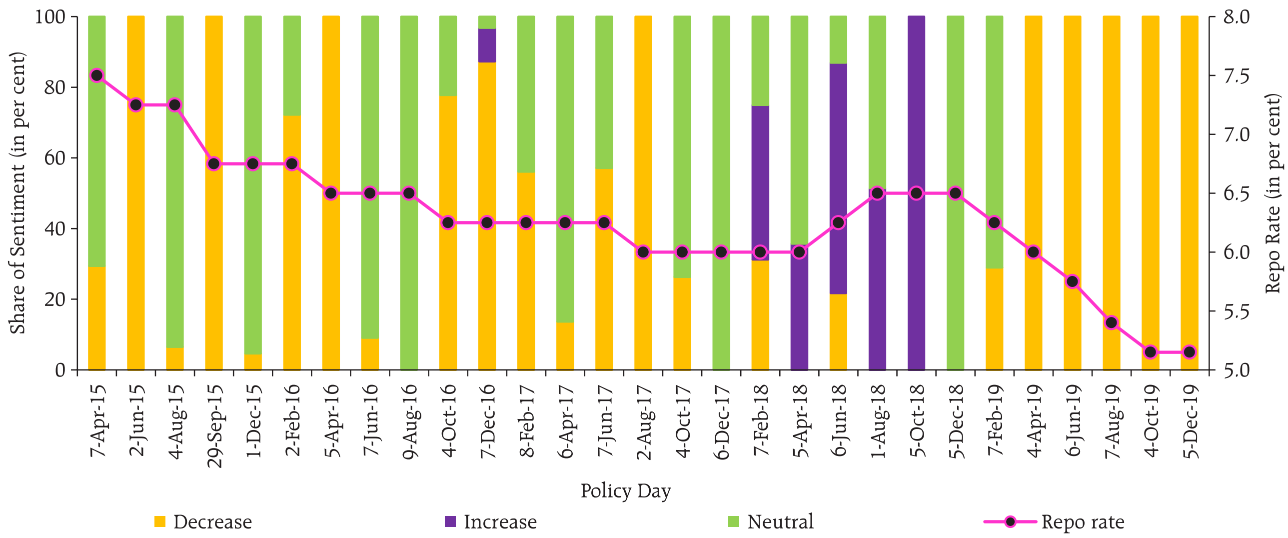
Annex I : Sentiment Proportion v/s Repo Rate *(Contd.)*

Chart 6: Media Sentiment Four Days Prior to Policy Day



Note: The solid line denotes the Reserve Bank's repo rate; the bars denote shares of news in each with sentiment class.

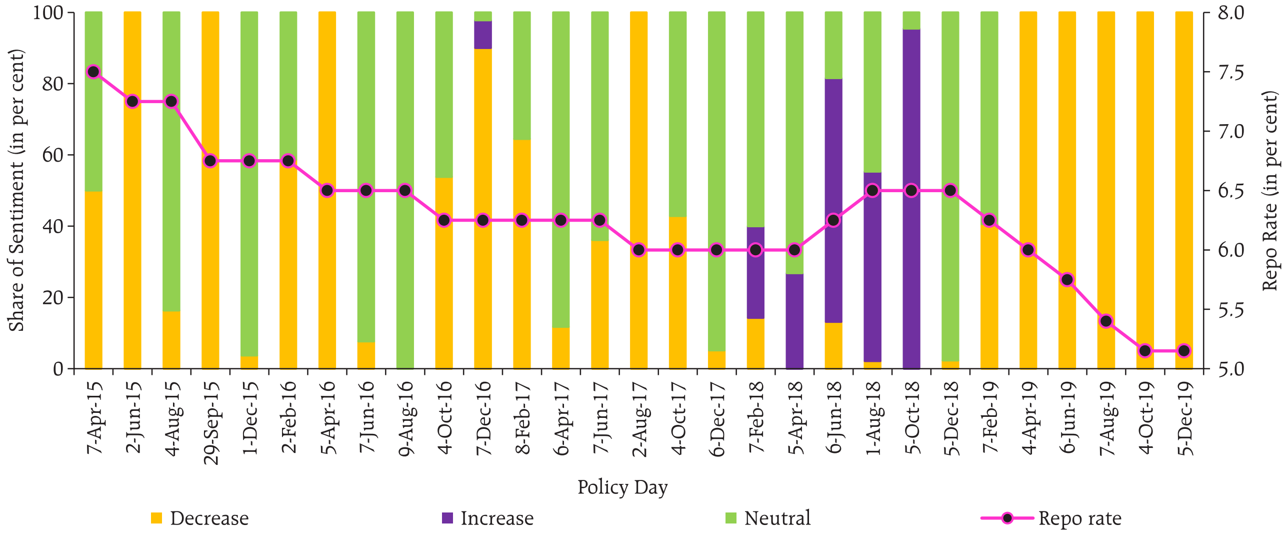
Chart 7: Media Sentiment Three Days Prior to Policy Day



Note: Same as Chart 6.

Annex I : Sentiment Proportion v/s Repo Rate *(Concld.)*

Chart 8 Media Sentiment Two Days Prior to Policy Day



Note: Same as Chart 7.

CURRENT STATISTICS

Select Economic Indicators

Reserve Bank of India

Money and Banking

Prices and Production

Government Accounts and Treasury Bills

Financial Markets

External Sector

Payment and Settlement Systems

Occasional Series

Contents

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

No. 1: Select Economic Indicators

Item	2019-20	2018-19		2019-20	
		Q3	Q4	Q3	Q4
	1	2	3	4	5
1 Real Sector (% Change)					
1.1 GVA at Basic Prices	3.9	5.6	5.6	3.5	3.0
1.1.1 Agriculture	4.0	2.0	1.6	3.6	5.9
1.1.2 Industry	0.8	4.4	1.4	-0.4	-0.01
1.1.3 Services	5.0	7.3	8.3	4.9	3.5
1.1a Final Consumption Expenditure	6.3	7.0	7.3	7.6	4.2
1.1b Gross Fixed Capital Formation	-2.8	11.4	4.4	-5.2	-6.5

	2019-20	2019		2020	
		May	Jun.	May	Jun.
	1	2	3	4	5
1.2 Index of Industrial Production	-0.8	4.5	1.3	-34.7	-
2 Money and Banking (% Change)					
2.1 Scheduled Commercial Banks					
2.1.1 Deposits	7.9	11.1	10.4	10.5	9.6
2.1.2 Credit	6.1	13.5	11.9	5.5	5.6
2.1.2.1 Non-food Credit	6.1	13.3	11.9	5.5	5.4
2.1.3 Investment in Govt. Securities	10.6	3.7	1.8	16.7	18.9
2.2 Money Stock Measures					
2.2.1 Reserve Money (M0)	9.4	13.8	13.5	11.8	11.8
2.2.2 Broad Money (M3)	8.9	10.3	10.1	11.7	12.3
3 Ratios (%)					
3.1 Cash Reserve Ratio	3.00	4.00	4.00	3.00	3.00
3.2 Statutory Liquidity Ratio	18.25	19.00	19.00	18.00	18.00
3.3 Cash-Deposit Ratio	4.6	4.9	5.1	3.8	3.7
3.4 Credit-Deposit Ratio	76.4	76.8	76.4	73.3	73.6
3.5 Incremental Credit-Deposit Ratio	60.3	-212.9	-60.4	-38.7	-37.6
3.6 Investment-Deposit Ratio	27.6	27.7	27.6	29.3	29.9
3.7 Incremental Investment-Deposit Ratio	36.2	302.3	105.3	91.4	122.7
4 Interest Rates (%)					
4.1 Policy Repo Rate	4.40	6.00	5.75	4.00	4.00
4.2 Reverse Repo Rate	4.00	5.75	5.50	3.35	3.35
4.3 Marginal Standing Facility (MSF) Rate	4.65	6.25	6.00	4.25	4.25
4.4 Bank Rate	4.65	6.25	6.00	4.25	4.25
4.5 Base Rate	8.15/9.40	8.95/9.40	8.95/9.40	8.15/9.40	7.40/9.00
4.6 MCLR (Overnight)	7.40/7.90	8.05/8.50	8.05/8.50	6.95/7.50	6.70/7.45
4.7 Term Deposit Rate >1 Year	5.90/6.40	6.25/7.50	6.25/7.30	5.10/5.90	5.10/5.65
4.8 Savings Deposit Rate	3.00/3.50	3.50	3.50	2.75/3.50	2.70/3.50
4.9 Call Money Rate (Weighted Average)	5.05	5.90	5.78	3.62	3.54
4.10 91-Day Treasury Bill (Primary) Yield	4.36	6.19	6.03	3.19	3.19
4.11 182-Day Treasury Bill (Primary) Yield	4.97	6.27	6.16	3.40	3.42
4.12 364-Day Treasury Bill (Primary) Yield	4.94	6.30	6.16	3.41	3.54
4.13 10-Year G-Sec Par Yield (FBIL)	6.71	7.07	6.93	5.79	5.90
5 Reference Rate and Forward Premia					
5.1 INR-US$ Spot Rate (Rs. Per Foreign Currency)	74.84	69.81	68.92	75.64	75.48
5.2 INR-Euro Spot Rate (Rs. Per Foreign Currency)	82.64	77.73	78.36	83.91	84.63
5.3 Forward Premia of US$ 1-month (%)	8.98	3.95	4.61	3.49	3.66
3-month (%)	5.93	3.95	4.64	3.60	3.66
6-month (%)	5.05	3.93	4.70	3.73	3.82
6 Inflation (%)					
6.1 All India Consumer Price Index	4.76	3.0	3.2	6.3	6.1
6.2 Consumer Price Index for Industrial Workers	7.54	8.7	8.6	5.1	5.1
6.3 Wholesale Price Index	1.69	2.8	2.0	-3.2	-1.8
6.3.1 Primary Articles	6.77	6.8	6.4	-2.9	-1.2
6.3.2 Fuel and Power	-1.63	2.0	-2.1	-19.8	-13.6
6.3.3 Manufactured Products	0.29	1.5	1.0	-0.4	0.1
7 Foreign Trade (% Change)					
7.1 Imports	-7.80	6.3	-10.1	-52.4	-47.6
7.2 Exports	-5.13	3.1	-7.9	-36.2	-12.4

Note : Financial Benchmark India Pvt. Ltd. (FBIL) has commenced publication of the G-Sec benchmarks with effect from March 31, 2018 as per RBI 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						
	2019-20	2019	2020				
		Jul.	Jul. 3	Jul. 10	Jul. 17	Jul. 24	Jul. 31
	1	2	3	4	5	6	7
1 Issue Department							
1.1 Liabilities							
1.1.1 Notes in Circulation	2412993	2149553	2639014	2651466	2649445	2644672	2646131
1.1.2 Notes held in Banking Department	10	13	12	9	9	9	13
1.1/1.2 Total Liabilities (Total Notes Issued) or Assets	**2413003**	**2149566**	**2639026**	**2651475**	**2649454**	**2644681**	**2646144**
1.2 Assets							
1.2.1 Gold Coin and Bullion	103439	82572	112211	115268	114698	118880	123866
1.2.2 Foreign Securities	2308718	2066181	2526035	2535430	2533981	2525029	2521510
1.2.3 Rupee Coin	846	813	780	777	775	772	768
1.2.4 Government of India Rupee Securities	–	–	–	–	–	–	–
2 Banking Department							
2.1 Liabilities							
2.1.1 Deposits	1187409	759396	1224758	1228600	1242901	1256137	1281734
2.1.1.1 Central Government	100	100	101	100	100	100	100
2.1.1.2 Market Stabilisation Scheme							
2.1.1.3 State Governments	43	42	43	43	43	43	42
2.1.1.4 Scheduled Commercial Banks	536186	525908	441784	424190	434563	432426	435414
2.1.1.5 Scheduled State Co-operative Banks	7603	4083	5191	5798	5418	5342	5443
2.1.1.6 Non-Scheduled State Co-operative Banks	3445	2618	2612	2563	2578	2481	2536
2.1.1.7 Other Banks	32641	30327	24692	25425	25325	25518	25694
2.1.1.8 Others	605100	196317	750335	763537	764164	779543	805280
2.1.1.9 Financial Institution Outside India	2291			6944	10710	10684	7225
2.1.2 Other Liabilities	1350333	1134310	1451303	1494886	1489568	1505204	1544130
2.1/2.2 Total Liabilities or Assets	**2537742**	**1893706**	**2676061**	**2723486**	**2732469**	**2761341**	**2825864**
2.2 Assets							
2.2.1 Notes and Coins	10	13	12	9	9	9	13
2.2.2 Balances held Abroad	1006357	710469	1033638	1069142	1070871	1097837	1180774
2.2.3 Loans and Advances							
2.2.3.1 Central Government	50477	37084	573		–	–	–
2.2.3.2 State Governments	1967	896	7004	10353	10095	5651	4857
2.2.3.3 Scheduled Commercial Banks	285623	29570	285587	280597	280632	280577	258425
2.2.3.4 Scheduled State Co-op.Banks	–	–	–	–	–	–	–
2.2.3.5 Industrial Dev. Bank of India	–	–	–	–	–	–	–
2.2.3.6 NABARD	–	–	22123	22123	24998	25123	25013
2.2.3.7 EXIM Bank	–	–	–	–	–	–	–
2.2.3.8 Others	10064	5846	9884	9884	9863	9616	9649
2.2.3.9 Financial Institution Outside India	2300			10704	14467	14425	7226
2.2.4 Bills Purchased and Discounted							
2.2.4.1 Internal	–	–	–	–	–	–	–
2.2.4.2 Government Treasury Bills	–	–	–	–	–	–	–
2.2.5 Investments	1042950	987096	1174768	1173895	1174701	1175717	1180831
2.2.6 Other Assets	137993	122731	142472	146779	146833	152386	159076
2.2.6.1 Gold	127644	92052	141695	145922	145933	151254	157597

* Data are provisional

No. 3: Liquidity Operations by RBI

(₹ Crore)

Date	Repo	Reverse Repo	Variable Rate Repo	Variable Rate Reverse Repo	MSF	Standing Liquidity Facilities	Market Stabilisation Scheme	Sale	Purchase	Long Term Repo Operations	Targeted Long Term Repo Operations #	Special Liquidity Facility for Mutual Funds	Net Injection (+)/ Absorption (-) (1+3+5+6+9+10+11+12-2-4-7-8)
	1	2	3	4	5	6	7	8	9	10	11	12	13
Jun. 1, 2020	-	669360	-	-	10	–	-	-	-	-	-	-	-669350
Jun. 2, 2020	-	685893	-	-	0	-627	-	-	-	-	-	-	-686520
Jun. 3, 2020	-	686606	-	-	0	54	-	-	-	-	-	-	-686552
Jun. 4, 2020	-	658108	-	-	23	–	-	-	-	-	-	-	-658085
Jun. 5, 2020	-	649610	-	-	10	–	-	-	-	-	-	-	-649600
Jun. 6, 2020	-	6640	-	-	2846	–	-	-	-	-	-	-	-3794
Jun. 7, 2020	-	0	-	-	125	–	-	-	-	-	-	-	125
Jun. 8, 2020	-	611775	-	-	50	1017	-	-	-	-	-	-	-610708
Jun. 9, 2020	-	677151	-	-	0	-47	-	-	-	-	-	-	-677198
Jun. 10, 2020	-	676975	-	-	0	–	-	-	-	-	-	-	-676975
Jun. 11, 2020	-	658315	-	-	0	–	-	-	-	-	-	-	-658315
Jun. 12, 2020	-	672603	-	-	0	184	-	-	-	-	-	-	-672419
Jun. 13, 2020	-	808	-	-	0	–	-	-	-	-	-	-	-808
Jun. 14, 2020	-	0	-	-	0	–	-	-	-	-	-	-	0
Jun. 15, 2020	-	639616	-	-	0	–	-	-	-	-	-	-	-639616
Jun. 16, 2020	-	639403	-	-	0	163	-	-	-	-	-	-	-639240
Jun. 17, 2020	-	647239	-	-	0	-925	-	-	-	-	-	-	-648164
Jun. 18, 2020	-	623676	-	-	50	–	-	-	-	-	-	-	-623626
Jun. 19, 2020	-	602207	-	-	310	–	-	-	-	-	-	-	-601897
Jun. 20, 2020	-	27341	-	-	0	–	-	-	-	-	-	-	-27341
Jun. 21, 2020	-	9	-	-	0	–	-	-	-	-	-	-	-9
Jun. 22, 2020	-	588568	-	-	0	–	-	-	-	-	-	-	-588568
Jun. 23, 2020	-	654115	-	-	0	2483	-	-	-	-	-	-	-651632
Jun. 24, 2020	-	651640	-	-	0	-850	-	-	-	-	-	-	-652490
Jun. 25, 2020	-	623748	-	-	0	–	-	-	-	-	-	-	-623748
Jun. 26, 2020	-	634893	-	-	65	381	-	-	-	-	-	-	-634447
Jun. 27, 2020	-	909	-	-	0	–	-	-	-	-	-	-	-909
Jun. 28, 2020	-	0	-	-	0	–	-	-	-	-	-	-	0
Jun. 29, 2020	-	613688	-	-	78	–	-	-	-	-	-	-	-613610
Jun. 30, 2020	-	632871	-	-	0	2628	-	-	-	-	-	-	-630243

Notes: # Includes Targeted Long Term Repo Operations (TLTRO) and Targeted Long Term Repo Operations 2.0 (TLTRO 2.0)

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

i) Operations in onshore / offshore OTC segment

Item	2019-20	2019	2020	
		Jun.	May	Jun.
	1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US $ Million) (1.1–1.2)	45097	2463	4363	9814
1.1 Purchase (+)	72205	4434	4663	14847
1.2 Sale (–)	27108	1971	300	5033
2 ₹ equivalent at contract rate (₹ Crores)	312005	16395	32724	73847
3 Cumulative (over end-March) (US $ Million)	45097	9902	3221	13035
(₹ Crores)	312005	66285	24135	97982
4 Outstanding Net Forward Sales (–)/ Purchase (+) at the end of month (US $ Million)	-4939	-13406	-1958	2459

ii) Operations in currency futures segment

Item	2019-20	2019	2020	
		Jun.	May.	Jun.
	1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US $ Million) (1.1–1.2)	0	0	0	0
1.1 Purchase (+)	7713	0	0	0
1.2 Sale (–)	7713	0	0	0
2 Outstanding Net Currency Futures Sales (–)/ Purchase (+) at the end of month (US $ Million)	-500	0	0	0

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

Item	As on June 30, 2020		
	Long (+)	Short (-)	Net (1-2)
	1	2	3
1. Upto 1 month	6283	140	6143
2. More than 1 month and upto 3 months	5462	1565	3897
3. More than 3 months and upto 1 year	2439	0	2439
4. More than 1 year	0	10020	-10020
Total (1+2+3+4)	**14184**	**11725**	**2459**

