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# MONETARY POLICY STATEMENT FOR 2019-20

Third Bi-monthly Monetary Policy Statement, 2019-20



# ***Third Bi-monthly Monetary Policy Statement, 2019-20***

## ***Resolution of the Monetary Policy Committee (MPC) Reserve Bank of India \****

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

- reduce the policy repo rate under the liquidity adjustment facility (LAF) by 35 basis points (bps) from 5.75 per cent to 5.40 per cent with immediate effect.

Consequently, the reverse repo rate under the LAF stands revised to 5.15 per cent, and the marginal standing facility (MSF) rate and the Bank Rate to 5.65 per cent.

- The MPC also decided to maintain the accommodative stance of monetary policy.

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. Global economic activity has slowed down since the meeting of the MPC in June 2019, amidst elevated trade tensions and geo-political uncertainty. Among advanced economies (AEs), GDP growth in the US decelerated in Q2:2019 on weak business fixed investment. In the Euro area too, GDP growth

moderated in Q2 on worsening external conditions. Economic activity in the UK was subdued in Q2 with waning consumer confidence on account of Brexit related uncertainty and weak industrial production. In Japan, available data on industrial production and consumer confidence suggest that growth is likely to be muted in Q2.

3. Economic activity remained weak in major emerging market economies (EMEs), pulled down mainly by slowing external demand. The Chinese economy decelerated to a multi-year low in Q2, while in Russia subdued economic activity in Q1 continued into Q2 on slowing exports and retail sales. In Brazil, the economy is struggling to gain momentum after contracting in Q1 on weak service sector activity and declining industrial production. Economic activity in South Africa appears to be losing pace in Q2 as the manufacturing purchasing managers' index (PMI) contracted for the sixth month in succession in June and business confidence remained weak.

4. Crude oil prices fell sharply in mid-May on excess supplies from an increase in non-OPEC production, combined with a further weakening of demand. Consequently, extension of OPEC production cuts in early July did not have much impact on prices. Gold prices have risen sharply since the last week of May, propelled by increased safe haven demand amidst rising downside risks to growth and a worsening geo-political situation. Inflation remained benign in major advanced and emerging market economies.

5. Financial markets were driven by the monetary policy stances of major central banks and intensifying geo-political tensions. In the US, the equity market recovered most of the losses suffered in May, boosted by dovish guidance by the US Fed and some transient respite in trade tensions with China. EM stocks lagged behind their developed market counterparts, mainly reflecting the weak performance of Chinese and South Korean stocks. Bond yields in the US, which were already trading with a softening bias on increased probability of policy rate cuts, fell markedly

\* Released on August 07, 2019.

in early August on escalation of trade tensions. Bond yields in some more member countries in the Euro area moved into negative territory as expectations of more accommodative monetary policy by the European Central Bank gained traction. In Emerging Market Economies (EMEs), bond yields edged lower on more accommodative guidance by systemic central banks. In currency markets, the US dollar weakened against major currencies in June on dovish guidance by the US Fed but appreciated in July. EME currencies, which traded with an appreciating bias in July, depreciated in early August on escalation of trade tensions.

#### *Domestic Economy*

6. On the domestic front, the south-west monsoon gained intensity and spread with the cumulative rainfall 6 per cent below the long-period average (LPA) up to August 6, 2019. In terms of its spatial distribution, 25 of the 36 sub-divisions received normal or excess rainfall as against 28 sub-divisions last year. The total area sown under *kharif* crops was 6.6 per cent lower as on August 2 than a year ago. The live storage in major reservoirs on August 1 was at 33 per cent of the full reservoir level as compared with 45 per cent a year ago. Rainfall during the second half of the season (August-September) has been forecast to be normal by the India Meteorological Department (IMD).

7. Industrial growth, measured by the index of industrial production (IIP), moderated in May 2019, pulled down by manufacturing and mining even as electricity generation picked up on strong demand. In terms of the use-based classification, the production of capital goods and consumer durables decelerated. However, consumer non-durables accelerated for the third consecutive month in May. The growth in the index of eight core industries decelerated in June, dragged down by a contraction in petroleum refinery products, crude oil, natural gas and cement. Capacity utilisation (CU) in the manufacturing sector, measured by the order books, inventory and capacity

utilisation survey (OBICUS) of the Reserve Bank rose marginally to 76.1 per cent in Q4:2018-19 from 75.9 per cent in Q3; seasonally adjusted CU, however, fell to 74.5 per cent in Q4 from 75.6 per cent in Q3. The Reserve Bank's business assessment index (BAI) for Q1:2019-20 improved marginally, supported by a modest recovery in profit margins of the surveyed firms even as production and order books slowed. The manufacturing PMI rose to 52.5 in July from 52.1 in June, underpinned by a pick-up in production, higher new orders and optimism on demand conditions in the year ahead.

8. High frequency indicators of services sector activity for May-June present a mixed picture. Tractor and motorcycle sales – indicators of rural demand – continued to contract. Amongst indicators of urban demand, passenger vehicle sales contracted for the eighth consecutive month in June; however, domestic air passenger traffic growth turned positive in June after three consecutive months of contraction. Commercial vehicle sales slowed down even after adjusting for base effects. Construction activity indicators slackened, with contraction in cement production and slower growth in finished steel consumption in June. Import of capital goods – a key indicator of investment activity – contracted in June. The services PMI expanded to 53.8 in July from 49.6 in June on increase in new business activity, new export orders and employment.

9. Retail inflation, measured by y-o-y change in the CPI, edged up to 3.2 per cent in June from 3.0 per cent in April-May, driven by food inflation, even as fuel inflation and CPI inflation excluding food and fuel moderated.

10. Inflation in the food group rose to 2.4 per cent in June from 2.0 per cent in May and 1.4 per cent in April, caused by a sharp pick up in prices of meat and fish, pulses and vegetables. Inflation also edged up in cereals, milk, spices and prepared meals. However, inflation in eggs and non-alcoholic beverages softened. Prices of fruits, and sugar and

confectionery remained in deflation in June.

11. Inflation in the fuel and light group moderated in June, with electricity moving into deflation. Fuels such as firewood and chips, and dung cake have been in deflation from April. Inflation in liquified petroleum gas (LPG) and subsidised kerosene prices, however, remained elevated.

12. CPI inflation excluding food and fuel fell by 50 basis points to 4.1 per cent in May from 4.6 per cent in April, and remained unchanged in June. The softness in inflation in this category was broad-based across clothing and footwear; household goods and services; transport and communication; and recreation and amusement. Housing inflation remained unchanged over the last three months. Despite some moderation, inflation in the health sub-group remained elevated. Inflation in personal care and effects edged up in June due to a resurgence in gold prices.

13. Inflation expectations of households remained unchanged in the July 2019 round of the Reserve Bank's survey for the three months ahead horizon as compared with the previous round, but they moderated by 20 basis points for the one year ahead horizon. Input cost pressures from prices of agricultural and industrial raw materials continued to ease in May and June. Nominal growth in rural wages was muted, while growth in staff costs in the manufacturing sector eased in Q1. Manufacturing firms participating in the Reserve Bank's industrial outlook survey expect input cost pressures to soften on account of lower raw material costs in Q2.

14. Liquidity in the system was in large surplus in June-July 2019 due to (i) return of currency to the banking system; (ii) drawdown of excess cash reserve ratio (CRR) balances by banks; (iii) open market operation (OMO) purchase auctions; and (iv) the Reserve Bank's foreign exchange market operations. The Reserve Bank absorbed liquidity of ₹51,710 crore in June, ₹1,30,931 crore in July and ₹2,04,921 crore in August (up to August 6, 2019) on a daily net average basis under the LAF. Two OMO purchase auctions amounting to ₹27,500 crore were conducted in June,

thereby injecting durable liquidity into the system. The weighted average call money rate (WACR) – the operating target of monetary policy – was aligned with the policy repo rate in June, but it traded below the policy repo rate on a daily average basis by 14 bps in July and 17 bps in August (up to August 6, 2019).

15. The transmission of policy repo rate cuts to the weighted average lending rates (WALRs) on fresh rupee loans of banks has improved marginally since the last meeting of the MPC. Overall, banks reduced their WALR on fresh rupee loans by 29 bps during the current easing phase so far (February-June 2019).

16. Merchandise exports contracted in June 2019, weighed down by the subdued performance of gems and jewellery, petroleum products, rice, engineering goods and cotton. After a modest increase in May, imports also contracted in June, impacted by falling prices of petroleum products and reduced imports of pearls and precious stones, transport equipment, machinery, metalliferous ores, chemicals and fertilisers. As the fall in imports was larger than that of exports, the trade deficit declined modestly during May-June on a y-o-y basis. Provisional data suggest a sequential decline in net services exports in May 2019. On the financing side, net foreign direct investment flows moderated to US\$ 6.8 billion in April-May 2019 from US\$ 7.9 billion a year ago. Net foreign portfolio investment (FPI) flows in the domestic capital market amounted to US\$ 2.3 billion during the current financial year so far (up to August 5, 2019) as against net outflows of US\$ 8.5 billion in the same period last year. India's foreign exchange reserves were at US\$ 429.0 billion on August 2, 2019 – an increase of US\$ 16.1 billion over end-March 2019.

### **Outlook**

17. In the second bi-monthly monetary policy resolution of June 2019, CPI inflation was projected at 3.0-3.1 per cent for H1:2019-20 and 3.4-3.7 per cent for H2:2019-20, with risks broadly balanced. The actual headline inflation outcome for Q1:2019-20 at 3.1 per cent was in alignment with these projections.

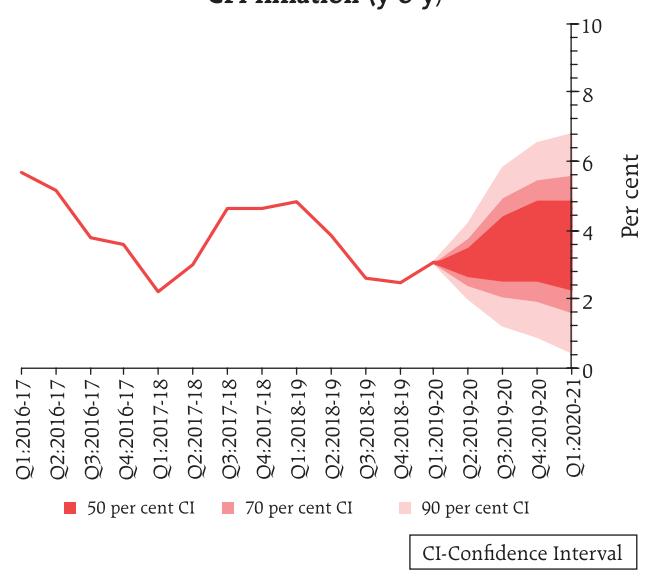
18. The baseline inflation trajectory for the next four quarters will be shaped by several factors. First, the uptick in food inflation may be sustained by price pressures in vegetables and pulses as more recent data suggest. Uneven spatial and temporal distribution of monsoon could exert some upward pressure on food items, though this risk is likely to be mitigated by the recent catch up in rainfall. Second, despite excess supply conditions, crude oil prices may likely remain volatile due to geo-political tensions in the Middle-East. Third, the outlook for CPI inflation excluding food and fuel remains soft. Manufacturing firms participating in the industrial outlook survey expect output prices to ease in Q2. Fourth, one year ahead inflation expectations of households polled by the Reserve Bank have moderated. Taking into consideration these factors and the impact of recent policy rate cuts, the path of CPI inflation is projected at 3.1 per cent for Q2:2019-20 and 3.5-3.7 per cent for H2:2019-20, with risks evenly balanced. CPI inflation for Q1:2020-21 is projected at 3.6 per cent (Chart 1).

19. In the MPC's June resolution, real GDP growth for 2019-20 was projected at 7.0 per cent – in the range of 6.4-6.7 per cent for H1:2019-20 and 7.2-7.5

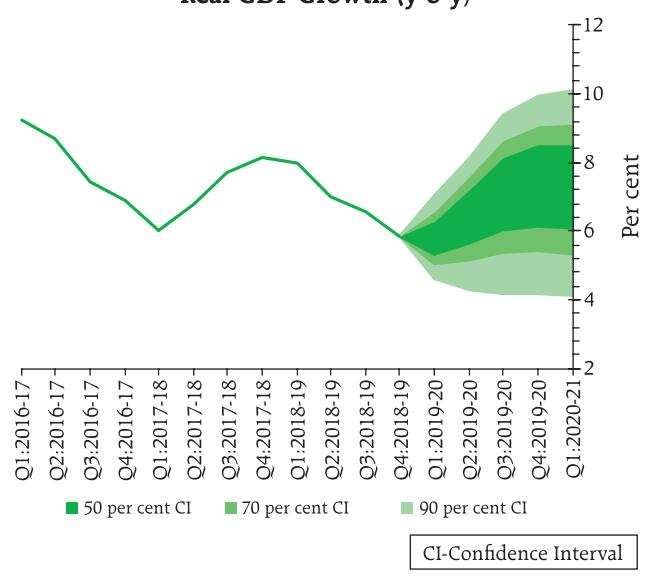
per cent for H2 – with risks evenly balanced. Various high frequency indicators suggest weakening of both domestic and external demand conditions. The Business Expectations Index of the Reserve Bank's industrial outlook survey shows muted expansion in demand conditions in Q2, although a decline in input costs augurs well for growth. The impact of monetary policy easing since February 2019 is also expected to support economic activity, going forward. Moreover, base effects will turn favourable in H2:2019-20. Taking into consideration the above factors, real GDP growth for 2019-20 is revised downwards from 7.0 per cent in the June policy to 6.9 per cent – in the range of 5.8-6.6 per cent for H1:2019-20 and 7.3-7.5 per cent for H2 – with risks somewhat tilted to the downside; GDP growth for Q1:2020-21 is projected at 7.4 per cent (Chart 2).

20. The MPC notes that inflation is currently projected to remain within the target over a 12-month ahead horizon. Since the last policy, domestic economic activity continues to be weak, with the global slowdown and escalating trade tensions posing downside risks. Private consumption, the mainstay of aggregate demand, and investment activity remain sluggish. Even as past rate cuts are being gradually

**Chart 1: Quarterly Projection of CPI Inflation (y-o-y)**



**Chart 2: Quarterly Projection of Real GDP Growth (y-o-y)**



transmitted to the real economy, the benign inflation outlook provides headroom for policy action to close the negative output gap. Addressing growth concerns by boosting aggregate demand, especially private investment, assumes the highest priority at this juncture while remaining consistent with the inflation mandate.

21. All members of the MPC unanimously voted to reduce the policy repo rate and to maintain the accommodative stance of monetary policy.

Four members (Dr. Ravindra H. Dholakia, Dr. Michael Debabrata Patra, Shri Bibhu Prasad Kanungo and Shri Shaktikanta Das) voted to reduce the policy repo rate by 35 basis points, while two members (Dr. Chetan Ghate and Dr. Pami Dua) voted to reduce the policy repo rate by 25 basis points.

22. The minutes of the MPC's meeting will be published by August 21, 2019.

23. The next meeting of the MPC is scheduled during October 1, 3 and 4, 2019.

## **Statement on Developmental and Regulatory Policies**

This Statement sets out various developmental and regulatory policy measures in the areas of Financial Markets; Payment and Settlement Systems; Banking Regulation, Financial Inclusion and Credit flow to NBFCs.

### **I. Financial Markets**

#### **1. Introduction of stripping/reconstitution facility for State Development Loans (SDLs)**

As a debt manager to the States in terms of Section 21A of RBI Act 1934, the Reserve Bank has been making efforts to develop the SDL market in both primary and secondary segments. The extension of the Scheme of Non-Competitive Bidding and aggregators/facilitators to SDLs are some of the efforts taken by RBI in this direction. In continuation of these efforts, it has been decided to introduce the stripping/reconstitution facility for SDLs. This measure will be implemented in consultation with the respective State governments.

### **II. Payment and Settlement Systems**

#### **2. Round-the-Clock Availability of National Electronic Funds Transfer System**

Currently, the National Electronic Funds Transfer (NEFT) payment system operated by the Reserve Bank as a retail payment system is available for customers from 8.00 am to 7.00 pm on all working days of the week (except 2<sup>nd</sup> and 4<sup>th</sup> Saturdays of the month). As mentioned in the Payment System Vision 2021 document, the Reserve Bank will make available the NEFT system on a 24x7 basis from December 2019. This is expected to revolutionise the retail payments system of the country.

#### **3. Expansion of Biller Categories for Bharat Bill Payment System**

The Bharat Bill Payment System (BBPS), an interoperable platform for repetitive bill payments, currently covers five segments *viz.*, (i) direct-to-home (DTH); (ii)

electricity; (iii) gas; (iv) telecom; and (v) water bills. In order to leverage the advantages of the BBPS and harness its full potential, it has been decided to permit all categories of billers (except prepaid recharges) who provide for recurring bill payments to participate in BBPS on a voluntary basis. Apart from digitisation of cash-based bill payments, these segments would also benefit from the standardised bill payment experience for customers, centralised customer grievance redressal mechanism, prescribed customer convenience fee and the like. Detailed instructions in this regard will be issued by the end of September 2019.

#### **4. 'On-tap' Authorisation for Retail Payment Systems**

As announced in the Statement on Developmental and Regulatory Policies of June 6, 2018, the Reserve Bank published a policy paper on January 21, 2019 for public consultation on minimising concentration risk in retail payment systems from a financial stability perspective. Comments/feedback received from a wide array of individuals, public and private entities, institutions and industry associations suggested the need to encourage more players to participate in and promote pan-India payment platforms. Accordingly, in order to benefit from diversification of risk as also to encourage innovation and competition, it has been decided to offer 'on tap' authorisation to entities desirous to function/operate/provide platforms for

- i) Bharat Bill Payment Operating Unit (BBPOU);
- ii) Trade Receivables Discounting System (TReDS); and
- iii) White Label ATMs (WLAs).

Instructions to this effect will be issued by the end of September 2019.

#### **5. Creation of a Central Payments Fraud Information Registry**

At present, there is a mechanism in place for banks to report all banking frauds to the Central Fraud Monitoring Cell of the Reserve Bank. With the digital

payment ecosystem making substantial progress in terms of growth of payment infrastructure as well as volume and value of digital payment transactions, fraud risk monitoring and management by the stakeholders have assumed importance. It has always been the endeavour of the Reserve Bank to improve the confidence of customers in the payment systems. The Payment System Vision 2021 also envisages a framework for collecting data on frauds in the payment systems. In order to carry forward these efforts and ensure quick and systemic responses, it is proposed to facilitate the creation of a Central Payment Fraud Registry that will track these frauds. Payment system participants will be provided access to this registry for near-real time fraud monitoring. The aggregated fraud data will be published to educate customers on emerging risks. A detailed framework in this regard will be put in place by the end of October 2019.

### **III. Banking Regulation, Financial Inclusion and Credit flow to NBFCs**

#### **6. Reduction in risk weight for consumer credit except credit card receivables**

Under the standardised approach for Credit Risk Management, consumer credit, including personal loans and credit card receivables attract a higher risk weight of 125 per cent or higher, if warranted by the external rating of the counterparty. On a review, it has been decided to reduce the risk weight for consumer credit, including personal loans, but excluding credit card receivables, to 100 per cent.

Guidelines in this regard would be issued by the end of August 2019.

#### **7. Measures to enhance credit flow to NBFC Sector:**

During the last one year, the Reserve Bank has taken several measures to facilitate credit flow to the well managed NBFCs/HFCs. The steps taken by the Reserve Bank are as follows:

- (i) On September 23, 2018, the Reserve Bank issued a press release stating that along with

SEBI, it was closely monitoring the situation and will take measures, as necessary.

- (ii) The FALLCR (*i.e.* securities that can be reckoned, both for SLR and LCR), was increased on two occasions (September 27, 2018 and April 4, 2019) by two per cent each, thereby enabling banks to raise additional liquidity by selling their excess SLR securities.
- (iii) A special FALLCR of 0.5 per cent exclusively for lending to NBFCs was introduced in October 2018.
- (iv) The risk weights for banks' exposure to NBFCs were harmonised with those of other corporates.
- (v) The prudential limit on exposure of banks to NBFCs was also aligned with that of other sectors, thereby increasing it from 10 per cent of the banks' capital to 15 per cent.
- (vi) The minimum holding period for assets to be securitised or assigned was reduced from one year to six months, thereby enabling the NBFCs and HFCs to raise funds by securitising their originations without having to wait for a longer period.
- (vii) The durable liquidity in the system was increased through a series of OMOs and Forex SWAPs.
- (viii) On July 5 2019, the FALLCR scheduled to increase by 0.50 per cent of NDTL each on August 1 and December 1, 2019 was allowed to be frontloaded by banks for computing LCR to the extent of incremental outstanding credit to NBFCs and Housing Finance Companies (HFCs) over and above the amount of credit to NBFCs/ HFCs outstanding in their books as on July 5, 2019. Further, on the same day, pursuant to the announcement in the

Union Budget of a partial credit enhancement to Public Sector Banks for acquiring highly rated pooled assets of financially sound NBFCs/HFCs, the Reserve Bank, through a press release, conveyed its readiness to provide required liquidity backstop to the banks against their excess G-sec holdings in order to enable them to implement the budget announcement.

It has now been decided to take following further measures to enhance credit flow to the NBFC sector:

**(a) Harmonisation of single counterparty exposure limit for banks' exposure to single NBFCs with general single counterparty exposure limit**

Under the revised guidelines on large exposure framework (LEF) that came into effect from April 1, 2019, a bank's exposure to a single NBFC is restricted to 15 per cent of its Tier I capital, while for entities in the other sectors the exposure limit is, 20 percent of Tier I capital of the bank, which can be extended to 25 per cent by banks' Boards under exceptional

circumstances. As a step towards harmonisation of the counterparty exposure limit to single NBFC with that of the general limit, it has been decided to raise a bank's exposure limit to a single NBFC to 20 per cent of Tier-I capital of the bank.

**(b) Credit to the Priority Sector – Permitting banks to on-lend through NBFCs**

With a view to further increasing the credit flow to certain priority sectors which contribute significantly to the economic growth in terms of export and employment, and recognizing the role played by NBFCs in providing credit to these sectors, it has been decided to allow, subject to certain conditions, bank lending to registered NBFCs (other than MFIs) for on-lending to Agriculture (investment credit) up to 10.0 lakhs; Micro and Small Enterprises up to 20.0 lakh and housing up to 20.0 lakh per borrower (up from 10.0 lakh at present) to be classified as priority sector lending.

Detailed guidelines on the above measures will be issued by the end of August 2019.

## SPEECHES

Governor's Remarks at the Book Release

Shaktikanta Das

Consumer Protection in a Digital Financial World – Initiatives and Beyond

M K Jain



## **Governor's Remarks at the Book Release\***

**Shaktikanta Das**

I am delighted to be part of this event for the launch of Shri V. Srinivas's book on 'India's Relations with the International Monetary Fund'. A respected civil servant of the 1989 batch, he has drawn extensively on his hands-on stint as Advisor to the Executive Director for India at the IMF during 2003-06, combining it with his scholarship and experience in policy making. The book and the function today will promote readership on an important subject and spur more thoughts and analysis. As you are aware, RBI as an institution is closely involved with the functioning of the IMF both to project our Macro economic interests as well as from the angle of governance of the IMF.

Against the backdrop of previous Fund programs with India in 1966 and 1981, the book trains its focus on perhaps the most eventful period of India's engagement with the Fund, beginning with the balance of payments crisis of 1991 and covering the period up to 2016 that brings to the fore the dramatic transition in India's status with the IMF from a debtor to a creditor. In the same period, the Indian economy also witnessed a transformation from an inward-looking economy driven by import substitution to an increasingly open and emerging global power in a dynamic world order. This period also witnessed the transformation of the Fund from a stigmatised lender of last resort focused exclusively on exchange rate surveillance towards a more central role in the international monetary system after the global financial crisis. Over this period, the Fund has not only focussed on macroeconomic policies but embraced a wider gamut of issues that covered women's empowerment, poverty alleviation,

sustainable development, fintech and climate change. As Dr. Y. V. Reddy has stated in his Foreword to the book : 'The book fills a serious gap in the existing literature on the subject....' I congratulate Srinivas for his scholarly contribution in writing this book.

I thought I would take this opportunity to share some of my own thoughts on the Fund and its role in the international monetary system, drawing on my experiences, including as G20 Sherpa and now as Alternate to the Finance Minister in the Board of Governors of the Fund. Speaking on the sidelines of the Fund-Bank spring meeting in April this year, I had alluded to labels such as 'currency manipulation' and called for greater understanding all around, to the compulsions of emerging market economies (EMEs) in building up their own buffers. I would like to point out that the origin of the phrase 'currency manipulation' itself is of recent vintage, dating to 2015, when the US Treasury started publishing a semi-annual report on the subject. In this backdrop, it has acquired a predominantly bilateral connotation. Currently, the semi-annual Report judges countries as currency manipulators on the basis of three criteria: (i) a bilateral trade surplus with the US of at least US \$ 20 billion; (ii) a material current account surplus of at least 2 per cent of GDP; and (iii) persistent one-sided net purchases in 6 out of 12 months adding to at least 2 per cent of an economy's GDP over a 12-month period. A country is put on the monitoring list even if two out of the three criteria are met. India was recently removed from that list after featuring in it from 2018. In the more recent period, the term has gained greater focus in the heat and dust of trade wars.

A question that crops up is why has labelling become a bilateral prerogative when a multilateral institutional architecture exists for the purpose? After all, Article IV, Section 3 (a) of the Articles of Agreement that established the Fund, invests it with the oversight of the international monetary system. Article IV, Section 1(iii) enjoins each member country to avoid manipulating exchange rates to gain unfair

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\* Shri Shaktikanta Das, Governor, Reserve Bank of India, on the occasion of Book launch, 'India's Relations with the International Monetary Fund' in New Delhi on July 26, 2019.

competitive advantage. Article VIII, Section 3 obligates members and their fiscal agents not to engage in discriminatory currency arrangements or Multiple Currency Practices (MCPs) unless they are approved by the Fund or maintained under Article XIV, Section 2.3. The application of the MCP concept has been reasonably considered, explained and applied by the Fund with suitable changes carried out when needed.

After the collapse of the Bretton Woods system of fixed exchange rates and the eventual floating of currencies from 1973, the second amendment of the Fund's Articles of Agreement in 1978 made its mandate more explicit by fixing its oversight over individual countries' exchange rate policies. The Fund's mandate was updated in 2007 to clarify that exchange rate manipulation was associated with 'fundamental misalignment' that results in external instability. Fears of labelling among the membership led to several reviews culminating in 2012 when an Integrated Surveillance Decision was adopted, which emphasised the connection between domestic and external stability as well as global risks and spillovers.

In pursuit of this mandate, the Fund, in its Article IV Consultations every year, undertakes in-depth assessment of members' economic developments and policies, including and especially exchange rate policies. This is backed by rigorous technical evaluation through a suite of models. The Consultations report is published and any case of exchange rate misalignment and/or multiple currency practices is candidly brought to the notice of national authorities for correction. This is mandatory, as the Articles of Agreement constitute an international treaty; and in India, they are underpinned by parliamentary legislation in the form of the International Monetary Fund and Bank Act, 1945. Given this multilateral framework, the overlay of bilateral labelling that I talked about earlier raises questions, including on the role of the Fund itself.

Admittedly, like any policy-making institution, the Fund's policies and practices will not always be the right or the best in terms of their efficacy. As its

own Independent Evaluation Office (IEO) pointed out in 2005, a major reason for the Fund failing to meet its core responsibility of exchange rate surveillance was a strong sense among some member countries of a lack of even-handedness in surveillance – that somehow, it was tolerant of currency depreciations but not of countries resisting appreciation. This criticism by the IEO persists in its Evaluation Update of 2017. Notwithstanding such criticisms, the IMF is open to learning and deservedly remains a well-respected institution. We, therefore, look forward to engaging with the Fund on its April 2019 proposal for a more integrated framework encompassing the interaction of monetary, exchange rate, macro-prudential and capital flow management policies. I strongly believe that a multilateral framework under the aegis of the IMF is the most appropriate approach to deal with these issues.

It is important to appreciate the context in which EMEs operate so as to foster a shared understanding of their challenges. First, the nature of shocks which these countries face has changed from balance of payments strains to full-blown financial crises. Second, in the years following the global financial crisis, EMEs and financial markets have been buffeted by global spillovers which have amplified both sudden surges and sudden stops or reversals of capital flows. The existing state of financial safety nets, regional or multilateral, fall grossly short of providing the necessary buffers against such turbulence. Moreover, access to swaps from systemically important central banks is not available to the EMEs. For many EMEs, high fluctuations in currency movements have pronounced macroeconomic consequences. This is corroborated in a recently articulated view by Mark Carney, Governor, Bank of England that significant improvements in the institutional frameworks of EMEs are being offset by asymmetries in the international monetary system and market-driven finance.<sup>1</sup> Against this backdrop, these countries have

<sup>1</sup> Carney, Mark (2019), "Pull, Push, Pipes: Sustainable Capital Flows for a New World Order", speech at the Institute of International Finance Spring Membership Meeting, Tokyo, June 6.

accumulated reserves over the past two decades which has significantly reduced the sensitivity of capital flows to push factors. Governor Carney adds that this extra insurance, however, has come at a high cost for EMEs. In this context, I may mention that in spite of the insurance coming at a high cost, there is enough evidence to indicate that costs of financial crises have been very high in relation to costs of insurance. Thus, it is evident that build-up of reserves by EMEs, so far is not so much to prop up their currencies as to self-insure themselves against global contagion.

How do we collectively ensure that multilateral principles and frameworks for orderly exchange rate and payment arrangements are not superseded by bilateral hegemony? The best way forward is to strengthen existing institutions like the Fund and make them more relevant and trusted. Through its Articles of Agreement, the Fund is a quota-based organisation, but quotas currently constitute only 49 per cent of its resources. At the height of the global financial crisis and in the years following it, the Fund activated borrowing arrangements such as the New Arrangements to Borrow (NAB) and the bilateral Note Purchase Agreements (NPAs), to which India also contributed. These borrowing arrangements are, however, intended to be temporary bridges. The solution lies in commitments of quota resources by members in order to secure the legitimacy of the Fund as a global lender of the last resort, the overseer of the international monetary system and a trusted policy advisor. This adds urgency to the completion of the 15<sup>th</sup> General Review of Quotas, delayed for the fourth year now.

The global order today faces several challenges that will test the skills of the international organisations as well as those of national monetary and fiscal authorities. International coordination has become somewhat weaker in the very recent years. Many advanced economies (AEs) have been pursuing low interest rate policies for long without perhaps adequate recognition of their adverse impacts.

Today at the global level, the total amount of bonds with negative yields has risen to nearly \$13 trillion; implying that nearly a third of AE government bonds trade at negative yields. Equity premium has crossed 4 per cent, which is one standard deviation higher than its long-term average. Return to lower interest rates in AEs poses challenges as leverage has already built up in the EMEs and the needed deleveraging is not complete in many European economies. Amid low global interest rates, total credit to the non-financial sector in the EMEs went up from 107.2 per cent of GDP at the end of 2008 to 194.4 per cent of GDP by March 2018, before it dropped to 183.2 per cent at the end of 2018. Net private capital flows to EMEs in the form of direct and portfolio investments also nearly doubled in the post-crisis period. This has posed risks to some EMEs. Some of these risks have surfaced in the form of weak bank/ non-bank balance sheets and some remain latent and can surface, especially when the global interest rate cycles turn decisively. The world will be looking to the IMF to suggest dependable solutions. EMEs on their part need to follow policies that promote macroeconomic and financial stability, while focussing on growth.

Solutions are turning more difficult to come by as the global economy seems to be moving into a new and unsettling phase in an environment of stressed trade negotiations, rising geopolitical confrontation, and limited policy space and high debt levels in several economies. General government debt of AEs as a group has surpassed 100 per cent of GDP. Fiscal space is also constrained in many of the advanced economies.

It is important in the backdrop of slowing global growth that policies of monetary and fiscal authorities are well-calibrated so that they support growth without further build-up of leverage and asset price bubbles. Prudent policies are critical to growth with macro-economic stability. Globally, we need to focus on policy space, judiciously use it and simultaneously undertake structural reforms to improve productivity, innovation and job creation.

The coming year will test IMF for its policy advice in these areas. How the IMF and the central banks provide forward guidance will be key to sustaining global economic growth while maintaining financial stability.

I have highlighted a few concerns that have caused me to introspect considerably on the future of

the global monetary and financial system, especially as we confront these challenges on a day-to-day basis at the RBI. A global search for effective solutions is underway. This quest must be armed with the lessons of history and experience, and in this context, I commend this book for your reading.

Thank you.

# **Consumer Protection in a Digital Financial World – Initiatives and Beyond\***

**M K Jain**

Deputy Governor Shri Kanungo, Executive Director, Mrs. Marandi, other Executive Directors of the Reserve Bank of India, Managing Directors/ Chief Executive Officers from banks, overseas guests, colleagues from the Reserve Bank of India and other institutions.

I am happy to be here for delivering this address at this annual event of the Consumer Education and Protection Department (CEPD), Central Office (CO) on a historic moment as we enter the silver jubilee year of the Banking Ombudsman Scheme which was started on June 14, 1995. John F Kennedy, while addressing the US Congress on March 15, 1962 had said and I quote,

***'Consumer by definition include us all. They are the largest economic group in the economy, affecting and affected by every public and private economic decisions. Two thirds of all spending in the economy is by consumers. But they are the only important group in the economy who are not effectively organised, whose views are often not heard.'***

And we all know how important this day is for all of us pursuing consumer protection.

## **Reserve Bank's measures on consumer protection**

We, at the Reserve Bank of India have come a long way since then as we recognised the significance of customer service and consumer protection in the banking sector early on. The Reserve Bank has remained mindful of the need to empower the common man, the retail customers and the small

entities to ensure balance in a bank/ Financial Service Providers' (FSP) approach to this segment of customers *vis-à-vis* large and corporate customers. The Reserve Bank, as a multi-service central bank, has been proactively engaged in initiatives to build a strong financial system, expand the reach and access of financial services and ensure protection to customers of banks/FSPs. Since the 1970's, the Reserve Bank has progressively created, reviewed and updated, an elaborate guidance framework for banks on good customer service, including an internal grievance redressal mechanism with reporting to a Board level Committee.

Let me start with a brief account of the measures taken by the Reserve Bank in the area of consumer protection. Consumer confidence and trust in a well-functioning market for financial services promotes financial stability, growth, efficiency and innovation over the long term<sup>1</sup>. Effective customer protection regulations together with an easily accessible mechanism to resolve disputes between customers and the regulated entities in a timely manner, are essential for promoting consumer confidence. Further, awareness measures for customers on financial matters instills in them knowledge about their rights and responsibilities and helps them to make right financial decisions.

Specifically, in its pursuit of the objective of consumer protection, the Reserve Bank introduced the Banking Ombudsman Scheme on June 14, 1995, for the customers of banks, which has been reviewed periodically so that it retains its relevance as an apex level complaint redressal mechanism for customers of banks. Reserve Bank has also launched the Ombudsman Schemes to include the customers of non-banking financial companies and Pre-paid Payment Instrument (PPI) Providers. These Schemes have evolved over time as apex level complaint redressal mechanisms for customers of entities regulated by the Reserve Bank. I may mention here that these Schemes provide a cost-free and expeditious

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\* Shri M K Jain, Deputy Governor, Reserve Bank of India, speech delivered at Annual Conference of Banking Ombudsman, Mumbai on June 21, 2019.

<sup>1</sup> G20 High-Level Committee Principles on Financial Consumer Protection.

redressal of complaints relating to deficiency in the services by eligible entities covered under respective Schemes.

The Reserve Bank had created a dedicated Customer Service Department in 2006 to act as the nodal department in the Reserve Bank for grievance redressal of complaints received from the public. The department, has since been renamed as Consumer Education and Protection Department (CEPD), and continues to focus on providing a level playing field between suppliers and consumers of financial services, by easing the imbalances emanating from information asymmetries, inadequate disclosures and unfair treatment. In addition, the Charter of Customer Rights<sup>2</sup>, put in place by the Reserve Bank in December 2014, comprising of broad over-arching principles to be adopted by banks has been playing an important role in protecting the interests of their customers.

In India, we have a well-defined grievance redressal structure, the first resort on the complaint being the branch itself with proper escalation level in the banks/FSPs. It is expected that the grievances of the customers are redressed in a hassle-free manner at the first point of contact with the Ombudsman being the last resort. An important milestone in strengthening the grievance redressal mechanism available to bank customers was the institutionalisation of the Internal Ombudsman (IO) mechanism in 2015 in all public sector banks, select private sector and foreign banks. Based on a review of the framework in September 2018, the coverage of the IO Scheme was extended to all scheduled commercial banks (other than Regional Rural Banks) having 10 or more banking outlets in India. The objective of setting up the mechanism of IO was to ensure that there is undivided attention to resolution of customer complaints in banks and the customers of banks get an independent and auto-review of their grievances which are partially or

wholly unaddressed before they approach the Banking Ombudsman (BO). The IO mechanism is expected to strengthen the consumer protection and grievance redressal processes in banks.

In this era of digitalisation, given the increasing use of technology by service providers and their customers, being mindful of occurrence and potential of unauthorised transactions, the Reserve Bank has issued regulatory instructions keeping the interests of the customer in mind. The 'Framework on Limiting the Liability of Customers in Unauthorised Electronic Banking Transactions' issued on July 6, 2017 is a defining development in the wake of risks arising out of rapid digitalisation of payments and money transfer transactions, where there is a **judicious balance** between ease of use and security of the transactions. The provisions, initially applicable to scheduled commercial banks, have in January 2019, also been extended to cover authorised non-banks that issue PPIs.

In keeping with the rapid evolution in the financial sector, the Reserve Bank has progressively reviewed and updated its instructions and guidelines relating to customer service such as, simplification of know your customer (KYC) procedures, mandating issue of Europay, Mastercard and Visa (EMV) chip/pin cards, transparency in pricing of credit, etc., of which, you are all aware.

The current strategy of the Reserve Bank for consumer protection is to create an enabling environment for developing a customer-centric financial system by instituting mechanisms for addressing information asymmetries between the providers and consumers of financial services, enhancing standards of disclosures and ensuring a better alignment of product design *vis-à-vis* the customer's requirements while providing an efficient and effective grievance redressal mechanism. Through all the changes and developments in the financial world, the Reserve Bank has endeavored to ensure a robust consumer protection mechanism that is visible and credible.

<sup>2</sup> RBI has issued a 'Charter of customer rights' in December 2014. The Charter enunciates five basic rights of bank customers. These include right to fair treatment, right to transparency, fair and honest dealing, right to suitability, right to privacy and right to grievance redress and compensation.

## The Role of the Ombudsman

Before I delve into the role of the Ombudsman, let me say that in this journey of 25 years, several milestones have been achieved by the Ombudsmen and their staff. They have handled complaints with increased volume and complexity. Further, they are now handling complaints under two other Ombudsman Schemes which have been recently added to the redressal framework.

The financial sector in general, and banks in particular, are in the midst of a major revolution. A fintech wave is sweeping across financial products, processes and delivery channels. Digitalisation and electronic facilities have transformed the payments system. New types of financial entities are competing for traditional banking functions, though on a much smaller scale. Technology application and digitalisation have ensured that financial services can be availed anytime, anywhere, at the click of a button. Convenience, cost rationalisation and competition are the hallmarks of the day.

However, we are simultaneously being exposed to innumerable known and unknown risks and uncertainties - cyber security breaches, phishing/vishing frauds, data thefts and misuse, data privacy breaches, malware attacks, etc. While it is known that these risks exist, the garb in which they manifest, when and at what severity, is unknown. With convenience, there are new challenges for customers, entities and regulatory authorities. In this background, the role of the Ombudsman has become challenging; considering the increasing number of complaints, their complexity, as well as ability to deal with the dynamic financial environment.

The position of the Ombudsman – so to say is that of the 'Third Umpire' in financial dispute resolution - being quasi-judicial, comes with authority and independence. Clearly authority and independence are synonymous with responsibility and objectivity. Accordingly, Ombudsman should remain mindful of their conduct and behaviour, as also the quality of their decisions. They should also be aware of the

need to proactively guard against any cognitive bias. Also, while it is a fact that they are technically not assigned an investigative role or investigation tools to carry out their responsibility, Ombudsmen should, at least, adopt an exploratory approach to identify the exact issue or deficiency within their limited mandate of summary disposal. While being disciplined, fair, straightforward and upright, Ombudsmen should also remain accessible to the customers so as not to put to peril the reputation of the Reserve Bank or jeopardise public confidence in the consumer protection mechanism.

