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MONETARY POLICY STATEMENT FOR 2017-18

First Bi-monthly Monetary Policy Statement, 2017-18

Monetary Policy Report-April 2017

First Bi-monthly Monetary Policy Statement, 2017-18

Resolution of the Monetary Policy Committee (MPC)

Reserve Bank of India *

Part A: Monetary Policy

Monetary and Liquidity Measures

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

- keep the policy repo rate under the liquidity adjustment facility (LAF) unchanged at 6.25 per cent.

Consequent upon the narrowing of the LAF corridor as elaborated in the accompanying Statement on Developmental and Regulatory Policies, the reverse repo rate under the LAF is at 6.0 per cent, and the marginal standing facility (MSF) rate and the Bank Rate are at 6.50 per cent.

The decision of the MPC is consistent with a neutral stance of monetary policy 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

2. Since the MPC met in February 2017, indicators of global growth suggest signs of stronger activity in most advanced economies (AEs) and easing of recessionary conditions in commodity exporting

large emerging market economies (EMEs). In the US, high frequency data indicate that the labour market, industrial production and retail sales are catalysing a recovery in Q1 of 2017 from a relatively subdued performance in the preceding quarter. Nonetheless, risks to higher growth have arisen from non-realisation or under-achievement of macroeconomic policies. In the Euro area, the manufacturing purchasing managers' index (PMI) rose to a six-year high in March amidst improving consumer confidence and steadily strengthening employment conditions. In the Japanese economy, nascent signs of revival are evident in the form of falling unemployment, improving business sentiment on fixed investment, and rising exports helped by the depreciation of the yen; however, deflation risks linger.

3. For EMEs, the outlook is gradually improving, with indications that the slowdown characterising 2016 could be bottoming out. In China, supportive macroeconomic policies, surging credit growth and a booming property market have held up the momentum of growth *albeit* amidst concerns about financial stability and capital outflows. In Brazil, hardening commodity prices are providing tailwinds to reforms undertaken by the authorities to pull the economy out of recession, although financial fragilities remain a risk. Russia is benefiting from the firming up of crude prices and it is widely expected that growth will return to positive territory in 2017.

4. Inflation is edging up in AEs to or above target levels on the back of slowly diminishing slack, tighter labour markets and rising commodity prices. Among EMEs, Turkey and South Africa remain outliers in an otherwise generalised softening of inflation pressures. Global trade volumes are finally showing signs of improvement amidst shifts in terms of trade, with exports rising strongly in several EMEs as well as in some AEs whose currencies have depreciated.

* Released on April 06, 2017.

5. International financial markets have been impacted by policy announcements in major AEs, geopolitical events and country-specific factors. Equity markets in AEs were driven up by reflation trade, stronger incoming data and currency movements. Equity markets in EMEs had a mixed performance, reflecting domestic factors amidst a cautious return of investor appetite and capital flows. In the second half of March, dovish guidance on US monetary policy lifted equities across jurisdictions, especially in Asia, as the reach for EME assets resumed strongly, although doubts about the realisation of US policies, Brexit and softer crude prices tempered sentiments. Bond markets have mirrored the uncertainty surrounding the commitment to fiscal stimulus in the US and yields traded sideways in AEs, while they generally eased across EMEs. In the currency markets, the US dollar's bull run lost steam by mid-March. EME currencies initially rose on optimism on the global outlook, but some of them have weakened in recent days with the fall in commodity prices. Crude prices touched a three-month low in March on rising shale output and US inventories. Food prices have been firming up globally, driven by cereals.

6. On the domestic front, the Central Statistics Office (CSO) released its second advance estimates for 2016-17 on February 28, placing India's real GVA growth at 6.7 per cent for the year, down from 7 per cent in the first advance estimates released on January 6. Agriculture expanded robustly year-on-year after two consecutive years of sub-one per cent growth. In the industrial sector, there was a significant loss of momentum across all categories, barring electricity generation. The services sector also slowed, pulled down by trade, hotels, transport and communication as well as financial, real estate and professional services. Public administration, defence and other services cushioned this slowdown. To some extent, government expenditure made up for weakness in private consumption and capital formation.

7. Several indicators are pointing to a modest improvement in the macroeconomic outlook. Foodgrains production has touched an all-time high of 272 million tonnes, with record production of rice, wheat and pulses. The record production of wheat should boost procurement operations and economise on imports, which had recently surged. Rice stocks, which had depleted to close to the minimum buffer norm, have picked up with *kharif* procurement. The bumper production of pulses has helped in building up to the intended buffer stock (*i.e.*, 20 lakh tonnes) and this will keep the price of pulses under check – the domestic price of pulses has already fallen below the minimum support price (MSP).

8. Industrial output, measured by the index of industrial production (IIP), recovered in January from a contraction in the previous month, helped by a broad-based turnaround in manufacturing as well as mining and quarrying. Capital goods production improved appreciably, although this largely reflected the waning of unfavourable base effects. Consumer non-durables continued, however, to contract for the second successive month in spite of supportive base effects. Thus, investment and rural consumption demand remain muted. The output of core industries moderated in February due to slowdown in production of all the components except coal. The manufacturing purchasing managers' index (PMI) remained in expansion mode in February and rose to a five month high in March on the back of growth of new orders and output. The future output index also rose strongly on forecasts of pick-up in demand and the launch of new product lines. The 77th round of the Reserve Bank's industrial outlook survey indicates that overall business sentiment is expected to improve in Q1 of 2017-18 on the back of a sharp pick up in both domestic and external demand. Coincident indicators such as exports and non-oil non-gold imports are indicative of a brighter outlook

for industry, although the sizable under-utilisation of capacity in several industries could operate as a drag on investment.

9. Activity in the services sector appears to be improving as the constraining effects of demonetisation wear off. On the one hand, rural demand remains depressed as reflected in lower sales of two- and three-wheelers and fertiliser. On the other hand, high frequency indicators relating to railway traffic, telephone subscribers, foreign tourist arrivals, passenger car and commercial vehicles are regaining pace, thereby positioning the services sector on a rising trajectory. After three consecutive months of contraction, the services PMI for February and March emerged into the expansion zone on improvement in new business.