No. 5: RBI's Standing Facilities

(₹ Crore)

Item		As on the Last Reporting Friday						
	2019-20	2019	2020					
		Jul. 19	Feb. 28	Mar. 27	Apr. 24	May 22	Jun. 19	Jul. 31
	1	2	3	4	5	6	7	8
1 MSF	1262	1151	4130	1262	45	1400	310	80
2 Export Credit Refinance for Scheduled Banks								
2.1 Limit	-	-	-	-	-	-	-	-
2.2 Outstanding	-	-	-	-	-	-	-	-
3 Liquidity Facility for PDs								
3.1 Limit	10000	2800	2800	10000	10000	4900	4900	4900
3.2 Outstanding	4782	2356	1815	4782	4162	1372	326	30
4 Others								
4.1 Limit	-	-	-	-	50000	50000	50000	65000
4.2 Outstanding	-	-	-	-	–	21369	26894	34376
5 Total Outstanding (1+2.2+3.2+4.2)	6044	3507	5945	6044	4207	24141	27530	34486

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				
	2019-20	2019	2020		
		Jun. 21	May 22	Jun. 5	Jun. 19
	1	2	3	4	5
1 Currency with the Public (1.1 + 1.2 + 1.3 – 1.4)	2349715	2116677	2512742	2544417	2567008
1.1 Notes in Circulation	2420964	2179972	2584761	2613007	2634218
1.2 Circulation of Rupee Coin	25572	25211	25572	25572	25572
1.3 Circulation of Small Coins	743	743	743	743	743
1.4 Cash on Hand with Banks	97563	89250	98334	94904	93525
2 Deposit Money of the Public	1776199	1432959	1606278	1642416	1611690
2.1 Demand Deposits with Banks	1737692	1403276	1564750	1595473	1572974
2.2 'Other' Deposits with Reserve Bank	38507	29683	41528	46943	38716
3 M_1 (1 + 2)	**4125915**	**3549636**	**4119020**	**4186833**	**4178698**
4 Post Office Saving Bank Deposits	141786	143501	141786	141786	141786
5 M_2 (3 + 4)	**4267701**	**3693137**	**4260806**	**4328619**	**4320484**
6 Time Deposits with Banks	12674016	11866468	13111844	13192413	13140721
7 M_3 (3 + 6)	**16799930**	**15416104**	**17230864**	**17379245**	**17319418**
8 Total Post Office Deposits	409246	384526	409246	409246	409246
9 M_4 (7 + 8)	**17209176**	**15800630**	**17640110**	**17788491**	**17728664**

No. 7: Sources of Money Stock (M_3)

(₹ Crore)

Sources	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2019-20	2019	2020		
		Jun. 21	May 22	Jun. 5	Jun. 19
	1	2	3	4	5
1 Net Bank Credit to Government	**4906583**	**4589114**	**5551592**	**5567715**	**5499987**
1.1 RBI's net credit to Government (1.1.1–1.1.2)	992192	919696	1266000	1183545	1123896
1.1.1 Claims on Government	1047808	984770	1266144	1191031	1180189
1.1.1.1 Central Government	1045314	984607	1259392	1182225	1175526
1.1.1.2 State Governments	2494	163	6752	8806	4663
1.1.2 Government deposits with RBI	55616	65074	144	7486	56293
1.1.2.1 Central Government	55573	65032	101	7443	56251
1.1.2.2 State Governments	43	42	43	43	42
1.2 Other Banks' Credit to Government	3914391	3669418	4285592	4384170	4376091
2 Bank Credit to Commercial Sector	**11038644**	**10258394**	**10874441**	**10897869**	**10902373**
2.1 RBI's credit to commercial sector	13166	8443	5680	6796	7187
2.2 Other banks' credit to commercial sector	11025478	10249951	10868761	10891073	10895186
2.2.1 Bank credit by commercial banks	10370861	9648768	10222753	10243351	10247763
2.2.2 Bank credit by co-operative banks	637776	591200	635415	637184	637516
2.2.3 Investments by commercial and co-operative banks in other securities	16842	9982	10592	10538	9908
3 Net Foreign Exchange Assets of Banking Sector (3.1 + 3.2)	**3801036**	**3171094**	**3910796**	**3981552**	**4041348**
3.1 RBI's net foreign exchange assets (3.1.1–3.1.2)	3590402	2959806	3700162	3770918	3830714
3.1.1 Gross foreign assets	3590636	2960021	3700397	3771155	3830951
3.1.2 Foreign liabilities	234	215	235	237	237
3.2 Other banks' net foreign exchange assets	210634	211288	210634	210634	210634
4 Government's Currency Liabilities to the Public	**26315**	**25954**	**26315**	**26315**	**26315**
5 Banking Sector's Net Non-monetary Liabilities	**2972648**	**2628452**	**3132280**	**3094205**	**3150604**
5.1 Net non-monetary liabilities of RBI	1378342	1115978	1459643	1486036	1515001
5.2 Net non-monetary liabilities of other banks (residual)	1594306	1512474	1672637	1608169	1635603
M_3 (1+2+3+4–5)	**16799930**	**15416104**	**17230864**	**17379245**	**17319418**

No. 8: Monetary Survey

(₹ Crore)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2019-20	2019	2020		
		Jun. 21	May 22	Jun. 5	Jun. 19
	1	2	3	4	5
Monetary Aggregates					
NM_1 (1.1 + 1.2.1+1.3)	4125915	3549636	4119020	4186833	4178698
NM_2 (NM_1+ 1.2.2.1)	9745743	8812273	9938829	10044775	10013131
NM_3 (NM_2 + 1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	16923860	15601523	17342718	17491628	17430975
1 Components					
1.1 Currency with the Public	2349715	2116677	2512742	2544417	2567008
1.2 Aggregate Deposits of Residents	14226198	13098026	14497659	14613123	14538382
1.2.1 Demand Deposits	1737692	1403276	1564750	1595473	1572974
1.2.2 Time Deposits of Residents	12488506	11694750	12932909	13017650	12965408
1.2.2.1 Short-term Time Deposits	5619828	5262638	5819809	5857942	5834434
1.2.2.1.1 Certificates of Deposit (CDs)	169419	210079	156220	137376	123414
1.2.2.2 Long-term Time Deposits	6868678	6432113	7113100	7159707	7130974
1.3 ‘Other’ Deposits with RBI	38507	29683	41528	46943	38716
1.4 Call/Term Funding from Financial Institutions	309439	357137	290789	287145	286869
2 Sources					
2.1 Domestic Credit	16802627	15739114	17436173	17494640	17426552
2.1.1 Net Bank Credit to the Government	4906583	4589114	5551592	5567715	5499987
2.1.1.1 Net RBI credit to the Government	992192	919696	1266000	1183545	1123896
2.1.1.2 Credit to the Government by the Banking System	3914391	3669418	4285592	4384170	4376091
2.1.2 Bank Credit to the Commercial Sector	11896044	11150000	11884581	11926925	11926565
2.1.2.1 RBI Credit to the Commercial Sector	13166	8443	24680	28847	29238
2.1.2.2 Credit to the Commercial Sector by the Banking System	11882878	11141557	11859901	11898078	11897327
2.1.2.2.1 Other Investments (Non-SLR Securities)	846284	883614	979542	995174	989760
2.2 Government’s Currency Liabilities to the Public	26315	25954	26315	26315	26315
2.3 Net Foreign Exchange Assets of the Banking Sector	3612303	2891470	3721230	3793302	3852370
2.3.1 Net Foreign Exchange Assets of the RBI	3590402	2959806	3700162	3770918	3830714
2.3.2 Net Foreign Currency Assets of the Banking System	21900	-68336	21068	22385	21656
2.4 Capital Account	2670439	2432604	2788706	2804068	2821178
2.5 Other items (net)	846946	622411	1052294	1018561	1053084

No. 9: Liquidity Aggregates

(₹ Crore)

Aggregates	2019-20	2019	2020		
		Jun.	Apr.	May	Jun.
	1	2	3	4	5
1 NM_3	**16923860**	**15601523**	**17155388**	**17342718**	**17430975**
2 Postal Deposits	409246	384524	409246	409246	409246
3 L_1 (1 + 2)	**17333106**	**15986047**	**17564634**	**17751964**	**17840221**
4 Liabilities of Financial Institutions	57479	2932	56424	53017	52109
4.1 Term Money Borrowings	7928	2656	9928	10801	10801
4.2 Certificates of Deposit	46249	31	43199	38899	37950
4.3 Term Deposits	3302	245	3297	3317	3358
5 L_2 (3 + 4)	**17390584**	**15988979**	**17621058**	**17804981**	**17892330**
6 Public Deposits with Non-Banking Financial Companies	31905	31905	..	..	31905
7 L_3 (5 + 6)	**17422489**	**16020884**	..	..	**17924235**

Note : Since November 2019, updated data on liabilities of financial institutions have been incorporated in this table , and hence, are not comparable with past data

No. 10: Reserve Bank of India Survey

(₹ Crore)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2019-20	2019	2020		
		Jun. 21	May 22	Jun. 5	Jun. 19
	1	2	3	4	5
1 Components					
1.1 Currency in Circulation	2447279	2205926	2611076	2639322	2660533
1.2 Bankers' Deposits with the RBI	543888	539382	468214	478833	484463
1.2.1 Scheduled Commercial Banks	505131	503248	433987	445527	451363
1.3 'Other' Deposits with the RBI	38507	29683	41528	46943	38716
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	3029674	2774992	3120817	3165097	3183711
2 Sources					
2.1 RBI's Domestic Credit	791299	905209	853984	853901	841684
2.1.1 Net RBI credit to the Government	992192	919696	1266000	1183545	1123896
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)	989741	919575	1259291	1174782	1119275
2.1.1.1.1 Loans and Advances to the Central Government	–	–	86080	–	–
2.1.1.1.2 Investments in Treasury Bills	–	–	–	–	–
2.1.1.1.3 Investments in dated Government Securities	1044468	983768	1172496	1181422	1174736
2.1.1.1.3.1 Central Government Securities	1044468	983768	1172496	1181422	1174736
2.1.1.1.4 Rupee Coins	846	839	816	803	790
2.1.1.1.5 Deposits of the Central Government	55573	65032	101	7443	56251
2.1.1.2 Net RBI credit to State Governments	2451	121	6709	8763	4621
2.1.2 RBI's Claims on Banks	-214059	-22930	-436696	-358491	-311450
2.1.2.1 Loans and Advances to Scheduled Commercial Banks	-214059	-22930	-417696	-336440	-289399
2.1.3 RBI's Credit to Commercial Sector	13166	8443	24680	28847	29238
2.1.3.1 Loans and Advances to Primary Dealers	5920	2453	1372	1135	3256
2.1.3.2 Loans and Advances to NABARD	–	–	19000	22051	22051
2.2 Government's Currency Liabilities to the Public	26315	25954	26315	26315	26315
2.3 Net Foreign Exchange Assets of the RBI	3590402	2959806	3700162	3770918	3830714
2.3.1 Gold	230527	160265	248955	244532	250028
2.3.2 Foreign Currency Assets	3359893	2799559	3451224	3526403	3580703
2.4 Capital Account	1165066	983493	1219103	1236710	1259409
2.5 Other Items (net)	213276	132485	240540	249326	255592

No. 11: Reserve Money - Components and Sources

(₹ Crore)

Item	2019-20	Outstanding as on March 31/ last Fridays of the month/ Fridays					
		2019	2020				
		Jun. 28	May 29	Jun. 5	Jun. 12	Jun. 19	Jun. 26
	1	2	3	4	5	6	7
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 + 2.4 + 2.5 – 2.6)	3029674	2828612	3131576	3165097	3154447	3183711	3163578
1 Components							
1.1 Currency in Circulation	2447279	2189484	2616468	2639322	2658733	2660533	2660382
1.2 Bankers' Deposits with RBI	543888	609537	468973	478833	456516	484463	463901
1.3 'Other' Deposits with RBI	38507	29590	46136	46943	39199	38716	39296
2 Sources							
2.1 Net Reserve Bank Credit to Government	992192	992751	1179922	1183545	1163168	1123896	1134432
2.2 Reserve Bank Credit to Banks	-214059	-47104	-329604	-336440	-359443	-289399	-322330
2.3 Reserve Bank Credit to Commercial Sector	13166	8755	7316	6796	7949	7187	9203
2.4 Net Foreign Exchange Assets of RBI	3590402	2939668	3708976	3770918	3824565	3830714	3811722
2.5 Government's Currency Liabilities to the Public	26315	25954	26315	26315	26315	26315	26315
2.6 Net Non- Monetary Liabilities of RBI	1378342	1091413	1461348	1486036	1508106	1515001	1495763

No. 12: Commercial Bank Survey

(₹ Crore)

Item	Outstanding as on last reporting Fridays of the month/ reporting Fridays of the month				
	2019-20	2019	2020		
		Jun. 21	May 22	Jun. 5	Jun. 19
	1	2	3	4	5
1 Components					
1.1 Aggregate Deposits of Residents	13381983	12320748	13650980	13765618	13691815
1.1.1 Demand Deposits	1617003	1288828	1444907	1474515	1452440
1.1.2 Time Deposits of Residents	11764979	11031920	12206073	12291103	12239375
1.1.2.1 Short-term Time Deposits	5294241	4964364	5492733	5530996	5507719
1.1.2.1.1 Certificates of Deposits (CDs)	169419	210079	156220	137376	123414
1.1.2.2 Long-term Time Deposits	6470739	6067556	6713340	6760107	6731656
1.2 Call/Term Funding from Financial Institutions	309439	357137	290789	287145	286869
2 Sources					
2.1 Domestic Credit	14913131	13998321	15259565	15391528	15383601
2.1.1 Credit to the Government	3684917	3464636	4052677	4148205	4141325
2.1.2 Credit to the Commercial Sector	11228214	10533685	11206889	11243323	11242276
2.1.2.1 Bank Credit	10370861	9648768	10222753	10243351	10247763
2.1.2.1.1 Non-food Credit	10319097	9577349	10143337	10157668	10158474
2.1.2.2 Net Credit to Primary Dealers	11378	8256	11861	12094	12643
2.1.2.3 Investments in Other Approved Securities	8653	2010	1694	1666	1072
2.1.2.4 Other Investments (in non-SLR Securities)	837321	874651	970580	986212	980798
2.2 Net Foreign Currency Assets of Commercial Banks (2.2.1–2.2.2–2.2.3)	21900	-68336	21068	22385	21656
2.2.1 Foreign Currency Assets	315641	245786	295272	289788	289675
2.2.2 Non-resident Foreign Currency Repatriable Fixed Deposits	185510	171718	178935	174763	175313
2.2.3 Overseas Foreign Currency Borrowings	108231	142404	95269	92641	92706
2.3 Net Bank Reserves (2.3.1+2.3.2–2.3.3)	899410	605629	939673	866470	823903
2.3.1 Balances with the RBI	536186	503248	433987	445527	451363
2.3.2 Cash in Hand	87260	79451	87990	84503	83141
2.3.3 Loans and Advances from the RBI	-275964	-22930	-417696	-336440	-289399
2.4 Capital Account	1481202	1424941	1545433	1543188	1537598
2.5 Other items (net) (2.1+2.2+2.3–2.4–1.1–1.2)	661818	432788	733105	684433	712879
2.5.1 Other Demand and Time Liabilities (net of 2.2.3)	495445	347883	423646	446449	426797
2.5.2 Net Inter-Bank Liabilities (other than to PDs)	65654	-50121	53427	77841	75819

No. 13: Scheduled Commercial Banks' Investments

(₹ Crore)

Item	As on March 27, 2020	2019	2020		
		Jun. 21	May. 22	Jun. 5	Jun. 19
	1	2	3	4	5
1 SLR Securities	3747349	3466646	4054371	4149871	4142397
2 Commercial Paper	104526	97240	120516	119680	111433
3 Shares issued by					
3.1 PSUs	14106	11579	11791	11783	11800
3.2 Private Corporate Sector	75415	69242	70782	70740	70645
3.3 Others	5734	5624	5257	5207	5208
4 Bonds/Debentures issued by					
4.1 PSUs	125710	126331	133229	137347	131832
4.2 Private Corporate Sector	226559	257391	289350	293852	303462
4.3 Others	191690	160466	155155	157126	156846
5 Instruments issued by					
5.1 Mutual funds	35610	55543	61861	64440	67201
5.2 Financial institutions	97665	91147	122807	126024	122359

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			
	2019-20	2019	2020		2019-20	2019	2020	
		Jun.	May	Jun.		Jun.	May	Jun.
	1	2	3	4	5	6	7	8
Number of Reporting Banks	219	215	210	210	142	139	134	134
1 Liabilities to the Banking System	**320240**	**261115**	**335419**	**327674**	**314513**	**256028**	**329918**	**322336**
1.1 Demand and Time Deposits from Banks	239943	184953	260155	250131	234348	180169	254851	244950
1.2 Borrowings from Banks	64001	64878	59310	61179	64001	64720	59270	61179
1.3 Other Demand and Time Liabilities	16295	11285	15954	16364	16163	11139	15796	16207
2 Liabilities to Others	**14905949**	**13916921**	**15183762**	**15211857**	**14480607**	**13567386**	**14748737**	**14777587**
2.1 Aggregate Deposits	13975551	13026758	14360865	14332042	13567492	12691204	13942646	13915263
2.1.1 Demand	1653242	1434823	1543308	1520856	1617003	1403345	1506683	1485899
2.1.2 Time	12322309	11591936	12817557	12811186	11950489	11287859	12435963	12429364
2.2 Borrowings	313908	360894	295629	293320	309439	357469	291432	289056
2.3 Other Demand and Time Liabilities	616491	529269	527268	586496	603676	518713	514660	573267
3 Borrowings from Reserve Bank	**285623**	**54185**	**291023**	**290512**	**285623**	**54185**	**291023**	**290512**
3.1 Against Usance Bills /Promissory Notes	–	–	–	–	–	–	–	–
3.2 Others	285623	54185	291023	290512	285623	54185	291023	290512
4 Cash in Hand and Balances with Reserve Bank	643038	666700	538381	533003	623446	651388	522867	517853
4.1 Cash in Hand	89671	81166	90088	90075	87260	79375	87645	87658
4.2 Balances with Reserve Bank	553367	585534	448293	442928	536186	572013	435222	430194
5 Assets with the Banking System	**323680**	**368717**	**338771**	**330655**	**260238**	**319278**	**265058**	**260792**
5.1 Balances with Other Banks	181460	263547	206775	213456	155401	239889	168900	177347
5.1.1 In Current Account	17204	19631	17397	21562	14457	16024	15019	19589
5.1.2 In Other Accounts	164256	243916	189379	191894	140945	223864	153881	157758
5.2 Money at Call and Short Notice	43335	32525	46440	41258	20273	16512	18907	15365
5.3 Advances to Banks	38266	29711	26106	24288	30531	26552	24775	23141
5.4 Other Assets	60619	42935	59450	51654	54032	36325	52476	44940
6 Investment	**3865544**	**3606079**	**4205866**	**4289354**	**3747349**	**3503314**	**4083247**	**4166420**
6.1 Government Securities	3850819	3599693	4197381	4281675	3738696	3502670	4081619	4165563
6.2 Other Approved Securities	14724	6386	8485	7679	8653	644	1628	856
7 Bank Credit	**10705336**	**9985468**	**10555736**	**10571857**	**10370861**	**9700765**	**10225673**	**10240265**
7a Food Credit	82172	90712	113172	115026	51763	63678	82765	84620
7.1 Loans, Cash-credits and Overdrafts	10480934	9757672	10366873	10381618	10149509	9477239	10038841	10051961
7.2 Inland Bills-Purchased	26214	27439	22268	21675	25658	26331	22005	21421
7.3 Inland Bills-Discounted	147209	140811	128038	126940	145683	138557	126919	125979
7.4 Foreign Bills-Purchased	20866	24037	14638	16172	20458	23707	14435	15955
7.5 Foreign Bills-Discounted	30114	35509	23919	25452	29554	34930	23474	24950