The responsibility of objective dispute resolution cast upon Ombudsmen, while being significant is not singular. The Ombudsmen must, therefore, refrain from self-limiting their role as that of mere grievance redressal. In fact, Ombudsmen should leverage their vantage position to obtain a fair idea of the business conduct, the strengths and weaknesses of banks. In particular, Ombudsmen should ensure that regulated entities remain responsible and accountable to their customers, and their behaviour is consistent with the principles of sound financial conduct as prescribed through various guidelines issued by the Reserve Bank.

In order to ensure that consumer awareness reaches to persons in the remote corners of the country, we need to spread awareness through both physical and digital modes. Conducting and participating in the Town Hall activities and other awareness programmes in their jurisdiction should remain an ongoing agenda for Ombudsmen. Since the programmes are conducted outside the Ombudsman Offices, could these be used as opportunities to redress the grievances of the complainants by going near to them? In that case, the Ombudsman can plan well in advance and take on board the complainant and the concerned entities. This will have a positive impact with regard to the accessibility of the Ombudsman.

Educating and spreading awareness through digital modes are being undertaken from the Central Office level. While such effort should continue at

an enhanced scale, awareness should be spread in local languages for easy understanding and effective communication. The content should be carefully designed to spread financial literacy and awareness regarding customer rights, their obligations, their responsibility in the conduct of financial transactions and safeguarding financial information in a simple way to be easily understood by the common man. This is critical for the success of any programme designed for their protection and welfare.

### **Complaint Management System**

In order to effectively support the Ombudsman framework, the Reserve Bank has started implementing a technology enabled Complaint Management System (CMS) as an upgrade to the currently operational Complaint Tracking System (CTS). The new system will integrate the entire grievance redressal mechanism of the Reserve Bank, which includes the Banking Ombudsman, the Ombudsman for NBFCs, Digital Ombudsman as well the Consumer Education and Protection Cells (CEPCs) at Regional Offices that handle complaints which are not covered by the Ombudsmen Schemes. The new system will also encompass all the regulated entities – banks, NBFCs and PPI providers – as also allow the customers themselves to keep sight of grievances and their redressal. The system will reduce manual process resulting in reduction of Turnaround Time (TAT) and facilitate improved data analytics for use by stakeholders. Further, CMS has an awareness module on the front page containing information materials in audio, video and text formats.

### **The Role of Banks/FSPs**

Let me now turn to the role of banks/FSPs. All financial entities have a special relationship with their customers and thus, it is their duty to recognise issues raised by them in their financial transactions and provide a fair redressal of their customer grievances. Banks/FSPs need to maintain transparency in pricing, service charges, fees, and penalties.

Banks/FSPs not only need to make sufficient disclosures on all aspects of their functioning and

operations but also need to play a proactive role in educating customers on the products offered, the operational techniques, risks involved, safeguards and redressal options available. Liability for customer losses due to lapses on the part of banks/FSPs should lie with the latter. The Reserve Bank guidance on limiting customer liability in unauthorised electronic banking transactions targets this perspective<sup>3</sup>. More important than compensation, however, should be on 'prevention' through awareness initiatives. This would also help minimise complaint origination at the bank/FSP level and reduce complaint clogging at the Ombudsman level. As I have mentioned earlier, I would like to add that the Reserve Bank has issued guidelines last year strengthening the Internal Ombudsman Scheme in banks. While it is envisaged that the IOs appointed by the banks would be independent in their functioning; it is imperative that banks understand that all complaints which are partially or wholly rejected by the banks must necessarily pass through the desk of IO before final closure. I am sure the banks are taking steps to appoint adequate number of IOs, in line with the volume of complaints received by them as provided in the scheme.

A critical aspect of consumer protection that calls for dedicated attention within banks/FSPs is management engagement. Top and Senior Management in charge of grievance redressal need to take responsibility for the performance and robustness of the redressal framework and engage through deep involvement, close monitoring and oversight of issues involved. They and their staff, need to be driven by 'true service' sentiments. Customer service and consumer protection should not be relegated to the sidelines by goals driven by hard targets and sales related incentives for on-

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<sup>3</sup> In July 2017, RBI issued instructions to banks indicating that in any unauthorised electronic banking transaction, the liability of a customer would be zero or limited if the unauthorised transaction/s is reported to the bank timely and there is no contributory negligence on the part of the customer. Further, the onus of proving contributory negligence will lie with the bank.

boarding customers. Banks/FSPs are, at times, found wanting in these aspects. The rising number of complaints on mis-selling of products by providing incorrect or incomplete information to customers, fraudulent transactions caused due to breach in security protocols, breach of customer privacy, etc., point in this direction.

Finally, agility in addressing customer grievances needs to be inculcated at all levels of staff. The turnaround time (TAT) for complaints received within banks/FSPs and those referred to them by the Ombudsmen offices could then be reduced even further from the existing level of TAT.

### **Issues to Address in Consumer Protection and Grievance Redressal**

The G20 High Level Principles on Financial Consumer Protection, adopted by the Organisation for Economic Cooperation and Development (OECD) in October 2011, *inter alia*, mandate that jurisdictions should ensure that consumers have access to adequate complaints handling and redressal mechanisms that are accessible, affordable, independent, fair, accountable, timely and efficient. Such mechanisms should not impose unreasonable cost, delays or burdens on consumers. What is the scope for improvement for us *vis-à-vis* these guidelines? Let me talk about some specific issues in this context.

- i. **Timeliness in complaint disposal** - Irrespective of the minimum time requirement for a complaint examination with all required inputs/documentation from the involved parties, the time frame for disposal has to be reasonable. In this context, you may be aware that we are currently working on a framework to harmonise the TAT for resolution of customer complaints and charge-backs in all the electronic payment systems. Public expectations are high for early redressal and we too need to evolve a zero-tolerance framework for delays in responses from regulated entities.

- ii. **High level of non-maintainable complaints** – While non-maintainable complaints cannot be wished away, given that 48.9 per cent of the total complaints received during 2017-18 were non-maintainable could point to two things: first, the complainants are not aware about the procedural requirements for filing their complaints; and second, there could perhaps be a tendency to routinely close complaints without adequate examination in some cases. In either case, there is scope for more work from the Ombudsman.
- iii. **Large proportion of rejections** – A sizeable proportion of the maintainable complaints are being rejected, mainly on the ground that the bank was not deficient, and the complaints were not justified. During 2017-18, 33.82 per cent of the maintainable complaints were rejected, which though down from 57.23 per cent in the previous year is still rather high given that the objective of the Scheme is to facilitate resolution of issues through mediation. Further, 8.27 per cent of the total complaints were rejected citing requirement of elaborate documentary and oral evidence. However, in some of the appeal cases, it was observed that a better focused review of the facts could have resulted in a satisfactory outcome for both parties without taking recourse to the appellate mechanism.
- iv. **Communication issues** – Many a time, we deal with persons who may not understand the meaning or the implications of our communication. After all, if the recipient does not comprehend what was intended, there is no purpose served in such cases. Therefore, a concerted attempt should be made to de-jargonise the terms in all our correspondence and awareness materials. It is also essential that soft skills of the dealing staff are developed so that a customer

visiting our premises goes out as a satisfied person.

- v. **Effectiveness of redressal system in banks –** The secular trend in volume of complaints shows significant increase in most offices. As I mentioned earlier, this could be a positive indicator signifying increasing trust in the functioning of the Ombudsman mechanism. However, a portion of the increase could also be attributed to: a) the growing complexity in products, also enabled by technology, b) greater penetration of financial services covering even consumers with less than desired level of financial literacy, c) lack of monitoring and sensitisation of the dealing staff/Banking Correspondents (BCs) by banks, d) inadequate in-house redressal mechanisms, e) unfair business practices, f) ineffectiveness of the IO and g) not carrying out root cause analysis resulting in recurrence of similar complaints. Effective steps need to be taken to address these issues in banks/FSPs, both at the ground level and at the policy level.

### **Expectations from the Ombudsmen**

I would say that overall, the performance of the Ombudsman offices has been good. Nevertheless, given the enormous challenges in terms of increasing customer awareness, innovations, digitalisation and expectations of stakeholders, we should constantly be on the lookout for areas that need our attention. Let me now talk about some expectations that the Reserve Bank has from the Ombudsmen:

- i. **Quality outcome:** The Ombudsman should meticulously examine complaints and use his/her specialised knowledge of financial services. This would ensure that the consumer is not placed at a disadvantage due to any lack of resources or technical knowledge. Decisions and outcomes should take into account extant regulations, applicable law and good industry practice.

For this, the Ombudsman and the supporting contingent of staff members should keep themselves updated with the latest developments in policy and practices.

- ii. **Fairness:** The Ombudsman must exemplify a commitment to procedural fairness. The complainant, the regulated entity against which the complaint has been received and any person/entity directly affected by an Ombudsman's decision should be given an opportunity to respond before the final decision is taken. I would like to mention here that there were occasions when a case warranted reference back to the BO at the appeal stage as an opportunity was not provided to all parties to present their case.
- iii. **Consistency:** We should aim for consistency of outcome in similar cases. Else, banks will not know how they are expected to handle complaints themselves. There could also be a tendency to game the system by regulated entities in such a scenario. Frequent interactions and sharing of information among the BOs would help in this regard. I am glad to note that a Committee comprising of various stakeholders, *viz.*, Banking Ombudsmen, Department of Payment and Settlement Systems, Department of Banking Regulation, Department of Banking Supervision, Institute for Development and Research in Banking Technology (IDRBT) and National Payment Corporation of India (NPCI), has looked into increasing instances of frauds related to digital transactions and recommended certain operational procedures to facilitate better resolution and suggested a review of relevant regulatory instructions. The report of Committee may be examined for implementation.
- iv. **Public awareness initiatives:** Unless people are made aware of the 'what and how' of the entire 'grievance redressal' structure in

banks/FSPs and the Reserve Bank and the procedures for lodging complaints especially the grounds of complaints under the various Ombudsmen Schemes, the effectiveness of the grievance redressal mechanism would not be fully realised. In addition to targeted awareness campaigns by the Ombudsmen and those driven through banks and other consumer organisations, feeding information to the communications media with resolved case studies can be explored. The latter will have broader reach and it can also be effective.

- v. **Use of data:** Though it is not a stated objective of the Schemes, data on complaints should be analysed by the Ombudsmen carefully for providing meaningful insight and support to the regulatory, supervisory and other departments of the Reserve Bank for policy formulation. Further, data in the CMS should be effectively leveraged for data analytics to derive useful information such as commonalities across complaints, causative factors and details of banks/branches/delivery channels/products presenting adverse features. The data can be useful for appropriate policy and operational actions.
- vi. **Quality assurance:** The International standard ISO 10003:2018, a quality management standard for customer satisfaction, gives guidelines for an

organisation to plan, design, develop, operate, maintain and improve an effective and efficient dispute resolution process for complaints that have not been resolved by an external organisation. It would be useful to examine our processes *vis-à-vis* such/similar standards for possible improvements. In this context, I would be keen to learn the outcome of the consumer satisfaction survey on the banking Ombudsman Scheme being commissioned by CEPD. We need to also study the procedures and practices followed in select jurisdictions with well-developed dispute resolution systems for adoption/adaptation by the Reserve Bank.

### **Conclusion**

As I conclude, let me also quote John F. Kennedy once again who said:

**'There are risks and costs to a program of action - but they are far less than the long range cost of comfortable inaction'.**

Living with the status quo, without significant effort to change it, would lead to ineffective and unsuitable long range outcomes. So, let us continue to move with times and resolve to evolve!

I am sure that the deliberations during this Conference will seek to arrive at concrete action points for time-bound implementation towards the betterment of consumer protection in the financial sector.

I wish you all the very best!



## ARTICLES

Drivers of Digital Payments: A Cross Country Study

Network Analysis of NEFT Transactions in India



## ***Drivers of Digital Payments: A Cross Country Study\****

*Digital payments have several advantages over currency such as convenience, safety and transparency. Panel data regression results of eight advanced economies (AEs) and eight emerging market economies (EMEs) suggest that increase in per capita income, higher education levels, wider availability of digital infrastructure, greater internet penetration, financial deepening and price stability help in the growth of digital payments in an economy.*

### **Introduction**

The digital revolution has touched and transformed many areas of human life. Progress in digital payments has been a prominent feature of this revolution. Apart from the evident advantages such as convenience, safety and liquidity, other benefits of digital modes of transactions include promotion of transparency and security by increasing accountability and tracking, and thereby reducing the scope for misuse and theft. Digital payments also promote financial inclusion by advancing access to a range of financial services, often at a lower cost. Although digital payments<sup>1</sup> have been growing gradually in recent years, both in value and volume terms across countries, data also suggests that during the same time, currency in circulation to GDP ratio has also increased in consonance with the overall economic growth. Several anomalies, however, are visible in the trend: first, the spread and intensity of use of digital payments does not seem to have any specific relationship with how developed a country is – several AEs have low digital payments to GDP ratio while some EMEs have ratios comparable to AEs; second,

an increase in digital payments to GDP ratio over a period of time does not seem to automatically imply a fall in the currency to GDP ratio of the country. From a policy perspective, thus, if increasing usage of digital payments is considered a desirable objective, then a careful analysis of the factors contributing to its spread is necessary and this is the objective of this article.

Using a panel dataset of 8 AEs and 8 EMEs for the period 2003-2016, we examine the relationship between digital payments and various socio-economic indicators such as per capita income, credit to GDP ratio, inflation, internet penetration, share of rural population in total population and level of education. Controlling for country-specific behavioral idiosyncrasies, our findings suggest that supportive infrastructure and macroeconomic and price stability help in wider adoption of digital payments.

The rest of the article is organised as follows: Cross country experience in digital payments is covered in Section II. Some stylised facts on expansion of digital payments in India in recent years are covered in section III. A brief literature survey on empirical evidence so far is presented in Section IV. Section V presents the methodology used for empirical analysis along with key findings. Conclusions are set out in Section VI.

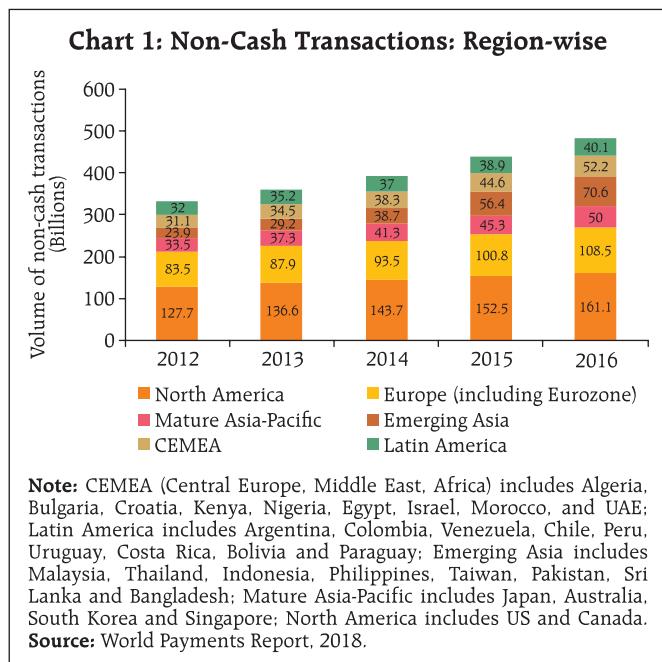
### **II. Trends in Digital Payments: A Cross-Country Analysis**

The volume of non-cash transactions globally grew at a compound annual growth rate (CAGR) of 9.8 per cent during the period 2012-2016, which was driven by emerging Asia and CEMEA (Central Europe, Middle East and Africa) (World Payments Report, 2018). Even though AEs accounted for the majority of share in non-cash transactions in terms of volume, the EMEs are catching up fast (Chart 1).

Notwithstanding the fact that the EMEs as a group are taking long leaps in digital payments, data and evidence from individual countries suggest

\* This article is prepared by Dr. Snehal S. Herwadkar, Radheshyam Verma and Prabal Bilantu, Department of Economic and Policy Research (DEPR). The views expressed in the article are those of the authors and do not represent the views of the Reserve Bank of India.

<sup>1</sup> Measured in terms of value of transactions at Point of Sale (POS) terminals to GDP ratio.

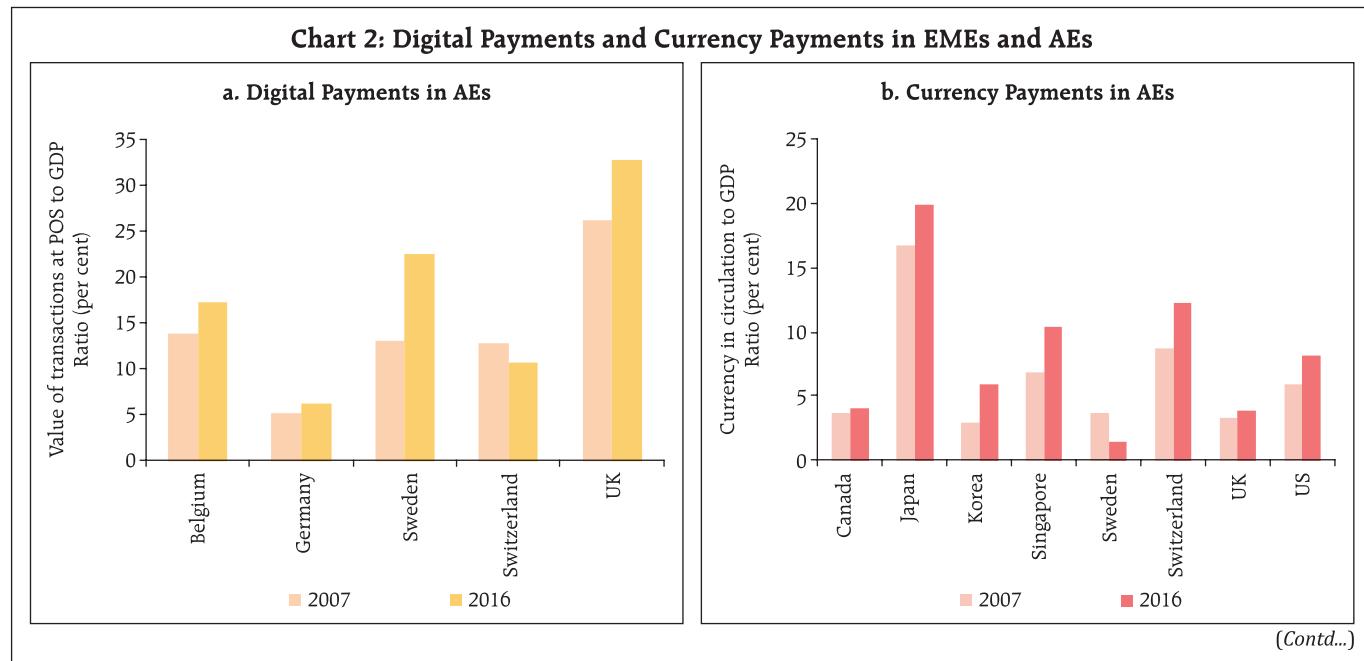


some anomalies. First, a cursory look at the data suggests that the spread and intensity of use of digital payments does not always increase in tandem with a country's GDP level. While some AEs, like Germany, have low digital payments to GDP ratio<sup>2</sup>, the ratio is quite similar in a couple of EMEs and AEs (e.g. the ratio in an EME like Brazil is quite close to the one in

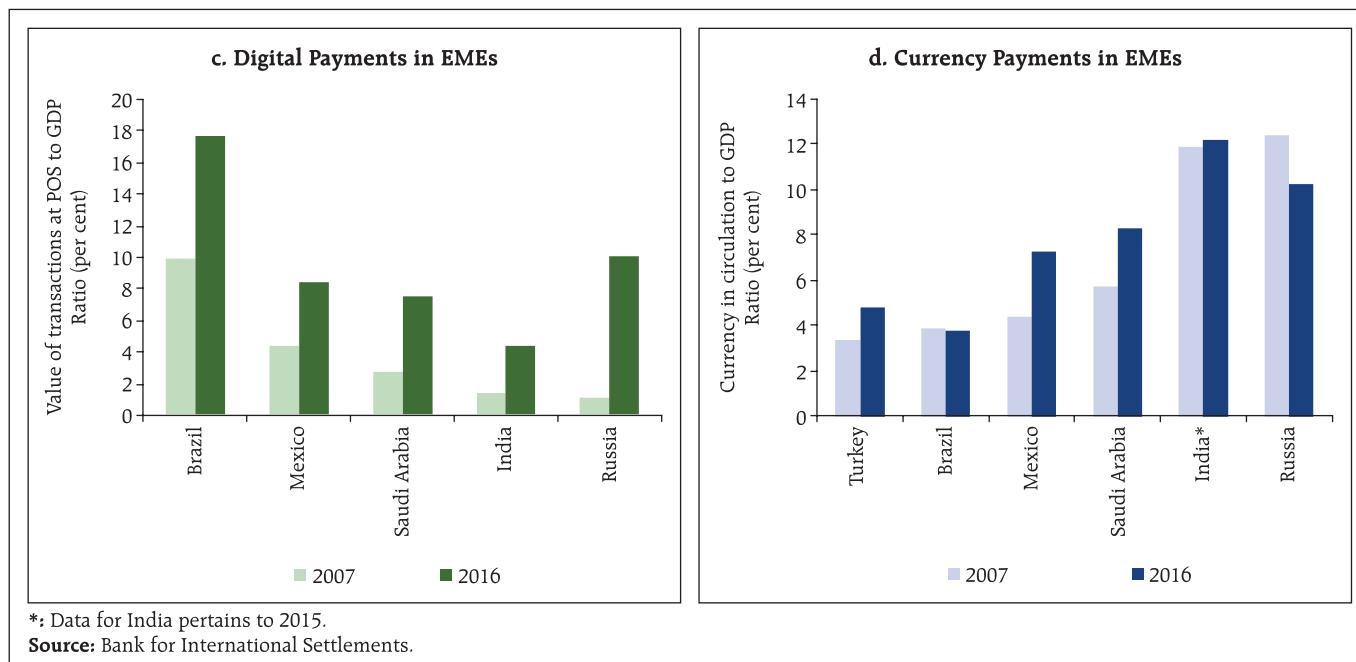
Belgium). In contrast, a high GDP level also does not automatically imply low currency usage. For example, Japan has one of the highest currency to GDP ratio—higher even as compared to most EMEs—and one of the lowest cashless payments to GDP ratio in the world. Second, increase in digital payments to GDP ratio over a period of time does not seem to have resulted in corresponding lowering of currency usage. For example, the digital payments to GDP ratio increased significantly during the decade ending 2016 in Brazil, Mexico, Saudi Arabia and India but the currency to GDP ratio in these countries either remained stable or even increased (Chart 2). Against the backdrop of these anomalies, it is clear that a combination of several economic and behavioral factors need to be analysed to unravel the drivers of growth in digital payments, which is the aim of this article.

### III. Digital Payments in India *vis-à-vis* World: Stylised Facts

Although the digital payments to GDP ratio in India has been traditionally low, in the last few years it has taken long strides in terms of introduction and promotion of various instruments of cashless

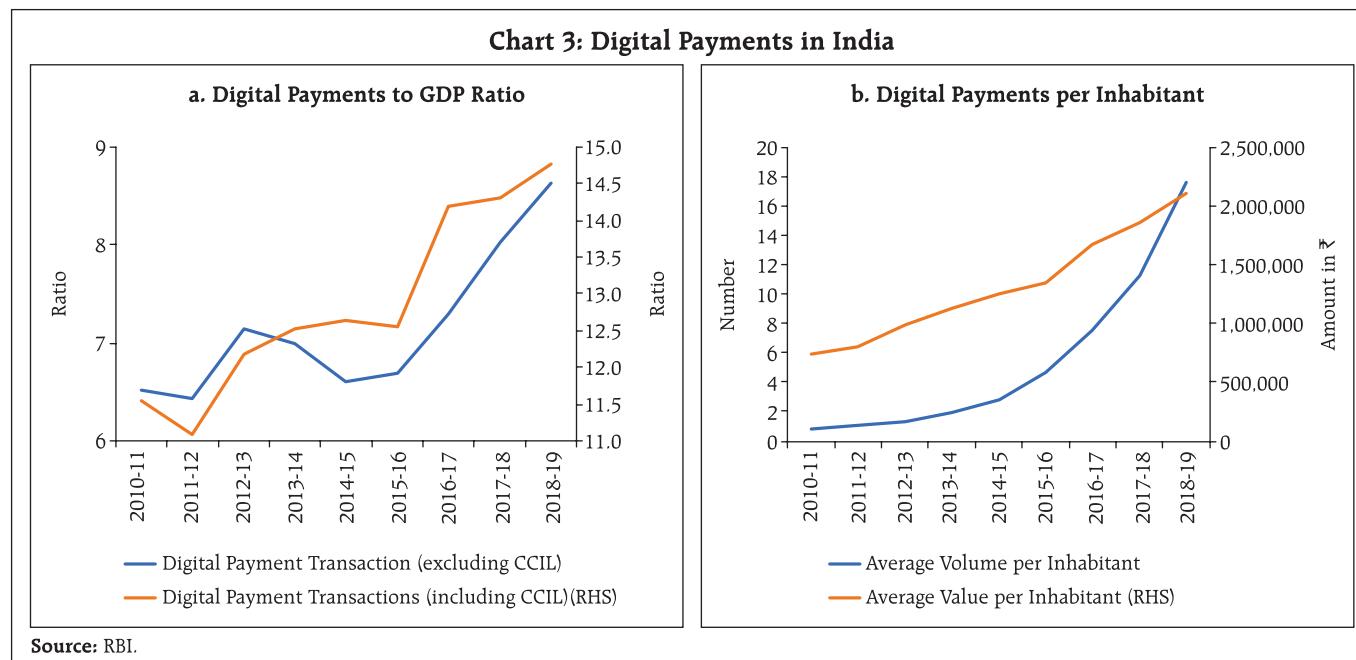


<sup>2</sup> Measured in terms of value of transactions at POS terminals to GDP ratio.



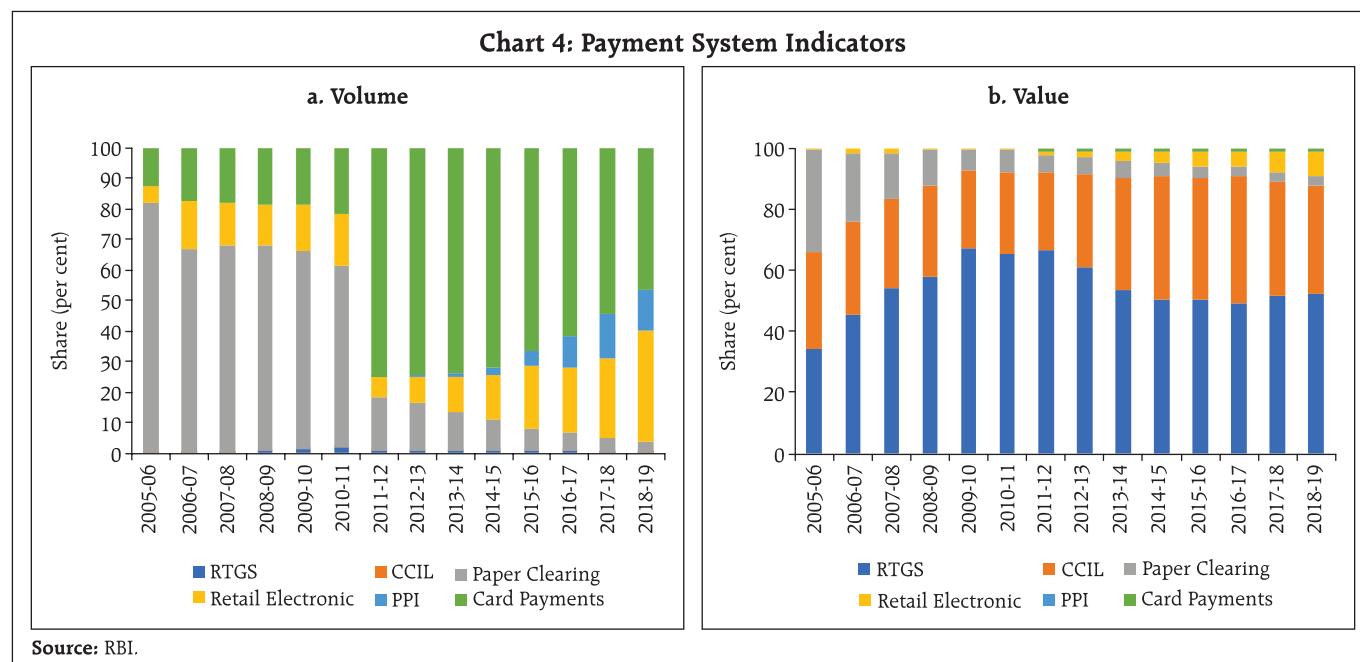
payments which have resulted in a significant increase in digital payments transactions<sup>3</sup>, especially after demonetisation (Chart 3a). The per person digital payments, both in terms of value and volume, also increased concomitantly (Chart 3b).

The share of retail electronic payments<sup>4</sup> in total payments is consistently rising in terms of both volume and value since 2011-12 due to the emergence of some new modes of retail payments such as Prepaid Payment Instruments (PPI) and



<sup>3</sup> Digital payments transactions comprise of Real Time Gross Settlement (RTGS), retail electronic clearing (Electronic Clearing Service (ECS), National Electronic Funds Transfer (NEFT)), Immediate Payment Service (IMPS), Unified Payments Interface (UPI), National Automated Clearing House (NACH) and card payments at POS terminals.

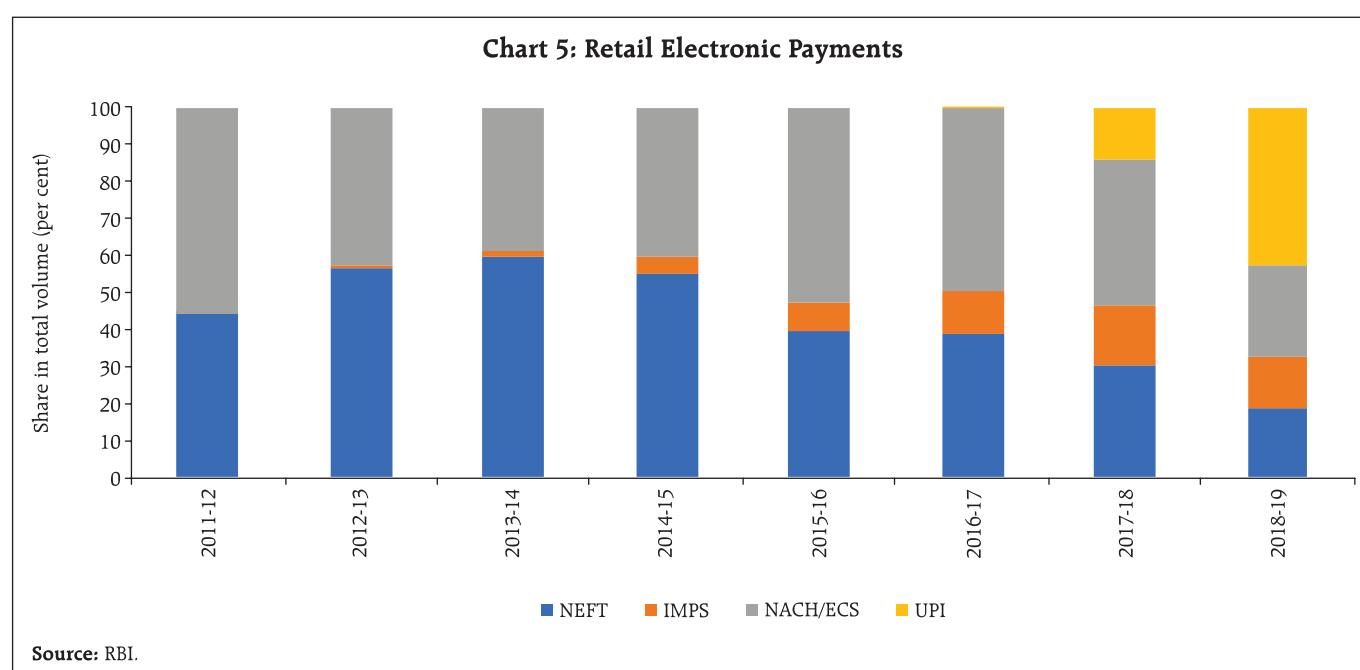
<sup>4</sup> Retail electronic payments comprises of ECS debit; ECS credit; NEFT, IMPS, NACH, UPI.



Unified Payments Interface (UPI). At the same time, the share of card payments<sup>5</sup> in terms of volume has been declining, although it continues to be the most important component. In terms of value, payments through Real Time Gross Settlement (RTGS) and Clearing Corporation of India Ltd. (CCIL) dominate. The share of paper clearing continues to decline and

constituted around 3 per cent of total payment system transactions, both in terms of volume and value during 2018-19 (Chart 4).

The introduction of UPI in 2016-17 altered the landscape of retail electronic payments – the UPI's share in it increased to 43 per cent within a span of three years (Chart 5).



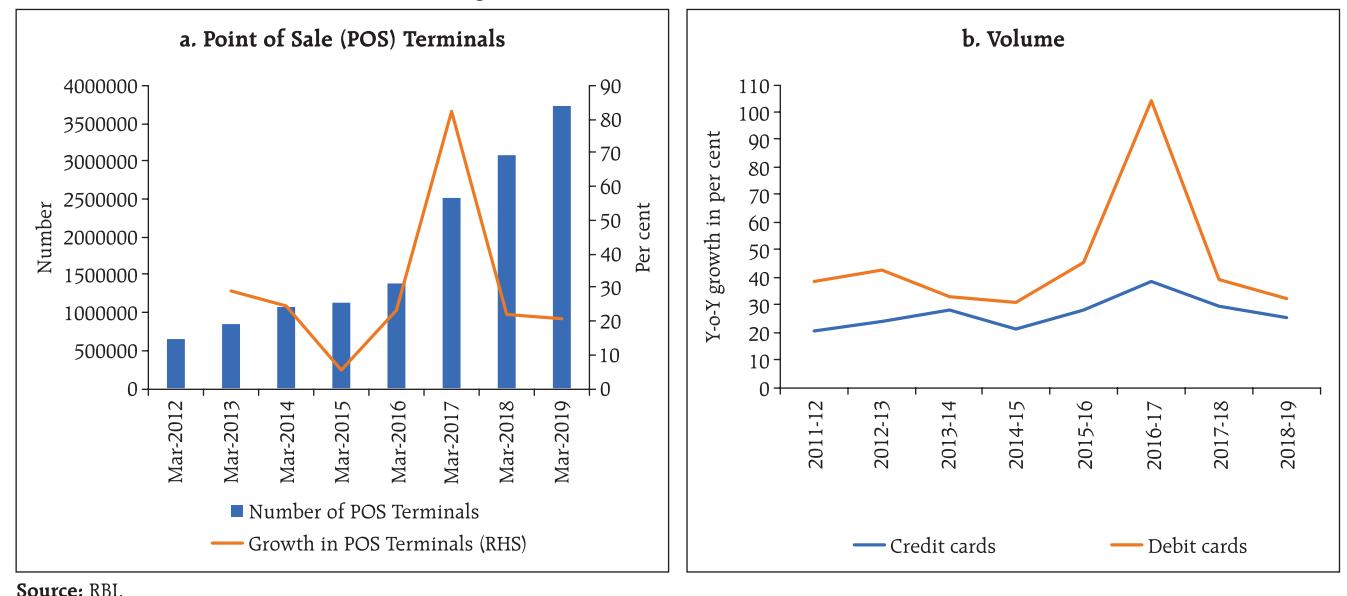
<sup>5</sup> Card payment data consists of transaction at POS terminals of both debit and credit cards.

The usage of debit cards at point of sale (POS) terminals as a proportion of its total usage<sup>6</sup> has witnessed a sharp pick-up in the recent years. In terms of volume, their share rose to 31 per cent in 2018-19 from 6 per cent in 2011-12 whereas in value terms the share increased to 16 per cent from 3 per cent during the same period. The growth in usage of debit cards at POS terminals has generally been higher than that of credit cards. The tremendous growth in use of debit cards may be attributable to the push provided through the RuPay cards under the Pradhan Mantri Jan Dhan Yojana (PMJDY), increase in the number of POS terminals and various incentives provided by the Government and merchants for digital payments. The number of POS terminals and usage of debit and credit cards increased significantly during 2016-17 on account of demonetisation. Though growth in usage of debit and credit cards at POS terminals declined in the post-demonetisation period, it nevertheless remained at elevated levels (Chart 6).

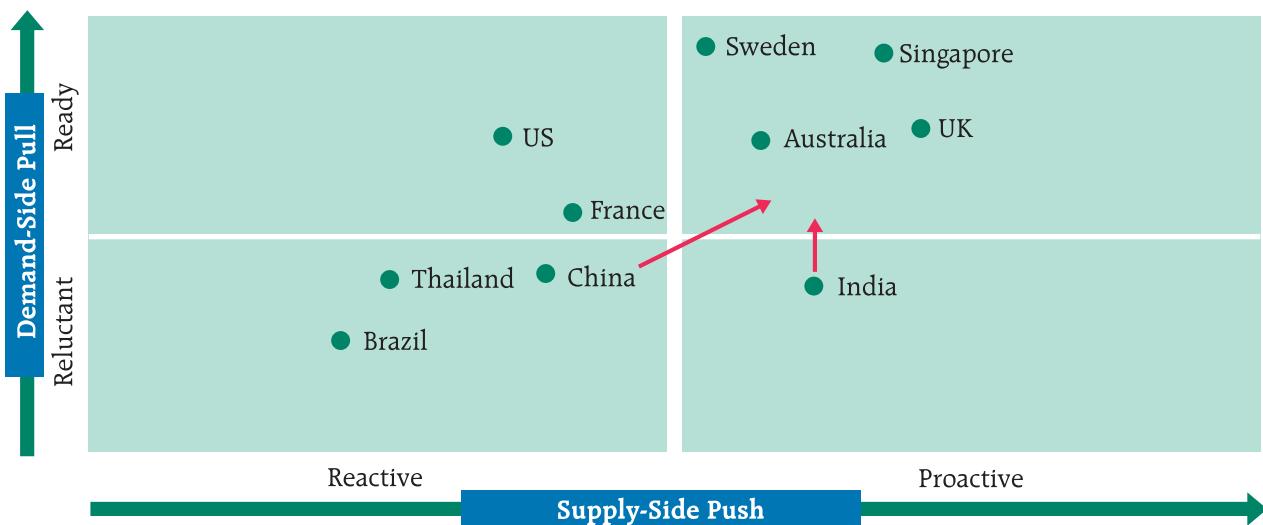
The wider adoption of digital payments depends on both the supply side factors (such as robust payments system infrastructure, reduced cost of

e-payments, introduction of new and innovative schemes to attract consumers, push to greater financial literacy and bank accounts) and demand side factors (such as strong consumer demand for e-payments because of convenience, safety and add-on benefits). The World Payments Report, 2018 documents that the UK, Singapore, Australia and Sweden have been leaders in terms of both regulatory supply-side push and demand-side pull (Chart 7). In India, the government and the Reserve Bank have taken various measures which have helped in increasing the usage and penetration of digital payments. Initiatives such as UPI, PPI, significant expansion in access to RuPay debit card through Jan-Dhan Accounts and Aadhar based direct benefit transfers (DBTs) have helped significantly in popularising and inculcating the habit of digital payments. The Reserve Bank has also been proactive in initiating a number of measures to promote greater usage of electronic payments and achieve a cash-lite society. The Reserve Bank's *'Payment and Settlement Systems in India: Vision 2019-2021'* endeavours to ensure increased efficiency, uninterrupted availability of safe, secure, accessible and affordable payment system as also to serve segments of the population which are hitherto untouched by the payment system.

**Chart 6: Usage of Debit and Credit Cards at POS Terminals**



<sup>6</sup> Total usage comprises of usage at ATMs and POS terminals.

**Chart 7: Demand Side and Supply Side Factors Affecting Digital Payments**

Source: World Payments Report, 2018.