10. After moderating continuously over the last six months to a historic low, retail inflation measured by year-on-year changes in the consumer price index (CPI) turned up in February to 3.7 per cent. While food prices bottomed out at the preceding month's level, base effects pushed up inflation in this category. Prices of sugar, fruits, meat, fish, milk and processed foods increased, generating a sizable jump in the momentum in the food group. In the fuel group, inflation increased as the continuous hardening of international prices lifted domestic prices of liquefied petroleum gas during December 2016 – February 2017. Kerosene prices have also been increasing since July with the programmed reduction of the subsidy. Adapting to the movements in these salient prices, both three months ahead and a year ahead households' inflation expectations, which had dipped in the December round of the Reserve Bank's survey, reversed in the latest round. Moreover, the survey reveals hardening of price expectations *across* product groups. The 77th round of the Reserve Bank's industrial outlook survey indicates that pricing power is returning to corporates as profit margins get squeezed by input costs.

11. Excluding food and fuel, inflation moderated in February by 20 basis points to 4.8 per cent, essentially on transient and item-specific factors. In February, favourable base effects were at work in the clothing and bedding sub-group as well as in personal care and effects, the latter also influenced by the disinflation in gold prices. The volatility in crude oil prices and its lagged pass-through are impacting the trajectory of CPI inflation excluding food and fuel. Much of the impact of the fall of US \$4.5 per barrel in international prices of crude since early February would feed into the CPI print in April as its cumulative pass-through occurred with a lag in the first week of this month. Importantly, inflation excluding food and fuel has exhibited persistence and has been significantly above headline inflation since September 2016.

12. With progressive remonetisation, the surplus liquidity in the banking system declined from a peak of ₹7,956 billion on January 4, 2017 to an average of ₹6,014 billion in February and further down to ₹4,806 billion in March. Currency in circulation expanded steadily during this period. Its impact on the liquidity overhang was, however, partly offset by a significant decline in cash balances of the Government up to mid-March which released liquidity into the system. Thereafter, the build-up of Government cash balances on account of advance tax payments and balance sheet adjustment by banks reduced surplus liquidity to ₹3,141 billion by end-March. Issuances of cash management bills (CMBs) under the market stabilisation scheme (MSS) ceased in mid-January and existing issues matured, with the consequent release of liquidity being absorbed primarily through variable rate reverse repo auctions of varying tenors. Accordingly, the average net absorption by the Reserve Bank increased from ₹2,002 billion in January to ₹4,483 billion in March. The weighted average call money rate (WACR) remained within the LAF corridor. The maturing of CMBs and reduced issuance

of Treasury bills leading up to end-March has also contributed to Treasury bill rates being substantially below the policy rate.

13. Merchandise exports rose strongly in February 2017 from a subdued profile in the preceding months. Growth impulses were broad-based, with major contributors being engineering goods, petroleum products, iron ore, rice and chemicals. The surge in imports in January and February 2017 largely reflected the effect of the hardening of commodity prices such as crude oil and coal. Non-oil non-gold imports continued to grow at a modest pace, though capital goods imports remained sluggish. With imports outpacing exports, the trade deficit widened in January and February from its level a year ago, though it was lower on a cumulative basis for the period April–February 2016-17.

14. Balance of payments data for Q3 indicate that the current account deficit for the first three quarters of the financial year narrowed to 0.7 per cent of GDP, half of its level a year ago. For the year as a whole, the current account deficit is likely to remain muted at less than 1 per cent of GDP. Foreign direct investment (FDI) has dominated net capital inflows during April–December, with manufacturing, communication and financial services being the preferred sectors. Turbulence in global financial markets set off a bout of global risk aversion and flight to safe haven that caused net outflows of foreign portfolio investment (FPI) during November 2016 to January 2017. The tide reversed with the pricing in of the Fed's normalisation path and improvement in global growth prospects. FPI flows turned positive in February and welled up into a surge in March, especially in debt markets relative to equity markets (which had been the dominant recipient until February). This reversal appears to have been driven by stable domestic inflation, better than expected domestic growth, encouraging

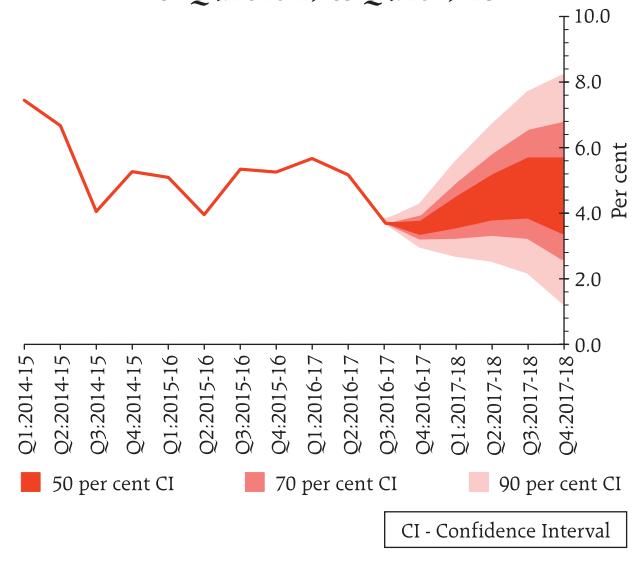
corporate earnings, clarity on FPI taxation, pro-reform budget proposals and state election results. The level of foreign exchange reserves was US\$ 369.9 billion on March 31, 2017.

Outlook

15. Since the February bi-monthly monetary policy statement, inflation has been quiescent. Headline CPI inflation is set to undershoot the target of 5.0 per cent for Q4 of 2016-17 in view of the sub-4 per cent readings for January and February. For 2017-18, inflation is projected to average 4.5 per cent in the first half of the year and 5 per cent in the second half (Chart 1).

16. Risks are evenly balanced around the inflation trajectory at the current juncture. There are upside risks to the baseline projection. The main one stems from the uncertainty surrounding the outcome of the south west monsoon in view of the rising probability of an *El Niño* event around July–August, and its implications for food inflation. Proactive supply management will play a critical role in staving off pressures on headline inflation. A prominent risk

Chart 1: Quarterly Projection of CPI Inflation (y-o-y) for Q4:2016-17 to Q4:2017-18