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

(₹ Crore)

Item	Outstanding as on				Growth (%)	
	Mar. 27, 2020	2019	2020		Financial year so far	Y-o-Y
		Jun. 21	May 22	Jun. 19	2020-21	2020
	1	2	3	4	5	6
1 Gross Bank Credit	**9263134**	**8547555**	**9108882**	**9136004**	**-1.4**	**6.9**
1.1 Food Credit	**51590**	**71178**	**79135**	**88990**	**72.5**	**25.0**
1.2 Non-food Credit	**9211544**	**8476377**	**9029747**	**9047014**	**–1.8**	**6.7**
1.2.1 Agriculture & Allied Activities	**1157795**	**1125788**	**1146207**	**1152934**	**–0.4**	**2.4**
1.2.2 Industry	**2905151**	**2812032**	**2861607**	**2875210**	**–1.0**	**2.2**
1.2.2.1 Micro & Small	381825	366185	352949	352696	–7.6	-3.7
1.2.2.2 Medium	105598	105170	99847	95670	–9.4	-9.0
1.2.2.3 Large	2417728	2340677	2408811	2426844	0.4	3.7
1.2.3 Services	**2594945**	**2284715**	**2543070**	**2528489**	**–2.6**	**10.7**
1.2.3.1 Transport Operators	144466	141711	149290	146715	1.6	3.5
1.2.3.2 Computer Software	20051	18312	19812	20592	2.7	12.5
1.2.3.3 Tourism, Hotels & Restaurants	45977	39603	45777	46253	0.6	16.8
1.2.3.4 Shipping	6557	6080	5249	5155	–21.4	-15.2
1.2.3.5 Professional Services	177085	168679	173325	173914	–1.8	3.1
1.2.3.6 Trade	552392	511576	538619	543012	–1.7	6.1
1.2.3.6.1 Wholesale Trade	263397	230097	252442	255206	–3.1	10.9
1.2.3.6.2 Retail Trade	288995	281479	286177	287806	–0.4	2.2
1.2.3.7 Commercial Real Estate	229770	205495	227847	229263	–0.2	11.6
1.2.3.8 Non-Banking Financial Companies (NBFCs)	807383	635098	804287	798514	–1.1	25.7
1.2.3.9 Other Services	611264	558161	578864	565071	–7.6	1.2
1.2.4 Personal Loans	**2553652**	**2253843**	**2478863**	**2490381**	**–2.5**	**10.5**
1.2.4.1 Consumer Durables	9298	5771	8703	8847	–4.9	53.3
1.2.4.2 Housing	1338964	1187027	1329147	1335902	–0.2	12.5
1.2.4.3 Advances against Fixed Deposits	79496	67105	63594	61457	–22.7	-8.4
1.2.4.4 Advances to Individuals against share & bond	5334	5368	4502	5803	8.8	8.1
1.2.4.5 Credit Card Outstanding	108094	94890	92887	97586	–9.7	2.8
1.2.4.6 Education	65745	67641	65205	65017	–1.1	-3.9
1.2.4.7 Vehicle Loans	220609	200419	214548	214602	–2.7	7.1
1.2.4.8 Other Personal Loans	726112	625622	700277	701167	–3.4	12.1
1.2A Priority Sector	**2897461**	**2751954**	**2795546**	**2803776**	**–3.2**	**1.9**
1.2A.1 Agriculture & Allied Activities	1146624	1118660	1138386	1144499	–0.2	2.3
1.2A.2 Micro & Small Enterprises	1149394	1062806	1077748	1132391	–1.5	6.5
1.2A.2.1 Manufacturing	381825	366185	352949	352696	–7.6	-3.7
1.2A.2.2 Services	767568	696621	724799	779695	1.6	11.9
1.2A.3 Housing	449945	440022	463004	463729	3.1	5.4
1.2A.4 Micro-Credit	38237	28690	34818	35826	–6.3	24.9
1.2A.5 Education Loans	51906	54237	52088	52035	0.2	-4.1
1.2A.6 State-Sponsored Orgs. for SC/ST	388	383	399	399	2.8	4.2
1.2A.7 Weaker Sections	731409	701478	739806	740428	1.2	5.6
1.2A.8 Export Credit	16114	14279	17381	16719	3.8	17.1

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

(₹ Crore)

Industry	Outstanding as on				Growth (%)	
	Mar. 27, 2020	2019	2020		Financial year so far	Y-o-Y
		Jun. 21	May 22	Jun. 19	2020-21	2020
	1	2	3	4	5	6
1 Industry	**2905151**	**2812032**	**2861607**	**2875210**	**–1.0**	**2.2**
1.1 Mining & Quarrying (incl. Coal)	**43927**	**41129**	**42094**	**42890**	**–2.4**	**4.3**
1.2 Food Processing	**154146**	**151625**	**149382**	**157937**	**2.5**	**4.2**
1.2.1 Sugar	27382	29572	26556	25491	–6.9	–13.8
1.2.2 Edible Oils & Vanaspati	19240	20100	17980	17589	–8.6	–12.5
1.2.3 Tea	5375	5110	4406	5108	–5.0	–0.0
1.2.4 Others	102149	96843	100440	109749	7.4	13.3
1.3 Beverage & Tobacco	**16522**	**14376**	**16111**	**15025**	**–9.1**	**4.5**
1.4 Textiles	**192424**	**193595**	**189249**	**189236**	**–1.7**	**–2.3**
1.4.1 Cotton Textiles	89283	91947	86023	86401	–3.2	–6.0
1.4.2 Jute Textiles	2116	2122	1958	2046	–3.3	–3.6
1.4.3 Man-Made Textiles	26074	25984	26349	26835	2.9	3.3
1.4.4 Other Textiles	74951	73542	74919	73954	–1.3	0.6
1.5 Leather & Leather Products	**11098**	**11150**	**10609**	**10936**	**–1.5**	**–1.9**
1.6 Wood & Wood Products	**12233**	**11691**	**12432**	**12591**	**2.9**	**7.7**
1.7 Paper & Paper Products	**30965**	**30142**	**31570**	**31675**	**2.3**	**5.1**
1.8 Petroleum, Coal Products & Nuclear Fuels	**75834**	**55775**	**73835**	**73323**	**–3.3**	**31.5**
1.9 Chemicals & Chemical Products	**202949**	**174540**	**182315**	**180006**	**–11.3**	**3.1**
1.9.1 Fertiliser	49066	33118	34781	34486	–29.7	4.1
1.9.2 Drugs & Pharmaceuticals	53427	49021	51800	52040	–2.6	6.2
1.9.3 Petro Chemicals	42233	39493	40832	39455	–6.6	–0.1
1.9.4 Others	58223	52908	54902	54025	–7.2	2.1
1.10 Rubber, Plastic & their Products	**50415**	**45828**	**48645**	**48402**	**–4.0**	**5.6**
1.11 Glass & Glassware	**8777**	**9832**	**8165**	**8132**	**–7.3**	**–17.3**
1.12 Cement & Cement Products	**58689**	**56126**	**58234**	**57163**	**–2.6**	**1.8**
1.13 Basic Metal & Metal Product	**350325**	**352015**	**354466**	**350359**	**0.0**	**–0.5**
1.13.1 Iron & Steel	262396	266162	268756	266465	1.6	0.1
1.13.2 Other Metal & Metal Product	87929	85853	85710	83894	–4.6	–2.3
1.14 All Engineering	**157259**	**164574**	**155201**	**147283**	**–6.3**	**–10.5**
1.14.1 Electronics	30159	37942	30438	29742	–1.4	–21.6
1.14.2 Others	127100	126632	124763	117541	–7.5	–7.2
1.15 Vehicles, Vehicle Parts & Transport Equipment	**82606**	**81419**	**84499**	**85374**	**3.4**	**4.9**
1.16 Gems & Jewellery	**59515**	**66218**	**57447**	**55686**	**–6.4**	**–15.9**
1.17 Construction	**104288**	**97160**	**100381**	**102608**	**–1.6**	**5.6**
1.18 Infrastructure	**1053913**	**1026481**	**1055249**	**1069160**	**1.4**	**4.2**
1.18.1 Power	559774	563743	568131	568950	1.6	0.9
1.18.2 Telecommunications	143760	106831	138289	146173	1.7	36.8
1.18.3 Roads	190676	186128	192041	194921	2.2	4.7
1.18.4 Other Infrastructure	159703	169779	156788	159116	–0.4	–6.3
1.19 Other Industries	**239266**	**228356**	**231723**	**237424**	**–0.8**	**4.0**

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								
	2019-20	2019	2020						
		May. 31	Mar. 13	Mar. 27	Apr. 10	Apr. 24	May. 08	May. 22	May. 29
	1	2	3	4	5	6	7	8	9
Number of Reporting Banks	31	32	31	31	31	31	31	31	31
1 Aggregate Deposits (2.1.1.2+2.2.1.2)	**123812.9**	**62639.2**	**123095.1**	**123812.9**	**123662.3**	**125204.9**	**125346.7**	**125096.8**	**125375.1**
2 Demand and Time Liabilities									
2.1 Demand Liabilities	**26007.5**	**17939.1**	**24248.2**	**26007.5**	**24423.4**	**24706.2**	**25729.6**	**23631.3**	**24755.4**
2.1.1 Deposits									
2.1.1.1 Inter-Bank	5295.0	4866.0	5573.2	5295.0	4572.9	5177.3	5919.2	5151.9	5276.6
2.1.1.2 Others	14,317.3	10129.4	12161.4	14317.3	13051.0	13835.8	13552.3	12649.7	13674.1
2.1.2 Borrowings from Banks	100.0	70.0	199.9	100.0	0.0	0.0	0.0	0.0	25.0
2.1.3 Other Demand Liabilities	6295.2	2873.8	6313.7	6295.2	6799.5	5693.1	6258.0	5829.8	5779.7
2.2 Time Liabilities	**167558.4**	**99457.8**	**167444.2**	**167558.4**	**173146.8**	**173854.7**	**175140.7**	**179693.5**	**177855.8**
2.2.1 Deposits									
2.2.1.1 Inter-Bank	56564.0	46246.8	54997.7	56564.0	60609.3	60943.0	61787.7	63944.7	64012.5
2.2.1.2 Others	109495.7	52509.8	110933.7	109495.7	110611.3	111369.1	111794.3	112447.2	111701.0
2.2.2 Borrowings from Banks	630.2	0.0	630.0	630.2	955.6	629.9	629.9	640.9	755.9
2.2.3 Other Time Liabilities	868.6	701.2	882.7	868.6	970.6	912.7	928.7	2660.7	1386.3
3 Borrowing from Reserve Bank	0.0	35.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 Borrowings from a notified bank / Government	52538.8	47320.8	49412.6	52538.8	51935.2	50287.7	57302.1	58212.6	56219.3
4.1 Demand	13764.4	14109.5	14027.1	13764.4	13624.3	12779.0	13496.5	13771.3	13701.3
4.2 Time	38774.4	33211.3	35385.6	38774.4	38310.8	37508.7	43805.6	44441.3	42517.9
5 Cash in Hand and Balances with Reserve Bank	**9425.7**	**4857.5**	**8860.3**	**9425.7**	**6899.9**	**7122.4**	**7278.1**	**7869.0**	**7525.9**
5.1 Cash in Hand	748.4	350.0	694.2	748.4	711.7	761.9	673.5	676.9	711.2
5.2 Balance with Reserve Bank	8677.2	4507.5	8166.1	8677.2	6188.2	6360.5	6604.7	7192.1	6814.7
6 Balances with Other Banks in Current Account	**1489.1**	**993.3**	**1127.9**	**1489.1**	**1009.2**	**1140.3**	**1651.3**	**991.6**	**1338.0**
7 Investments in Government Securities	**50626.9**	**31103.6**	**49381.9**	**50626.9**	**53518.3**	**52294.4**	**54080.9**	**52055.1**	**53179.8**
8 Money at Call and Short Notice	**25259.9**	**15031.4**	**22642.7**	**25259.9**	**25731.8**	**27393.7**	**32111.1**	**30755.6**	**30633.2**
9 Bank Credit (10.1+11)	**110575.6**	**62846.0**	**108078.9**	**110575.6**	**108889.7**	**107724.1**	**108234.9**	**109907.7**	**110987.8**
10 Advances									
10.1 Loans, Cash-Credits and Overdrafts	**110575.0**	**62841.7**	**108078.4**	**110575.0**	**108889.1**	**107723.5**	**108234.3**	**109907.1**	**110987.2**
10.2 Due from Banks	81300.1	78346.8	80135.6	81300.1	82861.4	81907.8	81947.9	82010.5	79337.2
11 Bills Purchased and Discounted	1.2	4.4	1.2	1.2	1.2	1.2	0.6	0.6	0.6

Prices and Production

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

Group/Sub group	2019-20			Rural			Urban			Combined		
	Rural	Urban	Combined	Jun. '19	May. '20	Jun '20(P)	Jun. '19	May. '20	Jun '20(P)	Jun. '19	May. '20	Jun '20(P)
	1	2	3	4	5	6	7	8	9	10	11	12
1 Food and beverages	**146.3**	**149.6**	**147.5**	**141.0**	**151.4***	**152.0**	**145.6**	**154.8***	**155.1**	**142.7**	**152.7***	**153.1**
1.1 Cereals and products	140.7	143.2	141.4	137.8	147.5	146.8	140.7	150.4	149.8	138.7	148.4	147.7
1.2 Meat and fish	163.3	161.4	162.6	163.5	181.5	187.8	159.6	188.1	189.5	162.1	183.8	188.4
1.3 Egg	142.1	145.7	143.5	136.2	146.4	146.2	140.4	150.0	150.8	137.8	147.8	148.0
1.4 Milk and products	146.5	146.0	146.3	143.2	154.9	155.5	143.4	155.4	155.3	143.3	155.1	155.4
1.5 Oils and fats	127.1	121.8	125.1	124.3	139.2	139.8	118.6	131.9	132.7	122.2	136.5	137.2
1.6 Fruits	144.0	148.8	146.2	143.3	146.2	141.9	150.9	153.0	150.3	146.8	149.4	145.8
1.7 Vegetables	163.5	187.8	171.7	140.6	145.1	147.2	169.8	161.8	165.2	150.5	150.8	153.3
1.8 Pulses and products	133.7	132.0	133.1	128.7	151.1	149.4	127.4	151.4	150.2	128.3	151.2	149.7
1.9 Sugar and confectionery	112.0	113.4	112.5	110.6	116.2	115.3	111.8	117.2	117.0	111.0	116.5	115.9
1.10 Spices	145.6	145.1	145.5	140.4	158.7	157.9	141.0	154.7	155.5	140.6	157.4	157.1
1.11 Non-alcoholic beverages	138.8	130.2	135.2	138.0	141.4	142.8	129.0	134.1	136.6	134.2	138.4	140.2
1.12 Prepared meals, snacks, sweets	157.6	156.7	157.2	156.6	161.9*	163.1	155.1	162.4*	162.0	155.9	162.1*	162.6
2 Pan, tobacco and intoxicants	**166.3**	**169.0**	**167.0**	**164.2**	**171.2***	**180.5**	**166.7**	**183.4**	**181.9**	**164.9**	**174.4***	**180.9**
3 Clothing and footwear	**151.3**	**143.7**	**148.3**	**150.7**	**153.2***	**155.4**	**142.4**	**150.8***	**148.4**	**147.4**	**152.3***	**152.6**
3.1 Clothing	152.0	145.7	149.5	151.4	154.0*	156.5	144.3	153.0*	150.4	148.6	153.6*	154.1
3.2 Footwear	146.9	132.4	140.9	146.5	148.2*	149.0	131.7	138.6*	137.1	140.4	144.2*	144.1
4 Housing	**--**	**152.2**	**152.2**	**--**	**--**	**--**	**149.4**	**155.6**	**154.7**	**149.4**	**155.6**	**154.7**
5 Fuel and light	**148.6**	**131.5**	**142.2**	**147.8**	**146.4**	**146.5**	**130.5**	**136.2**	**142.5**	**141.2**	**142.5**	**145.0**
6 Miscellaneous	**145.6**	**135.9**	**140.9**	**143.3**	**149.2***	**150.9**	**133.6**	**143.0***	**141.8**	**138.6**	**146.2***	**146.5**
6.1 Household goods and services	150.6	138.7	145.0	149.6	152.1*	150.2	137.4	145.9*	143.7	143.8	149.2*	147.1
6.2 Health	153.6	142.1	149.3	151.7	157.0	157.8	140.3	146.1	146.6	147.4	152.9	153.6
6.3 Transport and communication	132.6	122.2	127.1	130.2	136.3*	138.9	119.6	129.1*	128.7	124.6	132.5*	133.5
6.4 Recreation and amusement	148.3	135.9	141.3	146.4	151.8*	151.5	134.3	142.9*	137.9	139.6	146.8*	143.8
6.5 Education	159.8	150.9	154.5	157.7	161.8*	169.2	148.9	158.0*	155.0	152.5	159.6*	160.9
6.6 Personal care and effects	139.2	138.4	138.9	134.8	145.7*	150.4	133.7	150.5*	151.8	134.3	147.7*	151.0
General Index (All Groups)	**147.3**	**145.1**	**146.3**	**143.6**	**151.2***	**152.5**	**142.1**	**150.6***	**150.5**	**142.9**	**150.9***	**151.6**

Source: National Statistical Office, Ministry of Statistics and Programme Implementation, Government of India.
*: Indicated CPI indices for May-20 are imputed indices published by the NSO.