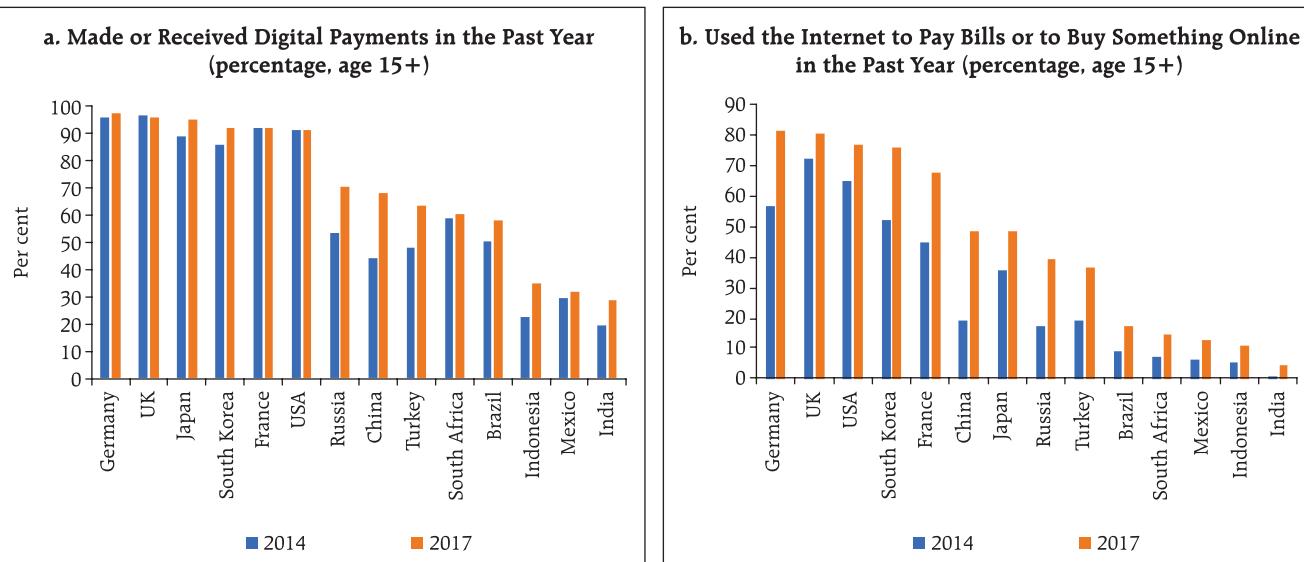
Although some progress in adoption of digital payments has been evident in India due to these initiatives, the usage of digital medium for payments remains much lower than major advanced and emerging economies (Chart 8a and 8b).

In terms of various indicators of payment system infrastructure and usage such as number of cards per inhabitant, number of cashless payments per inhabitant and value of cashless payments per

inhabitant, India lags behind the AEs and other EMEs. At the same time, the value of currency in circulation as a percentage of narrow money as well as percentage of GDP remained high as compared to other economies (Table 1).

#### IV. Literature Review

Empirical research on the subject has identified a few common factors that drive up or down the

**Chart 8: Cross-Country Spread of Digital Payments**

Source: Global Findex Database, World Bank.

**Table 1: Cross-country Comparison of Select Payment System Indicators (2017)**

Countries	Ratio of currency in circulation to narrow money (%)	Ratio of currency in circulation to GDP (%)	Number of cards (debit+credit) per inhabitant	Average number of cashless payments per inhabitant	Average value of cashless payments per inhabitant (USD)	Number of POS terminals per inhabitant
Argentina	63.3	6.8	2.4	46.7	35,278	0.01
Australia	22.8	4.5	2.8	497.2	539,748	0.04
Brazil	65.2	3.8	2.3	150.2	72,549	0.02
Canada	9.4	4.3	2.9	366.7	129,441	0.04
China	14.2	9.5	4.9	96.3	386,045	0.02
France	NA	NA	1	339.4	477,920	0.03
Germany	NA	NA	1.4	254.3	760,628	0.01
<b>India*</b>	<b>57.6</b>	<b>11.2</b>	<b>0.7</b>	<b>18.3</b>	<b>3,910</b>	<b>0.003</b>
Indonesia	50	5.1	0.7	34.3	6,993	0.005
Italy	NA	NA	1.3	99.7	168,733	0.04
Japan	14.9	20.4	3.5	NA	234,401	NA
Korea	12.7	6.2	5.1	499.9	426,066	NA
Mexico	36.1	6.7	1.4	36.7	132,776	0.01
Russia	48.9	10.4	1.9	175.7	86,527	0.02
Saudi Arabia	17.3	7.9	1	29	563,294	0.01
South Africa	9.2	3.4	NA	80.5	40,524	0.01
Turkey	29.7	4.3	2.1	65.9	51,419	0.03
United Kingdom	NA	NA	2.5	410.9	1,791,862	0.04
United States	44.3	8.2	4.2	473.4	601,977	NA

**Note:** \*: For India data pertains to the financial year 2018-19 and is sourced from RBI. Data on cashless payments excludes RTGS and CCIL transactions.

NA – Data not available

**Source:** Bank for International Settlements.

intensity of digital payment usage. These studies suggest that cash is used more frequently for lower-value transactions. Usage of cash tends to decrease with higher levels of education and income. Availability of digital infrastructure can reduce cash usage, and cash tends to be used relatively more by older generations (Davies *et al.*, 2016).

The demand for cash is generally found to be inversely related to GDP per capita, *i.e.*, cash usage declines as countries become richer (Bech *et al.*, 2018). As a corollary, higher income households tend to exhibit greater usage of credit cards, ATMs, direct deposit, internet banking, and other electronic transfers. Also, better educated individuals are, in general, found to be more open and receptive to the idea of digital payments (Stavins, 2001). Further, educated persons often get jobs where the salaries are paid directly by bank transfers, which makes card

payments more convenient (Goczek and Witkowski, 2016; Bergman *et al.*, 2007).

Moreover, there seems to be a positive relationship between average age of the population and the transaction demand for cash as younger people are more likely to use electronic means of payments, even for smaller value transactions, whereas older persons tend to use cash for payments (Stavins, 2001; Esselink and Hernández, 2017; Bech *et al.*, 2018; Bergman *et al.*, 2007).

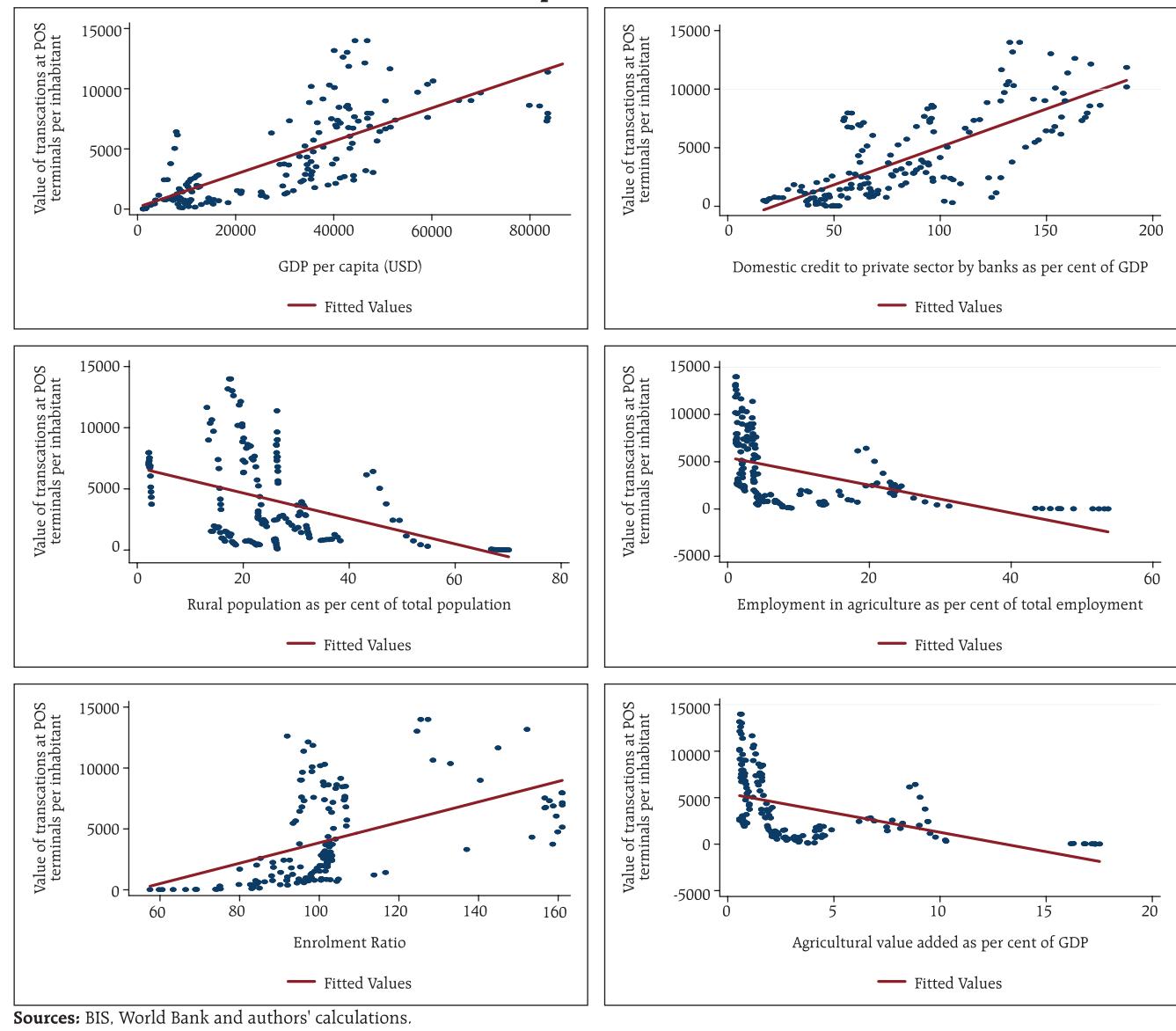
The state of technological development of a country's payment system also helps in explaining the state of cash substitution process. An analysis for ten European countries suggested that substitution of card payments for cash and cheques depends on the diffusion of card payment infrastructure, particularly electronic fund transfer and POS terminals (Snellman *et al.*, 2001).

## V. Database, Methodology and Findings

Using a panel dataset of 8 AEs and 8 EMEs<sup>7</sup> from Bank for International Settlements (BIS), International Monetary Fund (IMF) and World Bank's World Development Indicators database for the period 2003-2016<sup>8</sup>, the relationship between digital payments and various socio-economic indicators was analysed. Value/volume of transactions at POS per inhabitant was used as a proxy for digital payments.

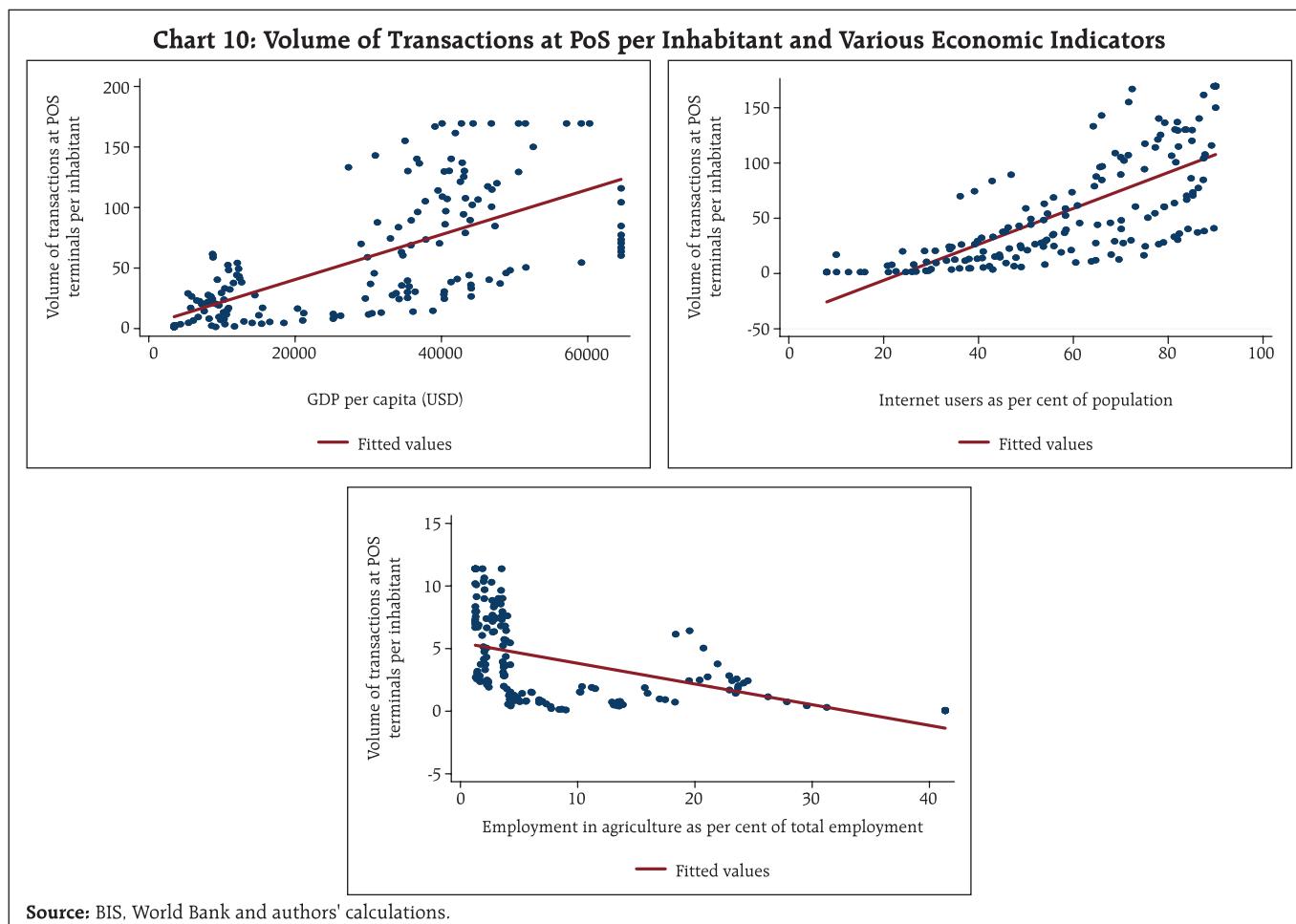
A preliminary analysis through charts suggests that as per capita income increases, value/volume of digital payments also increases, which is in line with the earlier findings (Humphrey 2004). Eyeballing of data also suggests a positive relationship between credit to GDP ratio and digital payments. On the other hand, higher share of rural population seems to be associated with lesser digital payments while enrolment ratio—a proxy for level of education—is positively associated with digital payments (Chart 9 and 10).

**Chart 9: Value of Transactions at PoS per Inhabitant and Various Economic Indicators**



<sup>7</sup> AEs include Belgium, Canada, France, Germany, Italy, Sweden, Switzerland and United Kingdom. EMEs include Brazil, China, India, Mexico, Russia, Saudi Arabia, South Africa, and Turkey.

<sup>8</sup> The latest period for which consistent data series are available for all countries in the panel.



Cross-country data on number of POS terminals, volume/value of transactions at POS terminals, number of ATMs (which is taken as a proxy for infrastructure supporting digital payments), GDP per capita and CPI inflation are sourced from the BIS statistics on payment and market infrastructures. The data relating to domestic credit to private sector (as per cent of GDP), agricultural value added (as per cent of GDP), internet users (individuals using internet as proportion of total population), enrolment ratio (secondary school enrolment as per cent of gross enrolment), employment in agriculture (as per cent of total employment), and rural population (as per cent of total population) are taken from World Development Indicators of the World Bank.

Cross-country determinants of digital payments were analysed in a fixed-effect panel regression

framework<sup>9</sup>. The value/volume of transactions at POS terminals was used as a proxy for digital payments. Following existing literature, GDP per capita, domestic credit to private sector as per cent of GDP, internet users as per cent of population, enrolment ratio, share of rural population in total population, share of agricultural value added in GDP, share of persons engaged in agriculture, per capita number of ATMs and CPI inflation were used as explanatory variables. Data was appropriately winsorized at 5 per cent level on both the sides. The results are presented in Appendix Tables 1 and 2.

The results suggest that increase in per capita income and education level (proxied by school enrolments) are determinants of increase in value/

<sup>9</sup> Results of Hausman test suggested selection of fixed-effect model over random-effect model.

volume of transactions at POS terminals. The positive relationship with income and education levels is in line with findings in the literature which show that the increase in the level of income and education results in lower usage of cash and increases the probability of using electronic modes of payments (Davies *et al.*, 2016; Bech *et al.*, 2018; Stavins, 2001).

We found no significant impact of proportion of rural population on value and volume of transactions at POS terminals. However, employment in agriculture was found to be negatively related to volume of transactions at POS terminals. In order to evaluate the relationship between availability of infrastructure and digital payments, we also explored the relationship between internet users as per cent of total population and value of POS transactions, and found a significantly positive relationship between the two. Similarly, number of POS terminals per capita, another proxy for digital infrastructure, was also found to be positively associated with value of digital transactions.

Domestic credit to private sector as percentage of GDP, which is an indicator of financial development was also found to lead to higher value/volume of transactions at POS terminals.

The number of ATMs was found to be positively associated with the value/volume of digital transactions as with higher number of ATMs people tend to carry less cash. Also, most of the ATM cards also have debit/credit features which leads to higher usage at POS terminals.

Lower CPI inflation was also found to be leading to greater volume of digital transactions at POS which could be due to the favourable impact of price stability in reducing uncertainty.

## VI. Conclusion

In sum, our findings suggest that higher per capita income, higher levels of education, increase in domestic credit to private sector as percentage of GDP, greater internet penetrations, and lower

inflation help in promoting digital payments. On the other hand, a high share of agricultural employment in total employment and high share of agricultural value added in GDP were found to be associated with lower digital payments. In India specific context, because of the role of DBTs in promoting adoption of digital mode of payments, and also because of the emphasis of the Reserve Bank on financial inclusion, the panel data results relating to share of agricultural employment in total employment may not hold. From a policy perspective, our findings suggest that in order to give a robust push to digital payments, it is important to provide a conducive macroeconomic environment and a safe and easy access to digital infrastructure.

## References

- Bech, M. L., Faruqui, U., Ougaard, F., & Picillo, C. (2018). Payments are a-changin'but cash still rules. *BIS Quarterly Review, March*.
- Bergman, M., Guibourg, G., & Segendorf, B. L. (2007). The Costs of Paying - Private and Social Costs of Cash and Card Payments. *Riksbank Research paper series*, (212).
- Capgemini, B. N. P. Paribas (2018). *World Payments Report, 2018*, available at <https://worldpaymentsreport.com/wp-content/uploads/sites/5/2018/10/World-Payments-Report-2018.pdf>.
- Dembiermont, C. (2017): Recent Developments in Payment Systems, accessed at [https://www.bis.org/ifc/events/ifc\\_isi\\_2017/13\\_dembiermont\\_paper.pdf](https://www.bis.org/ifc/events/ifc_isi_2017/13_dembiermont_paper.pdf).
- Davies, C., Doyle, M. A., Fisher, C., & Nightingale, S. (2016). The Future of Cash. *RBA Bulletin, December*, 43-52.
- Esselink, H., & Hernández, L. (2017). The Use of Cash by Households in the Euro Area. *ECB Occasional Paper*, (201).
- Goczek, L., & Witkowski, B. (2016). Determinants of Card Payments. *Applied Economics*, 48(16), 1530-1543.

- Hancock, D., & Humphrey, D. B. (1997). Payment Transactions, Instruments, and Systems: A survey. *Journal of Banking & Finance*, 21(11-12), 1573-1624.
- Humphrey, D. B. (2004). Replacement of Cash by Cards in US Consumer Payments. *Journal of Economics and Business*, 56(3), 211-225.
- Schmidt, T., & Bundesbank, D. (2016). Cash Payments More Popular in Germany than in other Countries. *Deutsche Bundesbank Research Brief*.
- Schneider, F. (2017). Restricting or Abolishing Cash: An Effective Instrument for Fighting the Shadow Economy, Crime and Terrorism?
- Shah, A., Kaushik, V., Roongta, P., Jain, C., & Awadhiya, A. (2016). Digital Payments 2020: The Making of a \$500 billion Ecosystem in India. *The Boston Consulting Group*.
- Snellman, J. S., Vesala, J. M., & Humphrey, D. B. (2001). Substitution of Noncash Payment Instruments for Cash in Europe. *Journal of Financial Services Research*, 19(2-3), 131-145.
- Stavins, J. (2001). Effect of Consumer Characteristics on the Use of Payment Instruments. *New England Economic Review*. February.

**Appendix Table 1: Dependent Variable – Log of Value of Transactions at POS Terminals per inhabitant**

	(1)	(2)	(3)	(4)	(5)
Log GDP per capita	0.782*** (0.172)				
Enrolment ratio	0.0049* (0.0018)		0.0039 (0.0020)	0.0024 (0.0043)	
Domestic credit to private sector as per cent of GDP	0.0082* (0.0029)	0.0085* (0.0039)	0.0099* (0.0034)		
Log of number of POS terminals	0.698*** (0.110)	0.834*** (0.0811)	0.726*** (0.144)	0.618*** (0.128)	
Agricultural value added as per cent of GDP		-0.156 (0.126)			
Internet users as proportion to total population			0.007 (0.0038)	0.0093* (0.0038)	0.0115* (0.0043)
Employment in agriculture as per cent of total employment				-0.0518* (0.0202)	
Share of rural population in total population					-0.0547 (0.0611)
Log of ATM per inhabitant					0.834** (0.241)
Constant	1.881 (1.881)	11.27*** (0.649)	9.299*** (0.903)	10.16*** (0.927)	14.58***
Country Fixed effects	Yes	Yes	Yes	Yes	Yes
N	155	166	155	155	170
R <sup>2</sup> _overall	0.913	0.872	0.887	0.847	0.623
Robust standard errors in parentheses					
* p < 0.05, ** p < 0.01, *** p < 0.001					

**Appendix Table 2: Dependent Variable – Log of number of transaction at POS terminals per inhabitant**

	(1)	(2)	(3)
Log of GDP per capita	0.508 (0.293)		
Enrolment ratio	0.0228* (0.0103)	0.0116* (0.0044)	0.0116 (0.0055)
Domestic credit to private sector as per cent of GDP	0.0117* (0.0049)	0.0078* (0.0032)	
Employment in agriculture as per cent of total employment	-0.103*** (0.0248)	-0.0773* (0.0297)	
Internet users as percentage of total population		0.0229** (0.0067)	0.0219** (0.0062)
CPI inflation		-0.0323** (0.0084)	
Share of rural population in total population			0.0460 (0.0953)
Log of ATM per inhabitant			0.837* (0.294)
Constant	-3.997* (1.804)	1.063 (0.833)	5.962** (1.816)
Country Fixed Effects	Yes	Yes	Yes
N	160	160	160
R <sup>2</sup> _overall	0.735	0.766	0.448
Robust standard errors in parentheses			
* p < 0.05, ** p < 0.01, *** p < 0.001			



# *Network Analysis of NEFT Transactions in India\**

*As a first attempt in the Indian context, we examine the network topology of the NEFT system and analyse financial interconnectedness using network metrics of centrality. Using bilateral transaction information for each participating institution aggregated for March and April months of 2019, we build a network graph depicting the linkages. We use these data to explore the connections between various groups of banks in order to identify patterns. We also seek prominent players in the payment network in order of their systemic importance using a non-parametric methodology.*

## **Introduction**

In the context of financial stability, central banks and regulators have increasingly realised that it is critically important to understand the underlying interconnectedness among banks and financial institutions in the architecture of financial system. Accordingly, the supervisory and regulatory framework for financial stability has acquired substantial rigour with the use of advanced theoretical and empirical models for measuring interconnectedness and identifying systemically important financial institutions. Since the global crisis in 2008, network models have emerged as a tool for analysis of interbank financial exposures. The recent literature has accordingly emphasised the role of network analysis of interbank payment transactions in complementing the existing framework for financial stability analysis (Caccioli *et al.*, 2018). Where central banks are the operators of payment and settlement infrastructure, as in India, a comparative advantage is that it is relatively easier to acquire clean, structured and accurate data that are crucial for network analysis. Surprisingly, therefore, there has been little research

on the interconnectedness of participating entities in the payment system in India. The motivation for this study is to bridge this gap as a first attempt in the Indian context. We use the National Electronic Fund Transfer (NEFT) system as a case study. Operated by the Reserve Bank of India (RBI), it is India's largest payment system by volume and a game changer in the retail payments sphere. We examine the network topology of the NEFT system and analyse financial interconnectedness using network metrics of centrality. Using bilateral transaction information for each participating institution aggregated for March and April months of 2019, we build a network graph depicting the linkages. We use these data to explore the connections between various groups of banks in order to identify patterns. We also seek prominent players in the payment network in order of their systemic importance using a non-parametric methodology (Jaramillo *et al.*, 2014).

In summary, our findings show that out of the public sector, private sector and foreign banks that constitute around 83 per cent and 87 per cent of the total transactions by value on NEFT in the month of March and April respectively, the flow from private sector to public sector banks is very large, with public sector banks being net receivers in the system. We also present evidence of strong connections between public and private sector, and between private sector banks, nascent role of co-operative banks and newly established payment banks in NEFT. The rest of the article is structured into five sections. Following a brief introduction of the NEFT system in Section II, the literature on application of network science to financial economics is reviewed in Section III. The methodology and data are set out in Section IV. Empirical results and rankings of the top 20 most influential banks are presented in Section V. Section VI concludes the article with some policy perspectives.

## **II. Primer on NEFT System**

NEFT traces its origin to the erstwhile Electronic Funds Transfer (EFT), the first payment system that enabled one-to-one fund transfers, which

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\*This article is prepared by Shashi Kant and Sarat Chandra Dhal, Department of Economic and Policy Research, the Reserve Bank of India. We acknowledge with thanks for the help of Manish Tarone, Department of Payment and Settlement Systems. The views expressed in this article are those of the authors and do not represent the views of the Reserve Bank of India.

was introduced in India in the late 1990s. It was operational at 15 major centres in the country. In 2005, it was replaced by a richer and more efficient system, namely, NEFT. With over 210 entities including all scheduled commercial banks – public sector, private sector and foreign banks, cooperative banks, regional rural banks (RRBs), payment banks and small finance banks participating in the NEFT system, it is the largest payment system operated by the Reserve Bank in terms of transaction volume. It is a countrywide payment system facilitating one-to-one money transfer without any limits on transaction amount, though it is commonly used for retail payments upto ₹2 lakhs. In this system, settlements of fund transfer requests happen in half-hourly batches starting from 8 am to 7 pm on all bank working days.

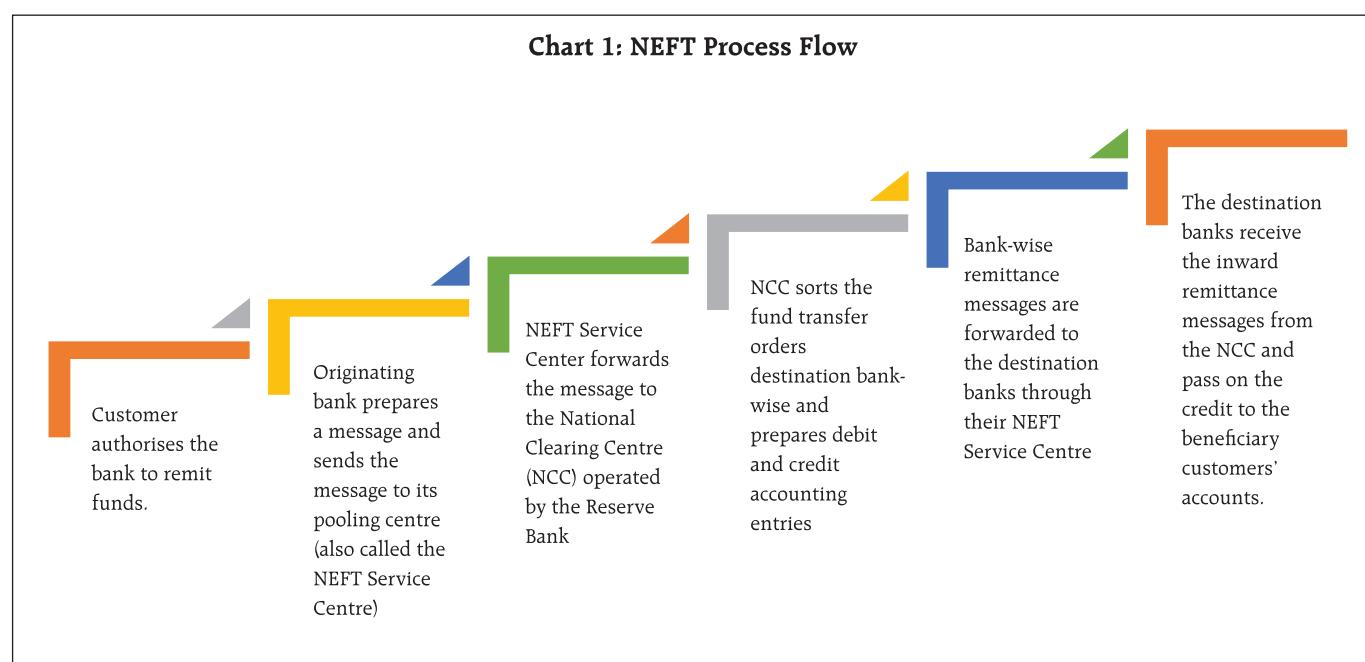
The NEFT operational flow chart is depicted in Chart 1. Beneficiaries are entitled to getting credit within two business hours from the batch in which the transaction was settled. If the NEFT transaction is not credited or returned within the stipulated time frame, banks are liable to pay penal interest to the affected customers calculated at the current Reserve Bank Liquidity Adjustment Facility (LAF) Repo Rate

plus 2 per cent for the period of delay/till the date of refund as the case may be. Recently, the Reserve Bank has waived the NEFT processing charges to lower the transaction costs and provide fillip to the ongoing digital revolution.

### III. The Literature

Network theory, owing its origin to physics, has witnessed applications to a wide range of areas in economics and finance: social networks (Grandjean, 2016; Dunbar *et al.*, 2015), international trade (Ma and Mondragón, 2015; Kali and Reyes, 2007), foreign investment flows and cross country debt holdings (Elliott *et al.*, 2014) and interbank exposures (Upper and Worms, 2004; Langfield *et al.*, 2014; Cont *et al.*, 2010; Iori *et al.*, 2005).

With the explosive growth in digital channels of financial transactions and the concomitant increase in complexity, payment systems have engaged the attention of scholars and practitioners. The increased attention towards payment systems is also aided by the relatively easier access of data as payment systems data is readily available with central banks. A seminal addition to this literature is the study of the network topology of interbank payment flows through the



Fedwire Funds Service operated by the Federal Reserve in the US. Studies have shown that the right tail of the Fedwire payment network follows a power-law distribution<sup>1</sup> (Soramaki *et al.*, 2006; Pröpper *et al.*, 2008; Embree and Roberts, 2009). The analysis of network topology of the Hungarian payment system was carried by Lubloy (2006). A similar study was done for the Clearing House Automated Payment System (CHAPS) operational in the UK by Becher *et al.*, (2008). They looked at the variations in network properties over the course of a day to assess vulnerabilities due to settlement failures of different participants at particular times of the day. Settlement data from the Bank of Japan Financial Network System (BOJ-NET) were examined to study the structure of transactions in the interbank money market by Imakubo and Soejima (2010). The interbank exposures and the payment system networks in Mexico were studied and a measure of interconnectedness from the systemic risk perspective was proposed by Jaramillo *et al.*, (2014). Thus, a common thread discernible in these studies is about discovering patterns in network layouts and identifying clusters which are difficult to detect using traditional economics.

Payment systems resemble other complex networks as they share similar features like high clustering coefficient, scale-free degree distribution and small world phenomenon<sup>2</sup> (Soramaki *et al.*, 2006). The scope of network analysis extends beyond discovering patterns in network layouts which could be investigated in future studies. Network analysis can also find the core constituents of a network which would be of much interest in identifying systematically

<sup>1</sup> Network graphs are called scale free when their degree distribution follows a power law: a probability distribution that exhibits scale invariance for a ratio of two values in the distribution. It has been observed in many man-made and natural systems like the phone call network, World Wide Web, actor collaboration network etc. For example, a network with a power law exponent of 2 implies that a node of degree 6 is four times less frequent than a node of degree 3. A node of degree 10 is four times less frequent than a node of degree 5 (Chapman, 2011).

<sup>2</sup> A clustering coefficient is a measure of the degree to which nodes in a graph tend to form a cluster together. Small world phenomenon refers to the principle that all nodes in a network can be accessed from any given node by small links, *i.e.*, short path lengths.

important entities. In this context, interbank networks have been modelled with a core–periphery structure (Borgatti *et al.*, 1999)<sup>3</sup>. Network simulations with random graphs have been deployed to study contagion in financial networks. The potential impact of contagion due to idiosyncratic and systemic shocks with changes in network was explored by Gai and Kapadia (2010). The effect of the degree of connectivity on contagion was investigated and it was found that a small increase in connectivity increases the contagion effect initially; but after a certain threshold value, connectivity improves the ability of a banking system to absorb shocks (Nier *et al.*, 2007). The contagion effects in relation to the magnitude of shock was examined and concluded that dense networks act as shock diffusers for small negative shocks but turn into shock amplifiers for sufficiently large shocks (Acemoglu *et al.*, 2015).

#### IV. Methodology and Data

The network approach to understanding payment system differs from conventional economic modelling. For a meaningful discussion on the usefulness of network analysis, we provide a non technical description of network analysis. The most important component of network analysis is *visualising the network*. The payment network consists of a set of nodes, where each node represents a participating entity, *i.e.*, scheduled commercial banks (SCBs) excluding small finance banks, RRBs, and small finance banks (SFBs) etc. The edges of the network represent the bilateral linkage between two parties either on transaction volume or transaction value basis. These edges are directed and reflect the direction of flow of money from one institution to another. The thickness of the edges is proportional to the associated linkage weights in terms of volume and value of payments settled (Barrat *et al.*, 2004). We have used the Kamada-Kawai algorithm which plots the nodes of a network in a 3D space in a

<sup>3</sup> A core–periphery structure is formed by two groups: core and periphery. The core and peripheral nodes are distinguished as follows: the core forms a subgraph of the entire network in which nodes are connected densely to each other. Peripheral nodes are connected to the core nodes but not to other peripheral nodes.

way so as to minimise the spring energy<sup>4</sup> of the system (Kamada and Kawai, 1989). To get a clearer picture, we also plot group-wise network to assess broader patterns in flow of payments.

*Identification of important nodes* forms another component of network analysis. Network models use various centrality measures for this purpose. In essence, it is a function that assigns a numerical value to each vertex of a network according to its influence on the others. Illustratively, *local centrality* measures take into consideration only the nodes and its adjacent vertices and edges. These measures consider only one node at a time; thereby losing vital information contained in rest of the network. *Degree centrality* (DC) counts the number of nodes adjacent to each vertex<sup>5</sup>. A node is more important if it has a higher degree. *In-degree centrality* and *out-degree centrality* take into consideration the incoming and outgoing edges, respectively. Strength centrality sums up the edge weights of all adjacent edges of each vertex. We also distinguish between inward and outward transactions as payment networks are directed graphs. Specifically, our degree and strength centrality measures are based on outward value transactions as they represent payment obligations settlement, which is crucial for payment systems.

A node may have high degree but its connections may not be important from a network perspective. In such situations, degree measures may lead to wrong interpretations about the importance of a node. *Global centrality* measures consider direct and indirect connections across the entire network and, therefore, incorporate information on entire pattern of network. Within this framework, *eigen vector centrality* (EC) takes into account how well connected a node is and how many links their connections have, and so on through the network. On the other hand, *pagerank*

*centrality* (PR) is a more sophisticated variant of EC designed by Google to rank webpages (Brin and Page, 1998). Each webpage is assigned a score based upon its number of in-coming links (its 'in-degree'). These links are also weighted depending on the relative score of its originating node. Thus, PR takes link direction and weights into account which EC doesn't (Disney, 2015). *Betweenness centrality* is particularly important for payment networks as it relates to being located at strategic points on the network which lie in the shortest path connecting two other nodes. A brief mathematical description of the centrality measures which form the core of our analysis is provided in the Annex.

There are several other centrality measures which can be used to determine most influential nodes of a network, but there is no consensus as to which is the best one. We use these centrality measures which are important from financial contagion perspective and are computationally less intensive. Thereafter, we follow the methodology proposed by Jaramillo *et al.*, (2014) to rank the nodes by creating a single index of centrality. We use the *principal component analysis* (PCA) approach to create an index with linear combination of z-scores of the centrality measures as all the measures are expected to be correlated. PCA helps in reducing dimensionality and redundancy of data. It reorients the axes and transforms the dataset by projecting the data along the directions in which the dataset shows maximum variance. It assigns optimal weights to each of these measures which are used to arrive at the final centrality score that incorporates all the information contained in these five scores.

Evidence suggests that daily networks can be much noisier and sparser than monthly networks and they appear to change their structure from day to day in a purely random manner (Caccioli *et al.*, 2018). Therefore, we have taken aggregate interbank data over a period of one month, March 2019. Our choice of this month is guided by the consideration that a lot of financial activity happens in this month owing to the closure of financial year in the country. We

<sup>4</sup> Network nodes are treated like physical objects that repel each other, such as electrons. The connections between nodes are treated like metal springs attached to the pair of nodes. These springs repel or attract their end points according to a force function. The layout algorithm sets the positions of the nodes in a way that minimises the spring energy in the network (Cytoscape user manual)

<sup>5</sup> Node and vertex are one and the same thing in network terminology.

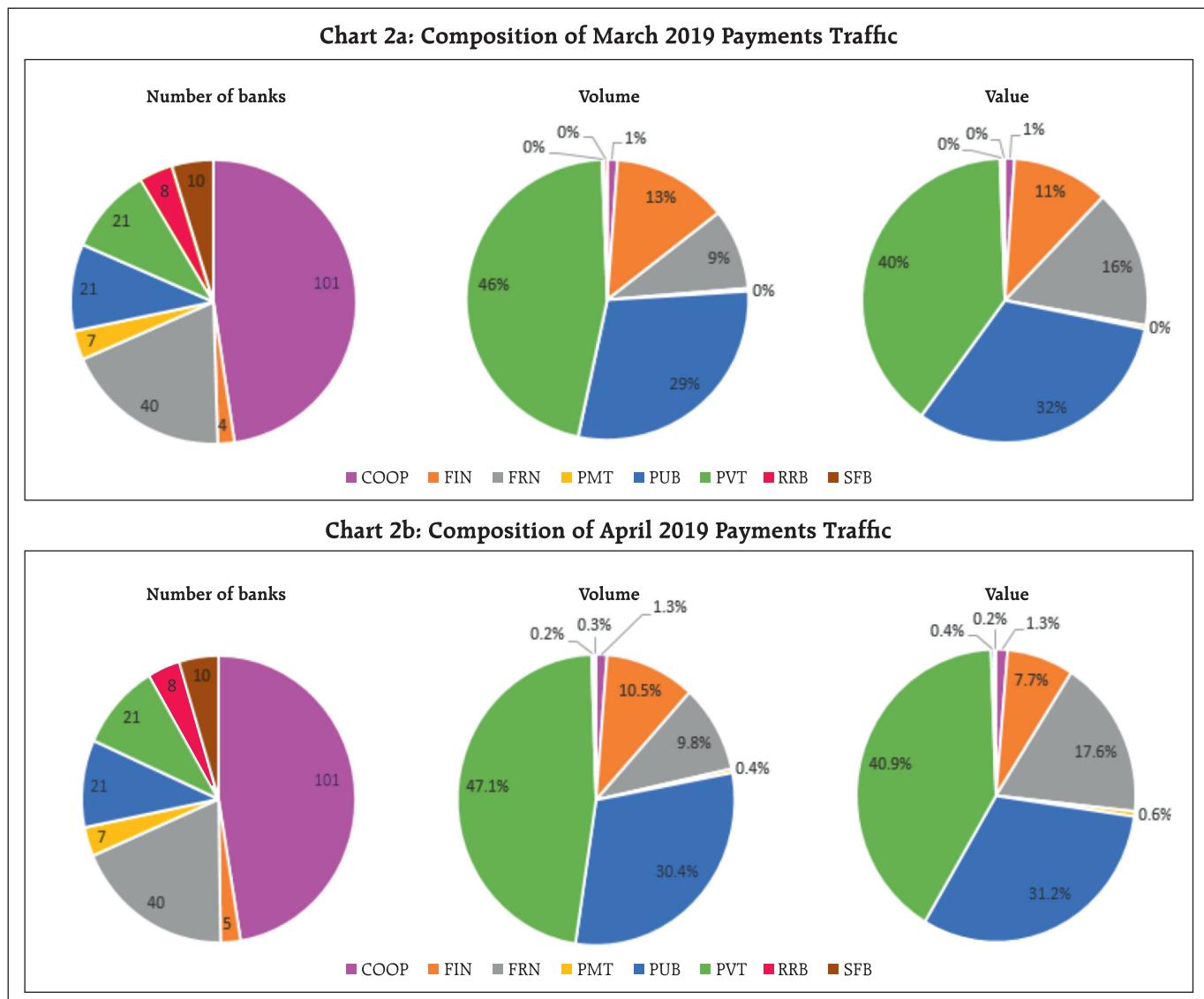
also collected data for April 2019 to get a comparative perspective. The data comprise interbank payment transaction volume and value between 210 entities which are categorised into eight groups; cooperative banks (COOP), financial institutions (FIN), foreign banks (FRN), payment banks (PMT), public sector banks (PUB), private sector banks (PVT), regional rural banks (RRBs) and small finance banks (SFBs). The FIN group comprises institutions like Deposit Insurance and Credit Guarantee Corporation (DICGC), National Bank for Agriculture and Rural Development (NABARD), Small Industries Development Bank of India (SIDBI), Export-Import Bank of India (EXIM Bank) and the Reserve Bank, Public Accounts Department (PAD).