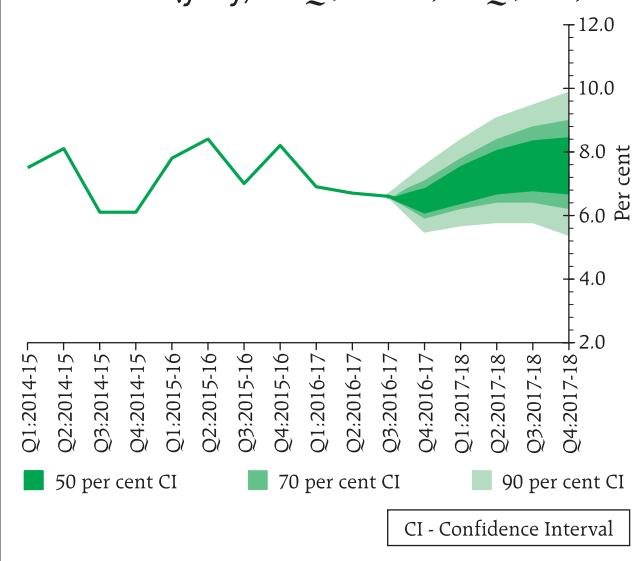


could emanate from managing the implementation of the allowances recommended by the 7th CPC. In case the increase in house rent allowance as recommended by the 7th CPC is awarded, it will push up the baseline trajectory by an estimated 100-150 basis points over a period of 12-18 months, with this initial statistical impact on the CPI followed up by second-order effects. Another upside risk arises from the one-off effects of the GST. The general government deficit, which is high by international comparison, poses yet another risk for the path of inflation, which is likely to be exacerbated by farm loan waivers. Recent global developments entail a reflation risk which may lift commodity prices further and pass through into domestic inflation. Moreover, geopolitical risks may induce global financial market volatility with attendant spillovers. On the downside, international crude prices have been easing recently and their pass-through to domestic prices of petroleum products should alleviate pressure on headline inflation. Also, stepped-up procurement operations in the wake of the record production of foodgrains will rebuild buffer stocks and mitigate food price stress, if it materialises.

17. GVA growth is projected to strengthen to 7.4 per cent in 2017-18 from 6.7 per cent in 2016-17, with risks evenly balanced (Chart 2).

18. Several favourable domestic factors are expected to drive this acceleration. First, the pace of remonetisation will continue to trigger a rebound in discretionary consumer spending. Activity in cash-intensive retail trade, hotels and restaurants, transportation and unorganised segments has largely been restored. Second, significant improvement in transmission of past policy rate reductions into banks' lending rates post demonetisation should help encourage both consumption and investment demand of healthy corporations. Third, various

Chart 2: Quarterly Projection of Growth in GVA at Basic Prices (y-o-y) for Q4:2016-17 to Q4:2017-18



proposals in the Union Budget should stimulate capital expenditure, rural demand, and social and physical infrastructure all of which would invigorate economic activity. Fourth, the imminent materialisation of structural reforms in the form of the roll-out of the GST, the institution of the Insolvency and Bankruptcy Code, and the abolition of the Foreign Investment Promotion Board will boost investor confidence and bring in efficiency gains. Fifth, the upsurge in initial public offerings in the primary capital market augurs well for investment and growth.

19. The global environment is improving, with global output and trade projected by multilateral agencies to gather momentum in 2017. Accordingly, external demand should support domestic growth. Downside risks to the projected growth path stem from the outturn of the south west monsoon; ebbing consumer optimism on the outlook for income, the general economic situation and employment as polled in the March 2017 round of the Reserve Bank's consumer confidence survey; and, commodity prices, other than crude, hardening further.

20. Overall, the MPC's considered judgement call to wait out the unravelling of the transitory effects of demonetisation has been broadly borne out. While these effects are still playing out, they are distinctly on the wane and should fade away by the Q4 of 2016-17. While inflation has ticked up in its latest reading, its path through 2017-18 appears uneven and challenged by upside risks and unfavourable base effects towards the second half of the year. Moreover, underlying inflation pressures persist, especially in prices of services. Input cost pressures are gradually bringing back pricing power to enterprises as demand conditions improve. The MPC remains committed to bringing headline inflation closer to 4.0 per cent on a durable basis and in a calibrated manner. Accordingly, inflation developments have to be closely and continuously monitored, with food price pressures kept in check so that inflation expectations can be re-anchored. At the same time, the output gap is gradually closing. Consequently, aggregate demand pressures could build up, with implications for the inflation trajectory.

21. Against this backdrop, the MPC decided to keep the policy rate unchanged in this review while persevering with a neutral stance. The future course of monetary policy will largely depend on incoming data on how macroeconomic conditions are evolving. Banks have reduced lending rates, although further scope for a more complete transmission of policy impulses remains, including for small savings/administered rates¹. It is in this context that greater clarity about liquidity management is being provided, even as surplus liquidity is being steadily drained out. Along with rebalancing liquidity conditions, it will be

the Reserve Bank's endeavour to put the resolution of banks' stressed assets on a firm footing and create congenial conditions for bank credit to revive and flow to productive sectors of the economy.

22. Six members voted in favour of the monetary policy decision. The minutes of the MPC's meeting will be published by April 20, 2017.

23. The next meeting of the MPC is scheduled on June 6 and 7, 2017.

Part B: Statement on Developmental and Regulatory Policies

24. This Statement reviews the progress of various developmental and regulatory policy measures announced by the Reserve Bank in recent policy statements and sets out new measures for further refining the liquidity management framework; strengthening the banking regulation and supervision; broadening and deepening financial markets; and extending the reach of financial services by enhancing the efficacy of the payment and settlement systems.

I. Liquidity Management Framework for Monetary Policy Operations

25. The liquidity management framework was modified in April 2016, providing assurance on both durable and frictional liquidity, while aiming to progressively lower the average ex-ante liquidity deficit in the system to a position closer to neutrality. Consistent with this assurance, the RBI proactively injected durable liquidity of ₹2.1 trillion during the year up to November 8, 2016 in the form of open market purchase operations, net forex market operations, and buyback of government securities. This helped in bringing down the system level ex-ante liquidity position from a deficit of about ₹813 billion in Q1 on a daily average basis to a surplus of ₹292 billion in Q2 and ₹64 billion in Q3 (up to November 8, 2016).

¹ Since the introduction of the formula in April 2016, interest rates on small savings are about 61-95 basis points higher, depending on tenor, compared to what they should be if the formula is followed. If the spread between small savings rates and bond yields remains wide, the diversion of deposits to small savings would impede a full transmission to bank lending rates.

26. Following demonetisation, a persistent large structural liquidity surplus has impacted the banking system. The Reserve Bank has absorbed the surplus liquidity using a mix of both conventional and unconventional instruments to ensure that the money market rates remain aligned to the repo rate. With the gradual decline in the magnitude of the surplus from its peak in early January and due to expiration of securities authorised under the MSS, the Reserve Bank has progressively moved to variable rate reverse repo operations for absorbing surplus liquidity, some of which may persist through 2017-18.