No. 19: Other Consumer Price Indices

Item	Base Year	Linking Factor	2019-20	2019	2020	
				Jun.	May	Jun.
	1	2	3	4	5	6
1 Consumer Price Index for Industrial Workers	2001	4.63	323	316	330	332
2 Consumer Price Index for Agricultural Labourers	1986-87	5.89	980	950	1019	1018
3 Consumer Price Index for Rural Labourers	1986-87	–	986	957	1025	1024

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

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

Item	2019-20	2019	2020	
		Jun.	May	Jun.
	1	2	3	4
1 Standard Gold (₹ per 10 grams)	37018	33121	46343	47315
2 Silver (₹ per kilogram)	42514	37187	45097	48213

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	2019-20	2019	2020		
			Jun.	Apr.	May (P)	Jun. (P)
	1	2	3	4	5	6
1 ALL COMMODITIES	**100.000**	**121.8**	**121.5**	**119.2**	**117.7**	**119.3**
1.1 PRIMARY ARTICLES	**22.618**	**143.3**	**141.0**	**137.8**	**136.2**	**139.3**
1.1.1 FOOD ARTICLES	**15.256**	**155.8**	**152.2**	**154.5**	**152.3**	**155.3**
1.1.1.1 Food Grains (Cereals+Pulses)	3.462	159.6	155.4	161.8	160.0	161.6
1.1.1.2 Fruits & Vegetables	3.475	174.7	166.8	161.4	152.3	159.3
1.1.1.3 Milk	4.440	146.7	145.5	151.6	151.2	151.4
1.1.1.4 Eggs,Meat & Fish	2.402	147.0	146.0	146.2	147.1	152.5
1.1.1.5 Condiments & Spices	0.529	143.9	133.9	147.1	147.3	145.6
1.1.1.6 Other Food Articles	0.948	144.0	144.2	141.8	146.2	147.8
1.1.2 NON-FOOD ARTICLES	**4.119**	**128.7**	**128.7**	**123.9**	**123.0**	**125.1**
1.1.2.1 Fibres	0.839	128.2	133.9	121.4	119.6	117.2
1.1.2.2 Oil Seeds	1.115	151.4	150.0	150.6	153.4	154.8
1.1.2.3 Other non-food Articles	1.960	104.8	106.1	105.0	103.8	103.8
1.1.2.4 Floriculture	0.204	238.0	208.3	169.9	156.2	200.5
1.1.3 MINERALS	**0.833**	**154.5**	**153.4**	**154.1**	**156.8**	**154.1**
1.1.3.1 Metallic Minerals	0.648	147.4	146.8	145.1	148.0	145.1
1.1.3.2 Other Minerals	0.185	179.0	176.6	185.7	187.7	185.7
1.1.4 CRUDE PETROLEUM & NATURAL GAS	**2.410**	**85.3**	**87.2**	**49.9**	**49.7**	**57.8**
1.2 FUEL & POWER	**13.152**	**102.2**	**102.2**	**89.8**	**83.7**	**88.3**
1.2.1 COAL	**2.138**	**125.3**	**124.0**	**126.5**	**126.5**	**126.5**
1.2.1.1 Coking Coal	0.647	138.1	133.9	141.9	141.9	141.9
1.2.1.2 Non-Coking Coal	1.401	119.0	119.0	119.0	119.0	119.0
1.2.1.3 Lignite	0.090	129.1	129.9	131.1	131.1	131.1
1.2.2 MINERAL OILS	**7.950**	**92.3**	**94.0**	**70.6**	**60.6**	**68.2**
1.2.3 ELECTRICITY	**3.064**	**111.8**	**108.3**	**113.9**	**113.9**	**113.9**
1.3 MANUFACTURED PRODUCTS	**64.231**	**118.3**	**118.5**	**118.7**	**118.1**	**118.6**
1.3.1 MANUFACTURE OF FOOD PRODUCTS	**9.122**	**133.9**	**130.8**	**136.3**	**135.7**	**137.4**
1.3.1.1 Processing and Preserving of meat	0.134	137.5	140.5	136.2	135.6	135.2
1.3.1.2 Processing and Preserving of fish, Crustaceans, Molluscs and products thereof	0.204	136.1	132.3	132.0	139.3	139.2
1.3.1.3 Processing and Preserving of fruit and Vegetables	0.138	114.3	115.6	116.2	115.6	119.4
1.3.1.4 Vegetable and Animal oils and Fats	2.643	119.3	112.4	126.4	126.2	128.0
1.3.1.5 Dairy products	1.165	145.0	139.8	151.1	148.4	148.8
1.3.1.6 Grain mill products	2.010	146.3	145.0	146.4	145.6	145.7
1.3.1.7 Starches and Starch products	0.110	135.5	136.0	127.0	124.0	117.5
1.3.1.8 Bakery products	0.215	133.5	132.2	136.6	136.4	137.2
1.3.1.9 Sugar, Molasses & honey	1.163	118.3	117.3	118.4	117.3	119.0
1.3.1.10 Cocoa, Chocolate and Sugar confectionery	0.175	127.2	128.4	127.8	127.3	128.0
1.3.1.11 Macaroni, Noodles, Couscous and Similar farinaceous products	0.026	132.7	133.7	126.3	133.8	142.0
1.3.1.12 Tea & Coffee products	0.371	139.7	145.8	138.1	139.8	160.7
1.3.1.13 Processed condiments & salt	0.163	132.4	124.8	144.0	144.1	141.6
1.3.1.14 Processed ready to eat food	0.024	128.7	131.6	133.1	129.4	134.0
1.3.1.15 Health supplements	0.225	159.9	154.5	151.3	146.7	146.8
1.3.1.16 Prepared animal feeds	0.356	173.6	172.1	166.1	167.8	167.6
1.3.2 MANUFACTURE OF BEVERAGES	**0.909**	**123.6**	**123.3**	**125.0**	**124.8**	**124.6**
1.3.2.1 Wines & spirits	0.408	117.8	116.4	119.8	119.9	119.7
1.3.2.2 Malt liquors and Malt	0.225	125.7	124.8	127.6	127.4	127.7
1.3.2.3 Soft drinks; Production of mineral waters and Other bottled waters	0.275	130.5	132.5	130.7	130.1	129.3
1.3.3 MANUFACTURE OF TOBACCO PRODUCTS	**0.514**	**153.4**	**154.0**	**156.4**	**160.6**	**158.0**
1.3.3.1 Tobacco products	0.514	153.4	154.0	156.4	160.6	158.0

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2019-20	2019	2020		
			Jun.	Apr.	May (P)	Jun. (P)
1.3.4 MANUFACTURE OF TEXTILES	**4.881**	**117.7**	**119.4**	**117.0**	**116.3**	**114.9**
1.3.4.1 Preparation and Spinning of textile fibres	2.582	107.9	110.7	105.7	104.4	102.0
1.3.4.2 Weaving & Finishing of textiles	1.509	130.1	130.7	131.5	130.8	130.2
1.3.4.3 Knitted and Crocheted fabrics	0.193	114.5	115.0	113.1	114.2	116.9
1.3.4.4 Made-up textile articles, Except apparel	0.299	134.5	135.2	133.0	133.7	133.8
1.3.4.5 Cordage, Rope, Twine and Netting	0.098	143.1	139.4	147.3	148.7	148.9
1.3.4.6 Other textiles	0.201	116.8	118.2	117.3	119.4	118.4
1.3.5 MANUFACTURE OF WEARING APPAREL	**0.814**	**138.3**	**138.0**	**138.9**	**138.5**	**139.1**
1.3.5.1 Manufacture of Wearing Apparel (woven), Except fur Apparel	0.593	139.2	139.3	139.0	139.4	139.5
1.3.5.2 Knitted and Crocheted apparel	0.221	135.9	134.6	138.6	136.4	138.0
1.3.6 MANUFACTURE OF LEATHER AND RELATED PRODUCTS	**0.535**	**118.6**	**118.6**	**117.7**	**117.8**	**116.7**
1.3.6.1 Tanning and Dressing of leather; Dressing and Dyeing of fur	0.142	105.5	106.2	104.1	104.5	101.0
1.3.6.2 Luggage, HandbAgs, Saddlery and Harness	0.075	136.3	136.4	138.3	138.4	139.0
1.3.6.3 Footwear	0.318	120.3	120.0	119.0	118.9	118.5
1.3.7 MANUFACTURE OF WOOD AND PRODUCTS OF WOOD AND CORK	**0.772**	**133.7**	**134.5**	**132.6**	**133.4**	**132.9**
1.3.7.1 Saw milling and Planing of wood	0.124	122.2	126.2	119.8	120.6	119.6
1.3.7.2 Veneer sheets; Manufacture of plywood, Laminboard, Particle board and Other panels and Boards	0.493	135.5	134.9	134.8	135.9	135.4
1.3.7.3 Builder's carpentry and Joinery	0.036	176.2	175.5	177.3	177.6	179.8
1.3.7.4 Wooden containers	0.119	125.7	129.2	123.4	123.1	122.5
1.3.8 MANUFACTURE OF PAPER AND PAPER PRODUCTS	**1.113**	**121.1**	**122.5**	**120.6**	**120.9**	**120.5**
1.3.8.1 Pulp, Paper and Paperboard	0.493	125.0	127.2	123.5	124.6	123.3
1.3.8.2 Corrugated paper and Paperboard and Containers of paper and Paperboard	0.314	115.0	115.1	116.6	116.3	117.4
1.3.8.3 Other articles of paper and Paperboard	0.306	121.2	122.6	120.0	119.6	119.3
1.3.9 PRINTING AND REPRODUCTION OF RECORDED MEDIA	**0.676**	**150.6**	**148.0**	**150.8**	**149.0**	**151.7**
1.3.9.1 Printing	0.676	150.6	148.0	150.8	149.0	151.7
1.3.10 MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS	**6.465**	**117.5**	**119.0**	**115.2**	**115.1**	**115.8**
1.3.10.1 Basic chemicals	1.433	119.9	123.4	115.4	115.2	115.3
1.3.10.2 Fertilizers and Nitrogen compounds	1.485	123.1	123.4	123.4	123.8	123.7
1.3.10.3 Plastic and Synthetic rubber in primary form	1.001	112.4	114.5	106.2	106.5	108.8
1.3.10.4 Pesticides and Other agrochemical products	0.454	122.6	121.9	120.3	121.0	123.1
1.3.10.5 Paints, Varnishes and Similar coatings, Printing ink and Mastics	0.491	114.7	116.4	113.2	113.3	113.9
1.3.10.6 Soap and Detergents, Cleaning and Polishing preparations, Perfumes and Toilet preparations	0.612	118.6	119.5	118.0	116.2	119.3
1.3.10.7 Other chemical products	0.692	114.2	114.6	114.6	114.7	114.4
1.3.10.8 Man-made fibres	0.296	97.9	100.3	95.4	93.3	91.1
1.3.11 MANUFACTURE OF PHARMACEUTICALS, MEDICINAL CHEMICAL AND BOTANICAL PRODUCTS	**1.993**	**127.3**	**125.7**	**130.3**	**130.2**	**130.8**
1.3.11.1 Pharmaceuticals, Medicinal chemical and Botanical products	1.993	127.3	125.7	130.3	130.2	130.8
1.3.12 MANUFACTURE OF RUBBER AND PLASTICS PRODUCTS	**2.299**	**108.5**	**109.3**	**107.3**	**107.3**	**107.9**
1.3.12.1 Rubber Tyres and Tubes; Retreading and Rebuilding of Rubber Tyres	0.609	98.9	99.3	98.1	98.7	97.8
1.3.12.2 Other Rubber Products	0.272	93.5	94.2	92.8	93.7	93.1
1.3.12.3 Plastics products	1.418	115.4	116.5	114.1	113.7	115.1
1.3.13 MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS	**3.202**	**116.7**	**118.3**	**117.8**	**117.5**	**118.0**
1.3.13.1 Glass and Glass products	0.295	124.5	125.7	122.4	121.6	125.6
1.3.13.2 Refractory products	0.223	108.7	109.4	107.3	107.3	109.0
1.3.13.3 Clay Building Materials	0.121	102.8	100.7	107.7	106.2	110.1
1.3.13.4 Other Porcelain and Ceramic Products	0.222	113.9	114.5	111.8	109.4	109.2
1.3.13.5 Cement, Lime and Plaster	1.645	119.5	121.8	122.6	122.7	122.5

No. 21: Wholesale Price Index (Contd.)

(Base: 2011-12 = 100)

Commodities	Weight	2019-20	2019	2020		
			Jun.	Apr.	May (P)	Jun. (P)
1.3.13.6 Articles of Concrete, Cement and Plaster	0.292	121.6	121.0	123.0	124.7	124.8
1.3.13.7 Cutting, Shaping and Finishing of Stone	0.234	120.2	119.7	121.5	119.1	118.7
1.3.13.8 Other Non-Metallic Mineral Products	0.169	86.6	94.6	77.6	77.6	77.6
1.3.14 MANUFACTURE OF BASIC METALS	**9.646**	**106.2**	**108.7**	**107.0**	**103.2**	**103.9**
1.3.14.1 Inputs into steel making	1.411	100.6	105.0	113.1	96.4	97.0
1.3.14.2 Metallic Iron	0.653	107.7	113.5	111.1	100.3	102.1
1.3.14.3 Mild Steel - Semi Finished Steel	1.274	95.1	96.2	96.3	95.0	94.7
1.3.14.4 Mild Steel -Long Products	1.081	105.5	108.4	106.2	105.3	104.6
1.3.14.5 Mild Steel - Flat products	1.144	108.7	113.7	105.1	105.2	105.5
1.3.14.6 Alloy steel other than Stainless Steel- Shapes	0.067	102.8	107.4	101.6	102.3	102.5
1.3.14.7 Stainless Steel - Semi Finished	0.924	102.9	106.3	102.0	101.3	101.4
1.3.14.8 Pipes & tubes	0.205	126.2	129.7	125.3	124.5	121.8
1.3.14.9 Non-ferrous metals incl. precious metals	1.693	107.0	106.9	104.9	103.5	104.9
1.3.14.10 Castings	0.925	112.8	113.5	106.9	106.4	109.3
1.3.14.11 Forgings of steel	0.271	146.5	143.5	145.2	145.9	147.5
1.3.15 MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENT	**3.155**	**115.5**	**116.2**	**114.8**	**114.4**	**114.8**
1.3.15.1 Structural Metal Products	1.031	113.9	114.7	112.9	112.2	111.5
1.3.15.2 Tanks, Reservoirs and Containers of Metal	0.660	124.4	124.4	124.5	125.2	125.4
1.3.15.3 Steam generators, Except Central Heating Hot Water Boilers	0.145	104.7	102.6	107.7	107.7	107.7
1.3.15.4 Forging, Pressing, Stamping and Roll-Forming of Metal; Powder Metallurgy	0.383	100.5	101.2	98.9	101.4	100.3
1.3.15.5 Cutlery, Hand Tools and General Hardware	0.208	100.5	100.2	100.8	101.0	101.1
1.3.15.6 Other Fabricated Metal Products	0.728	124.0	126.1	122.6	119.9	122.9
1.3.16 MANUFACTURE OF COMPUTER, ELECTRONIC AND OPTICAL PRODUCTS	**2.009**	**110.4**	**111.4**	**109.9**	**109.9**	**109.9**
1.3.16.1 Electronic Components	0.402	98.1	97.4	98.2	98.1	97.5
1.3.16.2 Computers and Peripheral Equipment	0.336	135.0	135.0	135.0	135.0	135.0
1.3.16.3 Communication Equipment	0.310	117.0	116.7	115.1	115.0	115.4
1.3.16.4 Consumer Electronics	0.641	98.8	102.2	98.0	98.1	98.3
1.3.16.5 Measuring, Testing, Navigating and Control equipment	0.181	111.5	112.5	111.0	111.0	111.0
1.3.16.6 Watches and Clocks	0.076	139.1	138.7	141.1	141.1	142.0
1.3.16.7 Irradiation, Electromedical and Electrotherapeutic equipment	0.055	103.6	104.2	104.3	104.3	103.9
1.3.16.8 Optical instruments and Photographic equipment	0.008	110.2	109.5	112.2	112.2	112.1
1.3.17 MANUFACTURE OF ELECTRICAL EQUIPMENT	**2.930**	**111.3**	**110.9**	**110.3**	**110.4**	**111.1**
1.3.17.1 Electric motors, Generators, Transformers and Electricity distribution and Control apparatus	1.298	109.0	107.5	108.7	108.1	109.8
1.3.17.2 Batteries and Accumulators	0.236	117.0	117.6	117.0	116.6	117.8
1.3.17.3 Fibre optic cables for data transmission or live transmission of images	0.133	109.9	113.6	99.4	104.0	100.1
1.3.17.4 Other electronic and Electric wires and Cables	0.428	109.7	109.3	108.3	109.0	109.6
1.3.17.5 Wiring devices, Electric lighting & display equipment	0.263	111.1	111.4	111.1	112.0	111.3
1.3.17.6 Domestic appliances	0.366	119.9	120.4	118.1	118.1	118.1
1.3.17.7 Other electrical equipment	0.206	108.6	108.9	109.4	109.1	109.4
1.3.18 MANUFACTURE OF MACHINERY AND EQUIPMENT	**4.789**	**113.1**	**113.2**	**113.0**	**112.9**	**112.7**
1.3.18.1 Engines and Turbines, Except aircraft, Vehicle and Two wheeler engines	0.638	104.8	104.7	104.7	104.0	103.5
1.3.18.2 Fluid power equipment	0.162	119.9	119.3	119.9	120.7	120.6
1.3.18.3 Other pumps, Compressors, Taps and Valves	0.552	111.2	111.6	111.9	109.2	111.4
1.3.18.4 Bearings, Gears, Gearing and Driving elements	0.340	110.1	110.2	113.6	114.3	111.7
1.3.18.5 Ovens, Furnaces and Furnace burners	0.008	80.0	79.3	81.0	81.0	81.3
1.3.18.6 Lifting and Handling equipment	0.285	111.5	110.6	111.2	112.0	111.8

No. 21: Wholesale Price Index (Concld.)