## V. Empirical Results

We present empirical analysis in three sections. The first section presents stylised facts. The second section enumerates the network topology and characteristics and presents the network visualisation with discernible patterns or layout of inter-linkages between institutions. Finally, we present the rankings of institutions based on their systemic importance.

### **NEFT System: Stylised Facts**

A snapshot of the NEFT participants and their transactional activity is given in Chart 2 and Table 1. While cooperative banks outnumber the public sector, private sector and foreign banks, their contribution



**Table 1a: Payment Flow Statistics by Volume – March 2019 (in per cent)**

		Beneficiary									
		Volume	COOP	FIN	FRN	PMT	PUB	PVT	RRB	SFB	Total
Payee	COOP	0.1	0.0	0.0	0.0	0.6	0.4	0.0	0.0	1.2	
	FIN	0.1	0.0	0.0	0.0	12.2	0.6	0.2	0.0	13.2	
	FRN	0.2	0.0	0.4	0.1	4.1	4.4	0.0	0.0	9.3	
	PMT	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.4	
	PUB	0.6	0.4	0.6	0.0	19.1	8.2	0.2	0.0	29.3	
	PVT	1.2	0.1	1.5	0.1	30.3	12.4	0.3	0.1	46.1	
	RRB	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.2	
	SFB	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.4	
	Total	2.3	0.6	2.6	0.2	67.0	26.2	0.8	0.2	100.0	

**Table 2a: Payment Flow Statistics by Value – March 2019 (in per cent)**

		Beneficiary									
		Volume	COOP	FIN	FRN	PMT	PUB	PVT	RRB	SFB	Total
Payee	COOP	0.1	0.0	0.0	0.0	0.5	0.4	0.0	0.0	1.1	
	FIN	0.0	0.4	0.4	0.0	7.2	2.8	0.0	0.0	10.9	
	FRN	0.1	0.1	4.9	0.3	3.3	7.1	0.0	0.0	15.8	
	PMT	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.4	
	PUB	0.5	0.9	2.1	0.0	15.4	12.6	0.1	0.1	31.7	
	PVT	0.7	0.4	5.1	0.1	16.7	16.2	0.1	0.2	39.5	
	RRB	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.3	
	SFB	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.3	
	Total	1.5	1.9	12.9	0.4	43.5	39.4	0.3	0.3	100.0	

to payment traffic in terms of volume and value is not very significant. Private sector banks followed by public sector banks are the biggest players in the NEFT network both in volume and value terms.

The bulk of transactions (over 80 per cent of the total payment volume and value) takes place between public sector, private sector and foreign banks (Tables 1 and 2). Based on the monthly value aggregates, public sector banks are the net receivers in the network with inflows exceeding 40 per cent in both the months, thereby far exceeding their outflows of around 31 per cent. The FIN group, with the Reserve Bank as the main constituent, acts as a net transmitter in the network.

**Table 1b: Payment Flow Statistics by Volume – April 2019 (in per cent)**

		Beneficiary									
		Volume	COOP	FIN	FRN	PMT	PUB	PVT	RRB	SFB	Total
Payee	COOP	0.1	0.0	0.0	0.0	0.7	0.4	0.0	0.0	1.3	
	FIN	0.2	0.0	0.0	0.0	9.7	0.4	0.1	0.0	10.5	
	FRN	0.2	0.0	0.4	0.1	4.2	4.8	0.0	0.0	9.8	
	PMT	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.4	
	PUB	0.6	0.4	0.7	0.1	19.6	8.8	0.2	0.1	30.4	
	PVT	1.2	0.2	1.7	0.1	30.4	13.0	0.4	0.1	47.1	
	RRB	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.2	
	SFB	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.3	
	Total	2.4	0.7	2.9	0.3	65.2	27.6	0.8	0.2	100.0	

**Table 2b: Payment Flow Statistics by Value – April 2019 (in per cent)**

		Beneficiary									
		Volume	COOP	FIN	FRN	PMT	PUB	PVT	RRB	SFB	Total
Payee	COOP	0.1	0.0	0.0	0.0	0.5	0.6	0.0	0.0	1.3	
	FIN	0.1	0.0	0.2	0.0	6.8	0.7	0.0	0.0	7.7	
	FRN	0.1	0.2	5.5	0.3	3.5	8.0	0.0	0.0	17.6	
	PMT	0.0	0.0	0.4	0.0	0.0	0.2	0.0	0.0	0.6	
	PUB	0.5	0.4	2.3	0.0	14.6	13.4	0.1	0.1	31.2	
	PVT	0.7	0.4	6.3	0.2	16.4	16.6	0.1	0.1	40.9	
	RRB	0.0	0.0	0.0	0.0	0.3	0.1	0.0	0.0	0.4	
	SFB	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.2	
	Total	1.5	1.0	14.8	0.5	42.2	39.6	0.2	0.2	100.0	

Its outward flows in March and April 2019 were 10.9 per cent and 7.7 per cent, respectively, as opposed to the inward flows which remained between 1 and 2 per cent in March and April. It is to be emphasised that these conclusions are based on monthly aggregates and the net receiver and transmitter pattern may differ in every batch settlement.

#### **Network Topology**

NEFT network is a large network consisting of around 210 nodes and 23 thousand edges in the March and April month of 2019. Average in and out degree across all categories of banks is about 109. It indicates that on an average, every bank is connected to more

than half of the banks in the network. The payment network has a high network density, i.e., the ratio of actual number of edges to the maximum possible number of edges (connectivity) of more than 50 per cent. Reciprocity, defined as the ratio of bidirectional links to the total number of links in a network, is found to be 87.6 per cent, suggesting that almost for every outward link from a bank, there is an inward link. A high reciprocity is an intuitive phenomenon given the clearing structure of NEFT which allows participants to link to another NEFT enabled bank directly. In an ideal scenario where every bank has transaction with every other bank in the network, reciprocity would be equal to unity or 100 per cent. However, the transactions data depict that some banks did not transact with some banks in the network leading to a reciprocity less than unity. The basic network properties are summarised in Table 3.

#### **Network Characteristics**

Network visualisation helps in assessing broad patterns in the payment network. The degree distribution of the network shows that public sector and private sector banks are at the extreme right end of the distribution, implying high connectedness with other participants (Chart 3).

In Chart 4, March 2019 network appears to be denser as compared to April 2019 which is in concordance to its higher network density as indicated in Table 3. Public and private sector banks lie at the centre of the network. The high transfer value between public sector to public sector; private sector to private sector; and public sector to private sector and vice versa as seen in Table 2 is

**Table 3: Properties of NEFT network**

	March 2019	April 2019
Nodes	212	213
Edges	23.1	23.0
Total Volume (million)	242.4	203.4
Mean volume per node (million)	1.1	1.0
Total Value (₹ billion)	25.5	20.5
Mean value per node (₹ billion)	120.1	96.5
Degree (Max, Average, Min)	(417, 217.8, 2)	(417, 216.2, 2)
Out	(208, 108, 9, 0)	(208, 108, 1, 0)
In	(210, 108, 9, 0)	(209, 108, 1, 1)
Reciprocity (per cent)	87.6	87.5
Network density (per cent)	51.6	51.0

presented diagrammatically in Chart 4. The strong intra-linkages within public sector and private sector banks and inter-linkages between public sector and private sector banks are quite discernible. The flow from private sector to public sector banks is much stronger than its counterpart. The public sector and private sector banks together account for more than 60 per cent of the total transactions by value in both the months reflecting their greater involvement in the payment network. In contrast, the co-operative, regional rural, payment and small finance banks have lesser connectivity within the payment network. The thickness of edges in Chart 4b indicate the magnitude of transaction value between bank groups and intra-group transactions.

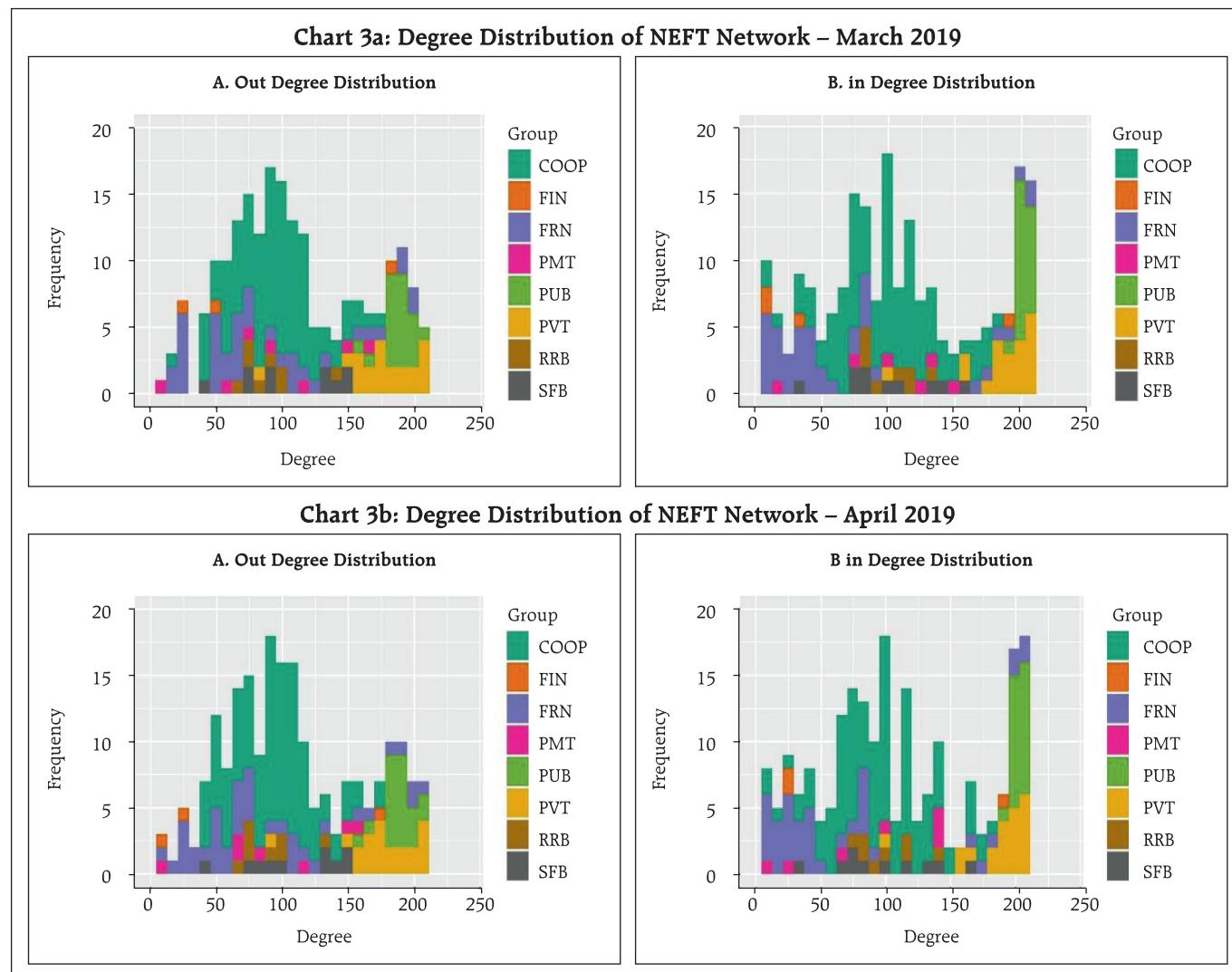
#### **Top 20 Banks in NEFT Network**

As centrality measures try to capture the same essence in a variety of ways, without loss of generality, we expect the measures to be correlated to some extent (Table 4). We, therefore, take the

**Table 4: Correlation Between Centrality Measures**

	March 2019					April 2019				
	zdg	zsc	zbw	zec	zpr	zdg	zsc	zbw	zec	zpr
<b>zdg</b>	1	0.43	0	0.97	0.46	1	0.44	0.01	0.97	0.46
<b>zsc</b>	0.43	1	-0.05	0.35	0.92	0.44	1	0.01	0.36	0.95
<b>zbw</b>	0	-0.05	1	0.02	-0.07	0.01	0.01	1	-0.01	-0.02
<b>zec</b>	0.97	0.35	0.02	1	0.38	0.97	0.36	-0.01	1	0.37
<b>zpr</b>	0.46	0.92	-0.07	0.38	1	0.46	0.95	-0.02	0.37	1

\*zdg=normalised degree centrality; zsc = normalized strength centrality; zbw=normalised betweenness centrality; zec=eigen vector centrality; zpr = normalised pagerank centrality

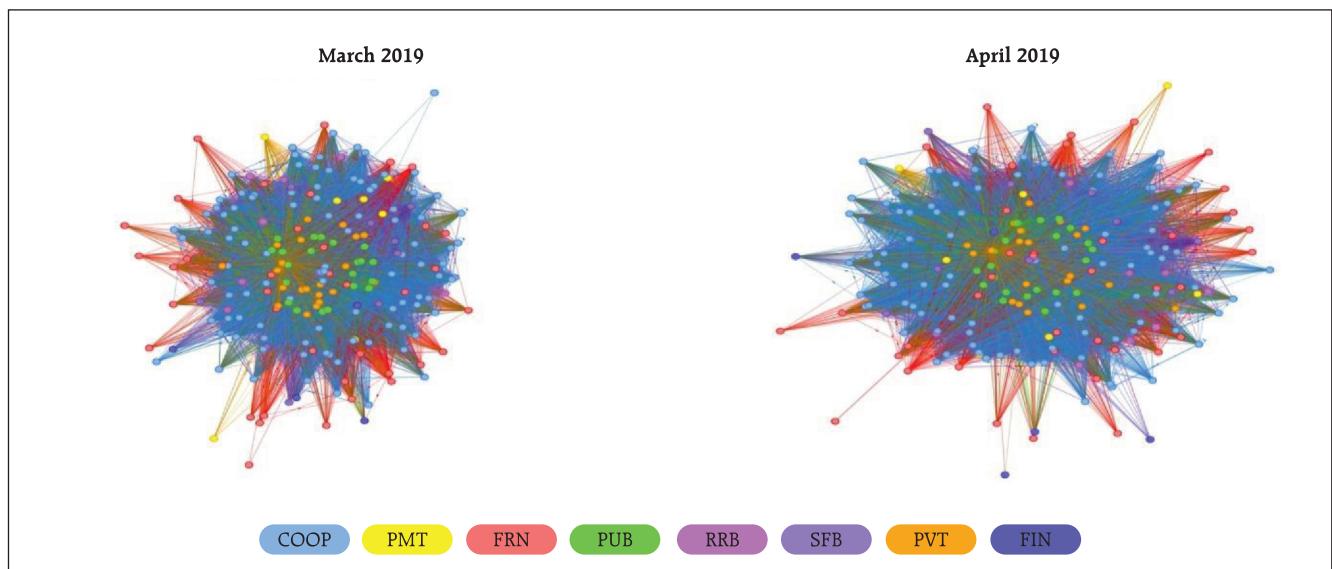
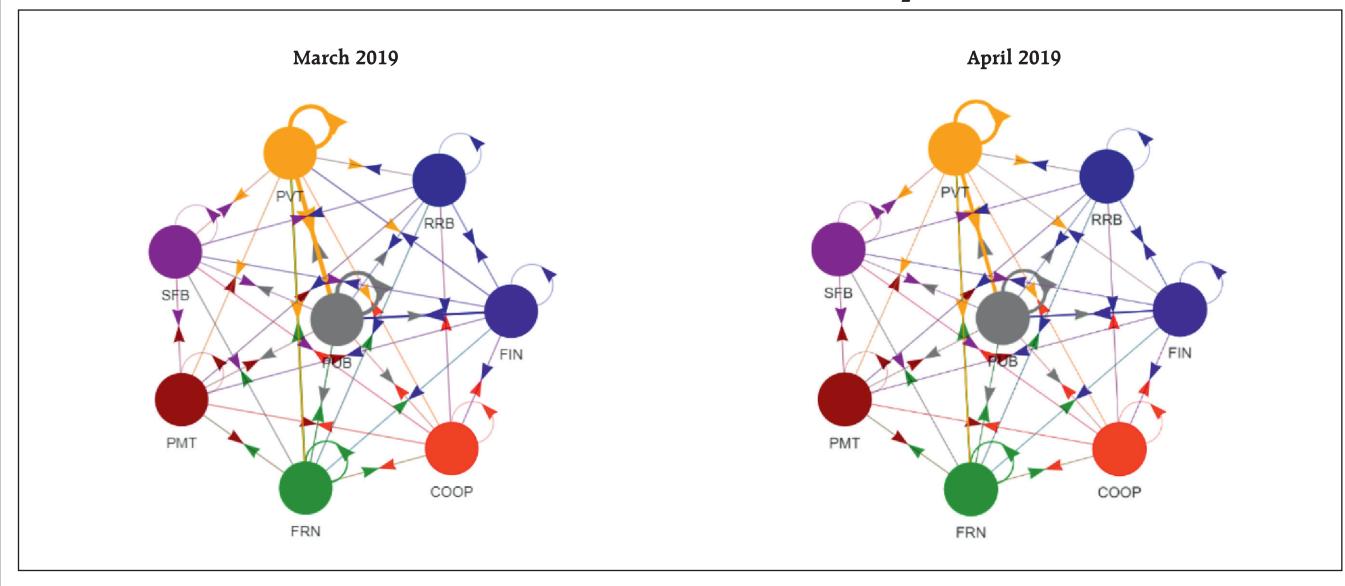


help of PCA approach to reduce dimensionality and redundancy of data. It gives out principal orthogonal components and assigns optimal weights to each of these measures. The first principal component (PC) alone explains about 55 per cent of the variation in centrality measures (Table 5). We use the coefficients of the first PC in constructing the index of centrality (Table 6).

While all the banks on the NEFT system are directly connected to each other by design, incidentally, some banks may not have transactions with each other in a month. In cases where direct transaction linkages are absent, betweenness coefficient gives high importance to those nodes that lie along the path connecting these nodes. As expected, we get a low betweenness coefficient since

**Table 5: Importance of Components**

	March 2019					April 2019				
	PC1	PC2	PC3	PC4	PC5	PC1	PC2	PC3	PC4	PC5
Proportion of Variance	0.55	0.23	0.19	0.02	0.00	0.56	0.23	0.20	0.01	0.00
Cumulative Proportion	0.55	0.79	0.98	1.00	1.00	0.56	0.79	0.99	1.00	1.00
Standard Deviation	1.66	1.08	0.98	0.29	0.15	1.67	1.07	1.00	0.22	0.15

**Chart 4a: NEFT Value Network – Bank-wise****Chart 4b: NEFT Value Network – Bank Group-wise**

most of the participants have direct transaction linkages with other participants in the network. We rank the nodes based on the final centrality score scaled between 0 and 1.

**Table 6: Coefficients of the First PC**

Centrality measure	March 2019	April 2019
Degree	0.52	0.52
Strength	0.49	0.49
Betweenness	-0.03	0.00
Eigen vector	0.49	0.49
Pagerank	0.50	0.50

Based on the unified centrality measure, we arrive at the rankings of top 20 banks, with a mix of public sector, private sector and foreign banks. Top 20 banks in March and April 2019 included 10 public sector banks, 6 private sector banks and 4 foreign banks (Table 7). We remove the Reserve Bank from the top 20 constituents as, being a central bank and a facilitator, its odds of perpetrating a settlement failure are zero. We find that the sub-network of top 20 banks in the network contributes to around 64 per cent of the payment traffic (excluding FIN group) by volume

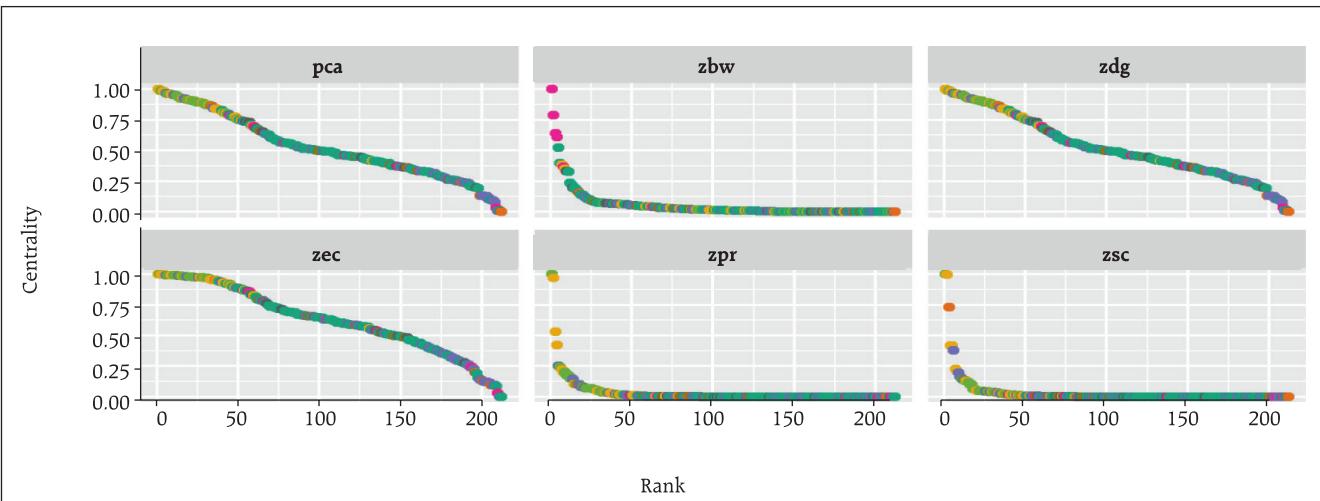
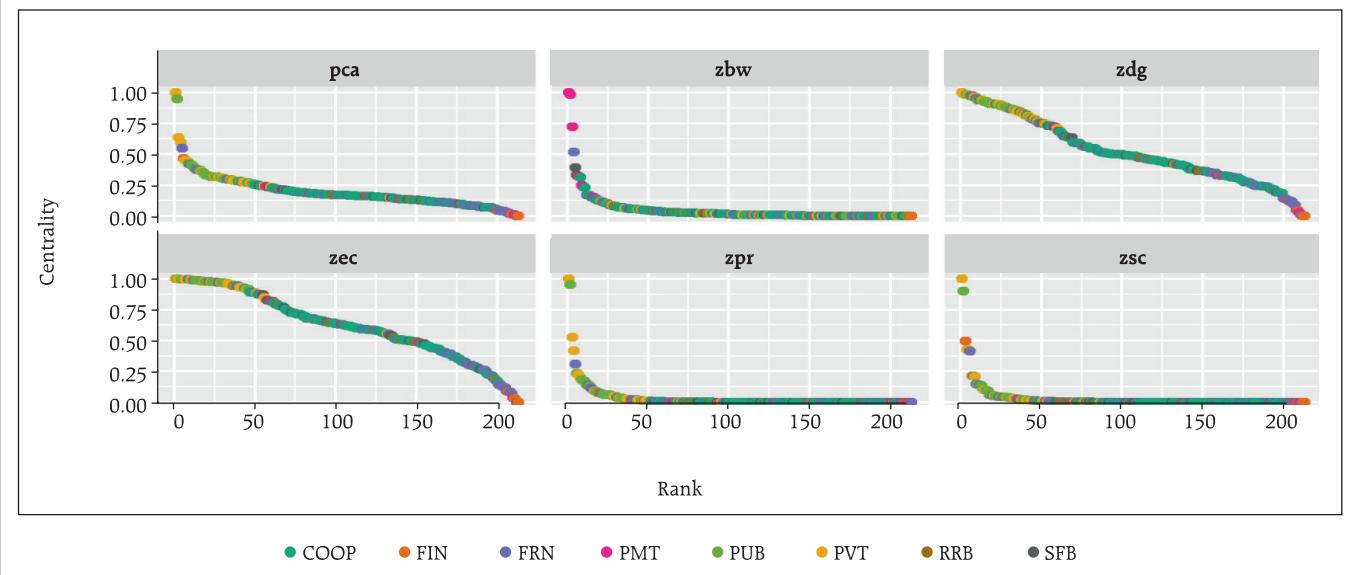
**Table 7: Top 20 Constituents**

	March 2019						April 19					
	zdg	zsc	zbw	zec	zpr	pca	zdg	zsc	zbw	zec	zpr	pca
COOP	4	4	10	3	5	4	3	5	8	2	5	4
FRN	5	1	3	5	4	3	3	7	7	2	5	4
PMT	9	8	10	9	10	11	8	7	11	9	10	10
PUB	7	8	2	7	6	6	6	7	7	6	6	6
PVT												
RRB												
SFB			2						2			

and 68 per cent of the payment traffic (excluding FIN group) by value in the months of March and April. Owing to low volume and value contribution to the network, none of the cooperative banks, RRBs, SFBs

and payment banks feature in this list. This study brings out an interesting insight, *i.e.*, some foreign banks being very influential in the NEFT system, despite their relatively small share of 5.7 per cent in total assets of SCBs.

We rank all the NEFT-enabled banks based on individual centrality measures and the unified centrality measure derived using PCA approach (Chart 5). All indices, except betweenness, indicate top ranks being occupied by public sector and private sector banks. However, we do not find these heavy-weight banks in the top ranks sorted by the

**Chart 5a: Bank Ranking V/s Centrality (March 2019)****Chart 5b: Bank Ranking V/s Centrality (April 2019)**

betweenness index. We find 10 cooperative banks, 5 payment banks and 2 small finance banks in the top 20 spots when sorted by betweenness for March 2019 with a more or less similar picture in April 2019 (Chart 5, *zbw*). As explained before, the betweenness measure quantifies the number of times a node acts as a bridge along the path between two other nodes not having direct transaction linkage. In our case, it provides an alternate perspective on rankings of participants wherein some of the cooperative banks, payment banks and small finance banks are serving as connecting nodes for those banks which do not share a direct linkage in the NEFT network. While state-level and larger urban co-operative banks act as conduits for smaller co-operative banks, payment banks have a larger presence as they are niche banks operating mainly in the payments arena by offering banking functions such as payments, deposits, remittances, internet banking, *etc.*

## VI. Conclusion

Network analysis provides new tools for analysing payment systems at the broader level. It facilitates the identification of patterns/layout at a system level which, otherwise, is difficult to assess using bilateral transaction volume and value level analysis. We study network topology and structure of NEFT interbank fund transfers so as to better comprehend the flow of payments in the network. Our study discovers intuitively acceptable patterns in network layouts and identifies clusters which would have been difficult to detect using conventional economics. It shows that public sector, private sector and foreign banks constituted around 83 per cent and 87 per cent of the total transactions by value on NEFT system in March and April, respectively. Payment flows are particularly strong within the public-to-public sector and private-to-private sector banks network. The flow from private-to-public sector banks is also very large with public sector banks being the net receivers in the system. We also observe large net outflows from the Reserve Bank to the NEFT participants in the month of March and April. A study of all the twelve months of

NEFT transactions would give us a more holistic idea about the seasonal patterns therein.

Ideally, all NEFT enabled banks are connected to each other by design. However, our study also presents evidence on some banks having no transactions with some banks in the network. On a broad level, most public sector, private sector and foreign banks share direct transaction linkage with each other; however, some smaller banks, including cooperative banks, do not have such direct linkages. In such cases, bigger cooperative banks and payment/small finance banks act as bridges between banks which don't have transaction linkages. Therefore, we find higher betweenness in cooperative banks, small finance banks and payment banks and a low betweenness index for the major public sector, private sector and foreign banks.

Settlement failures or lags by large banks which have payment obligation to large number of participants, may have impact on the stability of the payment system. In this context, this analysis serves a useful purpose by enabling us to find a holistic ranking of important players in the payment industry taking into consideration several aspects such as interconnections, degree, strength, position in network, *etc.* From a systemic perspective, we find that the top 20 banks have a large share in the payments value and volume. Settlement failures in them can cause operational interruptions having implications for the stability of entire payment/financial system.

The topology of payment networks is changing rapidly with the advent of financial technologies. These changes can be assessed through the changes happening in network topology over a longer period of time. Since, payments data can be made available without much lag, network analysis can be useful in tracking interconnectedness on a real time basis. The analysis of payment systems is complementary to the existing network analysis of interbank exposures. Such analysis will be useful in shedding light on the evolution of payment networks in India and pinpointing risks, if any, from concentration of payment flows. Evidence in network literature suggests

that highly interconnected networks may aid in shock amplification as well as shock attenuation. However, the mechanism of amplification and attenuation, and their characterisation with degree distribution and topological attributes is an area for further research. Apart from contributing to financial system stability analysis, the study is expected to motivate further research relating to India's payment system.

## References

- Acemoglu, D., A. Ozdaglar and A.T. Salehi (2015), "Systemic Risk and Stability in Financial Networks", *The American Economic Review*, 105(2), 564-608.
- Albert, R., H. Jeong and A.L. Barabasi (1999), "Diameter of the World Wide Web", *Nature*, 401(130). Available at SSRN:  
<https://ssrn.com/abstract=1733528> or <http://dx.doi.org/10.2139/ssrn.1733528>
- Barrat, A., M. Barthélémy, R. P. Satorras, and A. Vespignani (2004), "The architecture of complex weighted networks", *PNAS* March 16, 2004 101 (11) 3747-3752.
- Becher, C., S. Millard and K. Soramäki (2008), "The network topology of CHAPS Sterling", *Bank of England Working Paper No. 355*, November.
- Borgatti, S.P. and M.G. Everett (1999), "Models of core/periphery structures", *Social Networks* 21, 375–395.
- Brin, S. and L. Page (1998). The Anatomy of a Large-Scale Hypertextual Web Search Engine. *Computer Networks and ISDN Systems*, 30, 107- 117.
- Caccioli, F., P. Barucca and T. Kobayashi (2018). Network models of financial systemic risk: a review. *Journal of Computational Social Science*, 1, 81–114.
- Chapman, J., L. Embree, and T. Roberts (2011). Payment networks: A review of recent research. *Bank of Canada Review*, winter 2010–2011.
- Cont, R., M. Amal and E.B. Santos (2010). Network Structure and Systemic Risk in Banking Systems. December 1.
- Cytoscape User Manual. Navigation and Layout. Accessed 13 Jul 2019. [http://manual.cytoscape.org/en/stable/Navigation\\_and\\_Layout.html#edge-weighted-spring-embedded-layout](http://manual.cytoscape.org/en/stable/Navigation_and_Layout.html#edge-weighted-spring-embedded-layout)
- Disney, A. (2015), "Eigen Centrality and PageRank", *Cambridge Intelligence*, Nov 2, 2015. <https://cambridge-intelligence.com/eigencentrality-pagerank/>
- Dunbar, R.I.M., V. Arnaboldi, M. Conti and A. Passarella (2015), "The structure of online social networks mirrors those in the offline world", *Social Networks*, 43, 39–47.
- Elliott, M., B. Golub, and M. O. Jackson (2014), "Financial Networks and Contagion", *American Economic Review*, 104(10), 3115–3153.
- Embree, L. and T. Roberts (2009), "Network Analysis and Canada's Large Value Transfer System", *Bank of Canada Discussion Paper 2009/13*, December.
- Gai, P. and S. Kapadia (2010), "Contagion in financial networks", *Proceedings: Mathematical, Physical and Engineering Sciences*, 466(2120), 2401-2423.
- Grandjean, M. (2016), "A social network analysis of Twitter: Mapping the digital humanities community", *Cogent Arts and Humanities*, Taylor Francis.  
<https://doi.org/10.1073/pnas.0400087101>
- Imakubo, K. and Y. Soejima (2010), "The Transaction Network in Japan's Interbank Money Markets", Bank of Japan, *Monetary and Economic Studies*, November.
- Iori, G., G.D. Masi, O.V. Precup, G. Gabbi and G. Caldarelli (2005), "A Network Analysis of the Italian Overnight Money Market", *City University London*, Discussion Paper Series 05/05.
- Jaramillo, S.M., B.A. Kabadjova and B.B. Benitez, J.P.S. Margain (2014), "An empirical study of the Mexican banking system's network and its implications for systemic risk", *Journal of Economic Dynamics and Control*, 40, 242 – 265.
- Kali, R. and J. Reyes (2007), "The Architecture of Globalization: A Network Approach to International Economic Integration", *Journal of International Business Studies*, 38(4), 595-620.
- Kamada, T. and S. Kawai (1989), "An Algorithm for Drawing General Undirected Graphs", *Information Processing Letters*, 31, 7-15.

- Langfield, S. and Z. Liu and T. Ota (2014), "Mapping the UK interbank system", *Journal of Banking and Finance*, 45, 288–303.
- Lublóy, Á. (2006), "Topology of the Hungarian large-value transfer system", *MNB Occasional Papers* 2006/57.
- Ma, A. and Mondragón, R.J. (2015), "Rich-Cores in Networks", *PLoS ONE*, 10(3): e0119678.
- Nier, E., J. Yang, T. Yorulmazer and A. Alentorn (2007), "Network models and financial stability", *Journal of Economic Dynamics and Control*, 31, 2033–2060.
- Oesterreichische National Bank (OeNB) Financial Stability Report 7 "An Empirical Analysis of the Network Structure of the Austrian Interbank Market", 77-87.
- Pröpper, M., Lelyveld, I. V. and Heijmans, R. (2008), "Towards a Network Description of Interbank Payment Flows", *De Nederlandsche Bank, Working Paper No.* 177.
- Soramäki, K., M.L. Bech, J. Arnold, R.J. Glass and W.E. Beyeler (2006), "The Topology of Interbank Payment Flows", *Federal Reserve Bank of New York Staff Reports* 243, March.
- Upper, C. and A. Worms (2004), "Estimating bilateral exposures in the German interbank market: Is there a danger of contagion?", *European Economic Review*, 48, 827–849.

## Annex

### Definition of Some Important Network Metrics

This annex is a brief description of some important centrality measures that have been used in this study.

#### A.1 Connection-Based Measures

- **Connectivity:** Connectivity, also known as network density, gives an overall picture of how well-connected a network is. It refers to the ratio of actual number of edges to the maximum possible number of edges. It is 0 for a disconnected graph with no links and 1 for a complete network.

For a directed graph, connectivity is equal to  $\frac{m}{N(N-1)}$  where m is the number of links and, N is the number of nodes. For undirected graph, connectivity is  $\frac{m}{\frac{N(N-1)}{2}}$ .

- **Reciprocity:** Reciprocity refers to the ratio of number of reciprocated links ( $m_r$ ) to the number of directed links (m).

$$\text{Reciprocity, } r = \frac{m_r}{m}$$

#### A.2 Centrality and Centralization

- **Degree Centrality:** Degree centrality counts the number of nodes connected to each node. It is divided by (N-1) to scale the numbers between 0 and 1.

$$\text{Degree Centrality, } C_{DG} = \frac{d(n_i)}{N-1}$$

Where  $d_{n_i}$  is the degree of node  $n_i$  and, N is the number of nodes

- **Betweenness Centrality:** Measures the percentage of paths that go through a particular node. Nodes with high betweenness are important for connecting two different groups or clusters.

$$\text{Betweenness Centrality, } C_{BW} = \frac{\sum_{i,l \neq v} \sum_{j,j \neq i,j \neq v} \frac{g_{ij}}{g_{ij}}}{(N-1)(N-2)}$$

Where  $g_{ij}$  is the number of shortest paths from node i to node j and,

$g_{ivj}$  is the number of shortest paths from node i to node j, through v

- **Eigen vector centrality:** A node may have high degree but its connections may not be important from a network perspective. In such situations, degree measures may lead to wrong interpretations about the importance of a node. Eigen vector centrality computation is an iterative procedure where the centrality of node i is calculated by summing the centrality of node i's neighbours, M(i). It gives more weight to nodes if they are connected to influential nodes.

$$c_i = \frac{1}{\lambda} \sum_{j \in G} a_{ij} c_j$$

The above equation can be rewritten in matrix form as  $Ac = \lambda c$ , where A is the Adjacency Matrix of the graph (G). The largest eigen value of the equation results in Eigen vector centrality.

- **Pagerank centrality:** Pagerank is a more sophisticated variant of Eigen centrality designed by the founders of Google to rank webpages. Each webpage is assigned a score based upon its number of in-coming links (its 'in-degree'). These links are also weighted depending on the relative score of its originating node. It follows an iterative algorithm where the Pagerank is derived using the following formula

$$PR_{t+1}(i) = \sum_{j \in L(i)} \frac{PR_t(j)}{C(j)}$$

Where  $L(i)$  refers to the set of all nodes pointing towards node i and  $C(j)$  represents the number of outward links emanating from node j. The first iteration begins with an initial Pagerank of  $\frac{1}{n}$  for all nodes.

## CURRENT STATISTICS

Select Economic Indicators

Reserve Bank of India

Money and Banking

Prices and Production

Government Accounts and Treasury Bills

Financial Markets

External Sector

Payment and Settlement Systems

Occasional Series



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**Notes:** .. = Not available.

- = Nil/Negligible.

P = Preliminary/Provisional. PR = Partially Revised.