27. Management of Surplus Liquidity - The Reserve Bank is committed to reverting system liquidity to a position closer to neutrality, consistent with the stance of monetary policy. Towards this goal, the Reserve Bank will employ a mix of instruments to ensure that all normal requirements of liquidity consistent with the growing economy will be met:

- The expansion in currency in circulation will progressively drain away some of the surpluses associated with demonetisation, while remaining effects will be managed with variable reverse repo auctions with a preference for longer term tenors.
- Operations under the Market Stabilisation Scheme (MSS) using Treasury Bills and dated securities will be conducted to modulate liquidity from other sources.
- If required, durable liquidity will be managed through open market operations (OMO sales and purchases) with a view to moving system level liquidity to neutrality.
- Enduring surpluses due to government operations will be managed by issuances of cash management bills (CMBs) of appropriate tenors in accordance with the memorandum of understanding with the Government of India.

- Fine tuning operations in the form of variable rate repo/reverse repo auctions of various maturities will continue to be deployed to modulate day-to-day liquidity.

28. The Reserve Bank has proposed since November 2015 the introduction of a Standing Deposit Facility (SDF) by suitably amending the RBI Act, which is under examination of the Government. Introduction of this facility would give greater flexibility to the Reserve Bank for managing its liquidity operations.

29. Narrowing of the Monetary Policy Rate Corridor

- In consonance with the recommendation of the Expert Group to Revise and Strengthen the Monetary Policy Framework (Chairman: Dr. Urjit R. Patel), the policy rate corridor was narrowed from +/-100 bps to +/- 50 bps in April 2016, with a view to ensuring finer alignment of the weighted average call rate (WACR), the operating target of monetary policy, with the repo rate. In either extremely tight liquidity conditions or in situations of persistent excess liquidity, when most market participants are on one side of the market for overnight liquidity, a narrower corridor can contribute to finer alignment of the operating target with the policy rate. Accordingly, it has been decided to narrow the policy rate corridor around the policy repo rate to +/-25 bps from +/- 50 bps with immediate effect. As a result, the reverse repo rate under the liquidity adjustment facility (LAF) would be 25 bps lower than the policy repo rate and the marginal standing facility (MSF) rate would be 25 bps higher than the policy repo rate.

30. Substitution of Collateral under the LAF Term Repos

- Currently, there is no provision for LAF participants to substitute the security offered as collateral to the Reserve Bank under term repos. It has been decided to allow substitution of collateral by market participants in the term repos under the LAF which will provide operational flexibility to them by enhancing liquidity of collaterals. This functionality will be available from April 17, 2017.

II. Banking Regulation and Supervision

31. Revised Prompt Corrective Action (PCA)

Framework for Banks- Based on the recommendations of the Sub-Committee of Financial Stability and Development Council (FSDC-SC), the existing PCA framework for banks has been reviewed, updated and finalised with the approval of the Board for Financial Supervision (BFS). Indicators, which will trigger the updated PCA, include capital [capital-to-risk weighted assets ratio (CRAR) and common equity tier 1 (CET1) ratio], net non-performing assets (NPA) ratio and return on assets. Leverage would be monitored additionally. The banks under PCA would be required to conform to such mandatory and discretionary actions as may be decided by the Reserve Bank. The revised PCA framework for banks will be issued by mid-April 2017.

32. Asset Reconstruction Companies (ARCs):

Raising the Minimum Level of Net Owned Funds (NOF) - While the earlier provision in the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002 of a minimum of '₹ 2 crore of owned funds' was amended in 2016 as '₹ 2 crore of net owned funds (NOF)', the cap on owned fund of 15 per cent of financial assets was removed. In view of the enhanced role of ARCs and greater cash based transactions, it is proposed to stipulate a minimum NOF of ₹100 crore for ARCs. The necessary instructions will be issued by end-April, 2017.

33. Partial Credit Enhancement (PCE): Capital Requirement

- It is proposed that if the pre-enhancement rating of the PCE enhanced bond subsequently improves over the rating at the time of issuance, the capital calculated will be as per the prevailing difference in pre- and post-enhancement rating and it will not be subject to either the extant floor (the capital requirement on the PCE at the

time of issuance of the PCE enhanced bonds) or the restriction of maintaining the number of notches of improvement in rating at the time of issuance. The necessary instructions will be issued by end-April, 2017. It is also proposed that in order to be eligible for PCE by banks, the bonds will have to be rated by two credit rating agencies accredited by the Reserve Bank.

34. Banking Outlets: Final Guidelines

- Final guidelines are proposed to be issued on banking outlets, clarifying on what is a 'banking outlet' and harmonising the treatment of different forms of bank presence for the purpose of opening outlets in underserved areas. These will supersede the branch licensing guidelines in force. Detailed guidelines will be issued by end-April, 2017.

35. Real Estate Investment Trust (REITS) and Infrastructure Investment Trust (InvITs): Banks' Participation

- The Securities and Exchange Board of India (SEBI) has put in place regulations for REITS and InvITs and requested the Reserve Bank to allow banks to participate in these schemes. Currently, banks are allowed to invest in equity-linked mutual funds, venture capital funds (VCFs) and equities to the extent of 20 per cent of their NOF. It is proposed to allow banks to invest in REITS and InvITs within this umbrella limit. Detailed guidelines will be issued by end-May 2017.

36. Countercyclical Capital Buffer

- The framework on countercyclical capital buffer (CCCB) was put in place by the Reserve Bank in terms of guidelines issued on February 5, 2015 wherein it was advised that the CCCB would be activated as and when the circumstances warranted, and that the decision would normally be pre-announced with a lead time of four quarters. The framework envisages the credit-to-GDP gap as the main indicator, which may be used in conjunction with other supplementary indicators,

viz., the Credit-Deposit (C-D) ratio for a moving period of three years (given its correlation with the credit-to-GDP gap and GNPA growth), industrial outlook (IO) assessment index (with due note of its correlation with GNPA growth), and interest coverage ratio (noting its correlation with the credit-to-GDP gap). Based on the review and empirical testing of CCCB indicators, it has been decided that it is not necessary to activate CCCB at this point in time.

III. Financial Markets

37. Simplified Hedging Facility for Forex Exposure: Draft Guidelines – On August 25, 2016, the Reserve Bank announced a scheme to permit entities exposed to exchange rate risk, whether resident or non-resident, to undertake hedging transactions with simplified procedures up to a limit of USD 30 million at any given time. Draft guidelines on the proposed scheme are being placed in the public domain for wider feedback by mid-April, 2017.

38. Introduction of Tri-party Repo: Draft Framework - As recommended by the Working Group on Development of Corporate Bond Market in India (Chairman: Shri HR Khan), a draft policy framework for introduction of tri-party repo is being placed in the public domain by mid-April, 2017.