(Base: 2011-12 = 100)

Commodities	Weight	2019-20	2019	2020		
			Jun.	Apr.	May (P)	Jun. (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	130.9	133.7	128.4	128.4	128.1
1.3.18.9 Agricultural and Forestry machinery	0.833	120.6	119.7	121.6	121.3	120.6
1.3.18.10 Metal-forming machinery and Machine tools	0.224	108.1	107.4	109.6	109.6	109.5
1.3.18.11 Machinery for mining, Quarrying and Construction	0.371	75.1	74.5	75.0	74.4	76.2
1.3.18.12 Machinery for food, Beverage and Tobacco processing	0.228	125.2	125.3	119.3	125.3	125.2
1.3.18.13 Machinery for textile, Apparel and Leather production	0.192	119.7	120.8	119.2	119.3	117.5
1.3.18.14 Other special-purpose machinery	0.468	126.3	126.8	125.7	125.8	124.5
1.3.18.15 Renewable electricity generating equipment	0.046	66.0	66.6	64.3	64.3	64.3
1.3.19 MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS	**4.969**	**114.5**	**114.7**	**115.0**	**115.9**	**116.3**
1.3.19.1 Motor vehicles	2.600	115.2	115.7	115.4	116.8	117.9
1.3.19.2 Parts and Accessories for motor vehicles	2.368	113.7	113.5	114.5	114.9	114.6
1.3.20 MANUFACTURE OF OTHER TRANSPORT EQUIPMENT	**1.648**	**118.0**	**117.0**	**120.5**	**123.9**	**124.5**
1.3.20.1 Building of ships and Floating structures	0.117	158.8	158.8	158.8	158.8	158.8
1.3.20.2 Railway locomotives and Rolling stock	0.110	106.4	106.6	105.2	105.2	106.4
1.3.20.3 Motor cycles	1.302	114.3	113.0	117.6	121.9	122.6
1.3.20.4 Bicycles and Invalid carriages	0.117	128.9	128.7	128.2	128.5	128.6
1.3.20.5 Other transport equipment	0.002	126.1	125.1	127.4	127.4	127.2
1.3.21 MANUFACTURE OF FURNITURE	**0.727**	**130.9**	**132.1**	**132.3**	**132.0**	**131.0**
1.3.21.1 Furniture	0.727	130.9	132.1	132.3	132.0	131.0
1.3.22 OTHER MANUFACTURING	**1.064**	**112.7**	**108.7**	**120.0**	**119.7**	**123.3**
1.3.22.1 Jewellery and Related articles	0.996	109.9	105.6	117.6	117.1	120.9
1.3.22.2 Musical instruments	0.001	174.0	177.2	174.5	177.2	172.7
1.3.22.3 Sports goods	0.012	129.7	128.1	130.8	131.4	130.8
1.3.22.4 Games and Toys	0.005	136.9	137.7	137.0	135.9	139.9
1.3.22.5 Medical and Dental instruments and Supplies	0.049	162.1	161.1	163.2	165.0	167.2
2 FOOD INDEX	**24.378**	**147.6**	**144.2**	**147.7**	**146.1**	**148.6**

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

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

Industry	Weight	2018-19	2019-20	April-May		May	
				2019-20	2020-21	2019	2020
	1	2	3	4	5	6	7
General Index	100.00	130.1	129.1	131.0	71.0	135.4	88.4
1 Sectoral Classification							
1.1 Mining	14.37	107.9	109.6	109.0	82.9	110.1	87.0
1.2 Manufacturing	77.63	131.5	129.6	131.0	62.0	135.8	82.4
1.3 Electricity	7.99	156.9	158.4	169.9	137.6	176.9	149.6
2 Use-Based Classification							
2.1 Primary Goods	34.05	126.1	127.0	128.9	98.9	131.9	105.5
2.2 Capital Goods	8.22	108.4	93.4	100.1	22.1	103.9	37.1
2.3 Intermediate Goods	17.22	126.2	137.7	131.3	60.2	138.8	77.6
2.4 Infrastructure/ Construction Goods	12.34	141.7	136.5	140.0	52.4	145.0	84.1
2.5 Consumer Durables	12.84	130.4	119.0	130.5	23.7	133.8	42.2
2.6 Consumer Non-Durables	15.33	145.5	145.5	144.9	102.1	149.8	132.3

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 - June			
	2020-21 (Budget Estimates)	2020-21 (Actuals)	2019-20 (Actuals)	Percentage to Budget Estimates	
				2020-21	2019-20
	1	2	3	4	5
1 Revenue Receipts	**2020926**	**150008**	**284886**	**7.4**	**14.5**
1.1 Tax Revenue (Net)	1635909	134822	251411	8.2	15.2
1.2 Non-Tax Revenue	385017	15186	33475	3.9	10.7
2 Non-Debt Capital Receipt	**224967**	**3573**	**4764**	**1.6**	**4.0**
2.1 Recovery of Loans	14967	3573	2407	23.9	16.2
2.2 Other Receipts	210000	0	2357	0.0	2.2
3 Total Receipts (excluding borrowings) (1+2)	**2245893**	**153581**	**289650**	**6.8**	**13.9**
4 Revenue Expenditure	2630145	727671	658705	27.7	26.9
4.1 Interest Payments	708203	160493	141755	22.7	21.5
5 Capital Expenditure	412085	88273	63000	21.4	18.6
6 Total Expenditure (4+5)	**3042230**	**815944**	**721705**	**26.8**	**25.9**
7 Revenue Deficit (4-1)	**609219**	**577663**	**373819**	**94.8**	**77.1**
8 Fiscal Deficit (6-3)	**796337**	**662363**	**432055**	**83.2**	**61.4**
9 Gross Primary Deficit (8-4.1)	**88134**	**501870**	**290300**	**569.4**	**670.6**

Source: Controller General of Accounts, Ministry of Finance, Government of India and Union Budget 2020-21.

No. 24: Treasury Bills – Ownership Pattern

(₹ Crore)

Item	2019-20	2019	2020					
		Jun. 28	May 22	May 29	Jun. 5	Jun. 12	Jun. 19	Jun. 26
	1	2	3	4	5	6	7	8
1 91-day								
1.1 Banks	10165	29701	41246	41694	42211	49004	38559	37408
1.2 Primary Dealers	9190	16704	12996	13674	19535	17525	22659	15861
1.3 State Governments	8173	59642	8197	8397	8470	9015	11105	13097
1.4 Others	48004	82522	84328	93778	98824	104767	120270	138769
2 182-day								
2.1 Banks	66419	46323	75823	90674	108294	108056	114429	127626
2.2 Primary Dealers	43302	59538	48120	41997	42500	51596	56060	50405
2.3 State Governments	13386	6276	13884	14043	12945	12900	12805	12805
2.4 Others	22465	22633	91498	94556	88648	92604	94691	97950
3 364-day								
3.1 Banks	49660	51139	77030	82668	93741	95826	98535	102736
3.2 Primary Dealers	70672	88436	61956	57959	57851	67411	70871	71661
3.3 State Governments	11945	15895	12759	12650	12380	12380	12385	12395
3.4 Others	70576	45808	122344	124967	124127	122528	126358	131078
4 14-day Intermediate								
4.1 Banks								
4.2 Primary Dealers								
4.3 State Governments	155112	121965	119119	121818	121819	113664	120515	153167
4.4 Others	617	230	1038	1531	454	661	926	440
Total Treasury Bills (Excluding 14 day Intermediate T Bills) #	423957	524618	650182	677057	709527	743611	778727	811790

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										
2020-21										
May 27	15000	89	70436	2043	34	14997	2043	17040	99.21	3.1939
Jun. 3	15000	80	53117	1302	41	14998	1302	16300	99.17	3.3501
Jun. 10	15000	172	85393	2209	43	14991	2209	17200	99.16	3.4096
Jun. 17	15000	150	87378	8785	35	14996	8785	23781	99.19	3.2897
Jun. 24	15000	106	87275	5885	23	14993	5885	20879	99.21	3.1947
182-day Treasury Bills										
2020-21										
May 27	16000	136	56393	2	21	15998	2	16000	98.33	3.3998
Jun. 3	16000	116	58267	3	39	15997	3	16000	98.31	3.4475
Jun. 10	16000	104	43381	26	53	15999	26	16025	98.28	3.5098
Jun. 17	16000	105	52742	0	43	16000	0	16000	98.30	3.4770
Jun. 24	16000	105	64337	0	8	16000	0	16000	98.32	3.4197
364-day Treasury Bills										
2020-21										
May 27	14000	104	49865	0	8	14000	0	14000	96.71	3.4099
Jun. 3	14000	84	49979	775	48	14000	775	14775	96.58	3.5494
Jun. 10	14000	104	40825	1	52	13999	1	14000	96.55	3.5832
Jun. 17	14000	98	50290	0	37	14000	0	14000	96.57	3.5598
Jun. 24	14000	117	50157	0	35	14000	0	14000	96.59	3.5399

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
June 1, 2020	1.80-4.35	3.58
June 2, 2020	1.50-4.25	3.54
June 3, 2020	1.80-4.25	3.58
June 4, 2020	2.15-4.15	3.74
June 5, 2020	1.80-4.45	3.60
June 6, 2020	2.15-4.02	3.12
June 8, 2020	1.80-4.25	3.53
June 9, 2020	1.80-4.20	3.52
June 10, 2020	1.80-4.25	3.56
June 11, 2020	1.80-4.10	3.59
June 12, 2020	1.80-4.10	3.55
June 15, 2020	1.80-4.15	3.58
June 16, 2020	1.80-4.25	3.57
June 17, 2020	1.80-4.05	3.55
June 18, 2020	1.80-4.05	3.58
June 19, 2020	1.80-4.10	3.60
June 20, 2020	2.15-3.30	2.50
June 22, 2020	1.80-4.20	3.57
June 23, 2020	1.80-4.10	3.52
June 24, 2020	1.80-4.10	3.53
June 25, 2020	1.80-4.05	3.56
June 26, 2020	1.80-4.10	3.54
June 29, 2020	1.80-4.10	3.55
June 30, 2020	1.80-4.10	3.66
July 1, 2020	1.80-4.10	3.55
July 2, 2020	1.80-4.10	3.51
July 3, 2020	1.80-4.05	3.47
July 4, 2020	2.15-3.30	2.48
July 6, 2020	1.80-4.10	3.49
July 7, 2020	1.80-4.10	3.46
July 8, 2020	1.80-4.10	3.50
July 9, 2020	1.80-4.05	3.51
July 10, 2020	1.80-4.10	3.50
July 13, 2020	1.80-4.10	3.47
July 14, 2020	1.80-4.10	3.46
July 15, 2020	1.80-4.10	3.51

Note: Includes Notice Money.

No. 27: Certificates of Deposit

Item	2019	2020			
	Jun. 21	May 8	May 22	Jun. 5	Jun. 19
	1	2	3	4	5
1 Amount Outstanding (₹ Crore)	215944.00	171180.00	160455.00	140165.00	121465.00
1.1 Issued during the fortnight (₹ Crore)	28069.79	386.44	5705.35	3631.84	5500.59
2 Rate of Interest (per cent)	5.97-6.96	4.70-6.42	3.50-7.83	3.37-5.20	3.92-5.08

No. 28: Commercial Paper

Item	2019	2020			
	Jun. 30	May 15	May 31	Jun. 15	Jun. 30
	1	2	3	4	5
1 Amount Outstanding (₹ Crore)	503943.30	433624.85	425817.00	413652.40	391482.30
1.1 Reported during the fortnight (₹ Crore)	107691.05	62636.85	52155.65	68691.70	56270.85
2 Rate of Interest (per cent)	5.79-11.89	3.83-12.69	3.13-12.14	3.31-13.11	3.18-13.35

No. 29: Average Daily Turnover in Select Financial Markets

(₹ Crore)

Item	2019-20	2019	2020					
		Jun. 28	May 22	May 29	Jun. 5	Jun. 12	Jun. 19	Jun. 26
	1	2	3	4	5	6	7	8
1 Call Money	26815	31501	19494	19390	13685	19515	19427	18541
2 Notice Money	3660	5685	433	5974	4661	416	4996	478
3 Term Money	790	1259	848	1444	959	608	1078	690
4 CBLO/TRIPARTY REPO	300691	298523	359931	379531	281007	316867	440563	379722
5 Market Repo	221719	255194	297965	375863	331678	324437	387748	301952
6 Repo in Corporate Bond	2468	3404	2908	5995	5700	6327	3525	1764
7 Forex (US $ million)	67793	77216	43866	57930	47587	38471	41314	–
8 Govt. of India Dated Securities	93960	130125	79453	78604	64753	61701	59953	60318
9 State Govt. Securities	5800	4574	5607	4419	3160	4752	4040	7861
10 Treasury Bills								
10.1 91-Day	3720	4986	3804	4925	3654	7276	10242	7991
10.2 182-Day	2380	2884	2662	5500	2786	4230	7728	3242
10.3 364-Day	2900	2831	2706	5429	2539	2635	2174	2589
10.4 Cash Management Bills	2310		195	17605	1717	2175	7192	1375
11 Total Govt. Securities (8+9+10)	111070	145399	94427	116483	78608	82769	91330	83375
11.1 RBI	–	15	110	335	306	151	74	371

Note : Collateralised Borrowing and Lending Obligation (CBLO) segment of the money market has been discontinued and replaced with Triparty Repo with effect from November 05, 2018.

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

(Amount in ₹ Crore)

Security & Type of Issue	2019-20		2019-20 (Apr.-Jun.)		2020-21 (Apr.-Jun.) *		Jun. 2019		Jun. 2020 *	
	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	**72**	**64926**	**24**	**52792**	**5**	**53141**	**8**	**558**	**2**	**53127**
1A Premium	70	43259	24	31573	5	52710	8	537	2	52703
1.1 Public	57	9867	19	3397	4	16	7	548	1	2
1.1.1 Premium	55	9434	19	3314	4	9	7	528	1	2
1.2 Rights	15	55059	5	49394	1	53124	1	10	1	53124
1.2.1 Premium	15	33825	5	28259	1	52702	1	9	1	52702
2 Preference Shares	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
2.1 Public	–	–	–	–	–	–	–	–	–	–
2.2 Rights	–	–	–	–	–	–	–	–	–	–
3 Bonds & Debentures	**34**	**14984**	**11**	**4176**	**2**	**400**	**2**	**936**	**–**	**–**
3.1 Convertible	–	–	–	–	–	–	–	–	–	–
3.1.1 Public	–	–	–	–	–	–	–	–	–	–
3.1.2 Rights	–	–	–	–	–	–	–	–	–	–
3.2 Non-Convertible	34	14984	11	4176	2	400	2	936	–	–
3.2.1 Public	34	14984	11	4176	2	400	2	936	–	–
3.2.2 Rights	–	–	–	–	–	–	–	–	–	–
4 Total(1+2+3)	**106**	**79910**	**35**	**56967**	**7**	**53540**	**10**	**1494**	**2**	**53127**
4.1 Public	91	24851	30	7573	6	416	9	1484	1	2
4.2 Rights	15	55059	5	49394	1	53124	1	10	1	53124

Note : Since April 2020, monthly data on equity issues is compiled on the basis of their listing date.

Source : Securities and Exchange Board of India.

* : Data is Provisional

External Sector

No. 31: Foreign Trade

Item	Unit	2019-20	2019	2020				
			Jun.	Feb.	Mar.	Apr.	May	Jun.
		1	2	3	4	5	6	7
1 Exports	₹ Crore	2218233	173683	198233	158930	78951	144166	165899
	US $ Million	313139	25012	27729	21376	10356	19054	21908
1.1 Oil	₹ Crore	291418	18973	24589	17960	9473	12325	14143
	US $ Million	41164	2732	3440	2416	1243	1629	1868
1.2 Non-oil	₹ Crore	1926815	154709	173644	140970	69479	131841	151756
	US $ Million	271975	22280	24290	18960	9114	17425	20040
2 Imports	₹ Crore	3355762	279771	268093	231717	130525	167978	159892
	US $ Million	473995	40290	37502	31165	17121	22202	21114
2.1 Oil	₹ Crore	925031	76587	77067	74570	35537	26381	37342
	US $ Million	130532	11029	10780	10029	4661	3487	4931
2.2 Non-oil	₹ Crore	2430731	203184	191026	157148	94988	141597	122551
	US $ Million	343463	29261	26721	21136	12460	18715	16183
3 Trade Balance	₹ Crore	-1137530	-106089	-69859	-72788	-51574	-23812	6006
	US $ Million	-160857	-15278	-9772	-9790	-6765	-3147	793
3.1 Oil	₹ Crore	-633613	-57614	-52478	-56610	-26065	-14056	-23199
	US $ Million	-89368	-8297	-7341	-7614	-3419	-1858	-3063
3.2 Non-oil	₹ Crore	-503917	-48475	-17381	-16178	-25509	-9756	29205
	US $ Million	-71489	-6981	-2431	-2176	-3346	-1289	3857

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

No. 32: Foreign Exchange Reserves

Item	Unit	2019	2020					
		Jul. 19	Jun. 12	Jun. 19	Jun. 26	Jul. 3	Jul. 10	Jul. 17
		1	2	3	4	5	6	7
1 Total Reserves	**₹ Crore**	**2963555**	**3850473**	**3852021**	**3834323**	**3830997**	**3883436**	**3883221**
	US $ Million	**430376**	**507644**	**505566**	**506838**	**513254**	**516362**	**517637**
1.1 Foreign Currency Assets	₹ Crore	2761770	3555312	3558465	3537579	3532436	3577102	3577433
	US $ Million	401091	468737	467039	467603	473263	475635	476880
1.2 Gold	₹ Crore	167502	251616	250028	253609	253906	261190	260631
	US $ Million	24304	33173	32815	33523	34017	34729	34743
1.3 SDRs	SDRs Million	1047	1048	1048	1048	1048	1048	1048
	₹ Crore	9964	11026	11027	10926	10806	10925	10912
	US $ Million	1447	1454	1447	1444	1448	1453	1455
1.4 Reserve Tranche Position in IMF	₹ Crore	24320	32520	32502	32209	33849	34220	34244
	US $ Million	3534	4280	4264	4267	4526	4545	4560

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

No. 33: NRI Deposits

(US$ Million)

Scheme	Outstanding				Flows	
	2019-20	2019	2020		2019-20	2020-21
		Jun.	May	Jun.	Apr.-Jun.	Apr.-Jun.
	1	2	3	4	5	6
1 NRI Deposits	**130581**	**133586**	**131137**	**132249**	**2754**	**2531**
1.1 FCNR(B)	24244	24364	22876	22461	1194	-1783
1.2 NR(E)RA	90367	93422	92228	93648	1057	4012
1.3 NRO	15969	15801	16033	16140	503	302

No. 34: Foreign Investment Inflows

(US$ Million)