**No. 1: Select Economic Indicators**

Item	2018-19	2017-18		2018-19	
		Q3	Q4	Q3	Q4
		1	2	3	4
<b>1 Real Sector (% Change)</b>					
1.1 GVA at Basic Prices		6.6	7.3	7.9	6.3
1.1.1 Agriculture		2.9	4.6	6.5	2.8
1.1.2 Industry		6.2	8.0	8.6	6.0
1.1.3 Services		7.7	8.0	8.0	7.6
1.1a Final Consumption Expenditure		8.3	5.8	8.1	7.9
1.1b Gross Fixed Capital Formation		10.0	12.2	14.4	11.7
	2018-19	2018		2019	
		May	Jun.	May	Jun.
		1	2	3	4
1.2 Index of Industrial Production		3.60	3.8	7.0	3.1
<b>2 Money and Banking (% Change)</b>					
2.1 Scheduled Commercial Banks					
2.1.1 Deposits		10.0	8.1	6.8	11.1
2.1.2 Credit		13.3	12.8	10.9	13.5
2.1.2.1 Non-food Credit		13.4	13.0	10.9	13.3
2.1.2.3 Investment in Govt. Securities		1.9	5.1	6.0	3.7
2.2 Money Stock Measures					
2.2.1 Reserve Money (M0)		14.5	24.9	21.1	13.8
2.2.2 Broad Money (M3)		10.5	10.4	9.8	10.3
<b>3 Ratios (%)</b>					
3.1 Cash Reserve Ratio		4.00	4.00	4.00	4.00
3.2 Statutory Liquidity Ratio		19.25	19.50	19.50	19.00
3.3 Cash-Deposit Ratio		5.1	4.7	4.9	4.9
3.4 Credit-Deposit Ratio		77.7	75.2	75.4	76.8
3.5 Incremental Credit-Deposit Ratio		99.9	**	65.7	-212.9
3.6 Investment-Deposit Ratio		26.9	29.7	29.9	27.7
3.7 Incremental Investment-Deposit Ratio		5.4	*	169.3	302.3
<b>4 Interest Rates (%)</b>					
4.1 Policy Repo Rate		6.25	6.00	6.25	6.00
4.2 Reverse Repo Rate		6.00	5.75	6.00	5.75
4.3 Marginal Standing Facility (MSF) Rate		6.50	6.25	6.50	6.25
4.4 Bank Rate		6.50	6.25	6.50	6.25
4.5 Base Rate		8.95/9.40	8.70/9.45	8.70/9.45	8.95/9.40
4.6 MCLR (Overnight)		8.05/8.55	7.80/7.95	7.80/8.05	8.05/8.50
4.7 Term Deposit Rate >1 Year		6.25/7.50	6.25/6.75	6.25/7.00	6.25/7.50
4.8 Savings Deposit Rate		3.50/4.00	3.50/4.00	3.50/4.00	3.50
4.9 Call Money Rate (Weighted Average)		6.35	5.94	6.17	5.90
4.10 91-Day Treasury Bill (Primary) Yield		6.31	6.40	6.52	6.19
4.11 182-Day Treasury Bill (Primary) Yield		6.35	6.80	6.89	6.27
4.12 364-Day Treasury Bill (Primary) Yield		6.39	6.93	7.13	6.30
4.13 10-Year G-Sec Par Yield (FBIL)		7.34	7.92	7.98	7.07
<b>5 Reference Rate and Forward Premiums</b>					
5.1 INR-US\$ Spot Rate (Rs. Per Foreign Currency)		69.17	68.26	68.58	69.81
5.2 INR-Euro Spot Rate (Rs. Per Foreign Currency)		77.70	79.88	79.85	77.73
5.3 Forward Premiums of US\$ 1-month (%)		6.07	4.13	4.46	3.95
3-month (%)		4.80	4.01	4.37	3.95
6-month (%)		4.16	4.04	4.39	3.93
<b>6 Inflation (%)</b>					
6.1 All India Consumer Price Index		3.4	4.9	4.9	3.1
6.2 Consumer Price Index for Industrial Workers		5.4	4.0	3.9	8.7
6.3 Wholesale Price Index		4.3	4.8	5.7	2.5
6.3.1 Primary Articles		2.7	3.8	4.7	6.2
6.3.2 Fuel and Power		11.5	12.7	16.5	1.0
6.3.3 Manufactured Products		3.7	3.8	4.2	1.3
<b>7 Foreign Trade (% Change)</b>					
7.1 Imports		10.3	14.7	19.6	3.3
7.2 Exports		8.6	20.5	20.4	-9.7

\*\*Denominator and numerator negative

\*Denominator negative

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 \*

(₹ Billion)

Item	As on the Last Friday/ Friday						
	2018-19	2018	2019				
		Jul.	Jun. 28	Jul. 5	Jul. 12	Jul. 19	Jul. 26
	1	2	3	4	5	6	7
<b>1 Issue Department</b>							
<b>1.1 Liabilities</b>							
1.1.1 Notes in Circulation	21,137.64	18,968.03	21,635.30	21,716.25	21,790.36	21,615.26	21,495.53
1.1.2 Notes held in Banking Department	0.11	0.11	0.09	0.11	0.12	0.14	0.13
<b>1.1/1.2 Total Liabilities (Total Notes Issued) or Assets</b>	<b>21,137.75</b>	<b>18,968.14</b>	<b>21,635.39</b>	<b>21,716.36</b>	<b>21,790.48</b>	<b>21,615.40</b>	<b>21,495.66</b>
<b>1.2 Assets</b>							
1.2.1 Gold Coin and Bullion	794.81	743.49	757.82	792.04	792.04	792.04	825.72
1.2.2 Foreign Securities	20,335.59	18,215.32	20,869.24	20,916.01	20,990.24	20,815.16	20,661.81
1.2.3 Rupee Coin	7.35	9.33	8.33	8.32	8.20	8.20	8.13
1.2.4 Government of India Rupee Securities	—	—	—	—	—	—	—
<b>2 Banking Department</b>							
<b>2.1 Liabilities</b>							
2.1.1 Deposits	8,060.12	5,835.36	7,455.15	7,837.37	7,764.92	7,857.65	7,593.96
2.1.1.1 Central Government	1.01	1.00	1.00	1.00	1.00	1.00	1.00
2.1.1.2 Market Stabilisation Scheme	—	—	—	—	—	—	—
2.1.1.3 State Governments	0.43	0.42	0.42	0.43	0.43	0.42	0.42
2.1.1.4 Scheduled Commercial Banks	5,657.07	4,738.57	5,720.13	5,099.69	5,100.77	5,330.13	5,259.08
2.1.1.5 Scheduled State Co-operative Banks	41.97	35.17	39.97	40.30	39.99	40.09	40.83
2.1.1.6 Non-Scheduled State Co-operative Banks	34.94	20.12	26.61	26.92	26.22	26.47	26.18
2.1.1.7 Other Banks	320.36	271.68	308.66	299.57	299.77	306.46	303.27
2.1.1.8 Others	1,997.34	768.39	1,358.36	2,341.00	2,296.74	2,125.63	1,963.17
2.1.1.9 Financial Institution Outside India	7.00	—	—	28.45	—	27.44	—
2.1.2 Other Liabilities	10,876.86	10,363.28	11,309.45	11,173.50	11,195.54	11,338.43	11,343.10
<b>2.1/2.2 Total Liabilities or Assets</b>	<b>18,936.98</b>	<b>16,198.64</b>	<b>18,764.59</b>	<b>19,010.87</b>	<b>18,960.46</b>	<b>19,196.08</b>	<b>18,937.06</b>
<b>2.2 Assets</b>							
2.2.1 Notes and Coins	0.11	0.11	0.09	0.11	0.12	0.14	0.13
2.2.2 Balances held Abroad	6,466.40	8,065.31	6,926.94	6,784.78	6,690.02	7,037.43	7,104.69
2.2.3 Loans and Advances							
2.2.3.1 Central Government	—	—	65.96	667.93	789.43	657.29	370.84
2.2.3.2 State Governments	0.10	1.71	16.61	55.66	69.94	31.40	8.96
2.2.3.3 Scheduled Commercial Banks	1,806.88	762.95	541.85	343.05	293.65	352.63	295.70
2.2.3.4 Scheduled State Co-op.Banks	—	—	—	—	—	—	—
2.2.3.5 Industrial Dev. Bank of India	—	—	—	—	—	—	—
2.2.3.6 NABARD	—	—	—	—	—	—	—
2.2.3.7 EXIM Bank	—	—	—	—	—	—	—
2.2.3.8 Others	134.63	62.82	67.91	55.31	60.87	59.87	58.46
2.2.3.9 Financial Institution Outside India	7.00	—	—	-0.14	—	-0.14	—
2.2.4 Bills Purchased and Discounted							
2.2.4.1 Internal	—	—	—	—	—	—	—
2.2.4.2 Government Treasury Bills	—	—	—	—	—	—	—
2.2.5 Investments	9,230.80	6,433.51	9,857.67	9,918.63	9,870.35	9,870.66	9,870.96
2.2.6 Other Assets	1,291.06	872.23	1,287.57	1,185.54	1,186.08	1,186.80	1,227.31
2.2.6.1 Gold	871.69	710.41	844.83	882.98	882.98	882.98	920.52

\* Data are provisional

### No. 3: Liquidity Operations by RBI

Date	Liquidity Adjustment Facility				MSF	Standing Liquidity Facilities	Market Stabilisation Scheme	OMO (Outright)		Net Injection (+)/ Absorption (-) (1+3+5+6+9-2-4-7-8)
	Repo	Reverse Repo	Variable Rate Repo	Variable Rate Reverse Repo				Sale	Purchase	
	1	2	3	4	5	6	7	8	9	10
Jun. 1, 2019	20.00	343.10	—	—	1.50	—	—	—	—	-321.60
Jun. 3, 2019	43.41	185.33	—	869.07	21.00	—	—	—	—	-989.99
Jun. 4, 2019	52.86	148.66	4.40	601.43	19.50	-2.32	—	—	—	-675.65
Jun. 6, 2019	42.56	183.87	—	350.08	22.31	-0.70	—	—	—	-469.78
Jun. 7, 2019	71.17	244.16	139.75	390.42	26.54	0.70	—	—	—	-396.42
Jun. 10, 2019	88.72	104.08	—	277.70	—	—	—	—	—	-293.06
Jun. 11, 2019	43.62	101.51	138.40	390.24	—	-10.06	—	—	—	-319.79
Jun. 12, 2019	43.47	107.67	—	425.03	—	5.86	—	—	—	-483.37
Jun. 13, 2019	51.42	119.70	—	445.59	9.00	4.25	—	—	—	-500.62
Jun. 14, 2019	124.57	135.71	48.00	662.95	20.55	-0.32	—	—	150.00	-455.86
Jun. 15, 2019	40.08	133.36	—	—	12.95	—	—	—	—	-80.33
Jun. 17, 2019	46.62	83.93	—	406.79	65.11	—	—	—	—	-378.99
Jun. 18, 2019	135.23	186.95	80.25	443.76	1.45	-1.10	—	—	—	-414.88
Jun. 19, 2019	46.98	109.53	—	487.26	2.01	1.10	—	—	—	-546.70
Jun. 20, 2019	71.27	119.99	—	369.63	18.36	—	—	—	—	-399.99
Jun. 21, 2019	51.23	312.06	220.65	429.54	14.00	—	—	—	125.10	-330.62
Jun. 24, 2019	113.82	149.80	—	588.76	23.22	—	—	—	—	-601.52
Jun. 25, 2019	109.82	158.00	177.90	737.49	0.53	—	—	—	—	-607.24
Jun. 26, 2019	93.62	327.35	—	850.17	0.01	—	—	—	—	-1,083.89
Jun. 27, 2019	44.37	371.26	—	947.80	7.60	—	—	—	—	-1,267.09
Jun. 28, 2019	63.37	547.94	40.85	464.95	2.20	—	—	—	—	-906.47
Jun. 29, 2019	20.35	791.76	—	—	9.80	—	—	—	—	-761.61

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

### i) Operations in OTC segment

## ii) Operations in currency futures segment

Item	2018-19	2018		2019	
		Jun.	May.	Jun.	
		1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US \$ Million) (1.1–1.2)		0.00	0.00	0.00	0.00
1.1 Purchase (+)		13,935.0	1,714.00	312.00	0.00
1.2 Sale (-)		13,935.0	1,714.00	312.00	0.00
2 Outstanding Net Currency Futures Sales (–)/ Purchase (+) at the end of month (US \$ Million)		0.00	–692.00	0.00	0.00

**No. 4 A: Maturity Breakdown (by Residual Maturity) of Outstanding  
Forwards of RBI**

(US \$ Million)

Item	As on June 30, 2019		
	Long (+)	Short (-)	Net (1-2)
	1	2	3
1. Upto 1 month	1,070	1,469	-399
2. More than 1 month and upto 3 months	320	1,636	-1,316
3. More than 3 months and upto 1 year	2,439	3,965	-1,526
4. More than 1 year	720	10,885	-10,165
<b>Total (1+2+3+4)</b>	<b>4,549</b>	<b>17,955</b>	<b>-13,406</b>

**No. 5: RBI's Standing Facilities**

(₹ Billion)

Item	As on the Last Reporting Friday							
	2018-19	2018		2019				
		Jul. 20	Feb. 15	Mar. 29	Apr. 26	May 24	Jun. 21	Jul. 19
	1	2	3	4	5	6	7	8
1 MSF	128.8	29.8	10.9	128.8	10.0	16.2	14.0	11.5
2 Export Credit Refinance for Scheduled Banks								
2.1 Limit	—	—	—	—	—	—	—	—
2.2 Outstanding	—	—	—	—	—	—	—	—
3 Liquidity Facility for PDs								
3.1 Limit	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
3.2 Outstanding	26.8	24.3	17.9	26.8	23.5	27.6	24.5	23.6
4 Others								
4.1 Limit	—	—	—	—	—	—	—	—
4.2 Outstanding	—	—	—	—	—	—	—	—
5 Total Outstanding (1+2.2+3.2+4.2)	155.6	54.2	28.8	155.6	33.5	43.8	38.5	35.1

# Money and Banking

## No. 6: Money Stock Measures

(₹ Billion)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2018-19	2018	2019		
		Jun. 22	May 24	Jun. 7	Jun. 21
	1	2	3	4	5
1 Currency with the Public (1.1 + 1.2 + 1.3 – 1.4)	20,522.3	18,767.6	21,173.7	21,322.2	21,166.8
1.1 Notes in Circulation	21,108.8	19,316.8	21,786.1	21,936.4	21,799.7
1.2 Circulation of Rupee Coin	251.4	249.7	251.7	252.1	252.1
1.3 Circulation of Small Coins	7.4	7.4	7.4	7.4	7.4
1.4 Cash on Hand with Banks	845.4	806.3	871.5	873.8	892.5
2 Deposit Money of the Public	16,580.5	13,123.6	14,562.1	14,378.4	14,329.7
2.1 Demand Deposits with Banks	16,263.1	12,898.5	14,277.5	14,081.9	14,032.8
2.2 ‘Other’ Deposits with Reserve Bank	317.4	225.2	284.5	296.5	296.8
<b>3 M<sub>1</sub> (1 + 2)</b>	<b>37,102.8</b>	<b>31,891.3</b>	<b>35,735.8</b>	<b>35,700.6</b>	<b>35,496.5</b>
4 Post Office Saving Bank Deposits	1,406.0	1,162.0	1,406.0	1,406.0	1,406.0
<b>5 M<sub>2</sub> (3 + 4)</b>	<b>38,508.8</b>	<b>33,053.3</b>	<b>37,141.8</b>	<b>37,106.6</b>	<b>36,902.5</b>
6 Time Deposits with Banks	117,205.9	108,141.0	118,475.0	119,081.2	118,664.7
<b>7 M<sub>3</sub> (3 + 6)</b>	<b>154,308.7</b>	<b>140,032.3</b>	<b>154,210.8</b>	<b>154,781.8</b>	<b>154,161.1</b>
8 Total Post Office Deposits	3,672.9	3,161.5	3,672.9	3,672.9	3,672.9
<b>9 M<sub>4</sub> (7 + 8)</b>	<b>157,981.6</b>	<b>143,193.8</b>	<b>157,883.7</b>	<b>158,454.7</b>	<b>157,834.0</b>

**No. 7: Sources of Money Stock (M<sub>3</sub>)**

(₹ Billion)

Sources	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2018-19	2018	2019		
		Jun. 22	May 24	Jun. 7	Jun. 21
	1	2	3	4	5
<b>1 Net Bank Credit to Government</b>	<b>43,877.9</b>	<b>42,210.0</b>	<b>46,044.1</b>	<b>47,027.0</b>	<b>45,891.1</b>
1.1 RBI's net credit to Government (1.1.1–1.1.2)	8,019.5	6,188.4	8,792.1	10,060.0	9,197.0
1.1.1 Claims on Government	9,296.9	6,336.9	9,465.3	10,061.4	9,847.7
1.1.1.1 Central Government	9,281.7	6,336.5	9,460.0	10,007.4	9,846.1
1.1.1.2 State Governments	15.2	0.4	5.3	54.0	1.6
1.1.2 Government deposits with RBI	1,277.4	148.5	673.2	1.4	650.7
1.1.2.1 Central Government	1,276.9	148.1	672.8	1.0	650.3
1.1.2.2 State Governments	0.4	0.4	0.4	0.4	0.4
1.2 Other Banks' Credit to Government	35,858.4	36,021.6	37,252.0	36,967.1	36,694.2
<b>2 Bank Credit to Commercial Sector</b>	<b>103,801.8</b>	<b>92,026.8</b>	<b>102,296.6</b>	<b>102,613.8</b>	<b>102,583.5</b>
2.1 RBI's credit to commercial sector	153.6	95.4	92.5	88.0	84.4
2.2 Other banks' credit to commercial sector	103,648.2	91,931.5	102,204.1	102,525.9	102,499.1
2.2.1 Bank credit by commercial banks	97,691.9	86,144.2	96,215.5	96,519.0	96,487.3
2.2.2 Bank credit by co-operative banks	5,859.3	5,704.3	5,888.1	5,907.8	5,912.0
2.2.3 Investments by commercial and co-operative banks in other securities	97.0	82.9	100.6	99.1	99.8
<b>3 Net Foreign Exchange Assets of Banking Sector (3.1 + 3.2)</b>	<b>30,708.4</b>	<b>28,834.3</b>	<b>31,365.5</b>	<b>31,489.3</b>	<b>31,820.6</b>
3.1 RBI's net foreign exchange assets (3.1.1–3.1.2)	28,485.9	27,597.3	29,143.0	29,266.8	29,598.1
3.1.1 Gross foreign assets	28,488.0	27,599.4	29,145.1	29,268.9	29,600.2
3.1.2 Foreign liabilities	2.1	2.1	2.1	2.1	2.1
3.2 Other banks' net foreign exchange assets	2,222.5	1,237.0	2,222.5	2,222.5	2,222.5
<b>4 Government's Currency Liabilities to the Public</b>	<b>258.9</b>	<b>257.1</b>	<b>259.1</b>	<b>259.5</b>	<b>259.5</b>
<b>5 Banking Sector's Net Non-monetary Liabilities</b>	<b>24,338.2</b>	<b>23,296.0</b>	<b>25,754.5</b>	<b>26,607.9</b>	<b>26,393.7</b>
5.1 Net non-monetary liabilities of RBI	10,588.0	9,785.8	10,711.3	10,979.0	11,159.8
5.2 Net non-monetary liabilities of other banks (residual)	13,750.3	13,510.3	15,043.2	15,628.9	15,233.9
<b>M<sub>3</sub> (1+2+3+4–5)</b>	<b>154,308.7</b>	<b>140,032.3</b>	<b>154,210.8</b>	<b>154,781.8</b>	<b>154,161.1</b>

**No. 8: Monetary Survey**

(₹ Billion)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2018-19	2018	2019		
		Jun. 22	May 24	Jun. 7	Jun. 21
	1	2	3	4	5
<b>Monetary Aggregates</b>					
NM <sub>1</sub> (1.1 + 1.2.1+1.3)	37,102.8	31,891.3	35,735.8	35,700.6	35,496.5
NM <sub>2</sub> (NM <sub>1</sub> + 1.2.2.1)	89,108.8	79,849.7	88,279.5	88,514.5	88,122.8
NM <sub>3</sub> (NM <sub>2</sub> + 1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	156,452.1	142,310.9	156,077.8	156,560.3	156,015.6
<b>1 Components</b>					
1.1 Currency with the Public	20,522.3	18,767.6	21,173.7	21,322.2	21,166.8
1.2 Aggregate Deposits of Residents	131,831.8	119,472.8	131,041.5	131,446.1	130,980.3
1.2.1 Demand Deposits	16,263.1	12,898.5	14,277.5	14,081.9	14,032.8
1.2.2 Time Deposits of Residents	115,568.7	106,574.3	116,763.9	117,364.1	116,947.5
1.2.2.1 Short-term Time Deposits	52,005.9	47,958.5	52,543.8	52,813.9	52,626.4
1.2.2.1.1 Certificates of Deposit (CDs)	2,849.9	1,797.8	2,550.0	2,343.0	2,100.8
1.2.2.2 Long-term Time Deposits	63,562.8	58,615.9	64,220.2	64,550.3	64,321.1
1.3 ‘Other’ Deposits with RBI	317.4	225.2	284.5	296.5	296.8
1.4 Call/Term Funding from Financial Institutions	3,780.5	3,845.3	3,578.1	3,495.6	3,571.6
<b>2 Sources</b>					
2.1 Domestic Credit	156,561.0	142,746.0	157,242.9	158,551.7	157,390.7
2.1.1 Net Bank Credit to the Government	43,877.9	42,210.0	46,044.1	47,027.0	45,891.1
2.1.1.1 Net RBI credit to the Government	8,019.5	6,188.4	8,792.1	10,060.0	9,197.0
2.1.1.2 Credit to the Government by the Banking System	35,858.4	36,021.6	37,252.0	36,967.1	36,694.2
2.1.2 Bank Credit to the Commercial Sector	112,683.1	100,536.0	111,198.8	111,524.7	111,499.6
2.1.2.1 RBI Credit to the Commercial Sector	153.6	95.4	92.5	88.0	84.4
2.1.2.2 Credit to the Commercial Sector by the Banking System	112,529.4	100,440.6	111,106.4	111,436.7	111,415.2
2.1.2.2.1 Other Investments (Non-SLR Securities)	8,798.5	8,429.7	8,805.3	8,796.1	8,836.1
2.2 Government’s Currency Liabilities to the Public	258.9	257.1	259.1	259.5	259.5
2.3 Net Foreign Exchange Assets of the Banking Sector	28,017.3	26,373.0	28,380.1	28,726.7	28,914.7
2.3.1 Net Foreign Exchange Assets of the RBI	28,485.9	27,597.3	29,143.0	29,266.8	29,598.1
2.3.2 Net Foreign Currency Assets of the Banking System	-468.6	-1,224.2	-762.9	-540.0	-683.4
2.4 Capital Account	23,467.4	21,805.2	24,055.7	24,013.6	24,326.0
2.5 Other items (net)	4,917.6	5,260.1	5,748.6	6,964.1	6,223.4

**No. 9: Liquidity Aggregates**

(₹ Billion)

Aggregates	2018-19	2018		2019	
		Jun.	Apr.	May	Jun.
	1	2	3	4	5
<b>1 NM<sub>3</sub></b>	<b>156,452.1</b>	<b>142,310.9</b>	<b>155,721.7</b>	<b>156,077.8</b>	<b>156,015.6</b>
2 Postal Deposits	3,672.9	3,161.5	3,672.9	3,672.9	3,672.9
<b>3 L<sub>1</sub> (1 + 2)</b>	<b>160,125.0</b>	<b>145,472.5</b>	<b>159,394.6</b>	<b>159,750.7</b>	<b>159,688.4</b>
4 Liabilities of Financial Institutions	29.3	29.3	29.3	29.3	29.3
4.1 Term Money Borrowings	26.6	26.6	26.6	26.6	26.6
4.2 Certificates of Deposit	0.3	0.3	0.3	0.3	0.3
4.3 Term Deposits	2.5	2.5	2.5	2.5	2.5
<b>5 L<sub>2</sub> (3 + 4)</b>	<b>160,154.3</b>	<b>145,501.8</b>	<b>159,423.9</b>	<b>159,780.0</b>	<b>159,717.8</b>
6 Public Deposits with Non-Banking Financial Companies	319.1	319.1	..	..	319.1
<b>7 L<sub>3</sub> (5 + 6)</b>	<b>160,473.3</b>	<b>145,820.8</b>	<b>..</b>	<b>..</b>	<b>160,036.8</b>

**No. 10: Reserve Bank of India Survey**

(₹ Billion)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2018-19	2018	2019		
		Jun. 22	May 24	Jun. 7	Jun. 21
	1	2	3	4	5
<b>1 Components</b>					
1.1 Currency in Circulation	21,367.7	19,573.9	22,045.2	22,196.0	22,059.3
1.2 Bankers' Deposits with the RBI	6,019.7	5,177.0	5,343.7	5,459.1	5,393.8
1.2.1 Scheduled Commercial Banks	5,585.0	4,851.3	4,982.0	5,093.6	5,032.5
1.3 'Other' Deposits with the RBI	317.4	225.2	284.5	296.5	296.8
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 - 2.4 - 2.5)	27,704.8	24,976.1	27,673.4	27,951.5	27,749.9
<b>2 Sources</b>					
2.1 RBI's Domestic Credit	9,548.0	6,907.4	8,982.6	9,404.2	9,052.1
2.1.1 Net RBI credit to the Government	8,019.5	6,188.4	8,792.1	10,060.0	9,197.0
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)	8,004.7	6,188.4	8,787.3	10,006.4	9,195.8
2.1.1.1.1 Loans and Advances to the Central Government	-	-	-	425.3	-
2.1.1.1.2 Investments in Treasury Bills	-	-	-	-	-
2.1.1.1.3 Investments in dated Government Securities	9,274.3	6,327.3	9,451.3	9,573.6	9,837.7
2.1.1.1.3.1 Central Government Securities	9,274.3	6,327.3	9,451.3	9,573.6	9,837.7
2.1.1.1.4 Rupee Coins	7.4	9.2	8.7	8.5	8.4
2.1.1.1.5 Deposits of the Central Government	1,276.9	148.1	672.8	1.0	650.3
2.1.1.2 Net RBI credit to State Governments	14.8	-	4.8	53.6	1.2
2.1.2 RBI's Claims on Banks	1,374.9	623.6	98.1	-743.8	-229.3
2.1.2.1 Loans and Advances to Scheduled Commercial Banks	1,374.9	623.6	98.1	-744.1	-229.3
2.1.3 RBI's Credit to Commercial Sector	153.6	95.4	92.5	88.0	84.4
2.1.3.1 Loans and Advances to Primary Dealers	26.8	23.9	27.6	24.8	24.5
2.1.3.2 Loans and Advances to NABARD	-	-	-	-	-
2.2 Government's Currency Liabilities to the Public	258.9	257.1	259.1	259.5	259.5
2.3 Net Foreign Exchange Assets of the RBI	28,485.9	27,597.3	29,143.0	29,266.8	29,598.1
2.3.1 Gold	1,595.9	1,438.9	1,607.8	1,602.7	1,602.7
2.3.2 Foreign Currency Assets	26,890.2	26,158.5	27,535.4	27,664.3	27,995.6
2.4 Capital Account	9,702.7	9,261.0	9,752.0	9,701.4	9,834.9
2.5 Other Items (net)	885.3	524.8	959.3	1,277.6	1,324.9

**No. 11: Reserve Money - Components and Sources**

(₹ Billion)

Item	Outstanding as on March 31/ last Fridays of the month/ Fridays						
	2018-19	2018	2019				
		Jun. 22	May 31	Jun. 7	Jun. 14	Jun. 21	Jun. 28
	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)	27,704.8	24,976.1	28,001.0	27,951.5	28,297.8	27,749.9	28,286.1
<b>1 Components</b>							
1.1 Currency in Circulation	21,367.7	19,573.9	21,973.2	22,196.0	22,198.5	22,059.3	21,894.8
1.2 Bankers' Deposits with RBI	6,019.7	5,177.0	5,730.8	5,459.1	5,807.0	5,393.8	6,095.4
1.3 'Other' Deposits with RBI	317.4	225.2	297.0	296.5	292.3	296.8	295.9
<b>2 Sources</b>							
2.1 Net Reserve Bank Credit to Government	8,019.5	6,188.4	9,440.0	10,060.0	10,237.7	9,197.0	9,927.5
2.2 Reserve Bank Credit to Banks	1,374.9	623.6	-90.2	-743.8	-560.8	-229.3	-471.0
2.3 Reserve Bank Credit to Commercial Sector	153.6	95.4	89.9	88.0	86.2	84.4	87.6
2.4 Net Foreign Exchange Assets of RBI	28,485.9	27,597.3	29,351.1	29,266.8	29,277.4	29,598.1	29,396.7
2.5 Government's Currency Liabilities to the Public	258.9	257.1	259.5	259.5	259.5	259.5	259.5
2.6 Net Non- Monetary Liabilities of RBI	10,588.0	9,785.8	11,049.3	10,979.0	11,002.3	11,159.8	10,914.1

**No. 12: Commercial Bank Survey**

(₹ Billion)

Item	Outstanding as on last reporting Fridays of the month/ reporting Fridays of the month				
	2018-19	2018		2019	
		Jun. 22	May 24	Jun. 7	Jun. 21
	1	2	3	4	5
<b>1 Components</b>					
1.1 Aggregate Deposits of Residents	124,088.4	111,963.2	123,284.4	123,685.5	123,207.6
1.1.1 Demand Deposits	15,110.8	11,763.3	13,130.9	12,935.3	12,888.4
1.1.2 Time Deposits of Residents	108,977.5	100,199.9	110,153.5	110,750.3	110,319.2
1.1.2.1 Short-term Time Deposits	49,039.9	45,090.0	49,569.1	49,837.6	49,643.6
1.1.2.1.1 Certificates of Deposits (CDs)	2,849.9	1,797.8	2,550.0	2,343.0	2,100.8
1.1.2.2 Long-term Time Deposits	59,937.6	55,109.9	60,584.5	60,912.6	60,675.6
1.2 Call/Term Funding from Financial Institutions	3,780.5	3,845.3	3,578.1	3,495.6	3,571.6
<b>2 Sources</b>					
2.1 Domestic Credit	140,289.7	128,532.0	140,249.7	140,274.4	139,982.8
2.1.1 Credit to the Government	33,783.0	33,955.1	35,199.7	34,910.9	34,646.3
2.1.2 Credit to the Commercial Sector	106,506.7	94,576.9	105,050.0	105,363.5	105,336.5
2.1.2.1 Bank Credit	97,691.9	86,144.2	96,215.5	96,519.0	96,487.3
2.1.2.1.1 Non-food Credit	97,275.8	85,518.8	95,558.3	95,743.0	95,773.1
2.1.2.2 Net Credit to Primary Dealers	85.4	82.1	99.6	117.4	82.6
2.1.2.3 Investments in Other Approved Securities	20.5	10.6	19.3	20.7	20.1
2.1.2.4 Other Investments (in non-SLR Securities)	8,708.9	8,340.0	8,715.6	8,706.5	8,746.5
2.2 Net Foreign Currency Assets of Commercial Banks (2.2.1–2.2.2–2.2.3)	-468.6	-1,224.2	-762.9	-540.0	-683.4
2.2.1 Foreign Currency Assets	2,623.8	1,532.3	2,408.2	2,544.5	2,457.9
2.2.2 Non-resident Foreign Currency Repatriable Fixed Deposits	1,637.2	1,566.7	1,711.1	1,717.1	1,717.2
2.2.3 Overseas Foreign Currency Borrowings	1,455.3	1,189.9	1,460.0	1,367.4	1,424.0
2.3 Net Bank Reserves (2.3.1+2.3.2–2.3.3)	5,380.8	4,935.4	5,658.0	6,614.2	6,056.3
2.3.1 Balances with the RBI	5,657.1	4,851.3	4,982.0	5,093.6	5,032.5
2.3.2 Cash in Hand	748.5	707.7	774.2	776.5	794.5
2.3.3 Loans and Advances from the RBI	1,024.8	623.6	98.1	-744.1	-229.3
2.4 Capital Account	13,523.1	12,302.5	14,061.9	14,070.5	14,249.4
2.5 Other items (net) (2.1+2.2+2.3–2.4–1.1–1.2)	3,809.9	4,132.2	4,220.4	5,097.0	4,327.1
2.5.1 Other Demand and Time Liabilities (net of 2.2.3)	3,979.8	3,586.5	3,384.0	3,921.4	3,478.8
2.5.2 Net Inter-Bank Liabilities (other than to PDs)	-484.5	-357.8	-579.0	-475.7	-501.9

**No. 13: Scheduled Commercial Banks' Investments**

(₹ Billion)

Item	As on March 29, 2019	2018				2019			
		2018		2019		2018		2019	
		Jun. 22	May. 24	Jun. 7	Jun. 21	1	2	3	4
		1	2	3	4				5
1 SLR Securities	33,810.6	33,965.6	35,219.0		34,931.6				34,666.5
2 Commercial Paper	903.6	1,274.2	907.5		872.6				972.4
3 Shares issued by									
3.1 PSUs	115.4	118.4	116.9		115.7				115.8
3.2 Private Corporate Sector	695.9	743.0	695.3		693.9				692.4
3.3 Others	63.8	42.8	55.9		56.2				56.2
4 Bonds/Debentures issued by									
4.1 PSUs	1,348.2	1,293.8	1,309.4		1,265.8				1,264.2
4.2 Private Corporate Sector	2,687.8	2,213.0	2,536.2		2,572.4				2,574.9
4.3 Others	1,700.5	1,130.4	1,673.9		1,647.1				1,604.7
5 Instruments issued by									
5.1 Mutual funds	209.9	715.4	489.1		557.4				556.3
5.2 Financial institutions	983.8	809.5	933.8		925.3				909.6

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

(₹ Billion)

Item	As on the Last Reporting Friday (in case of March)/ Last Friday							
	All Scheduled Banks				All Scheduled Commercial Banks			
	2018-19	2018	2019		2018-19	2018	2019	
		Jun.	May	Jun.		Jun.	May	Jun.
	1	2	3	4	5	6	7	8
Number of Reporting Banks	222	223	213	215	147	149	138	139
<b>1 Liabilities to the Banking System</b>	<b>2,763.5</b>	<b>2,254.4</b>	<b>2,565.2</b>	<b>2,611.3</b>	<b>2,714.3</b>	<b>2,207.1</b>	<b>2,517.4</b>	<b>2,560.5</b>
1.1 Demand and Time Deposits from Banks	1,816.5	1,570.9	1,760.4	1,848.6	1,768.3	1,526.3	1,713.9	1,800.8
1.2 Borrowings from Banks	794.9	587.8	699.7	648.8	794.6	586.9	699.7	647.2
1.3 Other Demand and Time Liabilities	152.1	95.7	105.0	113.9	151.4	94.0	103.8	112.5
<b>2 Liabilities to Others</b>	<b>138,359.8</b>	<b>127,282.9</b>	<b>138,324.8</b>	<b>139,160.7</b>	<b>134,956.7</b>	<b>124,125.5</b>	<b>134,887.9</b>	<b>135,669.7</b>
2.1 Aggregate Deposits	129,015.8	117,986.7	129,421.9	130,259.7	125,737.7	114,982.2	126,129.1	126,907.7
2.1.1 Demand	15,425.5	12,919.8	13,753.1	14,347.8	15,112.9	12,632.6	13,452.5	14,033.4
2.1.2 Time	113,590.3	105,066.9	115,668.9	115,911.9	110,624.8	102,349.6	112,676.6	112,874.3
2.2 Borrowings	3,818.6	4,006.4	3,561.3	3,609.0	3,782.5	3,946.3	3,523.8	3,574.7
2.3 Other Demand and Time Liabilities	5,525.3	5,289.7	5,341.5	5,292.0	5,436.5	5,197.0	5,235.0	5,187.3
<b>3 Borrowings from Reserve Bank</b>	<b>1,806.9</b>	<b>918.3</b>	<b>450.1</b>	<b>541.9</b>	<b>1,806.9</b>	<b>918.3</b>	<b>449.8</b>	<b>541.9</b>
3.1 Against Usance Bills /Promissory Notes	–	–	–	–	–	–	–	–
3.2 Others	1,806.9	918.3	450.1	541.9	1,806.9	918.3	449.8	541.9
<b>4 Cash in Hand and Balances with Reserve Bank</b>	<b>6,575.6</b>	<b>5,775.1</b>	<b>6,298.0</b>	<b>6,666.6</b>	<b>6,405.8</b>	<b>5,632.6</b>	<b>6,147.2</b>	<b>6,513.5</b>
4.1 Cash in Hand	765.5	728.9	801.7	811.2	748.77	710.5	783.0	793.3
4.2 Balances with Reserve Bank	5,810.0	5,046.1	5,496.3	5,855.3	5,657.1	4,922.1	5,364.2	5,720.1
<b>5 Assets with the Banking System</b>	<b>3,726.7</b>	<b>3,063.4</b>	<b>3,583.6</b>	<b>3,691.3</b>	<b>3,278.1</b>	<b>2,678.4</b>	<b>3,131.6</b>	<b>3,193.2</b>
5.1 Balances with Other Banks	2,458.8	2,064.1	2,480.6	2,628.2	2,230.5	1,893.7	2,266.4	2,398.8
5.1.1 In Current Account	172.2	122.5	147.3	189.1	133.3	95.1	121.0	160.2
5.1.2 In Other Accounts	2,286.6	1,941.7	2,333.3	2,439.2	2,097.2	1,798.5	2,145.4	2,238.7
5.2 Money at Call and Short Notice	470.5	339.7	335.2	327.3	322.5	175.1	202.0	165.6
5.3 Advances to Banks	329.5	369.3	317.6	306.4	296.4	361.6	275.4	265.5
5.4 Other Assets	467.9	290.3	450.1	429.4	428.8	248.0	387.9	363.3
<b>6 Investment</b>	<b>34,756.1</b>	<b>35,352.4</b>	<b>35,928.9</b>	<b>35,971.6</b>	<b>33,810.6</b>	<b>34,404.3</b>	<b>34,991.1</b>	<b>35,033.3</b>
6.1 Government Securities	34,678.4	35,292.3	35,852.9	35,905.1	33,790.0	34,396.1	34,973.2	35,026.9
6.2 Other Approved Securities	77.6	60.1	76.0	66.5	20.5	8.1	17.9	6.4
<b>7 Bank Credit</b>	<b>100,471.2</b>	<b>89,289.1</b>	<b>99,739.7</b>	<b>99,860.7</b>	<b>97,717.2</b>	<b>86,728.1</b>	<b>96,884.0</b>	<b>97,010.2</b>
7a Food Credit	646.4	823.3	1,031.1	907.1	416.1	593.0	760.8	636.8
7.1 Loans, Cash-credits and Overdrafts	97,922.9	87,038.5	97,393.5	97,582.8	95,219.9	84,531.4	94,584.0	94,775.0
7.2 Inland Bills-Purchased	276.4	224.1	279.4	274.4	262.2	203.6	267.2	263.3
7.3 Inland Bills-Discounted	1,609.8	1,381.9	1,457.7	1,408.1	1,583.0	1,355.8	1,433.6	1,385.6
7.4 Foreign Bills-Purchased	249.1	250.6	226.5	240.4	245.9	248.4	222.4	237.1
7.5 Foreign Bills-Discounted	413.0	394.0	382.6	355.1	406.2	388.8	376.7	349.3

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

(₹ Billion)

Item	Outstanding as on				Growth (%)	
	Mar. 29, 2019	2018	2019		Financial year so far	Y-o-Y
		Jun. 22	May 24	Jun. 21	2019-20	2019
	1	2	3	4	5	6
<b>1 Gross Bank Credit</b>	<b>86,749</b>	<b>76,949</b>	<b>85,167</b>	<b>85,476</b>	<b>-1.5</b>	<b>11.1</b>
1.1 Food Credit	415	624	655	712	71.6	14.2
1.2 Non-food Credit	86,334	76,325	84,512	84,764	-1.8	11.1
1.2.1 Agriculture & Allied Activities	11,113	10,355	11,079	11,258	1.3	8.7
1.2.2 Industry	28,858	26,417	28,140	28,120	-2.6	6.4
1.2.2.1 Micro & Small	3,755	3,641	3,653	3,662	-2.5	0.6
1.2.2.2 Medium	1,064	1,029	1,054	1,052	-1.2	2.2
1.2.2.3 Large	24,039	21,747	23,433	23,407	-2.6	7.6
1.2.3 Services	24,156	20,218	22,879	22,847	-5.4	13.0
1.2.3.1 Transport Operators	1,385	1,223	1,416	1,417	2.3	15.8
1.2.3.2 Computer Software	185	183	184	183	-1.2	0.0
1.2.3.3 Tourism, Hotels & Restaurants	390	366	389	396	1.5	8.2
1.2.3.4 Shipping	77	67	62	61	-21.5	-9.2
1.2.3.5 Professional Services	1,715	1,536	1,708	1,687	-1.7	9.9
1.2.3.6 Trade	5,282	4,700	5,075	5,116	-3.1	8.9
1.2.3.6.1 Wholesale Trade	2,505	2,049	2,267	2,301	-8.2	12.3
1.2.3.6.2 Retail Trade	2,776	2,651	2,808	2,815	1.4	6.2
1.2.3.7 Commercial Real Estate	2,023	1,863	2,007	2,055	1.6	10.3
1.2.3.8 Non-Banking Financial Companies (NBFCs)	6,412	4,616	6,235	6,351	-1.0	37.6
1.2.3.9 Other Services	6,686	5,663	5,802	5,582	-16.5	-1.4
1.2.4 Personal Loans	22,207	19,336	22,414	22,538	1.5	16.6
1.2.4.1 Consumer Durables	63	203	61	58	-8.4	-71.5
1.2.4.2 Housing	11,601	9,983	11,769	11,870	2.3	18.9
1.2.4.3 Advances against Fixed Deposits	829	679	665	671	-19.0	-1.2
1.2.4.4 Advances to Individuals against share & bond	63	57	55	54	-14.3	-5.4
1.2.4.5 Credit Card Outstanding	883	744	936	949	7.5	27.5
1.2.4.6 Education	680	686	674	676	-0.5	-1.5
1.2.4.7 Vehicle Loans	2,022	1,906	2,019	2,004	-0.9	5.1
1.2.4.8 Other Personal Loans	6,068	5,078	6,235	6,256	3.1	23.2
1.2A Priority Sector	27,390	24,975	27,275	27,520	0.5	10.2
1.2A.1 Agriculture & Allied Activities	11,050	10,292	11,005	11,187	1.2	8.7
1.2A.2 Micro & Small Enterprises	10,672	9,572	10,623	10,628	-0.4	11.0
1.2A.2.1 Manufacturing	3,755	3,641	3,653	3,662	-2.5	0.6
1.2A.2.2 Services	6,917	5,930	6,970	6,966	0.7	17.5
1.2A.3 Housing	4,327	3,739	4,325	4,400	1.7	17.7
1.2A.4 Micro-Credit	241	211	276	287	19.0	36.2
1.2A.5 Education Loans	540	563	542	542	0.5	-3.7
1.2A.6 State-Sponsored Orgs. for SC/ST	4	3	4	4	-3.5	14.3
1.2A.7 Weaker Sections	6,626	5,765	6,794	7,015	5.9	21.7
1.2A.8 Export Credit	156	223	144	143	-8.3	-36.1

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

(₹ Billion)