IV. Payment and Settlement

39. Introduction of Additional Settlement Batches for National Electronic Funds Transfer (NEFT) - As envisaged in the document on Vision-2018 for Payment and Settlement Systems, the NEFT settlement cycle will be reduced from hourly batches to half hourly batches. Consequently, 11 additional settlement batches will be introduced at 8.30 am onwards, taking the total number of half hourly settlement batches during the day to 23. This will enhance the efficiency of the NEFT system and add to customer convenience. The starting batch at 8.00 am

and closing batch at 7.00 pm shall remain the same, as hitherto. The return discipline shall also remain the same, i.e., B+2 hours (settlement batch time plus two hours) as per the existing practice.

40. Merchant Discount Rate (MDR): Rationalisation

- The Reserve Bank issued a draft circular on "Rationalisation of Merchant Discount Rate (MDR) for Debit Card Transactions" on February 16, 2017. The extensive feedback received, including from the Government, banks, card networks, the Indian Banks' Association, the Payments Council of India, private entities and individuals are being examined. Until the issuance of final guidelines, the extant instructions on MDR for debit card transactions will continue to apply.

41. Issuance and Operation of Pre-paid Payment Instruments (PPIs) in India - The Reserve Bank had issued a draft circular on "Master Directions on Issuance and Operation of Pre-paid Payment Instruments (PPIs) in India" on March 20, 2017 with the deadline for comments as March 31, 2017. Based on the requests received from various quarters, the timeline for feedback/comments has been extended until April 15, 2017. The final guidelines for PPIs would be issued by end-May 2017.

V. Financial Inclusion

42. Pilot Project on Financial Literacy: Centres for Financial Literacy (CFL) - The Reserve Bank is initiating a pilot project on financial literacy at the block level to explore innovative and participatory approaches to financial literacy. The pilot project will be commissioned in nine states across 80 blocks by Non-Government Organisations (NGOs) in collaboration with the sponsor banks. Six NGOs registered with the Depositor Education and Awareness Fund, viz., CRISIL Foundation, Mumbai; Dhan Foundation; Swadhaar Fin Access, Mumbai; Indian School of Micro Finance for Women (ISMW); Samarpan, Chhattisgarh; and

the PACE Foundation have been selected to execute the pilot project in collaboration with banks. The pilot project would be executed with the following broad objectives: active saving and good borrowing; financial planning and goal setting; and, going digital and consumer protection. The CFLs would be set up

under a common name and logo, "Money-wise Centre for Financial Literacy". The sponsor banks will enter into contracts with the identified NGOs within three months, *i.e.*, by June 30, 2017. Thereafter, the NGOs will start operating the CFLs within three months of entering into contracts with banks.

I. Macroeconomic Outlook

Underneath current benign inflation conditions, there are broad-based inflation pressures, which make the inflation outlook for 2017-18 challenging. Growth in real gross value added is expected to accelerate in 2017-18, underpinned by strong consumption demand even as investment activity remains muted and external demand uncertain.

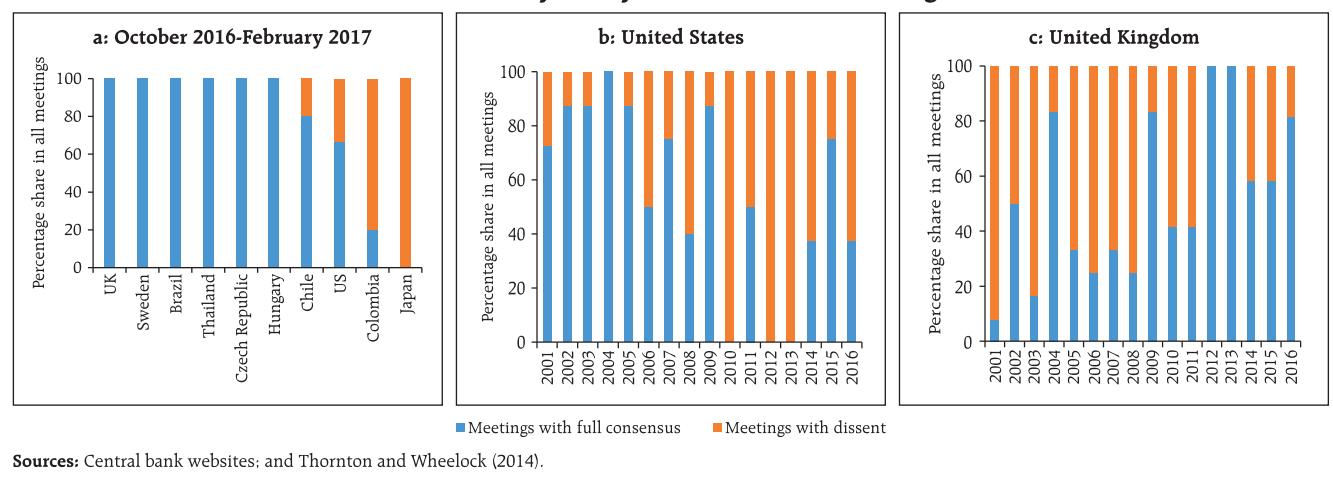
Under the monetary policy framework ushered in by amendments to the Reserve Bank of India (RBI) Act, the monetary policy decision has been vested in a six member monetary policy committee (MPC). Following its decision to lower the policy repo rate by 25 basis points (bps) at the time of the October 2016 Monetary Policy Report (MPR), the MPC decided to hold the policy rate in the December 2016 and February 2017 meetings of its bi-monthly schedule.

Four features distinguish these initial decisions under the new regime. First, there was a calibrated shift in the policy stance from accommodative to neutral. Second, there was an overwhelming preference for waiting out the transitory effects of

demonetisation and the unsettled political climate globally. Third, each decision was taken by unanimity. Fourth, within the consensus, members' decisions appear to have been driven by individualistic approaches to arriving at them, as revealed in their written public statements.

The recent experience of MPCs in the UK, Sweden, Brazil, Thailand, Czech Republic and Hungary suggests that rate decisions have been based on unanimity (Chart I.1). Other recent cases in point are the decisions of the US Federal Open Market Committee (FOMC) in its December 2016 and February 2017 meetings, and the Bank of England's MPC in its meetings during October-February. Differences have been typically confined to the size of the change in the policy rate rather than contesting the overarching policy stance.¹ Existing research on monetary policy decision making suggests that divergences stem mainly from (i) MPC members' policy preferences – the relative weight on price stability and output stabilisation – in their reaction functions, and (ii) assessment of expected economic conditions – the evolution of inflation and output gaps.^{2,3} Does the formative experience of the

Chart I.1: Monetary Policy Committees and Voting Pattern



Sources: Central bank websites; and Thornton and Wheelock (2014).