Item	2019-20	2019-20	2020-21	2019	2020	
		Apr.-May	Apr.-May	May	Apr.	May
	1	2	3	4	5	6
1.1 Net Foreign Direct Investment (1.1.1–1.1.2)	**43013**	**7204**	**4400**	**2818**	**2383**	**2016**
1.1.1 Direct Investment to India (1.1.1.1–1. 1.1.2)	**56006**	**9624**	**5937**	**4084**	**3402**	**2535**
1.1.1.1 Gross Inflows/Gross Investments	**74390**	**12275**	**8090**	**5409**	**4479**	**3611**
1.1.1.1.1 Equity	51734	9271	5236	3907	2884	2352
1.1.1.1.1.1 Government (SIA/FIPB)	3265	271	93	208	80	13
1.1.1.1.1.2 RBI	39364	7564	4253	2979	2169	2084
1.1.1.1.1.3 Acquisition of shares	7348	1212	667	608	524	143
1.1.1.1.1.4 Equity capital of unincorporated bodies	1757	224	224	112	112	112
1.1.1.1.2 Reinvested earnings	14175	2233	2233	1116	1116	1116
1.1.1.1.3 Other capital	8482	771	621	386	479	143
1.1.1.2 Repatriation/Disinvestment	**18384**	**2651**	**2153**	**1325**	**1076**	**1076**
1.1.1.2.1 Equity	18212	2638	2139	1319	1069	1069
1.1.1.2.2 Other capital	173	13	14	6	7	7
1.1.2 Foreign Direct Investment by India (1.1.2.1+1.1.2.2+1.1.2.3–1.1.2.4)	**12993**	**2420**	**1538**	**1265**	**1019**	**519**
1.1.2.1 Equity capital	7572	1164	600	582	443	156
1.1.2.2 Reinvested Earnings	3151	525	525	263	263	263
1.1.2.3 Other Capital	5674	987	544	549	379	165
1.1.2.4 Repatriation/Disinvestment	3403	256	131	128	66	66
1.2 Net Portfolio Investment (1.2.1+1.2.2+1.2.3–1.2.4)	**1403**	**2947**	**-575**	**1836**	**83**	**-659**
1.2.1 GDRs/ADRs	–	–	–	–	–	–
1.2.2 FIIs	552	3156	-1974	1940	-1001	-972
1.2.3 Offshore funds and others	–	–	–	–	–	–
1.2.4 Portfolio investment by India	-851	209	-1398	105	-1085	-313
1 Foreign Investment Inflows	**44417**	**10151**	**3824**	**4654**	**2467**	**1357**

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

(US$ Million)

Item	2019-20	2019	2020		
		May	Mar.	Apr.	May
	1	2	3	4	5
1 Outward Remittances under the LRS	**18760.69**	**1486.06**	**1358.82**	**499.14**	**617.62**
1.1 Deposit	623.37	50.15	112.96	60.17	43.18
1.2 Purchase of immovable property	86.43	9.41	8.99	3.21	3.06
1.3 Investment in equity/debt	431.41	31.64	49.22	24.80	25.47
1.4 Gift	1907.71	154.20	190.91	55.15	75.42
1.5 Donations	22.33	2.79	0.76	2.68	0.39
1.6 Travel	6955.98	568.28	307.24	121.13	157.76
1.7 Maintenance of close relatives	3439.74	300.03	346.31	148.25	150.75
1.8 Medical Treatment	33.90	2.46	3.21	1.35	1.31
1.9 Studies Abroad	4991.07	334.39	312.68	78.76	155.84
1.10 Others	268.75	32.71	26.55	3.66	4.45

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

Item	2018-19	2019-20	2019	2020	
			July	June	July
	1	2	3	4	5
36-Currency Export and Trade Based Weights (Base: 2004-05=100)					
1 Trade-Based Weights					
1.1 NEER	72.64	73.28	74.87	69.59	70.04
1.2 REER	114.01	116.75	117.72	113.84	114.58
2 Export-Based Weights					
2.1 NEER	74.18	74.33	76.09	70.52	70.97
2.2 REER	116.32	119.61	120.92	116.75	117.49
6-Currency Trade Based Weights					
1 Base: 2004-05 (April-March) =100					
1.1 NEER	63.07	63.59	65.12	59.58	59.63
1.2 REER	121.70	125.76	126.96	121.69	120.96
2 Base: 2017-18 (April-March) =100					
2.1 NEER	92.88	93.63	95.89	87.73	87.81
2.2 REER	94.20	97.32	98.27	94.19	93.63

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

(Amount in US$ Million)

Item	2019-20	2019	2020	
		Jun.	May	Jun.
	1	2	3	4
1 Automatic Route				
1.1 Number	1292	104	79	105
1.2 Amount	38011	3499	991	852
2 Approval Route				
2.1 Number	41	5	1	1
2.2 Amount	14921	1900	500	170
3 Total (1+2)				
3.1 Number	1333	109	80	106
3.2 Amount	52932	5399	1491	1022
4 Weighted Average Maturity (in years)	6.00	4.80	4.16	5.11
5 Interest Rate (per cent)				
5.1 Weighted Average Margin over 6-month LIBOR or reference rate for Floating Rate Loans	1.34	1.59	1.61	2.44
5.2 Interest rate range for Fixed Rate Loans	0.00-25.00	0.00-9.53	0.00-10.50	0.00-10.00

No. 38: India's Overall Balance of Payments

(US $ Million)

Item	Jan-Mar 2019(PR)			Jan-Mar 2020(P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance of Payments(1+2+3)	**324141**	**309979**	**14162**	**334313**	**315519**	**18794**
1 CURRENT ACCOUNT (1.1+ 1.2)	**165160**	**169807**	**-4647**	**157116**	**156558**	**558**
1.1 MERCHANDISE	**87367**	**122581**	**-35214**	**76527**	**111569**	**-35042**
1.2 INVISIBLES (1.2.1+1.2.2+1.2.3)	**77792**	**47226**	**30567**	**80590**	**44990**	**35600**
1.2.1 Services	54630	33299	21331	53060	31033	22027
1.2.1.1 Travel	7583	5112	2470	6860	4208	2652
1.2.1.2 Transportation	5154	5436	-282	5016	5761	-745
1.2.1.3 Insurance	720	603	117	623	426	198
1.2.1.4 G.n.i.e.	156	285	-129	182	284	-102
1.2.1.5 Miscellaneous	41018	21863	19155	40378	20354	20024
1.2.1.5.1 Software Services	21439	1571	19868	23285	2159	21125
1.2.1.5.2 Business Services	10290	11109	-820	11474	11928	-454
1.2.1.5.3 Financial Services	1111	618	494	1024	1256	-232
1.2.1.5.4 Communication Services	760	336	424	631	350	281
1.2.2 Transfers	17972	1812	16160	20579	2179	18400
1.2.2.1 Official	69	226	-157	26	299	-273
1.2.2.2 Private	17903	1587	16317	20553	1880	18673
1.2.3 Income	5190	12115	-6925	6950	11778	-4827
1.2.3.1 Investment Income	4033	11521	-7488	5523	11079	-5557
1.2.3.2 Compensation of Employees	1157	593	564	1428	698	729
2 CAPITAL ACCOUNT (2.1+2.2+2.3+2.4+2.5)	**158982**	**139740**	**19241**	**176311**	**158960**	**17350**
2.1 Foreign Investment (2.1.1+2.1.2)	**93816**	**77960**	**15856**	**99638**	**101420**	**-1782**
2.1.1 Foreign Direct Investment	16654	10235	6420	20871	8908	11963
2.1.1.1 In India	15461	5671	9790	19255	4070	15185
2.1.1.1.1 Equity	11058	5636	5422	13923	4062	9861
2.1.1.1.2 Reinvested Earnings	3650		3650	3772		3772
2.1.1.1.3 Other Capital	753	36	718	1560	8	1552
2.1.1.2 Abroad	1193	4563	-3370	1616	4838	-3222
2.1.1.2.1 Equity	1193	1683	-489	1616	2107	-491
2.1.1.2.2 Reinvested Earnings	0	758	-758	0	788	-788
2.1.1.2.3 Other Capital	0	2123	-2123	0	1943	-1943
2.1.2 Portfolio Investment	77162	67726	9436	78767	92511	-13745
2.1.2.1 In India	76807	65338	11469	76983	91726	-14743
2.1.2.1.1 FIIs	76807	65338	11469	76983	91726	-14743
2.1.2.1.1.1 Equity	58600	50602	7998	60171	66381	-6209
2.1.2.1.1.2 Debt	18207	14736	3471	16812	25345	-8534
2.1.2.1.2 ADR/GDRs	0		0	0		0
2.1.2.2 Abroad	355	2388	-2033	1783	785	998
2.2 Loans (2.2.1+2.2.2+2.2.3)	**31255**	**20997**	**10258**	**27444**	**17526**	**9918**
2.2.1 External Assistance	2554	1301	1253	2000	1420	580
2.2.1.1 By India	12	30	-18	2	28	-26
2.2.1.2 To India	2542	1271	1271	1998	1392	606
2.2.2 Commercial Borrowings	17993	10456	7537	16368	6030	10338
2.2.2.1 By India	7291	7000	292	1983	1053	930
2.2.2.2 To India	10702	3456	7246	14385	4977	9408
2.2.3 Short Term to India	10708	9241	1468	9077	10076	-1000
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	10052	9241	812	9077	9725	-649
2.2.3.2 Suppliers' Credit up to 180 days	656	0	656	0	351	-351
2.3 Banking Capital (2.3.1+2.3.2)	**21606**	**29670**	**-8064**	**22109**	**26716**	**-4606**
2.3.1 Commercial Banks	20599	29668	-9069	21996	26716	-4719
2.3.1.1 Assets	443	16542	-16099	4813	10222	-5409
2.3.1.2 Liabilities	20156	13127	7029	17183	16493	690
2.3.1.2.1 Non-Resident Deposits	14974	11563	3411	16844	14079	2765
2.3.2 Others	1007	1	1006	113	0	113
2.4 Rupee Debt Service		7	-7		7	-7
2.5 Other Capital	12304	11107	1197	27119	13292	13827
3 Errors & Omissions		**431**	**-431**	**886**		**886**
4 Monetary Movements (4.1+ 4.2)	0	**14162**	**-14162**	0	**18794**	**-18794**
4.1 I.M.F.	0	0	0			
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	14162	-14162	0	18794	-18794

Note : P : Preliminary PR: Partially Revised

No. 39: India's Overall Balance of Payments

(₹ Crore)

	Jan-Mar 2019(PR)			Jan-Mar 2020(P)		
	Credit	Debit	Net	Credit	Debit	Net
Item	1	2	3	4	5	6
Overall Balance of Payments(1+2+3)	**2284475**	**2184661**	**99814**	**2419902**	**2283860**	**136042**
1 CURRENT ACCOUNT (1.1+ 1.2)	**1164009**	**1196763**	**-32754**	**1137275**	**1133238**	**4037**
1.1 MERCHANDISE	**615745**	**863926**	**-248181**	**553933**	**807581**	**-253649**
1.2 INVISIBLES (1.2.1+1.2.2+1.2.3)	**548264**	**332837**	**215427**	**583342**	**325657**	**257686**
1.2.1 Services	385022	234684	150338	384069	224629	159441
1.2.1.1 Travel	53440	36030	17411	49657	30461	19197
1.2.1.2 Transportation	36323	38310	-1987	36311	41701	-5390
1.2.1.3 Insurance	5072	4249	823	4512	3081	1430
1.2.1.4 G.n.i.e.	1101	2009	-908	1316	2057	-741
1.2.1.5 Miscellaneous	289085	154086	134999	292273	147329	144944
1.2.1.5.1 Software Services	151099	11073	140026	168546	15631	152914
1.2.1.5.2 Business Services	72520	78297	-5777	83051	86341	-3290
1.2.1.5.3 Financial Services	7832	4353	3479	7410	9092	-1682
1.2.1.5.4 Communication Services	5353	2365	2988	4567	2532	2035
1.2.2 Transfers	126664	12772	113892	148962	15774	133188
1.2.2.1 Official	486	1590	-1104	189	2167	-1978
1.2.2.2 Private	126178	11182	114996	148773	13607	135166
1.2.3 Income	36578	85381	-48803	50311	85253	-34942
1.2.3.1 Investment Income	28422	81198	-52776	39977	80198	-40221
1.2.3.2 Compensation of Employees	8156	4183	3973	10333	5055	5278
2 CAPITAL ACCOUNT (2.1+2.2+2.3+2.4+2.5)	**1120466**	**984859**	**135607**	**1276212**	**1150622**	**125590**
2.1 Foreign Investment (2.1.1+2.1.2)	**661194**	**549446**	**111748**	**721222**	**734119**	**-12897**
2.1.1 Foreign Direct Investment	117377	72131	45246	151075	64481	86594
2.1.1.1 In India	108965	39968	68997	139378	29459	109919
2.1.1.1.1 Equity	77934	39718	38216	100781	29401	71380
2.1.1.1.2 Reinvested Earnings	25723	0	25723	27305	0	27305
2.1.1.1.3 Other Capital	5309	250	5058	11292	58	11234
2.1.1.2 Abroad	8411	32162	-23751	11697	35022	-23324
2.1.1.2.1 Equity	8411	11860	-3449	11697	15253	-3556
2.1.1.2.2 Reinvested Earnings	0	5343	-5343	0	5702	-5702
2.1.1.2.3 Other Capital	0	14960	-14960	0	14067	-14067
2.1.2 Portfolio Investment	543817	477315	66502	570147	669638	-99491
2.1.2.1 In India	541318	460488	80830	557238	663952	-106714
2.1.2.1.1 FIIs	541318	460488	80830	557238	663952	-106714
2.1.2.1.1.1 Equity	412998	356633	56365	435547	480491	-44945
2.1.2.1.1.2 Debt	128320	103855	24464	121691	183461	-61770
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	2499	16827	-14328	12909	5686	7223
2.2 Loans (2.2.1+2.2.2+2.2.3)	**220281**	**147982**	**72299**	**198653**	**126862**	**71791**
2.2.1 External Assistance	17999	9166	8833	14475	10277	4198
2.2.1.1 By India	81	209	-128	14	201	-187
2.2.1.2 To India	17918	8957	8961	14461	10076	4385
2.2.2 Commercial Borrowings	126813	73691	53122	118476	43648	74828
2.2.2.1 By India	51389	49334	2055	14351	7622	6729
2.2.2.2 To India	75424	24357	51067	104125	36026	68099
2.2.3 Short Term to India	75469	65125	10344	65702	72938	-7236
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	70846	65125	5721	65702	70397	-4695
2.2.3.2 Suppliers' Credit up to 180 days	4623	0	4623	0	2541	-2541
2.3 Banking Capital (2.3.1+2.3.2)	**152275**	**209105**	**-56830**	**160037**	**193379**	**-33343**
2.3.1 Commercial Banks	145176	209094	-63919	159220	193379	-34160
2.3.1.1 Assets	3121	116581	-113460	34842	73992	-39151
2.3.1.2 Liabilities	142054	92513	49541	124378	119387	4991
2.3.1.2.1 Non-Resident Deposits	105531	81492	24039	121926	101911	20016
2.3.2 Others	7099	10	7089	817	0	817
2.4 Rupee Debt Service	0	50	-50	0	50	-50
2.5 Other Capital	86716	78277	8439	196301	96212	100089
3 Errors & Omissions	0	**3039**	**-3039**	**6415**	0	**6415**
4 Monetary Movements (4.1+ 4.2)	0	**99814**	**-99814**	0	**136042**	**-136042**
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	99814	-99814	0	136042	-136042

Note : P: Preliminary PR: Partially Revised

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

(US $ Million)

Item	Jan-Mar 2019(PR)			Jan-Mar 2020(P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	**165158**	**169786**	**-4628**	**157116**	**156531**	**584**
1.A Goods and Services (1.A.a+1.A.b)	**141998**	**155880**	**-13883**	**129586**	**142601**	**-13015**
1.A.a Goods (1.A.a.1 to 1.A.a.3)	**87367**	**122581**	**-35214**	**76527**	**111569**	**-35042**
1.A.a.1 General merchandise on a BOP basis	86579	114412	-27832	75738	106394	-30656
1.A.a.2 Net exports of goods under merchanting	788	0	788	789	0	789
1.A.a.3 Nonmonetary gold		8170	-8170		5175	-5175
1.A.b Services (1.A.b.1 to 1.A.b.13)	**54630**	**33299**	**21331**	**53060**	**31033**	**22027**
1.A.b.1 Manufacturing services on physical inputs owned by others	78	11	67	66	8	58
1.A.b.2 Maintenance and repair services n.i.e.	41	358	-317	41	309	-269
1.A.b.3 Transport	5154	5436	-282	5016	5761	-745
1.A.b.4 Travel	7583	5112	2470	6860	4208	2652
1.A.b.5 Construction	747	625	122	931	708	223
1.A.b.6 Insurance and pension services	720	603	117	623	426	198
1.A.b.7 Financial services	1111	618	494	1024	1256	-232
1.A.b.8 Charges for the use of intellectual property n.i.e.	120	1826	-1706	182	1641	-1459
1.A.b.9 Telecommunications, computer, and information services	22262	2029	20233	23967	2638	21329
1.A.b.10 Other business services	10290	11109	-820	11474	11928	-454
1.A.b.11 Personal, cultural, and recreational services	451	649	-198	588	819	-231
1.A.b.12 Government goods and services n.i.e.	156	285	-129	182	284	-102
1.A.b.13 Others n.i.e.	5917	4638	1279	2105	1046	1059
1.B Primary Income (1.B.1 to 1.B.3)	**5190**	**12115**	**-6925**	**6950**	**11778**	**-4827**
1.B.1 Compensation of employees	1157	593	564	1428	698	729
1.B.2 Investment income	3390	11109	-7719	4487	10921	-6434
1.B.2.1 Direct investment	1411	4708	-3297	2163	4654	-2491
1.B.2.2 Portfolio investment	71	2435	-2364	88	2346	-2259
1.B.2.3 Other investment	354	3951	-3596	457	3910	-3452
1.B.2.4 Reserve assets	1553	15	1538	1778	10	1768
1.B.3 Other primary income	643	412	231	1036	159	878
1.C Secondary Income (1.C.1+1.C.2)	**17970**	**1791**	**16179**	**20579**	**2152**	**18427**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	17903	1587	16317	20553	1880	18673
1.C.1.1 Personal transfers (Current transfers between resident and/	17322	1199	16123	20102	1358	18745
1.C.1.2 Other current transfers	581	387	194	451	522	-71
1.C.2 General government	67	204	-138	26	272	-247
2 Capital Account (2.1+2.2)	**84**	**167**	**-83**	**142**	**161**	**-19**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	14	94	-81	9	40	-31
2.2 Capital transfers	70	72	-3	133	121	12
3 Financial Account (3.1 to 3.5)	**158900**	**153757**	**5143**	**176169**	**177620**	**-1451**
3.1 Direct Investment (3.1A+3.1B)	**16654**	**10235**	**6420**	**20871**	**8908**	**11963**
3.1.A Direct Investment in India	15461	5671	9790	19255	4070	15185
3.1.A.1 Equity and investment fund shares	14708	5636	9072	17695	4062	13633
3.1.A.1.1 Equity other than reinvestment of earnings	11058	5636	5422	13923	4062	9861
3.1.A.1.2 Reinvestment of earnings	3650		3650	3772		3772
3.1.A.2 Debt instruments	753	36	718	1560	8	1552
3.1.A.2.1 Direct investor in direct investment enterprises	753	36	718	1560	8	1552
3.1.B Direct Investment by India	1193	4563	-3370	1616	4838	-3222
3.1.B.1 Equity and investment fund shares	1193	2441	-1247	1616	2895	-1279
3.1.B.1.1 Equity other than reinvestment of earnings	1193	1683	-489	1616	2107	-491
3.1.B.1.2 Reinvestment of earnings		758	-758		788	-788
3.1.B.2 Debt instruments	0	2123	-2123	0	1943	-1943
3.1.B.2.1 Direct investor in direct investment enterprises		2123	-2123		1943	-1943
3.2 Portfolio Investment	**77162**	**67726**	**9436**	**78767**	**92511**	**-13745**
3.2.A Portfolio Investment in India	76807	65338	11469	76983	91726	-14743
3.2.1 Equity and investment fund shares	58600	50602	7998	60171	66381	-6209
3.2.2 Debt securities	18207	14736	3471	16812	25345	-8534
3.2.B Portfolio Investment by India	355	2388	-2033	1783	785	998
3.3 Financial derivatives (other than reserves) and employee stock options	**6425**	**5687**	**739**	**11473**	**9287**	**2186**
3.4 Other investment	**58659**	**55948**	**2711**	**65058**	**48119**	**16939**
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	15981	11564	4417	16957	14079	2878
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	1007	1	1006	113	0	113
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	14974	11563	3411	16844	14079	2765
3.4.2.3 General government						
3.4.2.4 Other sectors						
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	26172	29862	-3690	23520	20086	3433
3.4.3.A Loans to India	18869	22832	-3963	21535	19006	2529
3.4.3.B Loans by India	7303	7030	273	1985	1081	904
3.4.4 Insurance, pension, and standardized guarantee schemes	21	364	-344	37	45	-8
3.4.5 Trade credit and advances	10708	9241	1468	9077	10076	-1000
3.4.6 Other accounts receivable/payable - other	5777	4917	860	15468	3832	11635
3.4.7 Special drawing rights						0
3.5 Reserve assets	0	**14162**	**-14162**	0	**18794**	**-18794**
3.5.1 Monetary gold						
3.5.2 Special drawing rights n.a.						
3.5.3 Reserve position in the IMF n.a.						
3.5.4 Other reserve assets (Foreign Currency Assets)	0	14162	-14162	0	18794	-18794
4 Total assets/liabilities	**158900**	**153757**	**5143**	**176169**	**177620**	**-1451**
4.1 Equity and investment fund shares	81302	67117	14184	92776	83455	9321
4.2 Debt instruments	71822	67561	4261	67925	71539	-3613
4.3 Other financial assets and liabilities	5777	19079	-13303	15468	22627	-7159
5 Net errors and omissions		**431**	**-431**	**886**		**886**