Industry	Outstanding as on				Growth (%)	
	Mar. 29, 2019	2018	2019		Financial year so far	Y-o-Y
		Jun. 22	May 24	Jun. 21	2019-20	2019
	1	2	3	4	5	6
<b>1 Industry</b>	<b>28,858</b>	<b>26,417</b>	<b>28,140</b>	<b>28,120</b>	<b>-2.6</b>	<b>6.4</b>
1.1 Mining & Quarrying (incl. Coal)	418	399	414	411	-1.5	3.0
1.2 Food Processing	1,571	1,498	1,517	1,516	-3.5	1.2
1.2.1 Sugar	297	276	296	296	-0.4	7.1
1.2.2 Edible Oils & Vanaspati	213	212	201	201	-5.8	-5.1
1.2.3 Tea	50	49	50	51	2.9	4.7
1.2.4 Others	1,010	961	970	968	-4.2	0.8
1.3 Beverage & Tobacco	147	140	138	144	-2.0	2.7
1.4 Textiles	2,035	2,033	1,945	1,936	-4.9	-4.8
1.4.1 Cotton Textiles	977	1,008	933	919	-5.9	-8.8
1.4.2 Jute Textiles	21	22	22	21	0.1	-1.9
1.4.3 Man-Made Textiles	267	239	257	260	-2.9	8.8
1.4.4 Other Textiles	770	764	733	735	-4.4	-3.8
1.5 Leather & Leather Products	111	111	111	112	0.7	0.5
1.6 Wood & Wood Products	120	111	116	117	-2.3	5.5
1.7 Paper & Paper Products	303	304	301	301	-0.6	-0.9
1.8 Petroleum, Coal Products & Nuclear Fuels	631	640	526	558	-11.7	-12.8
1.9 Chemicals & Chemical Products	1,915	1,571	1,760	1,745	-8.8	11.1
1.9.1 Fertiliser	400	272	340	331	-17.3	21.9
1.9.2 Drugs & Pharmaceuticals	505	495	485	490	-2.9	-1.0
1.9.3 Petro Chemicals	467	349	398	395	-15.5	13.3
1.9.4 Others	542	456	538	529	-2.4	16.1
1.10 Rubber, Plastic & their Products	458	415	458	458	0.1	10.3
1.11 Glass & Glassware	99	90	99	98	-0.6	9.4
1.12 Cement & Cement Products	557	520	555	561	0.8	8.0
1.13 Basic Metal & Metal Product	3,716	3,925	3,516	3,520	-5.3	-10.3
1.13.1 Iron & Steel	2,829	3,005	2,665	2,662	-5.9	-11.4
1.13.2 Other Metal & Metal Product	887	920	851	859	-3.2	-6.7
1.14 All Engineering	1,686	1,526	1,652	1,646	-2.4	7.9
1.14.1 Electronics	379	337	374	379	0.2	12.7
1.14.2 Others	1,308	1,189	1,277	1,266	-3.2	6.5
1.15 Vehicles, Vehicle Parts & Transport Equipment	799	748	788	814	2.0	8.8
1.16 Gems & Jewellery	720	681	657	662	-8.0	-2.7
1.17 Construction	995	911	974	972	-2.3	6.7
1.18 Infrastructure	10,559	8,912	10,419	10,265	-2.8	15.2
1.18.1 Power	5,690	5,140	5,567	5,637	-0.9	9.7
1.18.2 Telecommunications	1,156	883	1,239	1,068	-7.6	20.9
1.18.3 Roads	1,869	1,624	1,863	1,861	-0.4	14.6
1.18.4 Other Infrastructure	1,845	1,265	1,750	1,698	-8.0	34.2
1.19 Other Industries	2,020	1,882	2,195	2,284	13.1	21.3

**No. 17: State Co-operative Banks Maintaining Accounts with the Reserve Bank of India**

(₹ Billion)

Item	Last Reporting Friday (in case of March)/Last Friday/ Reporting Friday								
	2018-19	2018		2019					
		May, 25	Mar, 15	Mar, 29	Apr, 12	Apr, 26	May, 10	May, 24	May, 31
		1	2	3	4	5	6	7	9
Number of Reporting Banks		32	32	32	32	31	31	31	31
<b>1 Aggregate Deposits (2.1.1.2+2.2.1.2)</b>	<b>620.0</b>	<b>561.7</b>	<b>614.7</b>	<b>620.0</b>	<b>625.0</b>	<b>618.1</b>	<b>630.3</b>	<b>623.3</b>	<b>623.4</b>
2 Demand and Time Liabilities									
<b>2.1 Demand Liabilities</b>	<b>182.4</b>	<b>171.0</b>	<b>187.3</b>	<b>182.4</b>	<b>176.8</b>	<b>179.7</b>	<b>174.5</b>	<b>175.8</b>	<b>177.2</b>
2.1.1 Deposits									
2.1.1.1 Inter-Bank	58.4	48.8	55.4	58.4	46.6	52.6	47.4	47.7	48.7
2.1.1.2 Others	98.1	90.5	97.9	98.1	101.7	96.6	97.7	98.0	99.1
2.1.2 Borrowings from Banks	0.0	6.1	2.5	0.0	0.0	0.0	0.0	0.7	0.7
2.1.3 Other Demand Liabilities	25.9	25.5	31.5	25.9	28.6	30.5	29.5	29.4	28.7
<b>2.2 Time Liabilities</b>	<b>985.3</b>	<b>905.4</b>	<b>963.9</b>	<b>985.3</b>	<b>1004.6</b>	<b>983.8</b>	<b>999.8</b>	<b>993.1</b>	<b>993.4</b>
2.2.1 Deposits									
2.2.1.1 Inter-Bank	456.6	424.7	437.6	456.6	474.4	455.7	460.4	461.2	462.5
2.2.1.2 Others	521.9	471.1	516.8	521.9	523.3	521.5	532.6	525.4	524.4
2.2.2 Borrowings from Banks	0.0	2.4	2.6	0.0	0.0	0.0	0.0	0.0	0.0
2.2.3 Other Time Liabilities	6.8	7.2	6.9	6.8	6.9	6.6	6.7	6.5	6.6
3 Borrowing from Reserve Bank	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
4 Borrowings from a notified bank / Government	503.8	438.0	499.2	503.8	478.2	469.5	458.9	443.2	471.0
4.1 Demand	168.3	146.4	160.3	168.3	153.7	151.9	152.6	144.3	141.1
4.2 Time	335.5	291.6	338.8	335.5	324.5	317.7	306.3	298.8	329.9
<b>5 Cash in Hand and Balances with Reserve Bank</b>	<b>57.2</b>	<b>47.6</b>	<b>49.5</b>	<b>57.2</b>	<b>50.6</b>	<b>54.4</b>	<b>51.0</b>	<b>51.0</b>	<b>48.5</b>
5.1 Cash in Hand	3.2	3.1	3.2	3.2	2.6	2.9	2.9	3.0	3.4
5.2 Balance with Reserve Bank	54.0	44.5	46.4	54.0	48.0	51.5	48.0	48.0	45.1
<b>6 Balances with Other Banks in Current Account</b>	<b>15.4</b>	<b>7.7</b>	<b>11.0</b>	<b>15.4</b>	<b>8.6</b>	<b>8.9</b>	<b>10.9</b>	<b>8.4</b>	<b>9.6</b>
<b>7 Investments in Government Securities</b>	<b>308.9</b>	<b>322.8</b>	<b>313.7</b>	<b>308.9</b>	<b>311.6</b>	<b>313.5</b>	<b>311.8</b>	<b>313.2</b>	<b>311.0</b>
<b>8 Money at Call and Short Notice</b>	<b>161.9</b>	<b>200.4</b>	<b>167.3</b>	<b>161.9</b>	<b>167.1</b>	<b>144.0</b>	<b>156.3</b>	<b>160.8</b>	<b>150.0</b>
<b>9 Bank Credit (10.1+11)</b>	<b>600.9</b>	<b>556.5</b>	<b>592.6</b>	<b>600.9</b>	<b>620.6</b>	<b>627.6</b>	<b>704.3</b>	<b>626.5</b>	<b>625.3</b>
10 Advances									
<b>10.1 Loans, Cash-Credits and Overdrafts</b>	<b>600.9</b>	<b>556.5</b>	<b>592.6</b>	<b>600.9</b>	<b>620.6</b>	<b>627.6</b>	<b>704.3</b>	<b>626.5</b>	<b>625.3</b>
10.2 Due from Banks	826.1	701.8	812.8	826.1	807.7	804.4	790.1	786.4	783.5
11 Bills Purchased and Discounted	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

## Prices and Production

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

Group/Sub group	2018-19			Rural			Urban			Combined		
	Rural	Urban	Combined	Jun. 18	May 19	Jun. 19	Jun. 18	May 19	Jun. 19	Jun. 18	May 19	Jun. 19
	1	2	3	4	5	6	7	8	9	10	11	12
<b>1 Food and beverages</b>	<b>139.5</b>	<b>138.4</b>	<b>139.1</b>	<b>140.0</b>	<b>139.2</b>	<b>141.0</b>	<b>138.4</b>	<b>143.8</b>	<b>145.5</b>	<b>139.4</b>	<b>140.9</b>	<b>142.7</b>
1.1 Cereals and products	137.7	137.2	137.5	137.6	137.4	137.8	135.3	140.4	140.7	136.9	138.3	138.7
1.2 Meat and fish	149.5	147.5	148.8	148.1	159.5	163.5	149.7	156.7	159.5	148.7	158.5	162.1
1.3 Egg	137.3	137.3	137.3	136.7	134.5	136.2	133.9	138.3	140.4	135.6	136.0	137.8
1.4 Milk and products	142.7	141.3	142.2	143.2	142.6	143.2	140.8	142.4	143.3	142.3	142.5	143.2
1.5 Oils and fats	124.0	117.6	121.6	124.0	124.0	124.3	116.6	118.6	118.6	121.3	122.0	122.2
1.6 Fruits	146.8	143.4	145.2	154.1	143.7	143.3	152.2	149.7	150.8	153.2	146.5	146.8
1.7 Vegetables	141.4	142.1	141.6	143.5	133.4	140.6	144.0	161.6	169.4	143.7	143.0	150.4
1.8 Pulses and products	124.1	115.3	121.1	126.0	125.1	128.7	112.3	124.4	127.4	121.4	124.9	128.3
1.9 Sugar and confectionery	111.9	110.8	111.5	112.4	109.3	110.6	108.4	111.2	111.8	111.1	109.9	111.0
1.10 Spices	138.8	140.7	139.4	137.6	139.3	140.4	140.0	141.0	141.0	138.4	139.9	140.6
1.11 Non-alcoholic beverages	134.9	127.5	131.8	132.8	137.7	138.1	126.7	128.9	129.0	130.3	134.0	134.3
1.12 Prepared meals, snacks, sweets	155.3	151.3	153.4	154.3	156.4	156.6	149.0	154.5	155.1	151.8	155.5	155.9
<b>2 Pan, tobacco and intoxicants</b>	<b>159.4</b>	<b>162.9</b>	<b>160.4</b>	<b>157.3</b>	<b>163.3</b>	<b>164.2</b>	<b>161.0</b>	<b>166.2</b>	<b>166.6</b>	<b>158.3</b>	<b>164.1</b>	<b>164.8</b>
<b>3 Clothing and footwear</b>	<b>150.3</b>	<b>139.3</b>	<b>145.9</b>	<b>150.3</b>	<b>150.7</b>	<b>150.7</b>	<b>137.4</b>	<b>142.2</b>	<b>142.3</b>	<b>145.2</b>	<b>147.3</b>	<b>147.4</b>
3.1 Clothing	151.2	141.0	147.2	151.3	151.3	151.4	138.9	144.0	144.2	146.4	148.4	148.6
3.2 Footwear	145.2	129.5	138.7	144.7	146.6	146.4	128.7	131.7	131.7	138.1	140.4	140.3
<b>4 Housing</b>	--	<b>145.6</b>	<b>145.6</b>	--	--	--	<b>142.5</b>	<b>150.1</b>	<b>149.4</b>	<b>142.5</b>	<b>150.1</b>	<b>149.4</b>
<b>5 Fuel and light</b>	<b>147.0</b>	<b>129.3</b>	<b>140.3</b>	<b>145.1</b>	<b>146.9</b>	<b>147.9</b>	<b>126.5</b>	<b>129.4</b>	<b>130.5</b>	<b>138.1</b>	<b>140.3</b>	<b>141.3</b>
<b>6 Miscellaneous</b>	<b>138.6</b>	<b>131.1</b>	<b>134.9</b>	<b>135.6</b>	<b>142.9</b>	<b>143.3</b>	<b>129.5</b>	<b>133.3</b>	<b>133.5</b>	<b>132.6</b>	<b>138.2</b>	<b>138.5</b>
6.1 Household goods and services	145.9	134.8	140.6	142.2	149.5	149.6	133.1	137.2	137.4	137.9	143.7	143.8
6.2 Health	143.5	135.5	140.5	138.4	151.3	151.7	132.6	139.8	140.3	136.2	146.9	147.4
6.3 Transport and communication	128.5	120.3	124.2	127.4	130.2	130.2	120.4	120.1	119.6	123.7	124.9	124.6
6.4 Recreation and amusement	140.4	130.3	134.7	137.8	145.9	146.4	128.5	134.0	134.2	132.6	139.2	139.5
6.5 Education	149.4	144.5	146.5	145.1	156.7	157.7	141.2	148.0	148.8	142.8	151.6	152.5
6.6 Personal care and effects	132.6	129.9	131.5	131.4	133.9	134.8	128.2	132.6	133.6	130.1	133.4	134.3
<b>General Index (All Groups)</b>	<b>141.3</b>	<b>137.7</b>	<b>139.6</b>	<b>140.5</b>	<b>142.4</b>	<b>143.6</b>	<b>136.2</b>	<b>141.5</b>	<b>142.1</b>	<b>138.5</b>	<b>142.0</b>	<b>142.9</b>

**Source:** Central Statistics Office, Ministry of Statistics and Programme Implementation, Government of India.

**No. 19: Other Consumer Price Indices**

Item	Base Year	Linking Factor	2018-19		2018	2019	
			Jun.	May	Jun.	May	Jun.
	1	2	3	4	5	6	
1 Consumer Price Index for Industrial Workers	2001	4.63	300	291	314	316	
2 Consumer Price Index for Agricultural Labourers	1986-87	5.89	907	894	940	950	
3 Consumer Price Index for Rural Labourers	1986-87	—	915	902	948	957	

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

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

Item	2018-19	2018		2019	
		Jun.	May	Jun.	May
	1	2	3	4	
1 Standard Gold (₹ per 10 grams)	31,193	30,707	31,738	33,121	
2 Silver (₹ per kilogram)	38,404	39,907	36,590	37,187	

**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	2018-19	2018		2019	
			Jun.	Apr.	May (P)	Jun. (P)
			1	2	3	4
<b>1 ALL COMMODITIES</b>	<b>100.000</b>	<b>119.8</b>	<b>119.1</b>	<b>121.1</b>	<b>121.2</b>	<b>121.5</b>
<b>1.1 PRIMARY ARTICLES</b>	<b>22.618</b>	<b>134.2</b>	<b>132.5</b>	<b>139.3</b>	<b>139.5</b>	<b>141.4</b>
<b>  1.1.1 FOOD ARTICLES</b>	<b>15.256</b>	<b>143.7</b>	<b>141.8</b>	<b>148.8</b>	<b>150.1</b>	<b>151.7</b>
1.1.1.1 Food Grains (Cereals+Pulses)	3.462	146.7	141.0	153.5	154.3	155.4
1.1.1.2 Fruits & Vegetables	3.475	147.3	145.9	158.5	161.5	166.8
1.1.1.3 Milk	4.440	143.1	142.5	143.2	143.4	143.8
1.1.1.4 Eggs, Meat & Fish	2.402	138.0	138.2	142.9	144.3	146.0
1.1.1.5 Condiments & Spices	0.529	129.6	129.6	127.4	132.3	133.9
1.1.1.6 Other Food Articles	0.948	144.4	142.2	149.6	148.5	144.2
<b>    1.1.2 NON-FOOD ARTICLES</b>	<b>4.119</b>	<b>123.1</b>	<b>122.5</b>	<b>127.7</b>	<b>127.8</b>	<b>128.7</b>
1.1.2.1 Fibres	0.839	127.0	127.3	133.4	134.2	133.9
1.1.2.2 Oil Seeds	1.115	140.5	137.3	147.8	147.8	150.0
1.1.2.3 Other non-food Articles	1.960	107.3	110.6	102.8	103.6	106.1
1.1.2.4 Floriculture	0.204	164.1	136.1	234.2	225.1	208.3
<b>    1.1.3 MINERALS</b>	<b>0.833</b>	<b>136.5</b>	<b>123.2</b>	<b>158.0</b>	<b>138.0</b>	<b>158.0</b>
1.1.3.1 Metallic Minerals	0.648	123.0	105.6	153.7	124.9	153.7
1.1.3.2 Other Minerals	0.185	183.5	184.6	173.0	183.7	173.0
<b>    1.1.4 CRUDE PETROLEUM &amp; NATURAL GAS</b>	<b>2.410</b>	<b>92.4</b>	<b>94.1</b>	<b>92.7</b>	<b>92.8</b>	<b>92.5</b>
<b>1.2 FUEL &amp; POWER</b>	<b>13.152</b>	<b>104.1</b>	<b>104.4</b>	<b>102.8</b>	<b>103.4</b>	<b>102.1</b>
<b>  1.2.1 COAL</b>	<b>2.138</b>	<b>123.3</b>	<b>123.0</b>	<b>123.6</b>	<b>123.6</b>	<b>124.0</b>
1.2.1.1 Coking Coal	0.647	132.9	132.0	133.9	133.9	133.9
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	120.3	120.0	121.2	121.2	129.9
<b>  1.2.2 MINERAL OILS</b>	<b>7.950</b>	<b>96.7</b>	<b>97.3</b>	<b>95.4</b>	<b>96.4</b>	<b>94.3</b>
<b>  1.2.3 ELECTRICITY</b>	<b>3.064</b>	<b>109.6</b>	<b>109.6</b>	<b>107.3</b>	<b>107.3</b>	<b>107.3</b>
<b>1.3 MANUFACTURED PRODUCTS</b>	<b>64.231</b>	<b>117.9</b>	<b>117.3</b>	<b>118.5</b>	<b>118.4</b>	<b>118.4</b>
<b>  1.3.1 MANUFACTURE OF FOOD PRODUCTS</b>	<b>9.122</b>	<b>128.6</b>	<b>128.5</b>	<b>129.4</b>	<b>129.2</b>	<b>130.4</b>
1.3.1.1 Processing and Preserving of meat	0.134	136.7	137.6	135.6	135.6	140.5
1.3.1.2 Processing and Preserving of fish, Crustaceans, Molluscs and products thereof	0.204	132.1	124.4	133.6	134.3	132.9
1.3.1.3 Processing and Preserving of fruit and Vegetables	0.138	114.3	116.1	112.2	113.8	115.6
1.3.1.4 Vegetable and Animal oils and Fats	2.643	117.6	120.6	113.9	113.2	112.5
1.3.1.5 Dairy products	1.165	136.2	138.3	135.1	135.9	139.9
1.3.1.6 Grain mill products	2.010	141.6	137.8	143.4	143.3	145.0
1.3.1.7 Starches and Starch products	0.110	116.6	110.1	133.3	135.6	135.8
1.3.1.8 Bakery products	0.215	129.3	127.9	131.3	131.3	130.9
1.3.1.9 Sugar, Molasses & honey	1.163	111.2	110.5	112.9	115.0	114.5
1.3.1.10 Cocoa, Chocolate and Sugar confectionery	0.175	126.7	125.2	128.2	127.8	128.2
1.3.1.11 Macaroni, Noodles, Couscous and Similar farinaceous products	0.026	134.5	131.5	133.1	137.8	133.7
1.3.1.12 Tea & Coffee products	0.371	137.7	144.8	146.2	139.0	145.5
1.3.1.13 Processed condiments & salt	0.163	122.2	121.3	125.3	126.3	124.7
1.3.1.14 Processed ready to eat food	0.024	127.0	128.8	128.3	128.3	126.6
1.3.1.15 Health supplements	0.225	143.6	138.9	158.7	156.9	154.5
1.3.1.16 Prepared animal feeds	0.356	157.5	153.4	165.3	163.7	172.3
<b>  1.3.2 MANUFACTURE OF BEVERAGES</b>	<b>0.909</b>	<b>120.7</b>	<b>119.3</b>	<b>122.7</b>	<b>122.5</b>	<b>123.3</b>
1.3.2.1 Wines & spirits	0.408	113.8	112.1	115.6	115.6	116.5
1.3.2.2 Malt liquors and Malt	0.225	120.5	119.4	122.6	123.4	124.2
1.3.2.3 Soft drinks; Production of mineral waters and Other bottled waters	0.275	131.2	129.9	133.3	132.0	132.5
<b>  1.3.3 MANUFACTURE OF TOBACCO PRODUCTS</b>	<b>0.514</b>	<b>150.4</b>	<b>150.8</b>	<b>153.2</b>	<b>152.1</b>	<b>155.1</b>
1.3.3.1 Tobacco products	0.514	150.4	150.8	153.2	152.1	155.1
<b>  1.3.4 MANUFACTURE OF TEXTILES</b>	<b>4.881</b>	<b>117.9</b>	<b>116.2</b>	<b>119.4</b>	<b>119.7</b>	<b>119.3</b>
1.3.4.1 Preparation and Spinning of textile fibres	2.582	110.6	109.0	111.7	111.2	110.7
1.3.4.2 Weaving & Finishing of textiles	1.509	127.3	125.3	130.3	130.9	130.6
1.3.4.3 Knitted and Crocheted fabrics	0.193	112.9	112.2	111.6	114.4	115.2
1.3.4.4 Made-up textile articles, Except apparel	0.299	130.3	126.5	132.2	134.8	134.8
1.3.4.5 Cordage, Rope, Twine and Netting	0.098	138.7	137.6	139.4	139.7	139.8
1.3.4.6 Other textiles	0.201	118.3	117.6	115.7	116.6	117.3
<b>  1.3.5 MANUFACTURE OF WEARING APPAREL</b>	<b>0.814</b>	<b>138.8</b>	<b>139.7</b>	<b>139.0</b>	<b>139.2</b>	<b>138.7</b>
1.3.5.1 Manufacture of Wearing Apparel (woven), Except fur Apparel	0.593	139.4	140.5	140.2	140.5	139.6
1.3.5.2 Knitted and Crocheted apparel	0.221	137.0	137.7	135.5	136.0	136.3

**No. 21: Wholesale Price Index (Contd.)**  
 (Base: 2011-12 = 100)

Commodities	Weight	2018-19	2018		2019	
			Jun.	Apr.	May (P)	Jun. (P)
	1	2	3	4	5	6
<b>1.3.6 MANUFACTURE OF LEATHER AND RELATED PRODUCTS</b>	<b>0.535</b>	<b>121.8</b>	<b>123.1</b>	<b>120.6</b>	<b>119.7</b>	<b>119.2</b>
1.3.6.1 Tanning and Dressing of leather; Dressing and Dyeing of fur	0.142	111.0	117.0	108.4	106.0	106.0
1.3.6.2 Luggage, Handbags, Saddlery and Harness	0.075	134.7	134.2	135.3	135.6	136.3
1.3.6.3 Footwear	0.318	123.5	123.1	122.5	122.0	121.1
<b>1.3.7 MANUFACTURE OF WOOD AND PRODUCTS OF WOOD AND CORK</b>	<b>0.772</b>	<b>133.5</b>	<b>132.7</b>	<b>133.6</b>	<b>134.3</b>	<b>134.6</b>
1.3.7.1 Saw milling and Planing of wood	0.124	124.5	123.4	125.6	126.5	126.6
1.3.7.2 Veneer sheets; Manufacture of plywood, Laminboard, Particle board and Other panels and Boards	0.493	136.3	134.6	135.3	135.4	134.9
1.3.7.3 Builder's carpentry and Joinery	0.036	158.7	158.3	173.9	174.6	175.5
1.3.7.4 Wooden containers	0.119	124.1	126.7	123.3	126.0	129.2
<b>1.3.8 MANUFACTURE OF PAPER AND PAPER PRODUCTS</b>	<b>1.113</b>	<b>123.3</b>	<b>121.3</b>	<b>123.9</b>	<b>123.5</b>	<b>122.7</b>
1.3.8.1 Pulp, Paper and Paperboard	0.493	129.3	126.4	129.5	128.9	127.9
1.3.8.2 Corrugated paper and Paperboard and Containers of paper and Paperboard	0.314	116.5	115.1	116.2	115.7	114.7
1.3.8.3 Other articles of paper and Paperboard	0.306	120.6	119.3	122.9	122.9	122.6
<b>1.3.9 PRINTING AND REPRODUCTION OF RECORDED MEDIA</b>	<b>0.676</b>	<b>146.6</b>	<b>147.0</b>	<b>150.1</b>	<b>148.3</b>	<b>148.6</b>
1.3.9.1 Printing	0.676	146.6	147.0	150.1	148.3	148.6
<b>1.3.10 MANUFACTURE OF CHEMICALS AND CHEMICAL PRODUCTS</b>	<b>6.465</b>	<b>119.1</b>	<b>117.6</b>	<b>119.9</b>	<b>119.7</b>	<b>119.3</b>
1.3.10.1 Basic chemicals	1.433	125.0	123.1	125.4	124.9	124.1
1.3.10.2 Fertilizers and Nitrogen compounds	1.485	121.1	118.7	122.9	123.1	123.3
1.3.10.3 Plastic and Synthetic rubber in primary form	1.001	117.6	117.7	116.9	115.5	114.3
1.3.10.4 Pesticides and Other agrochemical products	0.454	120.2	117.9	123.0	124.2	123.9
1.3.10.5 Paints, Varnishes and Similar coatings, Printing ink and Mastics	0.491	112.7	111.8	116.2	115.2	115.6
1.3.10.6 Soap and Detergents, Cleaning and Polishing preparations, Perfumes and Toilet preparations	0.612	116.8	114.7	120.0	119.6	120.2
1.3.10.7 Other chemical products	0.692	116.6	115.9	115.6	115.8	115.2
1.3.10.8 Man-made fibres	0.296	104.0	104.0	100.7	101.0	100.4
<b>1.3.11 MANUFACTURE OF PHARMACEUTICALS, MEDICINAL CHEMICAL AND BOTANICAL PRODUCTS</b>	<b>1.993</b>	<b>123.5</b>	<b>122.2</b>	<b>125.1</b>	<b>125.5</b>	<b>125.5</b>
1.3.11.1 Pharmaceuticals, Medicinal chemical and Botanical products	1.993	123.5	122.2	125.1	125.5	125.5
<b>1.3.12 MANUFACTURE OF RUBBER AND PLASTICS PRODUCTS</b>	<b>2.299</b>	<b>109.6</b>	<b>108.9</b>	<b>109.7</b>	<b>109.2</b>	<b>109.1</b>
1.3.12.1 Rubber Tyres and Tubes; Retreading and Rebuilding of Rubber Tyres	0.609	98.9	97.2	100.2	99.5	99.3
1.3.12.2 Other Rubber Products	0.272	91.7	90.5	92.5	92.5	93.1
1.3.12.3 Plastics products	1.418	117.6	117.5	117.1	116.6	116.3
<b>1.3.13 MANUFACTURE OF OTHER NON-METALLIC MINERAL PRODUCTS</b>	<b>3.202</b>	<b>115.9</b>	<b>115.2</b>	<b>117.4</b>	<b>118.4</b>	<b>118.2</b>
1.3.13.1 Glass and Glass products	0.295	121.4	119.1	125.4	126.0	125.5
1.3.13.2 Refractory products	0.223	111.1	112.1	108.0	107.7	109.5
1.3.13.3 Clay Building Materials	0.121	98.0	95.2	102.2	101.4	100.5
1.3.13.4 Other Porcelain and Ceramic Products	0.222	112.7	112.5	114.5	114.5	114.5
1.3.13.5 Cement, Lime and Plaster	1.645	114.3	113.5	119.9	122.0	121.7
1.3.13.6 Articles of Concrete, Cement and Plaster	0.292	121.5	121.5	121.8	120.8	120.6
1.3.13.7 Cutting, Shaping and Finishing of Stone	0.234	118.8	118.0	120.5	119.9	119.6
1.3.13.8 Other Non-Metallic Mineral Products	0.169	130.4	131.2	94.4	95.2	94.6
<b>1.3.14 MANUFACTURE OF BASIC METALS</b>	<b>9.646</b>	<b>112.2</b>	<b>112.9</b>	<b>110.5</b>	<b>109.7</b>	<b>108.7</b>
1.3.14.1 Inputs into steel making	1.411	113.0	112.9	106.2	105.7	105.4
1.3.14.2 Metallic Iron	0.653	117.8	118.6	115.5	114.0	113.7
1.3.14.3 Mild Steel - Semi Finished Steel	1.274	99.5	100.8	98.0	96.7	96.0
1.3.14.4 Mild Steel - Long Products	1.081	110.2	110.8	110.1	109.4	108.7
1.3.14.5 Mild Steel - Flat products	1.144	119.6	120.6	116.0	115.3	113.7
1.3.14.6 Alloy steel other than Stainless Steel- Shapes	0.067	111.7	111.3	110.6	109.5	108.5
1.3.14.7 Stainless Steel - Semi Finished	0.924	112.7	116.9	109.9	109.7	106.6
1.3.14.8 Pipes & tubes	0.205	126.6	126.5	127.1	127.1	128.2
1.3.14.9 Non-ferrous metals incl. precious metals	1.693	112.2	114.7	110.1	109.2	107.9
1.3.14.10 Castings	0.925	109.8	107.6	113.1	111.5	110.9
1.3.14.11 Forgings of steel	0.271	126.8	115.3	140.5	141.6	142.8
<b>1.3.15 MANUFACTURE OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND EQUIPMENT</b>	<b>3.155</b>	<b>115.1</b>	<b>114.1</b>	<b>116.8</b>	<b>116.9</b>	<b>116.4</b>
1.3.15.1 Structural Metal Products	1.031	112.8	110.6	115.6	115.3	114.5
1.3.15.2 Tanks, Reservoirs and Containers of Metal	0.660	127.3	128.3	126.7	126.3	126.4
1.3.15.3 Steam generators, Except Central Heating Hot Water Boilers	0.145	105.9	108.5	102.7	102.6	102.6
1.3.15.4 Forging, Pressing, Stamping and Roll-Forming of Metal; Powder Metallurgy	0.383	96.3	95.9	101.6	102.3	101.6
1.3.15.5 Cutlery, Hand Tools and General Hardware	0.208	99.7	99.9	99.9	100.1	100.2
1.3.15.6 Other Fabricated Metal Products	0.728	123.1	120.8	125.3	126.1	125.2
<b>1.3.16 MANUFACTURE OF COMPUTER, ELECTRONIC AND OPTICAL PRODUCTS</b>	<b>2.009</b>	<b>111.8</b>	<b>111.2</b>	<b>111.4</b>	<b>111.4</b>	<b>111.4</b>
1.3.16.1 Electronic Components	0.402	100.9	100.4	98.0	98.7	98.3
1.3.16.2 Computers and Peripheral Equipment	0.336	132.5	127.3	135.1	135.0	135.0

**No. 21: Wholesale Price Index (Concl.)**  
 (Base: 2011-12 = 100)

Commodities	Weight	2018-19	2018		2019	
			Jun.	Apr.	May (P)	Jun. (P)
			1	2	3	4
1.3.16.3 Communication Equipment	0.310	116.7	117.4	116.6	116.6	116.7
1.3.16.4 Consumer Electronics	0.641	103.8	104.6	101.9	102.0	102.2
1.3.16.5 Measuring, Testing, Navigating and Control equipment	0.181	109.1	109.2	111.9	111.9	112.1
1.3.16.6 Watches and Clocks	0.076	137.9	137.4	139.7	136.6	136.6
1.3.16.7 Irradiation, Electromedical and Electrotherapeutic equipment	0.055	103.2	103.7	105.3	105.3	103.6
1.3.16.8 Optical instruments and Photographic equipment	0.008	108.7	111.8	109.2	109.2	109.3
<b>1.3.17 MANUFACTURE OF ELECTRICAL EQUIPMENT</b>	<b>2.930</b>	<b>111.7</b>	<b>111.8</b>	<b>112.7</b>	<b>112.0</b>	<b>111.9</b>
1.3.17.1 Electric motors, Generators, Transformers and Electricity distribution and Control apparatus	1.298	107.7	107.4	111.0	109.6	109.6
1.3.17.2 Batteries and Accumulators	0.236	117.7	118.0	117.6	117.5	117.6
1.3.17.3 Fibre optic cables for data transmission or live transmission of images	0.133	126.1	127.3	119.0	118.0	117.2
1.3.17.4 Other electronic and Electric wires and Cables	0.428	111.2	111.9	110.2	110.2	108.6
1.3.17.5 Wiring devices, Electric lighting & display equipment	0.263	108.6	108.2	110.3	110.0	111.4
1.3.17.6 Domestic appliances	0.366	121.6	122.9	120.4	120.4	120.4
1.3.17.7 Other electrical equipment	0.206	108.6	107.6	108.9	108.5	109.3
<b>1.3.18 MANUFACTURE OF MACHINERY AND EQUIPMENT</b>	<b>4.789</b>	<b>111.3</b>	<b>110.5</b>	<b>112.5</b>	<b>112.7</b>	<b>113.1</b>
1.3.18.1 Engines and Turbines, Except aircraft, Vehicle and Two wheeler engines	0.638	103.0	102.1	105.0	105.5	105.4
1.3.18.2 Fluid power equipment	0.162	118.2	117.4	119.5	119.3	119.4
1.3.18.3 Other pumps, Compressors, Taps and Valves	0.552	108.9	109.1	110.1	110.2	110.4
1.3.18.4 Bearings, Gears, Gearing and Driving elements	0.340	111.2	111.7	110.1	109.9	109.8
1.3.18.5 Ovens, Furnaces and Furnace burners	0.008	78.2	79.3	77.9	79.3	79.3
1.3.18.6 Lifting and Handling equipment	0.285	110.4	109.5	111.8	111.9	111.7
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	129.6	130.2	128.4	128.6	131.2
1.3.18.9 Agricultural and Forestry machinery	0.833	116.9	114.6	119.3	119.2	119.7
1.3.18.10 Metal-forming machinery and Machine tools	0.224	101.8	97.5	104.9	107.2	107.4
1.3.18.11 Machinery for mining, Quarrying and Construction	0.371	75.7	74.1	76.9	76.8	76.7
1.3.18.12 Machinery for food, Beverage and Tobacco processing	0.228	124.7	124.1	123.1	123.9	125.4
1.3.18.13 Machinery for textile, Apparel and Leather production	0.192	119.9	121.8	122.1	121.8	121.8
1.3.18.14 Other special-purpose machinery	0.468	123.8	123.4	125.6	125.8	126.0
1.3.18.15 Renewable electricity generating equipment	0.046	67.3	67.2	66.6	66.6	66.6
<b>1.3.19 MANUFACTURE OF MOTOR VEHICLES, TRAILERS AND SEMI-TRAILERS</b>	<b>4.969</b>	<b>112.8</b>	<b>111.7</b>	<b>113.2</b>	<b>113.3</b>	<b>114.1</b>
1.3.19.1 Motor vehicles	2.600	113.3	112.5	113.6	113.7	114.6
1.3.19.2 Parts and Accessories for motor vehicles	2.368	112.2	111.0	112.8	112.9	113.6
<b>1.3.20 MANUFACTURE OF OTHER TRANSPORT EQUIPMENT</b>	<b>1.648</b>	<b>111.7</b>	<b>110.6</b>	<b>114.2</b>	<b>114.8</b>	<b>116.9</b>
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	104.7	105.2	106.2	106.2	106.2
1.3.20.3 Motor cycles	1.302	106.6	105.4	109.4	110.3	113.0
1.3.20.4 Bicycles and Invalid carriages	0.117	127.8	125.2	130.5	128.7	128.8
1.3.20.5 Other transport equipment	0.002	123.5	121.3	124.7	125.0	125.1
<b>1.3.21 MANUFACTURE OF FURNITURE</b>	<b>0.727</b>	<b>127.3</b>	<b>124.6</b>	<b>128.4</b>	<b>129.4</b>	<b>128.4</b>
1.3.21.1 Furniture	0.727	127.3	124.6	128.4	129.4	128.4
<b>1.3.22 OTHER MANUFACTURING</b>	<b>1.064</b>	<b>107.0</b>	<b>106.9</b>	<b>106.5</b>	<b>106.3</b>	<b>106.2</b>
1.3.22.1 Jewellery and Related articles	0.996	103.9	103.8	103.3	103.1	103.0
1.3.22.2 Musical instruments	0.001	174.1	173.7	170.4	173.0	177.2
1.3.22.3 Sports goods	0.012	127.4	126.2	127.7	127.0	127.8
1.3.22.4 Games and Toys	0.005	132.2	129.2	138.9	136.1	137.4
1.3.22.5 Medical and Dental instruments and Supplies	0.049	159.2	160.4	160.9	160.9	161.1
<b>2 FOOD INDEX</b>	<b>24.378</b>	<b>138.1</b>	<b>136.8</b>	<b>141.5</b>	<b>142.3</b>	<b>143.7</b>

**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	2017-18	2018-19	April-May		May	
				2018-19	2019-20	2018	2019
	1	2	3	4	5	6	7
<b>General Index</b>	100.00	125.3	129.8	126.1	130.8	129.6	133.6
<b>1 Sectoral Classification</b>							
1.1 Mining	14.37	104.9	107.9	105.1	109.4	107.6	111.0
1.2 Manufacturing	77.63	126.6	131.1	126.6	130.7	130.1	133.3
1.3 Electricity	7.99	149.2	156.9	159.2	169.9	164.7	176.9
<b>2 Use-Based Classification</b>							
2.1 Primary Goods	34.05	121.8	126.1	124.4	129.0	129.0	132.2
2.2 Capital Goods	8.22	105.6	108.5	101.9	102.9	106.1	106.9
2.3 Intermediate Goods	17.22	125.1	124.5	121.8	123.3	123.4	124.2
2.4 Infrastructure/ Construction Goods	12.34	132.0	141.9	138.4	147.2	140.8	148.6
2.5 Consumer Durables	12.84	123.6	130.4	129.0	130.3	133.5	133.4
2.6 Consumer Non-Durables	15.33	139.9	145.4	135.7	145.0	138.6	149.3

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**

(₹ Billion)

Item	Financial Year 2019-20 (Budget Estimates)	April - Jun			
		2019-20 (Actuals)	2018-19 (Actuals)	Percentage to Budget Estimates	
				2019-20	2018-19
	1	2	3	4	5
<b>1 Revenue Receipts</b>	<b>19,627.6</b>	<b>2,848.9</b>	<b>2,677.7</b>	<b>14.5</b>	<b>15.5</b>
1.1 Tax Revenue (Net)	16,495.8	2,514.1	2,371.7	15.2	16.0
1.2 Non-Tax Revenue	3,131.8	334.8	306.0	10.7	12.5
<b>2 Non-Debt Capital Receipt</b>	<b>1,198.3</b>	<b>47.6</b>	<b>108.4</b>	<b>4.0</b>	<b>11.8</b>
2.1 Recovery of Loans	148.3	24.1	20.8	16.2	17.1
2.2 Other Receipts	1,050.0	23.6	87.6	2.2	11.0
<b>3 Total Receipts (excluding borrowings) (1+2)</b>	<b>20,825.9</b>	<b>2,896.5</b>	<b>2,786.1</b>	<b>13.9</b>	<b>15.3</b>
4 Revenue Expenditure	24,477.8	6,587.1	6,206.6	26.9	29.0
4.1 Interest Payments	6,604.7	1,417.6	1,449.2	21.5	25.2
5 Capital Expenditure	3,385.7	630.0	869.9	18.6	29.0
<b>6 Total Expenditure (4+5)</b>	<b>27,863.5</b>	<b>7,217.1</b>	<b>7,076.5</b>	<b>25.9</b>	<b>29.0</b>
<b>7 Revenue Deficit (4-1)</b>	<b>4,850.2</b>	<b>3,738.2</b>	<b>3,528.9</b>	<b>77.1</b>	<b>84.8</b>
<b>8 Fiscal Deficit (6-3)</b>	<b>7,037.6</b>	<b>4,320.6</b>	<b>4,290.3</b>	<b>61.4</b>	<b>68.7</b>
<b>9 Gross Primary Deficit (8-4.1)</b>	<b>432.9</b>	<b>2,903.0</b>	<b>2,841.2</b>	<b>670.6</b>	<b>586.0</b>

Source: Controller General of Accounts (CGA), Ministry of Finance, Government of India and Union Budget 2018-19.