¹ Riboni, Alessandro and Francisco Ruge-Murcia (2014), "Dissent in Monetary Policy Decisions", *Journal of Monetary Economics*, 66, pp.137-154. Thornton, Daniel and David Wheelock (2014), "Making Sense of Dissents: A History of FOMC Dissents", *Federal Reserve Bank of St. Louis Review*, Third Quarter, pp.213-227.

Barwell, Richard (2016), "No Hawks, no Doves, only Consensus: How Central Banks Set Interest Rates?", *Voxeu.org*.

² Hansen, Stephen, Michael McMahon, and Carlos Rivera (2014), "Preferences or Private Assessments on a Monetary Policy Committee?", *Journal of Monetary Economics*, 67, pp.16-32.

³ Some other factors highlighted in the literature that can impinge on the rate outcome are: (a) perception among members that a disagreement might be seen as a sign of incompetence; and (b) dominance by the Chair.

MPC in India suggest similar policy preferences and assessments of the outlook? It is too early to tell.

The analysis of macroeconomic developments presented in chapters II and III explains why both inflation and output growth have undershot the forecasts set out in the October 2016 MPR. In part, these deviations reflect the impact of demonetisation. Turning to the outlook, recent domestic and global events warrant revisions to the baseline assumptions on initial conditions set out in the October 2016 MPR (Table I.1). First, international crude oil prices have fluctuated widely over the last six months, hardening initially on the back of the agreement by Organisation of the Petroleum Exporting Countries (OPEC) to curtail production becoming credible.⁴ More recently,

Table I.1: Baseline Assumptions for Near-Term Projections

Variable	October 2016 MPR	Current (April 2017) MPR
Crude oil (Indian basket)	US\$ 46 per barrel during FY 2016-17:H2	US\$ 50 per barrel during FY 2017-18
Exchange rate	₹67/US\$	Current level
Monsoon	Normal for 2016	Normal for 2017
Global growth	3.1 per cent in 2016 3.4 per cent in 2017	3.4 per cent in 2017 3.6 per cent in 2018
Fiscal deficit	To remain within BE 2016-17 (3.5 per cent)	To remain within BE 2017-18 (3.2 per cent)
Domestic macroeconomic/structural policies during the forecast period	No major change	No major change

Notes:

1. Crude oil (Indian basket) represents a derived basket comprising sour grade (Oman and Dubai average) and sweet grade (Brent) crude oil processed in Indian refineries in the ratio of 71:29.
2. The exchange rate path assumed here is for the purpose of generating RBI staff's baseline growth and inflation projections and does not indicate any 'view' on the level of the exchange rate. The Reserve Bank is guided by the need to contain undue volatility in the foreign exchange market and not by any specific level/band around the exchange rate.
3. Global growth projections are based on July 2016 and January 2017 updates of the IMF's World Economic Outlook.
4. BE: Budget Estimates.

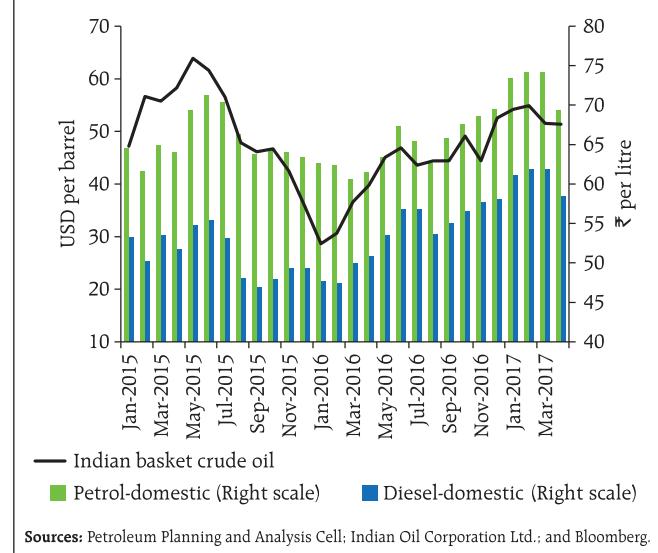
⁴ On November 30, 2016, OPEC members agreed to cut production by 1.2 million barrels per day (mb/d) to 32.5 mb/d, effective January 1, 2017.

these prices have eased with shale production stepping up, US inventories rising sizeably and a vast amount of past supply.⁵ Nonetheless, oil prices are now ruling around 10 per cent above the level (US\$ 46 per barrel) assumed in October 2016. Domestic petrol and diesel prices increased by around ₹5.5 per litre and ₹4.2 per litre, respectively, between November 2016 and February 2017 and were cut by around ₹4.9 per litre and ₹3.5 per litre, respectively, effective April 1, 2017 (Chart I.2).