Note : P : Preliminary PR: Partially Revised

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

(₹ Crore)

Item	Jan-Mar 2019(PR)			Jan-Mar 2020(P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	**1163995**	**1196614**	**-32620**	**1137271**	**1133041**	**4230**
1.A Goods and Services (1.A.a+1.A.b)	**1000767**	**1098610**	**-97843**	**938002**	**1032210**	**-94208**
1.A.a Goods (1.A.a.1 to 1.A.a.3)	**615745**	**863926**	**-248181**	**553933**	**807581**	**-253649**
1.A.a.1 General merchandise on a BOP basis	610190	806347	-196157	548221	770126	-221905
1.A.a.2 Net exports of goods under merchanting	5555	0	5555	5712	0	5712
1.A.a.3 Nonmonetary gold	0	57579	-57579	0	37456	-37456
1.A.b Services (1.A.b.1 to 1.A.b.13)	**385022**	**234684**	**150338**	**384069**	**224629**	**159441**
1.A.b.1 Manufacturing services on physical inputs owned by others	552	79	473	475	57	418
1.A.b.2 Maintenance and repair services n.i.e.	291	2524	-2233	295	2240	-1944
1.A.b.3 Transport	36323	38310	-1987	36311	41701	-5390
1.A.b.4 Travel	53440	36030	17411	49657	30461	19197
1.A.b.5 Construction	5263	4402	861	6740	5124	1616
1.A.b.6 Insurance and pension services	5072	4249	823	4512	3081	1430
1.A.b.7 Financial services	7832	4353	3479	7410	9092	-1682
1.A.b.8 Charges for the use of intellectual property n.i.e.	844	12867	-12023	1319	11876	-10557
1.A.b.9 Telecommunications, computer, and information services	156901	14303	142598	173487	19096	154390
1.A.b.10 Other business services	72520	78297	-5777	83051	86341	-3290
1.A.b.11 Personal, cultural, and recreational services	3178	4571	-1394	4259	5927	-1669
1.A.b.12 Government goods and services n.i.e.	1101	2009	-908	1316	2057	-741
1.A.b.13 Others n.i.e.	41704	32690	9015	15237	7575	7662
1.B Primary Income (1.B.1 to 1.B.3)	**36578**	**85381**	**-48803**	**50311**	**85253**	**-34942**
1.B.1 Compensation of employees	8156	4183	3973	10333	5055	5278
1.B.2 Investment income	23889	78292	-54403	32476	79049	-46573
1.B.2.1 Direct investment	9947	33182	-23235	15659	33689	-18030
1.B.2.2 Portfolio investment	498	17161	-16663	634	16984	-16351
1.B.2.3 Other investment	2498	27843	-25345	3311	28299	-24989
1.B.2.4 Reserve assets	10946	107	10840	12873	76	12797
1.B.3 Other primary income	4533	2907	1626	7502	1149	6352
1.C Secondary Income (1.C.1+1.C.2)	**126649**	**12623**	**114026**	**148958**	**15577**	**133381**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	126178	11182	114996	148773	13607	135166
1.C.1.1 Personal transfers (Current transfers between resident and/	122084	8454	113630	145508	9826	135681
1.C.1.2 Other current transfers	4094	2728	1365	3265	3781	-516
1.C.2 General government	472	1441	-969	185	1970	-1785
2 Capital Account (2.1+2.2)	**589**	**1176**	**-587**	**1027**	**1167**	**-140**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	97	666	-569	67	293	-226
2.2 Capital transfers	492	510	-18	960	874	85
3 Financial Account (3.1 to 3.5)	**1119892**	**1083646**	**36245**	**1275189**	**1285693**	**-10505**
3.1 Direct Investment (3.1A+3.1B)	**117377**	**72131**	**45246**	**151075**	**64481**	**86594**
3.1.A Direct Investment in India	108965	39968	68997	139378	29459	109919
3.1.A.1 Equity and investment fund shares	103657	39718	63939	128086	29401	98685
3.1.A.1.1 Equity other than reinvestment of earnings	77934	39718	38216	100781	29401	71380
3.1.A.1.2 Reinvestment of earnings	25723	0	25723	27305	0	27305
3.1.A.2 Debt instruments	5309	250	5058	11292	58	11234
3.1.A.2.1 Direct investor in direct investment enterprises	5309	250	5058	11292	58	11234
3.1.B Direct Investment by India	8411	32162	-23751	11697	35022	-23324
3.1.B.1 Equity and investment fund shares	8411	17203	-8792	11697	20955	-9257
3.1.B.1.1 Equity other than reinvestment of earnings	8411	11860	-3449	11697	15253	-3556
3.1.B.1.2 Reinvestment of earnings	0	5343	-5343	0	5702	-5702
3.1.B.2 Debt instruments	0	14960	-14960	0	14067	-14067
3.1.B.2.1 Direct investor in direct investment enterprises	0	14960	-14960	0	14067	-14067
3.2 Portfolio Investment	**543817**	**477315**	**66502**	**570147**	**669638**	**-99491**
3.2.A Portfolio Investment in India	541318	460488	80830	557238	663952	-106714
3.2.1 Equity and investment fund shares	412998	356633	56365	435547	480491	-44945
3.2.2 Debt securities	128320	103855	24464	121691	183461	-61770
3.2.B Portfolio Investment by India	2499	16827	-14328	12909	5686	7223
3.3 Financial derivatives (other than reserves) and employee stock options	**45285**	**40078**	**5206**	**83046**	**67224**	**15822**
3.4 Other investment	**413413**	**394308**	**19105**	**470921**	**348309**	**122612**
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	112631	81503	31128	122743	101911	20832
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	7099	10	7089	817	0	817
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	105531	81492	24039	121926	101911	20016
3.4.2.3 General government	0	0	0	0	0	0
3.4.2.4 Other sectors	0	0	0	0	0	0
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	184456	210459	-26003	170245	145393	24852
3.4.3.A Loans to India	132986	160916	-27930	155879	137570	18309
3.4.3.B Loans by India	51470	49543	1927	14365	7823	6542
3.4.4 Insurance, pension, and standardized guarantee schemes	145	2568	-2424	270	328	-58
3.4.5 Trade credit and advances	75469	65125	10344	65702	72938	-7236
3.4.6 Other accounts receivable/payable - other	40713	34653	6059	111962	27740	84222
3.4.7 Special drawing rights	0	0	0	0	0	0
3.5 Reserve assets	**0**	**99814**	**-99814**	**0**	**136042**	**-136042**
3.5.1 Monetary gold				0	0	0
3.5.2 Special drawing rights n.a.				0	0	0
3.5.3 Reserve position in the IMF n.a.				0	0	0
3.5.4 Other reserve assets (Foreign Currency Assets)	0	99814	-99814	0	136042	-136042
4 Total assets/liabilities	**1119892**	**1083646**	**36245**	**1275189**	**1285693**	**-10505**
4.1 Equity and investment fund shares	572995	473028	99967	671555	604085	67470
4.2 Debt instruments	506184	476152	30032	491672	517827	-26155
4.3 Other financial assets and liabilities	40713	134467	-93755	111962	163782	-51820
5 Net errors and omissions	**0**	**3039**	**-3039**	**6415**	**0**	**6415**

Note : P: Preliminary PR: Partially Revised

No. 42: International Investment Position

(US$ Million)

Item	As on Financial Year /Quarter End							
	2019-20		2019				2020	
			Mar.		Dec.		Mar.	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	1	2	3	4	5	6	7	8
1 Direct Investment Abroad/in India	182957	418232	169964	399229	179734	426940	182957	418232
1.1 Equity Capital and Reinvested Earnings	118442	395426	111122	382105	117163	404393	118442	395426
1.2 Other Capital	64515	22806	58841	17124	62572	22547	64515	22806
2 Portfolio Investment	3847	246632	4699	260313	4845	266707	3847	246632
2.1 Equity	602	134778	590	147479	2619	148859	602	134778
2.2 Debt	3246	111854	4109	112834	2226	117848	3246	111854
3 Other Investment	50999	430081	54187	419087	53415	429303	50999	430081
3.1 Trade Credit	1460	104276	924	105192	2224	105216	1460	104276
3.2 Loan	6741	180011	9880	167919	6180	177286	6741	180011
3.3 Currency and Deposits	26011	130761	25158	130644	27099	133331	26011	130761
3.4 Other Assets/Liabilities	16787	15034	18225	15332	17912	13469	16787	15034
4 Reserves	477807		412871		459863		477807	
5 Total Assets/ Liabilities	715610	1094945	641720	1078629	697858	1122950	715610	1094945
6 IIP (Assets - Liabilities)		-379335		-436909		-425092		-379335

Payment and Settlement Systems

No.43: Payment System Indicators

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

System	Volume (Lakh)				Value (₹ Crore)			
	FY 2019-20	2019	2020		FY 2019-20	2019	2020	
		Jun.	May	Jun.		Jun.	May	Jun.
	1	2	3	4	5	6	7	8
A. Settlement Systems								
Financial Market Infrastructures (FMIs)								
1 CCIL Operated Systems (1.1 to 1.3)	–	–	1.71	2.23	–	–	10829793	13383223
1.1 Govt. Securities Clearing (1.1.1 to 1.1.3)	–	–	0.94	1.01	–	–	7785920	9590341
1.1.1 Outright	–	–	0.56	0.54	–	–	1010178	928567
1.1.2 Repo	–	–	0.21	0.27	–	–	3130998	4244619
1.1.3 Tri-party Repo	–	–	0.18	0.21	–	–	3644744	4417155
1.2 Forex Clearing	–	–	0.75	1.19	–	–	2934498	3658697
1.3 Rupee Derivatives @	–	–	0.01	0.02	–	–	109375	134185
B. Payment Systems								
I Financial Market Infrastructures (FMIs)	–	–	–	–	–	–	–	–
1 Credit Transfers - RTGS (1.1 to 1.2)	–	–	90.04	119.68	–	–	7041869	8651978
1.1 Customer Transactions	–	–	88.68	118.09	–	–	6225396	7641700
1.2 Interbank Transactions	–	–	1.36	1.59	–	–	816473	1010278
II Retail								
2 Credit Transfers - Retail (2.1 to 2.7)	–	–	18091.79	20341.65	–	–	2018010	2499421
2.1 AePS (Fund Transfers) @	–	–	0.87	0.89	–	–	41	47
2.2 APBS $	–	–	1154.21	1371.10	–	–	14245	11767
2.3 ECS Cr	–	–	0.00	0.00	–	–	–	–
2.4 IMPS	–	–	1666.80	1989.12	–	–	169402	206951
2.5 NACH Cr $	–	–	995.55	1337.21	–	–	134182	112236
2.6 NEFT	–	–	1929.39	2274.01	–	–	1481750	1906586
2.7 UPI @	–	–	12344.97	13369.31	–	–	218392	261835
2.7.1 of which USSD @	–	–	0.75	0.85	–	–	14	15
3 Debit Transfers and Direct Debits (3.1 to 3.4)	–	–	672.90	837.03	–	–	50962	70703
3.1 BHIM Aadhaar Pay @	–	–	13.40	14.67	–	–	159	186
3.2 ECS Dr	–	–	0.00	0.00	–	–	–	–
3.3 NACH Dr $	–	–	640.09	788.94	–	–	50767	70492
3.4 NETC (linked to bank account) @	–	–	19.41	33.42	–	–	36	25
4 Card Payments (4.1 to 4.2)	–	–	3752.17	4339.08	–	–	80274	105266
4.1 Credit Cards (4.1.1 to 4.1.2)	–	–	1028.86	1248.55	–	–	32225	42773
4.1.1 PoS based $	–	–	432.30	588.58	–	–	13470	19293
4.1.2 Others $	–	–	596.56	659.97	–	–	18755	23479
4.2 Debit Cards (4.2.1 to 4.2.1)	–	–	2723.30	3090.54	–	–	48049	62494
4.2.1 PoS based $	–	–	1121.15	1475.32	–	–	18814	25788
4.2.2 Others $	–	–	1602.16	1615.22	–	–	29235	36705
5 Prepaid Payment Instruments (5.1 to 5.2)	–	–	3031.90	3546.66	–	–	12808	14494
5.1 Wallets	–	–	2532.20	2905.67	–	–	11080	12132
5.2 Cards (5.2.1 to 5.2.2)	–	–	499.70	640.98	–	–	1729	2362
5.2.1 PoS based $	–	–	40.82	35.36	–	–	551	710
5.2.2 Others $	–	–	458.89	605.62	–	–	1177	1652
6 Paper-based Instruments (6.1 to 6.2)	–	–	306.77	496.68	–	–	260227	401666
6.1 CTS (NPCI Managed)	–	–	306.50	496.37	–	–	260012	401441
6.2 Others	–	–	0.27	0.32	–	–	215	225
Total - Retail Payments (2+3+4+5+6)	–	–	25855.54	29561.10	–	–	2422282	3091551
Total Payments (1+2+3+4+5+6)	–	–	25945.57	29680.78	–	–	9464152	11743529
Total Digital Payments (1+2+3+4+5)	–	–	25638.80	29184.09	–	–	9203924	11341863

PART II - Payment Modes and Channels

System	Volume (Lakh)				Value (₹ Crore)			
	FY 2019-20	2019	2020			2019	2020	
		Jun.	May	Jun.		Jun.	May	Jun.
	1	2	3	4	5	6	7	8
A. Other Payment Channels					–			
1 Mobile Payments (mobile app based) (1.1 to 1.2)	–	–	14622.03	16188.00	–	–	485513	599381
1.1 Intra-bank $	–	–	1264.97	1423.94	–	–	94592	118965
1.2 Inter-bank $	–	–	13357.06	14764.06	–	–	390921	480416
2 Internet Payments (Netbanking / Internet Browser Based) @ (2.1 to 2.2)	–	–	2003.48	2431.49	–	–	2478416	3123215
2.1 Intra-bank @	–	–	482.55	533.60	–	–	1249062	1529247
2.2 Inter-bank @	–	–	1520.93	1897.89	–	–	1229353	1593967
B. ATMs					–			
3 Cash Withdrawal at ATMs $ (3.1 to 3.3)	–	–	4094.01	4735.87	–	–	197265	231372
3.1 Using Credit Cards $	–	–	2.76	3.23	–	–	141	163
3.2 Using Debit Cards $	–	–	4076.31	4717.74	–	–	196628	230588
3.3 Using Pre-paid Cards $	–	–	14.94	14.91	–	–	496	620
4 Cash Withdrawal at PoS $ (4.1 to 4.2)	–	–	36.25	29.42	–	–	116	116
4.1 Using Debit Cards $	–	–	36.06	27.82	–	–	116	114
4.2 Using Pre-paid Cards $	–	–	0.19	1.60	–	–	1	3
5 Cash Withrawal at Micro ATMs @	–	–	1000.69	990.75	–	–	17929	19749
5.1 AePS @	–	–	1000.69	990.75	–	–	17929	19749

PART III - Payment Infrastructures (Lakh)

System	FY 2019-20	2019	2020	
		Jun.	May	Jun.
	1	2	3	4
Payment System Infrastructures				
1 Number of Cards (1.1 to 1.2)	–	–	8925.29	9027.03
1.1 Credit Cards	–	–	571.80	572.89
1.2 Debit Cards	–	–	8353.49	8454.14
2 Number of PPIs @ (2.1 to 2.2)	–	–	18689.42	19008.07
2.1 Wallets @	–	–	17302.28	17553.64
2.2 Cards @	–	–	1387.15	1454.43
3 Number of ATMs (3.1 to 3.2)	–	–	2.34	2.34
3.1 Bank owned ATMs $	–	–	2.10	2.10
3.2 White Label ATMs $	–	–	0.24	0.24
4 Number of Micro ATMs @	–	–	2.84	2.96
5 Number of PoS Terminals	–	–	50.22	50.39
6 Bharat QR @	–	–	20.59	21.51

@: New inclusion w.e.f. November 2019
$: Inclusion separately initiated from November 2019 - would have been part of other items hitherto.