**No. 24: Treasury Bills – Ownership Pattern**

(₹ Billion)

Item	2018-19	2018		2019					
		Jun. 22		May 24	May 31	Jun. 7	Jun. 14	Jun. 21	Jun. 28
		1	2	3	4	5	6	7	8
<b>1 91-day</b>									
1.1 Banks		185.2	503.3	248.9	245.8	250.4	259.9	294.6	297.0
1.2 Primary Dealers		178.8	164.7	182.1	218.7	159.8	151.5	152.5	167.0
1.3 State Governments		270.0	718.1	551.1	521.1	523.3	523.3	571.3	596.4
1.4 Others		277.5	376.4	609.6	627.0	730.6	779.4	793.1	825.2
<b>2 182-day</b>									
2.1 Banks		319.5	290.2	409.7	419.1	419.9	436.6	468.5	463.2
2.2 Primary Dealers		387.4	401.0	554.5	556.2	561.5	558.1	563.5	595.4
2.3 State Governments		280.4	327.9	209.2	209.2	209.2	140.1	87.9	62.8
2.4 Others		185.7	244.8	170.6	190.0	214.7	231.5	223.0	226.3
<b>3 364-day</b>									
3.1 Banks		488.1	381.4	491.6	474.4	469.6	467.0	479.0	511.4
3.2 Primary Dealers		741.7	683.2	867.4	884.5	864.4	876.0	887.3	884.4
3.3 State Governments		188.9	149.5	187.1	187.1	196.9	196.9	159.0	159.0
3.4 Others		623.9	510.5	489.8	493.2	516.8	508.0	487.1	458.1
<b>4 14-day Intermediate</b>									
4.1 Banks		—	—	—	—	—	—	—	—
4.2 Primary Dealers		—	—	—	—	—	—	—	—
4.3 State Governments		1,656.1	1,307.4	1,436.5	1,309.1	947.4	792.4	1,322.4	1,219.6
4.4 Others		2.5	12.3	3.3	4.5	13.1	4.1	10.5	2.3
<b>Total Treasury Bills (Excluding 14 day Intermediate T Bills) #</b>		4,127.0	4,750.9	4,971.5	5,026.4	5,117.2	5,128.4	5,166.7	5,246.2

# 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**

(₹ Billion)

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		Competitive	Non-Competitive								
		1	2	3	4	5	6	7	8	9	10				
<b>91-day Treasury Bills</b>															
<b>2019-20</b>															
May 29	90	77	963.80	30.02	22	89.98	30.02	120.00	98.48	6.1908					
Jun. 4	90	67	854.72	10.37	27	89.93	10.37	100.30	98.51	6.0668					
Jun. 12	90	59	524.99	11.25	16	89.95	11.25	101.20	98.54	5.9428					
Jun. 19	90	59	374.49	61.57	42	89.93	61.57	151.50	98.53	5.9841					
Jun. 26	90	62	450.12	35.06	46	89.94	35.06	125.00	98.52	6.0254					
<b>182-day Treasury Bills</b>															
<b>2019-20</b>															
May 29	70	56	194.05	0.00	24	70.00	0.00	70.00	96.97	6.2665					
Jun. 4	70	58	143.32	0.00	37	70.00	0.00	70.00	97.01	6.1812					
Jun. 12	70	56	131.86	0.01	41	69.99	0.01	70.00	97.04	6.1173					
Jun. 19	70	61	164.47	1.48	36	69.74	1.48	71.22	97.05	6.0960					
Jun. 26	70	52	152.70	0.00	27	70.00	0.00	70.00	97.02	6.1599					
<b>364-day Treasury Bills</b>															
<b>2019-20</b>															
May 29	40	53	155.70	0.09	14	39.91	0.09	40.00	94.09	6.2985					
Jun. 4	40	63	142.50	10.00	19	40.00	10.00	50.00	94.19	6.1853					
Jun. 12	40	52	111.33	0.02	31	39.98	0.02	40.00	94.24	6.1288					
Jun. 19	40	42	90.06	0.00	27	40.00	0.00	40.00	94.24	6.1288					
Jun. 26	40	56	119.46	0.00	24	40.00	0.00	40.00	94.21	6.1627					

# 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, 2019	4.50-6.00	5.58
June	3, 2019	4.50-6.00	5.85
June	4, 2019	4.50-6.00	5.87
June	6, 2019	4.40-6.00	5.85
June	7, 2019	4.40-5.80	5.69
June	10, 2019	4.40-5.80	5.69
June	11, 2019	4.40-5.80	5.70
June	12, 2019	4.40-5.80	5.69
June	13, 2019	4.40-5.85	5.69
June	14, 2019	4.40-6.12	5.81
June	15, 2019	4.60-6.00	5.59
June	17, 2019	4.40-5.90	5.78
June	18, 2019	4.40-5.90	5.75
June	19, 2019	4.40-5.91	5.80
June	20, 2019	4.40-6.00	5.81
June	21, 2019	4.40-5.90	5.78
June	24, 2019	4.40-5.90	5.77
June	25, 2019	4.40-6.00	5.76
June	26, 2019	4.40-7.45	5.77
June	27, 2019	4.40-6.02	5.73
June	28, 2019	4.40-6.30	5.90
June	29, 2019	4.50-6.05	5.79
July	1, 2019	4.40-5.90	5.74
July	2, 2019	4.40-6.05	5.71
July	3, 2019	4.40-5.90	5.65
July	4, 2019	4.40-5.90	5.67
July	5, 2019	4.40-5.80	5.53
July	6, 2019	4.50-5.80	5.52
July	8, 2019	4.40-5.90	5.65
July	9, 2019	4.40-5.85	5.62
July	10, 2019	4.40-5.85	5.62
July	11, 2019	4.40-5.90	5.58
July	12, 2019	4.40-5.85	5.63
July	15, 2019	4.40-5.80	5.59

**Note:** Includes Notice Money.

**No. 27: Certificates of Deposit**

Item	2018		2019			
	Jun. 22		May 10	May 24	Jun. 7	Jun. 21
	1	2	3	4	5	
1 Amount Outstanding (₹Billion)	1,745.0	2,494.8	2,271.5	2,186.7	2,159.4	
1.1 Issued during the fortnight (₹ Billion)	212.0	66.2	139.4	191.6	280.7	
2 Rate of Interest (per cent)	6.80-8.50	7.30-8.60	6.72-7.90	6.35-8.00	5.97-6.96	

**No. 28: Commercial Paper**

Item	2018		2019			
	Jun. 30		May 15	May 31	Jun. 15	Jun. 30
	1	2	3	4	5	
1 Amount Outstanding (₹ Billion)	4,918.3	5,837.2	5,519.8	5,561.8	5,039.4	
1.1 Reported during the fortnight (₹ Billion)	1,267.3	1,059.7	1,024.5	1,078.7	1,076.9	
2 Rate of Interest (per cent)	6.16-11.19	6.81-13.04	6.43-10.08	5.87-13.97	5.79-11.89	

**No. 29: Average Daily Turnover in Select Financial Markets**

(₹ Billion)

Item	2018-19	2018		2019				
		Jun. 22	May 24	May 31	Jun. 7	Jun. 14	Jun. 21	Jun. 28
	1	2	3	4	5	6	7	8
1 Call Money	312.8	428.6	425.0	340.8	303.3	303.1	397.6	315.0
2 Notice Money	49.3	3.3	4.8	74.0	3.6	96.6	4.1	56.8
3 Term Money	7.4	7.0	7.8	4.8	11.5	8.7	8.5	12.6
4 CBLO/TRIPARTY REPO	2,130.1	2,237.9	2,713.2	2,757.3	2,398.0	2,993.5	2,594.9	2,985.2
5 Market Repo	2,009.7	2,491.1	1,985.5	2,334.4	2,024.2	2,698.7	2,067.8	2,551.9
6 Repo in Corporate Bond		7.6	19.5	29.5	6.2	62.7	46.4	34.0
7 Forex (US \$ million)	67,793	62,202	64,867	65,606	65,574	60,894	64,690	77,216
8 Govt. of India Dated Securities	658	623.9	908.2	1,091.7	1,565.5	1,061.6	1,780.7	1,301.3
9 State Govt. Securities	43.2	29.5	58.0	98.9	85.0	95.1	80.4	45.7
10 Treasury Bills								
10.1 91-Day	33.8	44.9	37.4	28.2	24.4	57.0	51.7	49.9
10.2 182-Day	14.5	4.5	17.8	39.7	34.8	26.5	24.0	28.8
10.3 364-Day	16.2	9.0	29.4	41.4	63.2	29.2	17.1	28.3
10.4 Cash Management Bills	14	13.2	—	—	—	—	—	—
11 Total Govt. Securities (8+9+10)	779.7	725.0	1,050.8	1,300.0	1,773.0	1,269.3	1,954.0	1,454.0
11.1 RBI	—	20.1	2.8	2.7	3.6	41.8	27.9	0.2

**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**

Security & Type of Issue	2018-19		2018-19 (Apr.-Jun.)		2019-20 (Apr.-Jun.) *		Jun. 2018		Jun. 2019 *	
	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
<b>1 Equity Shares</b>	<b>129</b>	<b>167.5</b>	<b>44</b>	<b>52.6</b>	<b>25</b>	<b>528.0</b>	<b>10</b>	<b>26.9</b>	<b>9</b>	<b>5.7</b>
1A Premium	124	160.8	43	51.0	25	315.8	10	26.6	9	5.4
1.1 Public	119	146.1	42	51.1	20	34.1	10	26.9	8	5.6
1.1.1 Premium	115	141.2	41	49.5	20	33.2	10	26.6	8	5.4
1.2 Rights	10	21.5	2	1.5	5	493.9	—	—	1	0.1
1.2.1 Premium	9	19.6	2	1.5	5	282.6	—	—	1	0.1
<b>2 Preference Shares</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
2.1 Public	—	—	—	—	—	—	—	—	—	—
2.2 Rights	—	—	—	—	—	—	—	—	—	—
<b>3 Debentures</b>	<b>25</b>	<b>366.8</b>	<b>5</b>	<b>154.2</b>	<b>10</b>	<b>40.9</b>	<b>—</b>	<b>—</b>	<b>1</b>	<b>8.5</b>
3.1 Convertible	—	—	—	—	—	—	—	—	—	—
3.1.1 Public	—	—	—	—	—	—	—	—	—	—
3.1.2 Rights	—	—	—	—	—	—	—	—	—	—
3.2 Non-Convertible	25	366.8	5	154.2	10	40.9	—	—	1	8.5
3.2.1 Public	25	366.8	5	154.2	10	40.9	—	—	1	8.5
3.2.2 Rights	—	—	—	—	—	—	—	—	—	—
<b>4 Bonds</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
4.1 Public	—	—	—	—	—	—	—	—	—	—
4.2 Rights	—	—	—	—	—	—	—	—	—	—
<b>5 Total (1+2+3+4)</b>	<b>154</b>	<b>534.3</b>	<b>49</b>	<b>206.8</b>	<b>35</b>	<b>568.9</b>	<b>10</b>	<b>26.9</b>	<b>10</b>	<b>14.2</b>
5.1 Public	144	512.8	47	205.3	30	75.0	10	26.9	9	14.1
5.2 Rights	10	21.5	2	1.5	5	493.9	—	—	1	0.1

\* : Data is Provisional

Note : Since April 2018, monthly data is compiled on the basis of closing date of issues as against the earlier practice of compilation on the basis of opening date.

Source : Securities and Exchange Board of India.

## External Sector

### No. 31: Foreign Trade

Item	Unit	2018-19	2018		2019			
					Jun.	Feb.	Mar.	Apr.
			1	2	3	4	5	6
1 Exports	₹ Billion	23,076.6	1,878.0	1,913.2	2,273.7	1,809.4	2,093.7	1,736.8
	US \$ Million	330,069.6	27,702.0	26,862.1	32,725.2	26,061.5	30,008.0	25,012.3
1.1 Oil	₹ Billion	3,258.6	275.8	219.6	251.3	254.8	360.0	189.7
	US \$ Million	46,544.4	4,069.0	3,083.4	3,616.9	3,669.9	5,159.4	2,732.4
1.2 Non-oil	₹ Billion	19,818.0	1,602.2	1,693.6	2,022.4	1,554.6	1,733.8	1,547.1
	US \$ Million	283,525.2	23,633.0	23,778.7	29,108.2	22,391.5	24,848.5	22,279.9
2 Imports	₹ Billion	35,943.7	3,003.5	2,606.1	3,035.6	2,874.3	3,164.5	2,797.7
	US \$ Million	514,034.1	44,304.2	36,591.1	43,690.4	41,400.0	45,354.1	40,290.3
2.1 Oil	₹ Billion	9,862.6	862.7	670.5	818.5	794.3	868.2	765.9
	US \$ Million	140,918.4	12,725.6	9,414.0	11,780.2	11,440.7	12,443.5	11,029.4
2.2 Non-oil	₹ Billion	26,081.1	2,140.8	1,935.6	2,217.1	2,080.0	2,296.3	2,031.8
	US \$ Million	373,115.6	31,578.6	27,177.1	31,910.2	29,959.2	32,910.6	29,260.9
3 Trade Balance	₹ Billion	-12,867.1	-1,125.5	-692.9	-761.9	-1,064.9	-1,070.8	-1,060.9
	US \$ Million	-183,964.5	-16,602.2	-9,729.1	-10,965.3	-15,338.5	-15,346.2	-15,278.0
3.1 Oil	₹ Billion	-6,604.0	-586.9	-450.9	-567.2	-539.5	-508.2	-576.1
	US \$ Million	-94,374.0	-8,656.6	-6,330.6	-8,163.3	-7,770.8	-7,284.1	-8,297.0
3.2 Non-oil	₹ Billion	-6,263.1	-538.7	-242.0	-194.7	-525.4	-562.5	-484.7
	US \$ Million	-89,590.5	-7,945.6	-3,398.4	-2,802.0	-7,567.7	-8,062.1	-6,981.0

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

### No. 32: Foreign Exchange Reserves

Item	Unit	2018		2019				
				Jul. 20	Jun. 14	Jun. 21	Jun. 28	Jul. 5
		1	2	3	4	5	6	Jul. 19
1 Total Reserves	₹ Billion	27,873	29,376	29,697	29,495	29,471	29,450	29,636
	US \$ Million	405,143	422,200	426,416	427,679	429,911	428,798	430,376
1.1 Foreign Currency Assets	₹ Billion	26,151	27,440	27,760	27,561	27,467	27,446	27,618
	US \$ Million	380,050	394,447	398,649	399,902	400,809	399,698	401,091
1.2 Gold	₹ Billion	1,450	1,603	1,603	1,603	1,675	1,675	1,675
	US \$ Million	21,140	22,959	22,959	22,959	24,305	24,305	24,305
1.3 SDRs	SDRs Million	1,057	1,047	1,047	1,047	1,047	1,047	1,047
	₹ Billion	102	101	101	100	100	100	100
1.4 Reserve Tranche Position in IMF	US \$ Million	1,480	1,449	1,453	1,456	1,452	1,450	1,447
	₹ Billion	170	233	234	232	230	229	243
	US \$ Million	2,474	3,345	3,355	3,362	3,347	3,345	3,534

### No. 33: NRI Deposits

(US\$ Million)

Scheme	Outstanding				Flows	
	2018-19	2018		2019		2018-19
		Jun.	May	Jun.	Apr.-Jun.	Apr.-Jun.
1	2	3	4	5	6	
<b>1 NRI Deposits</b>	<b>130,423</b>	<b>124,256</b>	<b>131,937</b>	<b>133,692</b>	<b>3,512</b>	<b>2,859</b>
1.1 FCNR(B)	23,170	22,568	24,318	24,364	543	1,194
1.2 NR(E)RA	92,017	87,836	92,193	93,405	2,501	1,040
1.3 NRO	15,236	13,852	15,425	15,922	468	624

**No. 34: Foreign Investment Inflows**

(US\$ Million)

Item	2018-19	2018-19	2019-20	2018	2019	
		Apr.-Jun.	Apr.-Jun.	Jun.	May	Jun.
	1	2	3	4	5	6
<b>1.1 Net Foreign Direct Investment (1.1.1–1.1.2)</b>	<b>30,712</b>	<b>9,572</b>	<b>14,491</b>	<b>1,645</b>	<b>3,034</b>	<b>7,001</b>
<b>1.1.1 Direct Investment to India (1.1.1.1–1.1.2)</b>	<b>43,302</b>	<b>13,126</b>	<b>17,332</b>	<b>3,015</b>	<b>4,199</b>	<b>7,845</b>
<b>1.1.1.1 Gross Inflows/Gross Investments</b>	<b>62,001</b>	<b>16,960</b>	<b>21,310</b>	<b>4,293</b>	<b>5,076</b>	<b>9,198</b>
1.1.1.1.1 Equity	45,055	12,914	16,492	2,945	3,850	7,336
1.1.1.1.1.1 Government (SIA/FIPB)	2,429	1,541	2,715	236	208	2,444
1.1.1.1.1.2 RBI	36,315	10,038	12,192	1,972	2,979	4,628
1.1.1.1.1.3 Acquisition of shares	5,622	1,173	1,422	683	608	210
1.1.1.1.1.4 Equity capital of unincorporated bodies	689	163	163	54	54	54
1.1.1.1.2 Reinvested earnings	13,672	3,228	3,228	1,076	1,076	1,076
1.1.1.1.3 Other capital	3,274	817	1,590	272	150	785
<b>1.1.1.2 Repatriation/Disinvestment</b>	<b>18,699</b>	<b>3,834</b>	<b>3,979</b>	<b>1,278</b>	<b>876</b>	<b>1,353</b>
1.1.1.2.1 Equity	18,452	3,821	3,959	1,274	875	1,341
1.1.1.2.2 Other capital	247	12	19	4	1	12
<b>1.1.2 Foreign Direct Investment by India (1.1.2.1+1.1.2.2+1.1.2.3–1.1.2.4)</b>	<b>12,590</b>	<b>3,554</b>	<b>2,841</b>	<b>1,371</b>	<b>1,165</b>	<b>844</b>
1.1.2.1 Equity capital	7,201	2,326	1,220	912	535	371
1.1.2.2 Reinvested Earnings	3,032	758	758	253	253	253
1.1.2.3 Other Capital	5,202	745	1,248	298	522	347
1.1.2.4 Repatriation/Disinvestment	2,845	276	384	92	145	127
<b>1.2 Net Portfolio Investment (1.2.1+1.2.2+1.2.3–1.2.4)</b>	<b>-618</b>	<b>-8,145</b>	<b>3,938</b>	<b>-3,882</b>	<b>4,528</b>	<b>1,053</b>
1.2.1 GDRs/ADRs	1,820	—	—	—	—	—
1.2.2 FIIs	-2,225	-9,106	3,928	-4,202	2,295	1,658
1.2.3 Offshore funds and others	—	—	—	—	—	—
1.2.4 Portfolio investment by India	213	-961	-10	-320	-2,233	605
<b>1 Foreign Investment Inflows</b>	<b>30,094</b>	<b>1,427</b>	<b>18,429</b>	<b>-2,237</b>	<b>7,562</b>	<b>8,054</b>

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

(US\$ Million)

Item	2018-19	2018	2019		
		Jun.	Apr.	May	Jun.
	1	2	3	4	5
<b>1 Outward Remittances under the LRS</b>	<b>13,787.6</b>	<b>1,030.6</b>	<b>1,287.9</b>	<b>1,486.1</b>	<b>1,407.5</b>
1.1 Deposit	455.9	25.8	65.2	50.2	37.4
1.2 Purchase of immovable property	84.5	7.7	8.5	9.4	3.9
1.3 Investment in equity/debt	422.9	25.2	35.4	31.6	28.6
1.4 Gift	1,370.2	107.8	166.6	154.2	130.9
1.5 Donations	8.7	0.6	0.5	2.8	0.9
1.6 Travel	4,803.8	380.5	429.8	568.3	595.9
1.7 Maintenance of close relatives	2,800.9	208.5	296.1	300.0	230.2
1.8 Medical Treatment	28.6	2.1	2.5	2.5	2.2
1.9 Studies Abroad	3,569.9	257.2	252.8	334.4	353.9
1.10 Others	242.2	15.2	30.5	32.7	23.5

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

Item	2017-18	2018-19	2018		2019	
			July	June	July	5
	1	2	3	4		
<b>36-Currency Export and Trade Based Weights (Base: 2004-05=100)</b>						
1 Trade-Based Weights						
1.1 NEER	76.94	72.64	73.68	74.23	74.68	
1.2 REER	119.71	114.01	115.84	116.22	116.93	
2 Export-Based Weights						
2.1 NEER	78.89	74.18	75.11	75.75	76.28	
2.2 REER	121.94	116.32	118.07	118.71	119.54	
<b>6-Currency Trade Based Weights</b>						
1 Base: 2004-05 (April-March) =100						
1.1 NEER	67.91	63.07	64.03	64.45	65.12	
1.2 REER	129.19	121.70	123.37	124.59	125.08	
2 Base: 2017-18 (April-March) =100						
2.1 NEER	100.00	92.88	94.30	94.91	95.89	
2.2 REER	100.00	94.20	95.50	96.44	96.82	

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

(Amount in US\$ Million)

Item	2018-19	2018		2019	
		Jun.	May	Jun.	
	1	2	3	4	
1 Automatic Route					
1.1 Number	999	85	117	104	
1.2 Amount	28,387	2,714	2,895	3,499	
2 Approval Route					
2.1 Number	21	-	5	5	
2.2 Amount	13,537	-	653	1,900	
3 Total (1+2)					
3.1 Number	1,020	85	122	109	
3.2 Amount	41,924	2,714	3,548	5,399	
4 Weighted Average Maturity (in years)	5.20	5.10	5.40	4.80	
5 Interest Rate (per cent)					
5.1 Weighted Average Margin over 6-month LIBOR or reference rate for Floating Rate Loans	1.20	1.35	1.35	1.59	
5.2 Interest rate range for Fixed Rate Loans	0.00-15.00	0.30-11.00	0.00-11.50	0.00-9.53	

**No. 38: India's Overall Balance of Payments**

(US \$ Million)

Item	Jan-Mar 2018 (PR)			Jan-Mar 2019 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
<b>Overall Balance of Payments(1+2+3)</b>	<b>329,455</b>	<b>316,218</b>	<b>13,237</b>	<b>324,141</b>	<b>309,979</b>	<b>14,162</b>
<b>1 CURRENT ACCOUNT (1.1+ 1.2)</b>	<b>156,683</b>	<b>169,750</b>	<b>-13,066</b>	<b>165,160</b>	<b>169,807</b>	<b>-4,647</b>
<b>1.1 MERCHANDISE</b>	<b>82,218</b>	<b>123,841</b>	<b>-41,623</b>	<b>87,367</b>	<b>122,581</b>	<b>-35,214</b>
<b>1.2 INVISIBLES (1.2.1+1.2.2+1.2.3)</b>	<b>74,466</b>	<b>45,909</b>	<b>28,557</b>	<b>77,792</b>	<b>47,226</b>	<b>30,567</b>
1.2.1 Services	51,585	31,421	20,164	54,630	33,299	21,331
1.2.1.1 Travel	7,710	4,728	2,983	7,583	5,112	2,470
1.2.1.2 Transportation	4,688	4,941	-253	5,154	5,436	-282
1.2.1.3 Insurance	638	370	268	720	603	117
1.2.1.4 G.n.i.e.	179	305	-126	156	285	-129
1.2.1.5 Miscellaneous	38,370	21,076	17,293	41,018	21,863	19,155
1.2.1.5.1 Software Services	19,906	1,345	18,561	21,439	1,571	19,868
1.2.1.5.2 Business Services	9,936	9,433	503	10,290	11,109	-820
1.2.1.5.3 Financial Services	1,686	1,171	515	1,111	618	494
1.2.1.5.4 Communication Services	600	263	337	760	336	424
1.2.2 Transfers	18,100	1,887	16,213	17,972	1,812	16,160
1.2.2.1 Official	30	219	-190	69	226	-157
1.2.2.2 Private	18,070	1,668	16,402	17,903	1,587	16,317
1.2.3 Income	4,781	12,601	-7,820	5,190	12,115	-6,925
1.2.3.1 Investment Income	3,651	11,984	-8,333	4,033	11,521	-7,488
1.2.3.2 Compensation of Employees	1,129	617	513	1,157	593	564
<b>2 CAPITAL ACCOUNT (2.1+2.2+2.3+2.4+2.5)</b>	<b>171,492</b>	<b>146,468</b>	<b>25,024</b>	<b>158,982</b>	<b>139,740</b>	<b>19,241</b>
<b>2.1 Foreign Investment (2.1.1+2.1.2)</b>	<b>85,777</b>	<b>77,094</b>	<b>8,683</b>	<b>93,816</b>	<b>77,960</b>	<b>15,856</b>
2.1.1 Foreign Direct Investment	13,840	7,432	6,408	16,654	10,235	6,420
2.1.1.1 In India	13,097	4,492	8,605	15,461	5,671	9,790
2.1.1.1.1 Equity	9,096	4,458	4,638	11,058	5,636	5,422
2.1.1.1.2 Reinvested Earnings	3,393	—	3,393	3,650	—	3,650
2.1.1.1.3 Other Capital	608	34	574	753	36	718
2.1.1.2 Abroad	743	2,941	-2,198	1,193	4,563	-3,370
2.1.1.2.1 Equity	743	1,263	-520	1,193	1,683	-489
2.1.1.2.2 Reinvested Earnings	0	713	-713	0	758	-758
2.1.1.2.3 Other Capital	0	964	-964	0	2,123	-2,123
2.1.2 Portfolio Investment	71,937	69,661	2,276	77,162	67,726	9,436
2.1.2.1 In India	71,802	69,427	2,376	76,807	65,338	11,469
2.1.2.1.1 FIIs	71,802	69,427	2,376	76,807	65,338	11,469
2.1.2.1.1.1 Equity	58,274	56,148	2,126	58,600	50,602	7,998
2.1.2.1.1.2 Debt	13,528	13,279	249	18,207	14,736	3,471
2.1.2.1.2 ADR/GDRs	0	0	0	0	—	0
2.1.2.2 Abroad	135	235	-100	355	2,388	-2,033
<b>2.2 Loans (2.2.1+2.2.2+2.2.3)</b>	<b>40,835</b>	<b>33,870</b>	<b>6,965</b>	<b>31,255</b>	<b>20,997</b>	<b>10,258</b>
2.2.1 External Assistance	2,686	1,257	1,430	2,554	1,301	1,253
2.2.1.1 By India	14	31	-17	12	30	-18
2.2.1.2 To India	2,673	1,225	1,447	2,542	1,271	1,271
2.2.2 Commercial Borrowings	13,581	12,589	992	17,993	10,456	7,537
2.2.2.1 By India	6,134	6,098	36	7,291	7,000	292
2.2.2.2 To India	7,447	6,491	956	10,702	3,456	7,246
2.2.3 Short Term to India	24,568	20,025	4,543	10,708	9,241	1,468
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	22,951	20,025	2,926	10,052	9,241	812
2.2.3.2 Suppliers' Credit up to 180 days	1,617	0	1,617	656	0	656
<b>2.3 Banking Capital (2.3.1+2.3.2)</b>	<b>31,834</b>	<b>27,205</b>	<b>4,629</b>	<b>21,606</b>	<b>29,670</b>	<b>-8,064</b>
2.3.1 Commercial Banks	31,751	27,205	4,547	20,599	29,668	-9,069
2.3.1.1 Assets	7,132	10,960	-3,829	443	16,542	-16,099
2.3.1.2 Liabilities	24,620	16,244	8,375	20,156	13,127	7,029
2.3.1.2.1 Non-Resident Deposits	20,068	15,432	4,636	14,974	11,563	3,411
2.3.2 Others	83	0	83	1,007	1	1,006
<b>2.4 Rupee Debt Service</b>	—	50	-50	—	7	-7
<b>2.5 Other Capital</b>	13,045	8,250	4,795	12,304	11,107	1,197
<b>3 Errors &amp; Omissions</b>	<b>1,279</b>	<b>—</b>	<b>1,279</b>	<b>—</b>	<b>431</b>	<b>-431</b>
<b>4 Monetary Movements (4.1+ 4.2)</b>	<b>0</b>	<b>13,237</b>	<b>-13,237</b>	<b>0</b>	<b>14,162</b>	<b>-14,162</b>
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	13,237	-13,237	0	14,162	-14,162

**No. 39: India's Overall Balance of Payments**

(₹ Billion)

Item	Jan-Mar 2018 (PR)			Jan-Mar 2019 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
<b>Overall Balance of Payments(1+2+3)</b>	<b>21,198</b>	<b>20,347</b>	<b>852</b>	<b>22,845</b>	<b>21,847</b>	<b>998</b>
<b>1 CURRENT ACCOUNT (1.1+ 1.2)</b>	<b>10,082</b>	<b>10,922</b>	<b>-841</b>	<b>11,640</b>	<b>11,968</b>	<b>-328</b>
<b>1.1 MERCHANDISE</b>	<b>5,290</b>	<b>7,968</b>	<b>-2,678</b>	<b>6,157</b>	<b>8,639</b>	<b>-2,482</b>
<b>1.2 INVISIBLES (1.2.1+1.2.2+1.2.3)</b>	<b>4,791</b>	<b>2,954</b>	<b>1,837</b>	<b>5,483</b>	<b>3,328</b>	<b>2,154</b>
1.2.1 Services	3,319	2,022	1,297	3,850	2,347	1,503
1.2.1.1 Travel	496	304	192	534	360	174
1.2.1.2 Transportation	302	318	-16	363	383	-20
1.2.1.3 Insurance	41	24	17	51	42	8
1.2.1.4 G.n.i.e.	12	20	-8	11	20	-9
1.2.1.5 Miscellaneous	2,469	1,356	1,113	2,891	1,541	1,350
1.2.1.5.1 Software Services	1,281	87	1,194	1,511	111	1,400
1.2.1.5.2 Business Services	639	607	32	725	783	-58
1.2.1.5.3 Financial Services	108	75	33	78	44	35
1.2.1.5.4 Communication Services	39	17	22	54	24	30
1.2.2 Transfers	1,165	121	1,043	1,267	128	1,139
1.2.2.1 Official	2	14	-12	5	16	-11
1.2.2.2 Private	1,163	107	1,055	1,262	112	1,150
1.2.3 Income	308	811	-503	366	854	-488
1.2.3.1 Investment Income	235	771	-536	284	812	-528
1.2.3.2 Compensation of Employees	73	40	33	82	42	40
<b>2 CAPITAL ACCOUNT (2.1+2.2+2.3+2.4+2.5)</b>	<b>11,034</b>	<b>9,424</b>	<b>1,610</b>	<b>11,205</b>	<b>9,849</b>	<b>1,356</b>
2.1 Foreign Investment (2.1.1+2.1.2)	5,519	4,961	559	6,612	5,494	1,117
2.1.1 Foreign Direct Investment	891	478	412	1,174	721	452
2.1.1.1 In India	843	289	554	1,090	400	690
2.1.1.1.1 Equity	585	287	298	779	397	382
2.1.1.1.2 Reinvested Earnings	218	0	218	257	0	257
2.1.1.1.3 Other Capital	39	2	37	53	3	51
2.1.1.2 Abroad	48	189	-141	84	322	-238
2.1.1.2.1 Equity	48	81	-33	84	119	-34
2.1.1.2.2 Reinvested Earnings	0	46	-46	0	53	-53
2.1.1.2.3 Other Capital	0	62	-62	0	150	-150
2.1.2 Portfolio Investment	4,629	4,482	146	5,438	4,773	665
2.1.2.1 In India	4,620	4,467	153	5,413	4,605	808
2.1.2.1.1 FIIs	4,620	4,467	153	5,413	4,605	808
2.1.2.1.1.1 Equity	3,750	3,613	137	4,130	3,566	564
2.1.2.1.1.2 Debt	870	854	16	1,283	1,039	245
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	9	15	-6	25	168	-143
<b>2.2 Loans (2.2.1+2.2.2+2.2.3)</b>	<b>2,628</b>	<b>2,179</b>	<b>448</b>	<b>2,203</b>	<b>1,480</b>	<b>723</b>
2.2.1 External Assistance	173	81	92	180	92	88
2.2.1.1 By India	1	2	-1	1	2	-1
2.2.1.2 To India	172	79	93	179	90	90
2.2.2 Commercial Borrowings	874	810	64	1,268	737	531
2.2.2.1 By India	395	392	2	514	493	21
2.2.2.2 To India	479	418	62	754	244	511
2.2.3 Short Term to India	1,581	1,288	292	755	651	103
2.2.3.1 Buyers' credit & Suppliers' Credit >180 days	1,477	1,288	188	708	651	57
2.2.3.2 Suppliers' Credit up to 180 days	104	0	104	46	0	46
<b>2.3 Banking Capital (2.3.1+2.3.2)</b>	<b>2,048</b>	<b>1,750</b>	<b>298</b>	<b>1,523</b>	<b>2,091</b>	<b>-568</b>
2.3.1 Commercial Banks	2,043	1,750	293	1,452	2,091	-639
2.3.1.1 Assets	459	705	-246	31	1,166	-1,135
2.3.1.2 Liabilities	1,584	1,045	539	1,421	925	495
2.3.1.2.1 Non-Resident Deposits	1,291	993	298	1,055	815	240
2.3.2 Others	5	0	5	71	0	71
<b>2.4 Rupee Debt Service</b>	<b>0</b>	<b>3</b>	<b>-3</b>	<b>0</b>	<b>0</b>	<b>-0</b>
<b>2.5 Other Capital</b>	<b>839</b>	<b>531</b>	<b>309</b>	<b>867</b>	<b>783</b>	<b>84</b>
<b>3 Errors &amp; Omissions</b>	<b>82</b>	<b>0</b>	<b>82</b>	<b>0</b>	<b>30</b>	<b>-30</b>
<b>4 Monetary Movements (4.1+ 4.2)</b>	<b>0</b>	<b>852</b>	<b>-852</b>	<b>0</b>	<b>998</b>	<b>-998</b>
4.1 I.M.F.	-	-	-	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	852	-852	0	998	-998

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

(US \$ Million)

Item	Jan-Mar 2018 (PR)			Jan-Mar 2019 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
<b>1 Current Account (1.A+1.B+1.C)</b>						
<b>1.A Goods and Services (1.A.a+1.A.b)</b>						
<b>1.A.a Goods (1.A.a.1 to 1.A.a.3)</b>						
1.A.a.1 General merchandise on a BOP basis	156,683	169,730	-13,047	165,158	169,786	-4,628
1.A.a.2 Net exports of goods under merchanting	133,803	155,262	-21,459	141,998	155,880	-13,883
1.A.a.3 Nonmonetary gold	82,218	123,841	-41,623	87,367	122,581	-35,214
1.A.a.4 Manufacturing services on physical inputs owned by others	82,872	116,776	-33,904	86,579	114,412	-27,832
1.A.a.5 Maintenance and repair services n.i.e.	-655	0	-655	788	0	788
1.A.a.6 Insurance and pension services	-	7,065	-7,065	-	8,170	-8,170
1.A.a.7 Construction	51,585	31,421	20,164	54,630	33,299	21,331
1.A.a.8 Charges for the use of intellectual property n.i.e.	55	13	43	78	11	67
1.A.a.9 Telecommunications, computer, and information services	60	155	-95	41	358	-317
1.A.a.10 Other business services	4,688	4,941	-253	5,154	5,436	-282
1.A.a.11 Personal, cultural, and recreational services	7,710	4,728	2,983	7,583	5,112	2,470
1.A.a.12 Government goods and services n.i.e.	535	585	-50	747	625	122
1.A.a.13 Others n.i.e.	1,171	0	1,171	1,111	618	494
<b>1.A.b Services (1.A.b.1 to 1.A.b.13)</b>						
1.A.b.1 Manufacturing services on physical inputs owned by others	212	1,704	-1,492	120	1,826	-1,706
1.A.b.2 Maintenance and repair services n.i.e.	20,574	1,708	18,866	22,262	2,029	20,233
1.A.b.3 Transport	9,936	9,433	503	10,290	11,109	-820
1.A.b.4 Travel	480	616	-136	451	649	-198
1.A.b.5 Construction	179	305	-126	156	285	-129
1.A.b.6 Insurance and pension services	4,830	5,691	-861	5,917	4,638	1,279
1.A.b.7 Financial services	4,781	12,601	-7,820	5,190	12,115	-6,925
1.A.b.8 Charges for the use of intellectual property n.i.e.	1,129	617	513	1,157	593	564
1.A.b.9 Telecommunications, computer, and information services	2,844	11,841	-8,997	3,390	11,109	-7,719
1.A.b.10 Other business services	1,337	5,968	-4,631	1,411	4,708	-3,297
1.A.b.11 Personal, cultural, and recreational services	56	2,347	-2,292	71	2,435	-2,364
1.A.b.12 Government goods and services n.i.e.	268	3,515	-3,247	354	3,951	-3,596
1.A.b.13 Others n.i.e.	1,183	11	1,173	1,553	15	1,538
<b>1.B Primary Income (1.B.1 to 1.B.3)</b>						
1.B.1 Compensation of employees	807	143	664	643	412	231
1.B.2 Investment income	1,129	617	513	1,157	593	564
1.B.2.1 Direct investment	2,844	11,841	-8,997	3,390	11,109	-7,719
1.B.2.2 Portfolio investment	1,337	5,968	-4,631	1,411	4,708	-3,297
1.B.2.3 Other investment	56	2,347	-2,292	71	2,435	-2,364
1.B.2.4 Reserve assets	268	3,515	-3,247	354	3,951	-3,596
1.B.3 Other primary income	1,183	11	1,173	1,553	15	1,538
<b>1.C Secondary Income (1.C.1+1.C.2)</b>						
<b>1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs</b>						
1.C.1.1 Personal transfers (Current transfers between resident and/	18,099	1,868	16,231	17,970	1,791	16,179
1.C.1.2 Other current transfers	18,070	1,668	16,402	17,903	1,587	16,317
<b>1.C.2 General government</b>						
<b>2 Capital Account (2.1+2.2)</b>						
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	62	105	-43	84	167	-83
2.2 Capital transfers	6	5	1	14	94	-81
<b>3 Financial Account (3.1 to 3.5)</b>						
<b>3.1 Direct Investment (3.1A+3.1B)</b>						
<b>3.1.A Direct Investment in India</b>						
3.1.A.1 Equity and investment fund shares	13,840	7,432	6,408	16,654	10,235	6,420
3.1.A.1.1 Equity other than reinvestment of earnings	13,097	4,492	8,605	15,461	5,671	9,790
3.1.A.1.2 Reinvestment of earnings	12,489	4,458	8,031	14,708	5,636	9,072
3.1.A.2 Debt instruments	9,096	4,458	4,638	11,058	5,636	5,422
3.1.A.2.1 Direct investor in direct investment enterprises	3,393	-	3,393	3,650	-	3,650
3.1.B Direct Investment by India	608	34	574	753	36	718
3.1.B.1 Equity and investment fund shares	608	34	574	753	36	718
3.1.B.1.1 Equity other than reinvestment of earnings	743	2,941	-2,198	1,193	4,563	-3,370
3.1.B.1.2 Reinvestment of earnings	743	1,976	-1,234	1,193	2,441	-1,247
3.1.B.2 Debt instruments	743	1,263	-520	1,193	1,683	-489
3.1.B.2.1 Direct investor in direct investment enterprises	0	964	-964	0	2,123	-2,123
<b>3.2 Portfolio Investment</b>						
3.2.A Portfolio Investment in India	71,937	69,661	2,276	77,162	67,726	9,436
3.2.A.1 Equity and investment fund shares	71,802	69,427	2,376	76,807	65,338	11,469
3.2.A.2 Debt securities	58,274	56,148	2,126	58,600	50,602	7,998
3.2.B Portfolio Investment by India	13,528	13,279	249	18,207	14,736	3,471
<b>3.3 Financial derivatives (other than reserves) and employee stock options</b>						
<b>3.4 Other investment</b>						
3.4.1 Other equity (ADRs/GDRs)	5,010	5,114	-104	6,425	5,687	739
3.4.2 Currency and deposits	80,643	64,175	16,468	58,659	55,948	2,711
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	0	0	0	0	0	0
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	20,151	15,432	4,719	15,981	11,564	4,417
3.4.2.3 General government	83	0	83	1,007	1	1,006
3.4.2.4 Other sectors	20,068	15,432	4,636	14,974	11,563	3,411
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	27,951	25,618	2,333	26,172	29,862	-3,690
3.4.3.A Loans to India	21,803	19,489	2,313	18,869	22,832	-3,963
3.4.3.B Loans by India	6,148	6,129	19	7,303	7,030	273
3.4.4 Insurance, pension, and standardized guarantee schemes	41	951	-910	21	364	-344
3.4.5 Trade credit and advances	24,568	20,025	4,543	10,708	9,241	1,468
3.4.6 Other accounts receivable/payable - other	7,933	2,149	5,784	5,777	4,917	860
3.4.7 Special drawing rights	-	-	-	-	-	-
<b>3.5 Reserve assets</b>						
3.5.1 Monetary gold	0	13,237	-13,237	0	14,162	-14,162
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	13,237	-13,237	0	14,162	-14,162
<b>4 Total assets/liabilities</b>						
4.1 Equity and investment fund shares	171,430	159,620	11,811	158,900	153,757	5,143
4.2 Debt instruments	76,692	68,882	7,810	81,302	67,117	14,184
4.3 Other financial assets and liabilities	86,806	75,352	11,454	71,822	67,561	4,261
<b>5 Net errors and omissions</b>	1,279	-	1,279	-	431	-431