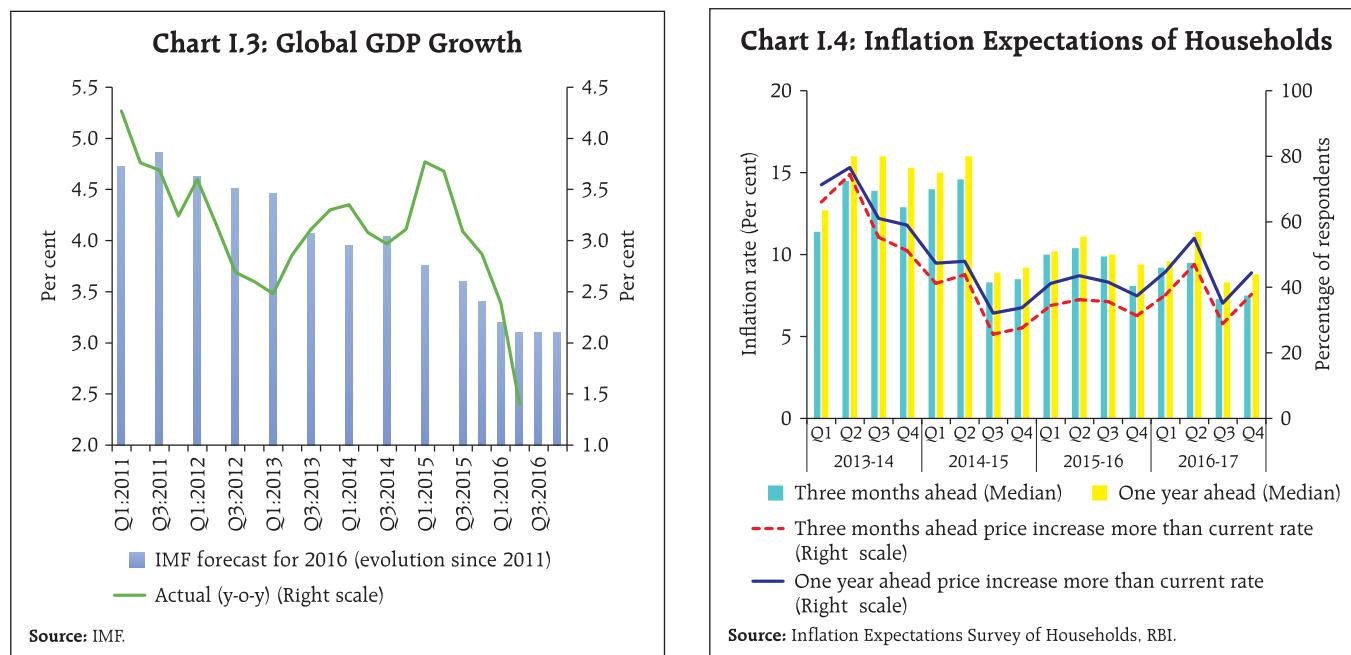
Second, the foreign exchange market has experienced bouts of volatility triggered by international developments. The Indian rupee depreciated sharply *vis-à-vis* the US dollar during November 8-28, 2016 in the aftermath of the US presidential election results. Since then, the rupee has recovered lost ground and appreciated beyond the October 2016 level (₹67 per USD).

Third, global growth and trade have evolved at a sluggish pace, as expected. Looking ahead, their pace is expected to accelerate modestly in 2017, benefitting

Chart I.2: Movements in Crude Oil and Pump Prices



⁵ Rising output from countries not included in OPEC accord is also reported to be undermining the effectiveness of the deal ("Oil's Promised Land Slips Away on OPEC Leaks", Bloomberg, February 5, 2017).



from the expected fiscal stimulus in the US and the strengthening recovery from recent macroeconomic strains in major emerging market and developing economies (EMDEs). A sobering thought, however, is that global growth has repeatedly disappointed initial expectations in the past few years (Chart I.3). Consequently, downside risks suffuse the domestic outlook for 2017-18.

I.1 The Outlook for Inflation

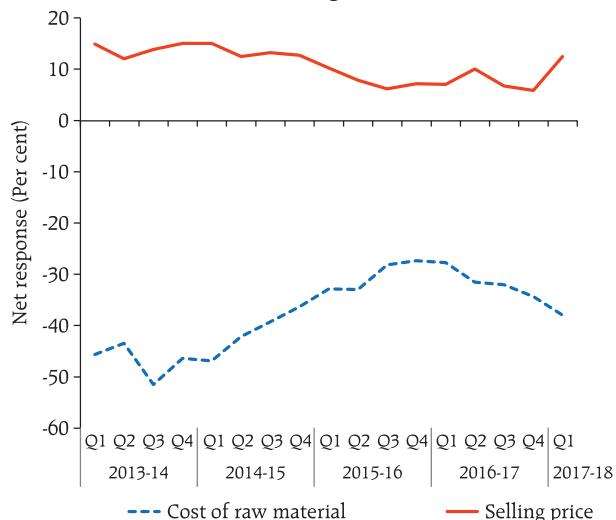
Headline inflation declined to significantly low levels during November 2016–February 2017, much lower than projected in the October 2016 MPR. Yet, the persistence of inflation excluding food and fuel poses a challenge to the inflation outlook. Also, there is considerable uncertainty as to how prices will pan out over the coming months. As vegetable price declines were likely on account of demonetisation-driven distress sales in addition to seasonal factors,⁶ remonetisation could fuel a sharp reversal in vegetable prices, going forward. This development imparts uncertainty to the near-term outlook for inflation.

⁶ While headline inflation moderated to 3.2 per cent in January 2017, inflation excluding vegetables was 4.5 per cent.

Households largely form inflation expectations adaptively, based on past movements in salient prices, especially those of food and fuel. The March 2017 round of the Reserve Bank's survey of urban households indicated an increase of 20-50 bps in inflation expectations over the December round, reversing partly the sharp decline of 2-3 percentage points recorded in the previous (*i.e.*, December) round. Three months and one year ahead inflation expectations were 7.5 per cent and 8.8 per cent, respectively. The proportion of respondents expecting the general price level to increase by more than the current rate also edged higher (Chart I.4).

The hardening of global oil, metal and other commodity prices that is driving the recent surge in India's wholesale inflation is imparting input price pressures for firms. Pricing power is also expected to improve, as reflected by manufacturing firms surveyed in the Reserve Bank's industrial outlook survey in its January-March 2017 round (Chart I.5). Staff costs in the manufacturing sector are also expected to increase in Q1:2017-18. Nominal wage growth in rural areas decelerated in December-January, partly on account of demonetisation.

Chart I.5: Expectations of Cost of Raw Material and Selling Prices



Source: Industrial Outlook Survey, RBI.

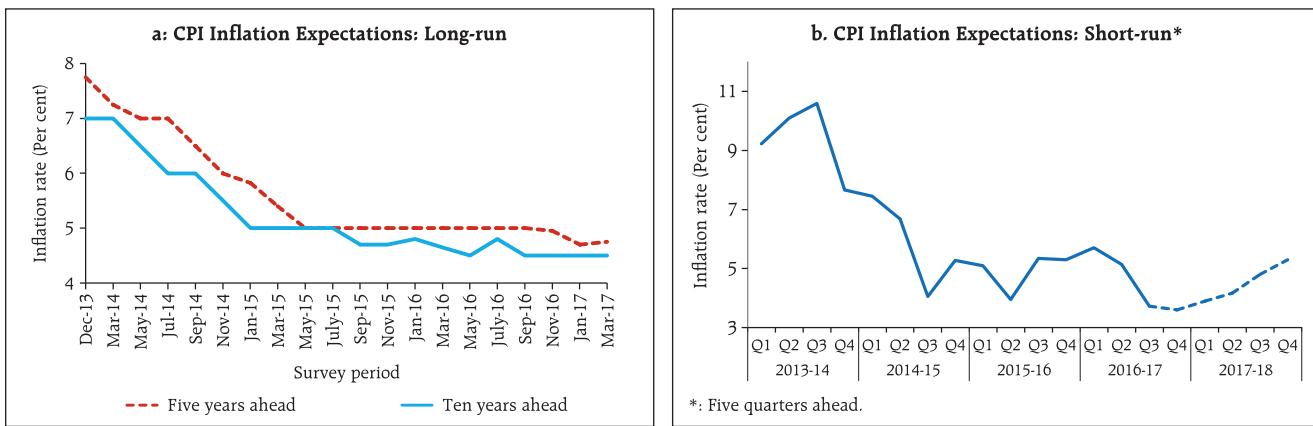
Manufacturing and services sector firms in *Nikkei's* purchasing managers' survey for March 2017 reported pressures from both input prices and output prices.