Note : 1. Data is provisional.
2. The data for November 2019 for card payments (Debit/Credit cards) and Prepaid Payment Instruments (PPIs) may not be comparable with earlier months/ periods, as more granular data is being published along with revision in data definitions.
3. Only domestic financial transactions are considered. The new format captures e-commerce transactions; transactions using FASTags; digtal 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		2018-19	2019		2020	
			Feb.	Dec.	Jan.	Feb.
		1	2	3	4	5
1 Small Savings	**Receipts**	**115714**	**9839**	**15814**	**15184**	**16911**
	Outstanding	**918459**	**899191**	**1015010**	**1030037**	**1046766**
1.1 Total Deposits	**Receipts**	**91108**	**7130**	**12117**	**11091**	**11460**
	Outstanding	**618418**	**606920**	**693812**	**704903**	**716363**
1.1.1 Post Office Saving Bank Deposits	Receipts	31037	2360	3455	3106	2690
	Outstanding	140247	134863	150462	153568	156258
1.1.2 MGNREG	Receipts					
	Outstanding					
1.1.3 National Saving Scheme, 1987	Receipts	-31	-19	-31	-25	-20
	Outstanding	3107	2877	2984	2959	2939
1.1.4 National Saving Scheme, 1992	Receipts	53	0	-827	-2	-3
	Outstanding	10	-8	-18	-20	-23
1.1.5 Monthly Income Scheme	Receipts	10967	928	1753	1712	1887
	Outstanding	192658	191653	203460	205172	207059
1.1.6 Senior Citizen Scheme 2004	Receipts	13990	1184	2070	2133	2131
	Outstanding	55708	54446	69464	71597	73728
1.1.7 Post Office Time Deposits	Receipts	25000	2451	4296	3999	4494
	Outstanding	124292	121687	152622	156621	161115
1.1.7.1 1 year Time Deposits	Outstanding	71534	70179	86344	88247	90327
1.1.7.2 2 year Time Deposits	Outstanding	5910	5824	6749	6854	6970
1.1.7.3 3 year Time Deposits	Outstanding	6901	6910	7328	7397	7464
1.1.7.4 5 year Time Deposits	Outstanding	39947	38774	52201	54123	56354
1.1.8 Post Office Recurring Deposits	Receipts	10081	215	1401	168	281
	Outstanding	102401	101407	114842	115010	115291
1.1.9 Post Office Cumulative Time Deposits	Receipts	11	11	0	0	0
	Outstanding	-26	-26	-25	-25	-25
1.1.10 Other Deposits	Receipts	0	0	0	0	0
	Outstanding	21	21	21	21	21
1.2 Saving Certificates	**Receipts**	**16067**	**1732**	**3326**	**3524**	**3937**
	Outstanding	**221517**	**219257**	**240900**	**244267**	**248022**
1.2.1 National Savings Certificate VIII issue	Receipts	11318	1262	2272	2458	2619
	Outstanding	98492	94795	110050	112508	115127
1.2.2 Indira Vikas Patras	Receipts	334	3	0	0	1
	Outstanding	263	300	-289	-289	-288
1.2.3 Kisan Vikas Patras	Receipts	-18678	-1609	-971	-1713	-1120
	Outstanding	19303	21232	6782	5069	3949
1.2.4 Kisan Vikas Patras - 2014	Receipts	23018	2065	2025	2782	2452
	Outstanding	93630	91314	113273	116055	118507
1.2.5 National Saving Certificate VI issue	Receipts	93	12	0	-1	0
	Outstanding	2	-47	-179	-180	-180
1.2.6 National Saving Certificate VII issue	Receipts	-18	-1	0	-2	-15
	Outstanding	-80	-82	-82	-84	-99
1.2.7 Other Certificates	Outstanding	9907	11745	11345	11188	11006
1.3 Public Provident Fund	**Receipts**	**8539**	**977**	**371**	**569**	**1514**
	Outstanding	**78524**	**73014**	**80298**	**80867**	**82381**

Source: Accountant General, Post and Telegraphs.

Note : Data on receipts from April 2017 are net receipts, *i.e.*, gross receipt minus gross payment.

No. 45 : Ownership Pattern of Central and State Governments Securities

(Per cent)

Central Government Dated Securities					
Category	2019				2020
	Mar.	Jun.	Sep.	Dec.	Mar.
	1	2	3	4	5
(A) Total (in ₹. Crore)	**5921026**	**6072243**	**6314426**	**6512659**	**6486585**
1 Commercial Banks	40.28	39.05	39.66	39.05	40.41
2 Non-Bank PDs	0.31	0.36	0.42	0.39	0.39
3 Insurance Companies	24.34	24.88	24.86	24.90	25.09
4 Mutual Funds	0.35	0.64	0.77	1.53	1.43
5 Co-operative Banks	2.29	2.17	2.01	1.97	1.90
6 Financial Institutions	1.05	1.05	1.15	1.14	0.53
7 Corporates	0.97	0.99	0.92	0.84	0.81
8 Foreign Portfolio Investors	3.22	3.27	3.31	3.33	2.44
9 Provident Funds	5.47	5.35	4.87	4.93	4.72
10 RBI	15.27	15.67	14.99	14.72	15.13
11. Others	6.46	6.57	7.05	7.23	7.17
11.1 State Governments	2.00	2.02	1.99	1.97	2.05

State Governments Securities					
Category	2019				2020
	Mar.	Jun.	Sep.	Dec.	Mar.
	1	2	3	4	5
(B) Total (in ₹. Crore)	**2777229**	**2826935**	**2905169**	**3047353**	**3265990**
1 Commercial Banks	33.87	32.57	32.53	32.46	34.99
2 Non-Bank PDs	0.58	0.81	0.72	0.64	0.76
3 Insurance Companies	33.04	33.94	33.39	32.50	31.63
4 Mutual Funds	1.20	1.24	1.12	1.20	1.14
5 Co-operative Banks	4.55	4.65	4.24	4.16	4.12
6 Financial Institutions	0.42	0.44	0.33	0.31	0.11
7 Corporates	0.29	0.32	0.28	0.31	0.30
8 Foreign Portfolio Investors	0.09	0.08	0.05	0.04	0.02
9 Provident Funds	22.15	21.88	22.36	23.66	22.22
10 RBI	0.00	0.00	0.00	0.00	0.00
11. Others	3.81	4.08	4.98	4.73	4.71
11.1 State Governments	0.11	0.14	0.16	0.17	0.18

Treasury Bills					
Category	2019				2020
	Mar.	Jun.	Sep.	Dec.	Mar.
	1	2	3	4	5
(C) Total (in ₹. Crore)	**412704**	**524618**	**538041**	**514588**	**538409**
1 Commercial Banks	57.56	53.60	50.81	45.19	61.06
2 Non-Bank PDs	2.68	1.85	1.92	2.07	2.26
3 Insurance Companies	6.61	5.13	5.55	5.76	7.45
4 Mutual Funds	2.78	13.00	14.08	20.42	13.24
5 Co-operative Banks	2.48	2.54	2.55	2.07	2.55
6 Financial Institutions	2.49	2.14	1.82	2.12	0.58
7 Corporates	2.23	1.67	1.57	1.66	1.89
8 Foreign Portfolio Investors	0.00	0.00	0.00	0.00	0.00
9 Provident Funds	0.08	0.07	0.01	0.01	0.02
10 RBI	0.00	0.00	0.00	0.00	0.00
11. Others	23.10	19.99	21.70	20.70	10.95
11.1 State Governments	17.91	15.59	17.91	16.36	6.22

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

(₹ Crore)

Item	2014-15	2015-16	2016-17	2017-18	2018-19 RE	2019-20 BE
	1	2	3	4	5	6
1 Total Disbursements	**3285210**	**3760611**	**4265969**	**4515946**	**5516932**	**6071777**
1.1 Developmental	1872062	2201287	2537905	2635110	3344948	3660857
1.1.1 Revenue	1483018	1668250	1878417	2029044	2543965	2830634
1.1.2 Capital	332262	412069	501213	519356	694352	732102
1.1.3 Loans	56782	120968	158275	86710	106630	98121
1.2 Non-Developmental	1366769	1510810	1672646	1812455	2089516	2315637
1.2.1 Revenue	1269520	1379727	1555239	1741432	2002766	2204742
1.2.1.1 Interest Payments	584542	648091	724448	814757	901783	1009776
1.2.2 Capital	94687	127306	115775	69370	85375	109030
1.2.3 Loans	2563	3777	1632	1654	1375	1865
1.3 Others	46379	48514	55417	68381	82469	95284
2 Total Receipts	**3189737**	**3778049**	**4288432**	**4528422**	**5364245**	**6003162**
2.1 Revenue Receipts	2387693	2748374	3132201	3376416	4205473	4653758
2.1.1 Tax Receipts	2020728	2297101	2622145	2978134	3512454	3910428
2.1.1.1 Taxes on commodities and services	1212348	1440952	1652377	1853859	2186529	2399337
2.1.1.2 Taxes on Income and Property	805176	852271	965622	1121189	1323113	1506912
2.1.1.3 Taxes of Union Territories (Without Legislature)	3204	3878	4146	3086	2812	4179
2.1.2 Non-Tax Receipts	366965	451272	510056	398282	693019	743330
2.1.2.1 Interest Receipts	39622	35779	33220	34224	36739	33619
2.2 Non-debt Capital Receipts	60955	59827	69063	142433	136636	170056
2.2.1 Recovery of Loans & Advances	22072	16561	20942	42213	56398	63131
2.2.2 Disinvestment proceeds	38883	43266	48122	100219	80238	106926
3 Gross Fiscal Deficit [1 - (2.1 + 2.2)]	**836563**	**952410**	**1064704**	**997097**	**1174823**	**1247962**
3A Sources of Financing: Institution-wise						
3A.1 Domestic Financing	823630	939662	1046708	989167	1179716	1250914
3A.1.1 Net Bank Credit to Government	-37476	231090	617123	144792	386389	...
3A.1.1.1 Net RBI Credit to Government	-334185	60472	195816	-144847	325987	...
3A.1.2 Non-Bank Credit to Government	861106	708572	429585	844375	793327	-----
3A.2 External Financing	12933	12748	17997	7931	-4893	-2952
3B Sources of Financing: Instrument-wise						
3B.1 Domestic Financing	823630	939662	1046708	989167	1179716	1250914
3B.1.1 Market Borrowings (net)	664058	673298	689821	794856	831554	959294
3B.1.2 Small Savings (net)	-56580	-78515	-105038	-163222	-217165	-208528
3B.1.3 State Provident Funds (net)	34339	35261	45688	42351	42703	42482
3B.1.4 Reserve Funds	5109	-3322	-6436	18423	-14577	-871
3B.1.5 Deposits and Advances	27545	13470	17792	25138	16011	13706
3B.1.6 Cash Balances	95474	-17438	-22463	-12476	152688	68615
3B.1.7 Others	53684	316908	427343	284095	368504	376216
3B.2 External Financing	12933	12748	17997	7931	-4893	-2952
4 Total Disbursements as per cent of GDP	*26.3*	*27.3*	*27.8*	*26.4*	*29.0*	*28.8*
5 Total Receipts as per cent of GDP	*25.6*	*27.4*	*27.9*	*26.5*	*28.2*	*28.5*
6 Revenue Receipts as per cent of GDP	*19.2*	*20.0*	*20.4*	*19.8*	*22.1*	*22.1*
7 Tax Receipts as per cent of GDP	*16.2*	*16.7*	*17.1*	*17.4*	*18.5*	*18.5*
8 Gross Fiscal Deficit as per cent of GDP	*6.7*	*6.9*	*6.9*	*5.8*	*6.2*	*5.9*

…: 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 June-2020					
		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	1449	28	1100	17	1085	2
2	Arunachal Pradesh	-	-	-	-	-	-
3	Assam	-	-	-	-	-	-
4	Bihar	-	-	-	-	-	-
5	Chhattisgarh	-	-	-	-	-	-
6	Goa	127	21	-	-	-	-
7	Gujarat	-	-	-	-	-	-
8	Haryana	49	1	-	-	-	-
9	Himachal Pradesh	-	-	151	2	-	-
10	Jammu & Kashmir UT	-	-	935	27	163	1
11	Jharkhand	-	-	-	-	-	-
12	Karnataka	-	-	-	-	-	-
13	Kerala	334	30	919	23	1270	5
14	Madhya Pradesh	-	-	-	-	-	-
15	Maharashtra	-	-	-	-	-	-
16	Manipur	24	4	0	-	-	-
17	Meghalaya	-	-	-	-	-	-
18	Mizoram	83	16	18	1	-	-
19	Nagaland	524	30	16	2	-	-
20	Odisha	-	-	-	-	-	-
21	Puducherry	89	4	-	-	-	-
22	Punjab	407	4	159	4	-	-
23	Rajasthan	-	-	-	-	-	-
24	Tamil Nadu	-	-	-	-	-	-
25	Telangana	1875	28	413	7	-	-
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 June 2020			
		Consolidated Sinking Fund (CSF)	Guarantee Redemption Fund (GRF)	Government Securities	Auction Treasury Bills (ATBs)
	1	2	3	4	5
1	Andhra Pradesh	8172	802	--	-
2	Arunachal Pradesh	1385	2	--	-
3	Assam	4377	54	--	-
4	Bihar	6890	--	--	-
5	Chhattisgarh	4370	--	1	4750
6	Goa	587	295	--	-
7	Gujarat	12811	476	--	-
8	Haryana	2055	1186	--	-
9	Himachal Pradesh	--	--	--	-
10	Jammu & Kashmir UT	--	--	--	-
11	Jharkhand	--	--	--	-
12	Karnataka	4175	--	--	-
13	Kerala	2120	--	--	-
14	Madhya Pradesh	--	904	--	-
15	Maharashtra	40584	420	--	4000
16	Manipur	373	99	--	-
17	Meghalaya	656	36	9	-
18	Mizoram	543	39	--	-
19	Nagaland	1617	33	--	-
20	Odisha	13239	1432	83	18005
21	Puducherry	288	--	--	1107
22	Punjab	461	--	8	-
23	Rajasthan	--	--	129	1800
24	Tamil Nadu	6544	--	40	8635
25	Telangana	5593	1211	--	-
26	Tripura	326	5	--	-
27	Uttar Pradesh	184	--	180	-
28	Uttarakhand	3117	78	--	-
29	West Bengal	10888	524	214	-
	Total	**131356**	**7595**	**663**	**38297**

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	2018-19		2019-20		2020-21						Total amount raised, so far in 2020-21	
						April		May		June			
		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	30200	23824	42915	33944	5000	3834	5000	4417	4000	3417	14000	11667
2	Arunachal Pradesh	719	693	1366	1287	428	428	-	-	-	-	428	428
3	Assam	10595	8089	12406	10496	500	500	-	-	-	-	500	500
4	Bihar	14300	10903	25601	22601	-	-1000	-	-	-	-	-	-1000
5	Chhattisgarh	12900	12900	11680	10980	-	-	-	-	-	-	-	-
6	Goa	2350	1850	2600	2000	200	200	300	200	200	200	700	600
7	Gujarat	36971	27457	38900	28600	2080	2080	3000	1793	1500	1500	6580	5373
8	Haryana	21265	17970	24677	20677	5000	4000	4000	3200	-	-	9000	7200
9	Himachal Pradesh	4210	2108	6580	4460	-	-	-	-	-	-800	-	-800
10	Jammu & Kashmir UT	6684	4927	7869	6760	800	300	500	500	400	400	1700	1200
11	Jharkhand	5509	4023	7500	5656	-	-	-	-500	-	-	-	-500
12	Karnataka	39600	31383	48500	42500	2000	2000	2000	2000	3000	3000	7000	7000
13	Kerala	19500	14784	18073	12617	5930	5930	3000	3000	2500	2500	11430	11430
14	Madhya Pradesh	20496	14971	22371	16550	2000	2000	2000	2000	1000	1000	5000	5000
15	Maharashtra	20869	3117	48498	32998	7000	7000	5000	5000	11500	10623	23500	22623
16	Manipur	970	667	1757	1254	200	200	150	150	100	100	450	450
17	Meghalaya	1122	863	1344	1070	-	-	-	-	-	-	-	-
18	Mizoram	0	-123	900	745	100	-	-	-	60	60	160	60
19	Nagaland	822	355	1000	423	200	200	-	-100	-	-	200	100
20	Odisha	5500	4500	7500	6500	3000	3000	-	-	-	-	3000	3000
21	Puducherry	825	475	970	470	-	-	-	-	-	-	-	-
22	Punjab	22115	17053	27355	18470	1600	800	1000	1000	1600	1600	4200	3400
23	Rajasthan	33178	20186	39092	24686	2750	2750	4500	4000	7250	3938	14500	10688
24	Sikkim	1088	795	809	481	467	467	-	-	-	-	467	467
25	Tamil Nadu	43125	32278	62425	49826	8000	8000	8000	8000	9500	8563	25500	24563
26	Telangana	26740	22183	37109	30697	4000	3166	4000	3583	4461	4044	12461	10794
27	Tripura	1543	1387	2928	2578	-	-	-	-	-	-100	-	-100
28	Uttar Pradesh	46000	33307	67453	50494	5000	3000	500	-1500	-	-2033	5500	-533
29	Uttarakhand	6300	5289	5100	4500	1000	500	-	-	-	-	1000	500
30	West Bengal	42828	30431	59242	43132	2000	-500	5000	3500	1000	-	8000	3000
	Grand Total	478323	348643	634521	487454	59255	48855	47950	40243	48071	38011	155276	127108

- : 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 (including RRBs) and for column Nos. (4) & (5) data are Provisional (excluding RRBs)

Table No. 14

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

Table No. 15 & 16

Data are provisional and relate to select 41 scheduled commercial banks, accounting for about 90 per cent of total non-food credit extended by all scheduled commercial banks (excludes ING Vysya which has been merged with Kotak Mahindra since April 2015).

Export credit under priority sector relates to foreign banks only.

Micro & small under item 2.1 includes credit to micro & small industries in manufacturing sector.

Micro & small enterprises under item 5.2 includes credit to micro & small enterprises in manufacturing as well as services sector.

Priority Sector is as per old definition and does not conform to FIDD Circular FIDD.CO.Plan.BC.54/04.09.01/2014-15 dated April 23, 2015.

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 2016-17 is a moving one, which gets updated every year. REER figures are based on Consumer Price Index (combined). Methodological details are available in December 2005 and April 2014 issues of the 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 2018-19 pertains to the Provisional Estimates of National Income released by Central Statistics Office on 31st May 2019. GDP for 2019-20 is from Union Budget 2019-20.

Data for 2017-18 onwards also includes NCT of Delhi and Puducherry.

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: Includes borrowings through dated securities.

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

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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