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

(₹ Billion)

Item	Jan-Mar 2018 (PR)			Jan-Mar 2019 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
<b>1 Current Account (1.A+1.B+1.C)</b>						
<b>1.A Goods and Services (1.A.a+1.A.b)</b>						
<b>1.A.a Goods (1.A.a.1 to 1.A.a.3)</b>						
1.A.a.1 General merchandise on a BOP basis	10,082	10,921	-840	11,640	11,966	-326
1.A.a.2 Net exports of goods under merchanting	8,609	9,990	-1,381	10,008	10,986	-978
1.A.a.3 Nonmonetary gold	5,290	7,968	-2,678	6,157	8,639	-2,482
1.A.a.4 General merchandise on a BOP basis	5,332	7,514	-2,182	6,102	8,063	-1,962
1.A.a.5 Net exports of goods under merchanting	-42	0	-42	56	0	56
1.A.a.6 Nonmonetary gold	0	455	-455	0	576	-576
<b>1.A.b Services (1.A.b.1 to 1.A.b.13)</b>						
1.A.b.1 Manufacturing services on physical inputs owned by others	3,319	2,022	1,297	3,850	2,347	1,503
1.A.b.2 Maintenance and repair services n.i.e.	4	1	3	6	1	5
1.A.b.3 Transport	4	10	-6	3	25	-22
1.A.b.4 Travel	302	318	-16	363	383	-20
1.A.b.5 Construction	496	304	192	534	360	174
1.A.b.6 Insurance and pension services	34	38	-3	53	44	9
1.A.b.7 Financial services	41	24	17	51	42	8
1.A.b.8 Charges for the use of intellectual property n.i.e.	108	75	33	78	44	35
1.A.b.9 Telecommunications, computer, and information services	14	110	-96	8	129	-120
1.A.b.10 Other business services	1,324	110	1,214	1,569	143	1,426
1.A.b.11 Personal, cultural, and recreational services	639	607	32	725	783	-58
1.A.b.12 Government goods and services n.i.e.	31	40	-9	32	46	-14
1.A.b.13 Others n.i.e.	12	20	-8	11	20	-9
<b>1.B Primary Income (1.B.1 to 1.B.3)</b>						
1.B.1 Compensation of employees	311	366	-55	417	327	90
1.B.2 Investment income	308	811	-503	366	854	-488
1.B.2.1 Direct investment	73	40	33	82	42	40
1.B.2.2 Portfolio investment	183	762	-579	239	783	-544
1.B.2.3 Other investment	86	384	-298	99	332	-232
1.B.2.4 Reserve assets	4	151	-147	5	172	-167
1.B.3 Other primary income	17	226	-209	25	278	-253
<b>1.C Secondary Income (1.C.1+1.C.2)</b>						
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	76	1	75	109	1	108
1.C.1.1 Personal transfers (Current transfers between resident and/	1,165	120	1,044	1,266	126	1,140
1.C.1.2 Other current transfers	1,163	107	1,055	1,262	112	1,150
1.C.2 General government	38	26	11	41	27	14
<b>2 Capital Account (2.1+2.2)</b>						
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	2	13	-11	5	14	-10
2.2 Capital transfers	4	7	-3	6	12	-6
<b>3 Financial Account (3.1 to 3.5)</b>						
<b>3.1 Direct Investment (3.1A+3.1B)</b>						
3.1.A Direct Investment in India	11,031	10,271	760	11,199	10,836	362
3.1.A.1 Equity and investment fund shares	891	478	412	1,174	721	452
3.1.A.1.1 Equity other than reinvestment of earnings	843	289	554	1,090	400	690
3.1.A.1.2 Reinvestment of earnings	804	287	517	1,037	397	639
3.1.A.2 Debt instruments	585	287	298	779	397	382
3.1.A.2.1 Direct investor in direct investment enterprises	218	0	218	257	0	257
3.1.B Direct Investment by India	39	2	37	53	3	51
3.1.B.1 Equity and investment fund shares	39	2	37	53	3	51
3.1.B.1.1 Equity other than reinvestment of earnings	48	189	-141	84	322	-238
3.1.B.1.2 Reinvestment of earnings	48	127	-79	84	172	-88
3.1.B.2 Debt instruments	0	46	-46	0	53	-53
3.1.B.2.1 Direct investor in direct investment enterprises	0	62	-62	0	150	-150
<b>3.2 Portfolio Investment</b>						
3.2.A Portfolio Investment in India	4,629	4,482	146	5,438	4,773	665
3.2.A.1 Equity and investment fund shares	4,620	4,467	153	5,413	4,605	808
3.2.A.2 Debt securities	3,750	3,613	137	4,130	3,566	564
3.2.B Portfolio Investment by India	870	854	16	1,283	1,039	245
<b>3.3 Financial derivatives (other than reserves) and employee stock options</b>						
<b>3.4 Other investment</b>						
3.4.1 Other equity (ADRs/GDRs)	5,189	4,129	1,060	4,134	3,943	191
3.4.2 Currency and deposits	0	0	0	0	0	0
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	1,297	993	304	1,126	815	311
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	5	0	5	71	0	71
3.4.2.3 General government	1,291	993	298	1,055	815	240
3.4.2.4 Other sectors	—	—	—	0	0	0
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	1,798	1,648	150	1,845	2,105	-260
3.4.3.A Loans to India	1,403	1,254	149	1,330	1,609	-279
3.4.3.B Loans by India	396	394	1	515	495	19
3.4.4 Insurance, pension, and standardized guarantee schemes	3	61	-59	1	26	-24
3.4.5 Trade credit and advances	1,581	1,288	292	755	651	103
3.4.6 Other accounts receivable/payable - other	510	138	372	407	347	61
3.4.7 Special drawing rights	—	—	—	0	0	0
<b>3.5 Reserve assets</b>						
3.5.1 Monetary gold	0	852	-852	0	998	-998
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	852	-852	0	998	-998
<b>4 Total assets/liabilities</b>						
4.1 Equity and investment fund shares	11,031	10,271	760	11,199	10,836	362
4.2 Debt instruments	4,935	4,432	503	5,730	4,730	1,000
4.3 Other financial assets and liabilities	5,585	4,848	737	5,062	4,762	300
<b>5 Net errors and omissions</b>						
	82	—	82	0	30	-30

**No. 42: International Investment Position**

(US\$ Million)

Item	As on Financial Year /Quarter End							
	2018-19		2018				2019	
			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	169,964	399,199	157,373	378,957	166,594	386,203	169,964	399,199
1.1 Equity Capital and Reinvested Earnings	111,122	382,105	103,734	363,190	109,875	369,544	111,122	382,105
1.2 Other Capital	58,841	17,094	53,640	15,767	56,719	16,659	58,841	17,094
2 Portfolio Investment	4,699	260,009	3,577	272,151	2,666	245,849	4,699	260,009
2.1 Equity	637	147,479	2,054	155,106	1,386	138,091	637	147,479
2.2 Debt	4,062	112,530	1,524	117,045	1,280	107,759	4,062	112,530
3 Other Investment	54,538	419,309	48,246	401,166	41,550	401,290	54,538	419,309
3.1 Trade Credit	924	105,191	1,696	103,155	252	103,648	924	105,191
3.2 Loan	9,884	168,143	8,235	159,820	6,553	160,454	9,884	168,143
3.3 Currency and Deposits	25,158	130,644	20,790	126,456	17,211	125,997	25,158	130,644
3.4 Other Assets/Liabilities	18,574	15,332	17,524	11,736	17,534	11,190	18,574	15,332
4 Reserves	412,871	—	424,545	—	395,591	—	412,871	—
5 Total Assets/ Liabilities	642,072	1,078,518	633,741	1,052,275	606,401	1,033,342	642,072	1,078,518
<b>6 IIP (Assets - Liabilities)</b>		<b>-436,446</b>		<b>-418,533</b>		<b>-426,942</b>		<b>-436,446</b>

# Payment and Settlement Systems

## No. 43: Payment System Indicators

System	Volume (Million )				Value (₹ Billion)			
	2018-19	2019			2018-19	2019		
		Apr.	May	Jun.		Apr.	May	Jun.
	1	2	3	4	5	6	7	8
<b>1 RTGS</b>	<b>136.63</b>	<b>11.48</b>	<b>12.49</b>	<b>11.83</b>	<b>1,715,520.61</b>	<b>148,481.20</b>	<b>158,379.63</b>	<b>152,991.31</b>
1.1 Customer Transactions	133.30	11.23	12.22	11.60	1,184,368.12	93,080.66	104,886.16	101,776.08
1.2 Interbank Transactions	3.31	0.25	0.26	0.22	172,513.75	19,372.66	19,087.66	18,241.35
1.3 Interbank Clearing	0.027	0.002	0.003	0.002	358,638.74	36,027.89	34,405.81	32,973.89
<b>2 CCIL Operated Systems</b>	<b>3.62</b>	<b>0.25</b>	<b>0.31</b>	<b>0.31</b>	<b>1,165,510.38</b>	<b>95,078.03</b>	<b>108,987.82</b>	<b>109,183.63</b>
2.1 CBLO	0.130	—	—	—	181,404.63	—	—	—
2.2 Govt. Securities Clearing	1.11	0.09	0.13	0.15	509,315.87	48,748.73	64,438.30	68,284.52
2.2.1 Outright	0.81	0.06	0.09	0.11	93,550.07	7,915.80	10,329.18	15,074.46
2.2.2 Repo	0.216	0.016	0.022	0.020	271,249.89	16,857.34	24,166.31	24,412.04
2.2.3 Tri-party Repo	0.09	0.02	0.02	0.02	144,515.90	23,975.59	29,942.82	28,798.02
2.3 Forex Clearing	2.38	0.16	0.19	0.16	474,789.88	46,329.31	44,549.52	40,899.10
<b>3 Paper Clearing</b>	<b>1,123.76</b>	<b>89.79</b>	<b>92.11</b>	<b>83.96</b>	<b>82,460.65</b>	<b>7,268.12</b>	<b>7,170.78</b>	<b>6,357.98</b>
3.1 Cheque Truncation System (CTS)	1,111.67	89.36	91.77	83.65	81,535.92	7,235.33	7,136.88	6,330.18
3.2 MICR Clearing	—	—	—	—	—	—	—	—
3.2.1 RBI Centres	—	—	—	—	—	—	—	—
3.2.2 Other Centres	—	—	—	—	—	—	—	—
3.3 Non-MICR Clearing	12.09	0.44	0.34	0.32	924.73	32.79	33.91	27.81
<b>4 Retail Electronic Clearing</b>	<b>7,113.25</b>	<b>731.85</b>	<b>683.81</b>	<b>643.65</b>	<b>258,745.44</b>	<b>23,801.05</b>	<b>24,834.16</b>	<b>20,580.81</b>
4.1 ECS DR	0.93	0.03	0.03	0.03	12.60	0.09	0.09	0.09
4.2 ECS CR (includes NECS)	5.36	0.52	0.29	0.33	132.35	11.87	7.77	9.24
4.3 EFT/NEFT	2,318.89	203.44	217.68	199.14	227,936.08	20,546.69	21,277.74	17,496.45
4.4 Immediate Payment Service (IMPS)	1,752.91	185.04	183.33	171.33	15,902.57	1,691.97	1,804.56	1,730.19
4.5 National Automated Clearing House (NACH)	3,035.17	342.82	282.48	272.83	14,761.84	1,550.43	1,744.00	1,344.84
<b>5 Cards</b>	<b>16,046.26</b>	<b>1,384.27</b>	<b>1,397.34</b>	<b>1,355.80</b>	<b>45,121.45</b>	<b>3,974.05</b>	<b>4,139.95</b>	<b>3,969.21</b>
5.1 Credit Cards	1,772.36	167.79	174.04	163.16	6,078.81	580.50	616.76	570.94
5.1.1 Usage at ATMs	9.77	0.86	0.89	0.79	45.33	4.02	4.17	3.80
5.1.2 Usage at POS	1,762.59	166.92	173.15	162.37	6,033.48	576.48	612.58	567.14
5.2 Debit Cards	14,273.90	1,216.48	1,223.30	1,192.64	39,042.64	3,393.55	3,523.19	3,398.27
5.2.1 Usage at ATMs	9,859.61	808.91	815.71	786.11	33,107.89	2,843.96	2,946.67	2,828.54
5.2.2 Usage at POS	4,414.28	407.57	407.59	406.53	5,934.75	549.58	576.52	569.73
<b>6 Prepaid Payment Instruments (PPIs)</b>	<b>4,604.34</b>	<b>420.97</b>	<b>419.00</b>	<b>389.82</b>	<b>2,128.76</b>	<b>185.54</b>	<b>182.97</b>	<b>177.64</b>
6.1 m-Wallet	4,139.28	380.62	367.45	334.70	1,836.55	159.75	157.27	154.71
6.2 PPI Cards	465.00	40.35	51.54	55.12	291.34	25.79	25.70	22.93
6.3 Paper Vouchers	0.05	0.00	0.00	0.00	0.87	—	—	—
<b>7 Mobile Banking</b>	<b>6,200.32</b>	<b>881.23</b>	<b>841.74</b>	<b>848.61</b>	<b>29,584.07</b>	<b>4,020.18</b>	<b>4,850.08</b>	<b>4,975.43</b>
<b>8 Cards Outstanding</b>	<b>971.72</b>	<b>932.77</b>	<b>873.85</b>	<b>886.20</b>	—	—	—	—
8.1 Credit Card	47.09	48.00	48.92	49.31	—	—	—	—
8.2 Debit Card	924.63	884.78	824.93	836.89	—	—	—	—
<b>9 Number of ATMs (in actuals)</b>	<b>221703</b>	<b>227164</b>	<b>227227</b>	<b>226757</b>	—	—	—	—
<b>10 Number of POS (in actuals)</b>	<b>3722229</b>	<b>3757621</b>	<b>3845111</b>	<b>3991007</b>	—	—	—	—
<b>11 Grand Total (1.1+1.2+2+3+4+5+6)</b>	<b>29,027.83</b>	<b>2,638.61</b>	<b>2,605.07</b>	<b>2,485.36</b>	<b>2,910,848.56</b>	<b>242,760.11</b>	<b>269,289.51</b>	<b>260,286.70</b>

**Note :** Data for latest 12 month period is provisional.

Mobile Banking - 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.

2.1: With effect from November 05, 2018, CCIL has discontinued CBLO.

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

# Occasional Series

## No. 44: Small Savings

(₹ Billion)

Scheme			2017-18	2018		2019	
				Feb.	Dec.	Jan.	Feb.
			1	2	3	4	5
<b>1 Small Savings</b>		<b>Receipts</b>	<b>728.98</b>	<b>59.21</b>	<b>104.15</b>	<b>85.67</b>	<b>98.39</b>
		<b>Outstanding</b>	<b>8,039.71</b>	<b>7,919.97</b>	<b>8,806.98</b>	<b>8,893.96</b>	<b>8,991.91</b>
<b>1.1 Total Deposits</b>		<b>Receipts</b>	<b>583.32</b>	<b>46.20</b>	<b>85.79</b>	<b>63.58</b>	<b>71.30</b>
1.1.1 Post Office Saving Bank Deposits		<b>Outstanding</b>	<b>5,273.10</b>	<b>5,197.72</b>	<b>5,934.32</b>	<b>5,997.90</b>	<b>6,069.20</b>
		Receipts	171.45	15.11	29.15	23.18	23.60
		Outstanding	1,092.10	1,066.94	1,301.85	1,325.03	1,348.63
1.1.2 MGNREG		Receipts	0.00	0.00	0.00	0.00	0.00
		Outstanding	0.00	0.00	0.00	0.00	0.00
1.1.3 National Saving Scheme, 1987		Receipts	-1.62	-0.19	-0.30	-0.21	-0.19
		Outstanding	31.38	30.32	29.17	28.96	28.77
1.1.4 National Saving Scheme, 1992		Receipts	0.05	-0.68	-0.01	0.04	0.00
		Outstanding	-0.43	-0.46	-0.12	-0.08	-0.08
1.1.5 Monthly Income Scheme		Receipts	16.25	5.27	10.36	9.66	9.28
		Outstanding	1,816.91	1,808.01	1,897.59	1,907.25	1,916.53
1.1.6 Senior Citizen Scheme 2004		Receipts	122.64	10.39	12.32	11.90	11.84
		Outstanding	417.18	405.90	520.72	532.62	544.46
1.1.7 Post Office Time Deposits		Receipts	196.33	15.00	23.17	25.08	24.51
		Outstanding	992.92	973.90	1,167.28	1,192.36	1,216.87
1.1.7.1 1 year Time Deposits		Outstanding	598.18	590.68	676.62	689.20	701.79
1.1.7.2 2 year Time Deposits		Outstanding	45.97	45.59	56.17	57.34	58.24
1.1.7.3 3 year Time Deposits		Outstanding	61.40	60.36	68.60	68.88	69.10
1.1.7.4 5 year Time Deposits		Outstanding	287.37	277.27	365.89	376.94	387.74
1.1.8 Post Office Recurring Deposits		Receipts	78.68	1.30	11.10	-6.07	2.15
		Outstanding	923.20	913.57	1,017.99	1,011.92	1,014.07
1.1.9 Post Office Cumulative Time Deposits		Receipts	-0.45	0.00	0.00	0.00	0.11
		Outstanding	-0.37	-0.68	-0.37	-0.37	-0.26
1.1.10 Other Deposits		Receipts	-0.01	0.00	0.00	0.00	0.00
		Outstanding	0.21	0.22	0.21	0.21	0.21
<b>1.2 Saving Certificates</b>		<b>Receipts</b>	<b>79.43</b>	<b>7.90</b>	<b>15.00</b>	<b>16.23</b>	<b>17.32</b>
		<b>Outstanding</b>	<b>2,066.76</b>	<b>2,059.53</b>	<b>2,158.15</b>	<b>2,175.69</b>	<b>2,192.57</b>
1.2.1 National Savings Certificate VIII issue		Receipts	-0.65	5.83	11.24	11.59	12.62
		Outstanding	871.74	862.05	923.74	935.33	947.95
1.2.2 Indira Vikas Patras		Receipts	-9.56	-0.01	0.05	0.09	0.03
		Outstanding	-0.71	11.04	2.88	2.97	3.00
1.2.3 Kisan Vikas Patras		Receipts	-155.92	-12.80	-18.95	-16.55	-16.09
		Outstanding	379.81	388.77	244.96	228.41	212.32
1.2.4 Kisan Vikas Patras - 2014		Receipts	245.88	14.89	22.59	20.95	20.65
		Outstanding	706.12	687.83	871.54	892.49	913.14
1.2.5 National Saving Certificate VI issue		Receipts	-0.29	0.00	0.07	0.15	0.12
		Outstanding	-1.40	-1.45	-0.74	-0.59	-0.47
1.2.6 National Saving Certificate VII issue		Receipts	-0.03	-0.01	0.00	0.00	-0.01
		Outstanding	-0.64	-0.64	-0.81	-0.81	-0.82
1.2.7 Other Certificates		Outstanding	111.84	111.93	116.58	117.89	117.45
<b>1.3 Public Provident Fund</b>		<b>Receipts</b>	<b>66.23</b>	<b>5.11</b>	<b>3.36</b>	<b>5.86</b>	<b>9.77</b>
		<b>Outstanding</b>	<b>699.85</b>	<b>662.72</b>	<b>714.51</b>	<b>720.37</b>	<b>730.14</b>

**Note:** The data on receipts from April 2017 are net receipts, i.e., gross receipts minus gross payments.

**Source:** Accountant General, Post and Telegraphs.

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

(Per cent)

Category	Central Government Dated Securities				2019 Mar. 5	
	2018					
	Mar. 1	Jun. 2	Sep. 3	Dec. 4		
<b>(A) Total (in ₹. Billion)</b>	<b>53967.78</b>	<b>54556.81</b>	<b>56028.30</b>	<b>57581.03</b>	<b>59210.26</b>	
1 Commercial Banks	42.68	41.84	41.41	40.51	40.28	
2 Non-Bank PDs	0.29	0.33	0.37	0.33	0.31	
3 Insurance Companies	23.49	24.24	24.61	24.57	24.34	
4 Mutual Funds	1.00	1.13	1.41	0.64	0.35	
5 Co-operative Banks	2.57	2.59	2.51	2.38	2.29	
6 Financial Institutions	0.90	0.93	0.97	1.01	1.05	
7 Corporates	0.91	1.09	1.01	1.05	0.97	
8 Foreign Portfolio Investors	4.35	3.84	3.65	3.60	3.22	
9 Provident Funds	5.88	5.79	5.71	5.54	5.47	
10 RBI	11.62	11.63	11.76	13.81	15.27	
11. Others	6.30	6.58	6.58	6.55	6.46	
11.1 State Governments	1.91	1.97	1.99	1.97	2.00	

Category	State Governments Securities				2019 Mar. 5	
	2018					
	Mar. 1	Jun. 2	Sep. 3	Dec. 4		
<b>(B) Total (in ₹. Billion)</b>	<b>24288.29</b>	<b>24954.61</b>	<b>25668.33</b>	<b>26693.93</b>	<b>27772.29</b>	
1 Commercial Banks	35.79	35.02	34.66	34.00	33.87	
2 Non-Bank PDs	0.51	0.75	0.58	0.60	0.58	
3 Insurance Companies	34.13	34.24	33.74	33.90	33.04	
4 Mutual Funds	1.64	1.20	1.05	1.23	1.20	
5 Co-operative Banks	4.78	4.79	4.75	4.67	4.55	
6 Financial Institutions	0.35	0.35	0.43	0.37	0.42	
7 Corporates	0.15	0.16	0.17	0.22	0.29	
8 Foreign Portfolio Investors	0.23	0.15	0.10	0.09	0.09	
9 Provident Funds	19.67	20.34	21.04	21.29	22.15	
10 RBI	0.00	0.00	0.00	0.00	0.00	
11. Others	2.76	2.99	3.48	3.64	3.81	
11.1 State Governments	0.05	0.06	0.07	0.07	0.11	

Category	Treasury Bills				2019 Mar. 5	
	2018					
	Mar. 1	Jun. 2	Sep. 3	Dec. 4		
<b>(C) Total (in ₹. Billion)</b>	<b>3798.76</b>	<b>5280.07</b>	<b>5657.50</b>	<b>5298.26</b>	<b>4127.04</b>	
1 Commercial Banks	60.74	55.30	47.84	53.76	57.56	
2 Non-Bank PDs	2.17	1.41	1.86	2.06	2.68	
3 Insurance Companies	4.17	3.66	4.55	4.74	6.61	
4 Mutual Funds	2.27	7.03	10.69	5.65	2.78	
5 Co-operative Banks	2.42	1.29	1.20	1.21	2.48	
6 Financial Institutions	3.55	2.36	1.67	1.88	2.49	
7 Corporates	2.45	1.88	6.67	1.86	2.23	
8 Foreign Portfolio Investors	0.00	0.00	0.00	0.09	0.00	
9 Provident Funds	0.11	0.21	0.01	0.02	0.08	
10 RBI	0.00	0.00	0.00	0.00	0.00	
11. Others	22.12	26.87	25.50	28.72	23.10	
11.1 State Governments	16.35	23.11	21.36	24.04	17.91	

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

Item	(₹ Billion)					
	2013-14 1	2014-15 2	2015-16 3	2016-17 4	2017-18 RE 5	2018-19 BE 6
<b>1 Total Disbursements</b>	<b>30,002.99</b>	<b>32,852.10</b>	<b>37,606.11</b>	<b>42,659.69</b>	<b>48,579.90</b>	<b>53,611.81</b>
1.1 Developmental	17,142.21	18,720.62	22,012.87	25,379.05	29,324.08	32,025.64
1.1.1 Revenue	13,944.26	14,830.18	16,682.50	18,784.17	22,525.73	24,390.87
1.1.2 Capital	2,785.08	3,322.62	4,120.69	5,012.13	5,857.77	6,745.79
1.1.3 Loans	412.88	567.82	1,209.68	1,582.75	940.58	888.98
1.2 Non-Developmental	12,427.83	13,667.69	15,108.10	16,726.46	18,542.53	20,762.79
1.2.1 Revenue	11,413.65	12,695.20	13,797.27	15,552.39	17,684.36	19,839.32
1.2.1.1 Interest Payments	5,342.30	5,845.42	6,480.91	7,244.48	8,166.36	8,851.50
1.2.2 Capital	990.37	946.87	1,273.06	1,157.75	844.41	909.08
1.2.3 Loans	23.81	25.63	37.77	16.32	13.76	14.40
1.3 Others	432.95	463.79	485.14	554.17	713.29	823.38
<b>2 Total Receipts</b>	<b>30,013.72</b>	<b>31,897.37</b>	<b>37,780.49</b>	<b>42,884.32</b>	<b>47,718.59</b>	<b>52,780.35</b>
2.1 Revenue Receipts	22,114.75	23,876.93	27,483.74	31,322.01	35,923.82	41,185.41
2.1.1 Tax Receipts	18,465.45	20,207.28	22,971.01	26,221.45	30,132.23	34,941.02
2.1.1.1 Taxes on commodities and services	11,257.81	12,123.48	14,409.52	16,523.77	18,296.56	22,138.76
2.1.1.2 Taxes on Income and Property	7,176.34	8,051.76	8,522.71	9,656.22	11,802.47	12,775.14
2.1.1.3 Taxes of Union Territories (Without Legislature)	31.30	32.04	38.78	41.46	33.20	27.12
2.1.2 Non-Tax Receipts	3,649.30	3,669.65	4,512.72	5,100.56	5,791.59	6,244.38
2.1.2.1 Interest Receipts	401.62	396.22	357.79	332.20	316.10	368.35
2.2 Non-debt Capital Receipts	391.13	609.55	598.27	690.63	1,651.83	1,428.43
2.2.1 Recovery of Loans & Advances	93.85	220.72	165.61	209.42	648.80	616.50
2.2.2 Disinvestment proceeds	297.28	388.83	432.66	481.22	1,003.03	811.93
<b>3 Gross Fiscal Deficit [ 1 - ( 2.1 + 2.2 ) ]</b>	<b>7,497.11</b>	<b>8,365.63</b>	<b>9,524.10</b>	<b>10,647.04</b>	<b>11,004.25</b>	<b>10,997.97</b>
<b>3A Sources of Financing: Institution-wise</b>						
3A.1 Domestic Financing	7,424.19	8,236.30	9,396.62	10,467.08	10,980.08	11,023.86
3A.1.1 Net Bank Credit to Government	3,358.58	-374.76	2,310.90	6,171.23	1,447.92	..
3A.1.1.1 Net RBI Credit to Government	1,081.30	-3,341.85	604.72	1,958.16	-1,448.47	..
3A.1.2 Non-Bank Credit to Government	4,065.61	8,611.06	7,085.72	4,295.85	9,532.16	..
3A.2 External Financing	72.92	129.33	127.48	179.97	24.18	-25.89
<b>3B Sources of Financing: Instrument-wise</b>						
3B.1 Domestic Financing	7,424.19	8,236.30	9,396.62	10,467.08	10,980.08	11,023.86
3B.1.1 Market Borrowings (net)	6,391.99	6,640.58	6,732.98	6,898.21	7,951.99	8,398.36
3B.1.2 Small Savings (net)	-142.81	-565.80	-785.15	-1,050.38	-1,653.29	-1,434.61
3B.1.3 State Provident Funds (net)	312.90	343.39	352.61	456.88	406.13	474.19
3B.1.4 Reserve Funds	34.63	51.09	-33.22	-64.36	6.70	31.14
3B.1.5 Deposits and Advances	255.45	275.45	134.70	177.92	168.45	159.10
3B.1.6 Cash Balances	-10.72	954.74	-174.38	-224.63	861.31	831.46
3B.1.7 Others	582.75	536.84	3,169.08	4,273.43	3,238.79	2,564.21
3B.2 External Financing	72.92	129.33	127.48	179.97	24.18	-25.89
<b>4 Total Disbursements as per cent of GDP</b>	<b>26.7</b>	<b>26.3</b>	<b>27.3</b>	<b>27.8</b>	<b>28.4</b>	<b>28.1</b>
<b>5 Total Receipts as per cent of GDP</b>	<b>26.7</b>	<b>25.6</b>	<b>27.4</b>	<b>27.9</b>	<b>27.9</b>	<b>27.7</b>
<b>6 Revenue Receipts as per cent of GDP</b>	<b>19.7</b>	<b>19.2</b>	<b>20.0</b>	<b>20.4</b>	<b>21.0</b>	<b>21.6</b>
<b>7 Tax Receipts as per cent of GDP</b>	<b>16.4</b>	<b>16.2</b>	<b>16.7</b>	<b>17.1</b>	<b>17.6</b>	<b>18.3</b>
<b>8 Gross Fiscal Deficit as per cent of GDP</b>	<b>6.7</b>	<b>6.7</b>	<b>6.9</b>	<b>6.9</b>	<b>6.4</b>	<b>5.8</b>

Source : Budget Documents of Central and State Governments.

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

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

(₹ Billion)

Sr. No	State/Union Territory	During June-2019					
		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	8
1	Andhra Pradesh	1.47	19	13.69	19	10.82	11
2	Arunachal Pradesh	0.33	6	-	-	-	-
3	Assam	-	-	-	-	-	-
4	Bihar	-	-	-	-	-	-
5	Chhattisgarh	7.40	12	-	-	-	-
6	Goa	-	-	0.60	16	-	-
7	Gujarat	-	-	-	-	-	-
8	Haryana	-	-	-	-	-	-
9	Himachal Pradesh	-	-	-	-	-	-
10	Jammu & Kashmir	-	-	5.45	26	3.79	2
11	Jharkhand	-	-	-	-	-	-
12	Karnataka	-	-	-	-	-	-
13	Kerala	1.39	17	3.83	17	-	-
14	Madhya Pradesh	-	-	-	-	-	-
15	Maharashtra	-	-	-	-	-	-
16	Manipur	0.16	20	1.95	20	2.65	19
17	Meghalaya	-	-	-	-	-	-
18	Mizoram	-	-	-	-	-	-
19	Nagaland	-	-	0.43	7	-	-
20	Odisha	-	-	-	-	-	-
21	Puducherry	-	-	-	-	-	-
22	Punjab	0.84	14	3.45	14	-	-
23	Rajasthan	5.37	4	-	-	-	-
24	Tamil Nadu	-	-	-	-	-	-
25	Telangana	6.47	23	7.75	14	6.34	8
26	Tripura	15.16	5	-	-	-	-
27	Uttar Pradesh	-	-	-	-	-	-
28	Uttarakhand	-	-	-	-	-	-
29	West Bengal	4.12	19	9.89	19	4.38	6

- Notes:**
1. SDF is availed by State Governments against the collateral of Consolidated Sinking Fund (CSF), Guarantee Redemption Fund (GRF) & Auction Treasury Bills (ATBs) balances and other investments in government securities.
  2. WMA is advance by Reserve Bank of India to State Governments for meeting temporary cash mismatches.
  3. OD is advanced to State Governments beyond their WMA limits.
  4. Average Availed is the total accommodation (SDF/WMA/OD) availed divided by number of days for which accommodation was extended during the month.
  5. - : Nil.

**Source:** Reserve Bank of India.

**No. 48: Investments by State Governments**

(₹ Billion)

Sr. No	State/Union Territory	As on end of June 2019			
		Consolidated Sinking Fund (CSF)	Guarantee Redemption Fund (GRF)	Government Securities	Auction Treasury Bills (ATBs)
1	2	3	4	5	
1	Andhra Pradesh	75.90	7.47	0.02	0
2	Arunachal Pradesh	10.51	0.01	--	0
3	Assam	38.60	0.47	--	40.00
4	Bihar	64.78	--	--	100.00
5	Chhattisgarh	39.28	--	0.01	60.00
6	Goa	5.46	2.74	--	0
7	Gujarat	125.44	4.41	--	0
8	Haryana	19.11	10.98	--	0
9	Himachal Pradesh	--	--	--	0
10	Jammu & Kashmir	--	--	--	0
11	Jharkhand	--	--	--	0
12	Karnataka	35.47	--	--	65.00
13	Kerala	19.72	--	--	0
14	Madhya Pradesh	--	8.45	--	0
15	Maharashtra	358.90	2.69	--	200.00
16	Manipur	3.46	0.92	--	0
17	Meghalaya	5.62	0.28	0.09	0
18	Mizoram	5.05	0.29	--	0
19	Nagaland	13.64	0.29	--	0
20	Odisha	122.92	13.26	0.77	183.95
21	Puducherry	2.94	--	--	9.10
22	Punjab	0.76	--	0.08	0
23	Rajasthan	--	--	1.29	0
24	Tamil Nadu	60.86	--	0.45	160.09
25	Telangana	51.13	10.35	0.01	0
26	Tripura	3.02	0.05	--	0
27	Uttar Pradesh	--	--	1.80	0
28	Uttarakhand	27.56	0.72	--	0
29	West Bengal	101.23	4.86	2.14	0
	<b>Total</b>	<b>1191.36</b>	<b>68.24</b>	<b>6.65</b>	<b>818.14</b>

**No. 49: Market Borrowings of State Governments**

Sr. No.	State	2017-18		2018-19		2019-20						(₹ Billion)	
						April		May		June			
		Gross Amount Raised	Net Amount Raised	Gross	Net								
1	2	3	4	5	6	7	8	9	10	11	12	13	
1	Andhra Pradesh	228.00	189.22	302.00	238.24	50.00	34.84	20.00	14.17	31.04	25.21	101.04	74.21
2	Arunachal Pradesh	8.88	7.03	7.19	6.93	2.11	2.11	-	-	2.61	2.61	4.72	4.72
3	Assam	77.60	67.97	105.95	80.89	-	-	-	-	-	-	-	-
4	Bihar	100.00	89.08	143.00	109.03	-	-	-	-	-	-10.00	-	-10.00
5	Chhattisgarh	81.00	81.00	129.00	129.00	-	-	-	-	-	-	-	-
6	Goa	18.00	14.00	23.50	18.50	1.00	1.00	1.00	1.00	2.00	1.00	4.00	3.00
7	Gujarat	240.00	157.85	369.71	274.57	33.00	33.00	20.00	20.00	20.00	10.00	73.00	63.00
8	Haryana	166.40	158.40	212.65	179.70	10.00	10.00	10.00	10.00	-	-7.00	20.00	13.00
9	Himachal Pradesh	46.00	25.51	42.10	21.08	4.00	4.00	2.00	2.00	-	-	6.00	6.00
10	Jammu & Kashmir	62.00	39.74	66.84	49.27	8.00	2.61	3.00	3.00	2.49	2.49	13.49	8.10
11	Jharkhand	60.00	48.07	55.09	40.23	-	-5.17	-	-	15.00	15.00	15.00	9.83
12	Karnataka	220.98	173.48	396.00	313.83	-	-	-	-	-	-	-	-
13	Kerala	205.00	162.03	195.00	147.84	30.00	30.00	25.00	25.00	7.29	1.29	62.29	56.29
14	Madhya Pradesh	150.00	131.25	204.96	149.71	5.00	5.00	15.00	15.00	20.00	20.00	40.00	40.00
15	Maharashtra	450.00	364.80	208.69	31.17	25.00	25.00	35.00	35.00	20.00	20.00	80.00	80.00
16	Manipur	5.25	2.78	9.70	6.67	2.03	2.03	-	-	4.00	4.00	6.03	6.03
17	Meghalaya	11.16	9.20	11.22	8.63	-	-	-	-	-	-0.50	-	-0.50
18	Mizoram	4.24	2.77	0.00	-1.23	1.58	1.58	-	-	-	-	1.58	1.58
19	Nagaland	11.35	7.66	8.22	3.55	1.00	-1.60	-	-	-	-	1.00	-1.60
20	Odisha	84.38	84.38	55.00	45.00	10.00	10.00	-	-	-	-	10.00	10.00
21	Puducherry	8.25	4.88	8.25	4.75	-	-	-	-	-	-	-	-
22	Punjab	174.70	133.49	221.15	170.53	23.00	12.00	10.00	10.00	19.00	14.00	52.00	36.00
23	Rajasthan	249.14	167.77	331.78	201.86	40.00	40.00	15.00	10.00	59.95	31.83	114.95	81.83
24	Sikkim	9.95	7.45	10.88	7.95	-	-	-	-	2.13	2.13	2.13	2.13
25	Tamil Nadu	409.65	360.23	431.25	322.78	30.00	30.00	40.00	40.00	40.00	40.00	110.00	110.00
26	Telangana	246.00	218.28	267.40	221.83	15.00	4.16	25.00	20.83	33.00	28.83	73.00	53.83
27	Tripura	11.37	11.37	15.43	13.87	-	-	-	-	-	-	-	-
28	Uttar Pradesh	416.00	371.78	460.00	333.07	-	-	-	-15.00	-	-5.00	-	-20.00
29	Uttarakhand	66.60	58.30	63.00	52.89	5.00	2.00	-	-	-	-	5.00	2.00
30	West Bengal	369.11	253.04	428.28	304.31	-	-20.00	-	-40.00	20.00	20.00	20.00	-40.00
<b>Grand Total</b>		<b>4191.00</b>	<b>3402.81</b>	<b>4783.23</b>	<b>3486.43</b>	<b>295.72</b>	<b>222.56</b>	<b>221.00</b>	<b>151.00</b>	<b>298.51</b>	<b>215.89</b>	<b>815.23</b>	<b>589.45</b>

- : Nil.

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<sub>2</sub> and NM<sub>3</sub> 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<sub>1</sub> and L<sub>2</sub> are compiled monthly and L<sub>3</sub> quarterly.  
 Wherever data are not available, the last available data have been repeated.

### **Table No. 13**

Data in column Nos. (4) & (5) are Provisional.

**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**

1.3: Pertain to multiarteral net settlement batches.

3.1: Pertain to three centres – Mumbai, New Delhi and Chennai.

3.3: Pertain to clearing houses managed by 21 banks.

6: Available from December 2010.

7: Include IMPS transactions.

9: Includes ATMs deployed by Scheduled Commercial banks and White Label ATMs (WLA). WLA are included from April 2014 onwards.

Mobile Banking - 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.

**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 from 2011-12 onwards are based on 2011-12 base. Data from year 2015-16 pertains to 29 states.

The GDP data from 2015-16 pertains to the Second Advance Estimates of National Income released by Central Statistics Office on 28th February 2018.

GDP for 2016-17 (RE) and 2017-18 are from Union Budget 2017-18.

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 and 364-day Treasury Bills.

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 (excluding 364-day 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**.

### Recent Publications of the Reserve Bank of India

<b>Name of Publication</b>	<b>Price</b>	
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1. Reserve Bank of India Bulletin 2019	₹300 per copy (over the counter) ₹350 per copy (inclusive of postage) ₹4,200 (one year subscription - inclusive of postage) ₹3,150 (one year concessional rate*) ₹3,360 (one year subscription - inclusive of postage <sup>@</sup> ) ₹2,520 (one year concessional rate <sup>@</sup> )	US\$ 15 per copy (inclusive of postage) US\$ 180 (one-year subscription) (inclusive of air mail courier charges)
2. Handbook of Statistics on the Indian States 2018-19	₹650 (Normal) ₹700 (inclusive of postage)	US\$ 24 (inclusive of air mail courier charges)
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10. Reserve Bank of India Occasional Papers Vol. 39, 2018	₹200 per copy (over the counter) ₹250 per copy (inclusive of postal charges)	US\$ 18 per copy (inclusive of air mail courier charges)
11. Reserve Bank of India Occasional Papers Vol. 40, No. 1, 2019	₹200 per copy (over the counter) ₹250 per copy (inclusive of postal charges)	US\$ 18 per copy (inclusive of air mail courier charges)
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](http://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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