Professional forecasters surveyed by the Reserve Bank in March 2017 expected CPI inflation to pick up from its current level to 5.3 per cent by Q4:2017-18 (Chart I.6). Their medium-term inflation expectations (five years ahead) increased marginally by 10 bps to 4.8 per cent. Their longer-term inflation expectations (10 years ahead) remained unchanged at 4.5 per cent,

close to the Reserve Bank's medium-term inflation target of four per cent.

Taking into account the revised baseline assumptions, signals from the various forward-looking surveys and estimates from structural and other models (Box I.1), RBI staff's baseline path for headline CPI inflation is expected to take it from its current level of 3.7 per cent (February 2017) to 4.2 per cent in Q1:2017-18, and 4.7 per cent in Q2. It is then forecast to edge higher to 5.1 per cent in Q3 on account of the demonetisation-induced base effect before moderating to 4.9 per cent in Q4:2017-18, with risks evenly balanced around this trajectory (the 50 per cent confidence interval for inflation in Q4:2017-18 is in a range of 3.4-6.4 per cent and the 70 per cent confidence interval is in a range of 2.6-7.2 per cent) (Chart I.7). Forecasts from the structural model indicate that inflation may evolve in a stable manner through 2018-19 and reach 4.6 per cent in Q4:2018-19 under the baseline scenario, with the monetary policy stance remaining unchanged. There are three major upside risks to the baseline inflation path – uncertainty in crude oil prices; exchange rate volatility due to global financial market developments, especially if political risks materialise; and implementation of the house rent allowances under the 7th Central Pay Commission (CPC) award. The likely impact of these shocks to

Chart I.6: Inflation Expectations of Professional Forecasters



Source: Survey of Professional Forecasters, RBI.

*: Five quarters ahead.

Box I.1: Inflation Forecast Combinations

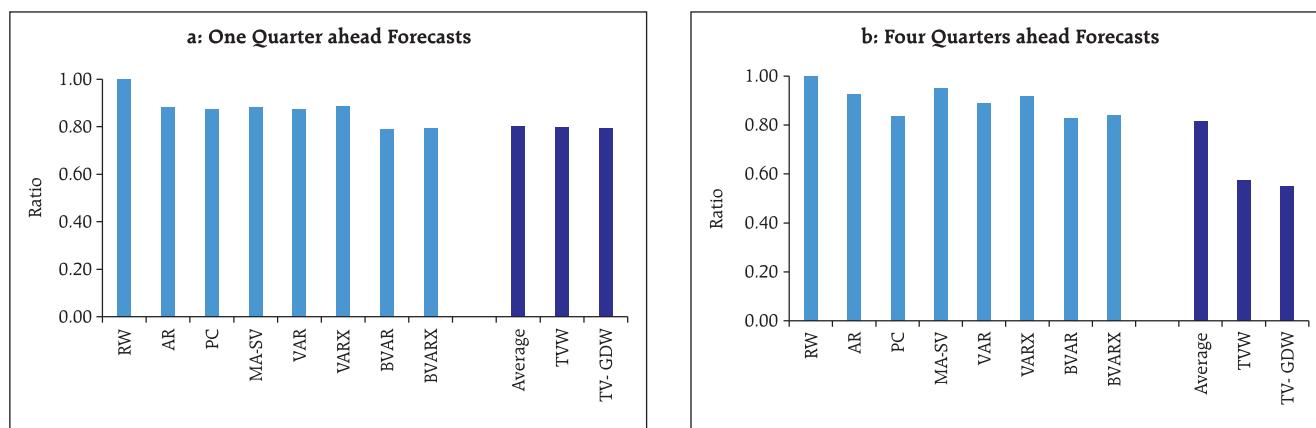
Timely and reliable forecasts of inflation are critical inputs for setting forward-looking monetary policy. Forecasting inflation is challenging in all countries, both advanced and emerging, but it is rendered tenuous in emerging economies on account of recurrent supply shocks. Most central banks, therefore, use a suite of models, supplemented with informed judgement, for obtaining reasonably robust forecasts. Underlying this preference is a tacit recognition that all models are misspecified in some dimension and at some time points. In this context, a forecast combination approach – combining forecasts from alternative models through a judicious weighting system – finds favour among practitioners. Forecast combinations can act as a useful hedge against bad forecast performance of individual models, especially when inflation is volatile (Hubrich and Skudelny, 2017).

In order to empirically validate if a forecast combination approach in the Indian context shows promising results *vis-à-vis* individual models, the following eight time series models are analysed: (i) a random walk (RW)

model; (ii) a first-order autoregression (AR) model; (iii) a Phillips curve (PC) model; (iv) a moving average model with stochastic volatility (MA-SV); (v) a three-variable vector autoregression (VAR) model; (vi) a three-variable VAR with one exogenous variable (VARX) model; (vii) a Bayesian VAR (BVAR) model; and (viii) a Bayesian VARX (BVARX) model.⁷ Three approaches are used for combining the forecasts of the individual models: (i) a simple average of individual model forecasts; (ii) a performance-based weighted average, based on time varying weights (TVW) derived from the individual forecast performance of the past three years; and (iii) time varying geometrically backward decaying weights (TV-GDW) (*i.e.*, a larger weight is given to the model's recent performance). Quarterly data from Q1:2000 to Q3:2016 are used to estimate these models.

Forecast performance is measured by the inverse of the root mean square errors (RMSEs) of individual models and their combinations (relative to the benchmark RW model) for two alternative forecasting horizons (one quarter ahead and four quarters ahead) (Chart 1). The

Chart 1: Inflation Forecasting Performance: Individual Models *versus* Combination



Notes:

1. Charts above represent the ratio of RMSE of individual models *vis-à-vis* the benchmark RW model.
2. RW: Random Walk Model; AR: first-order Autoregression Model; PC: Phillips Curve; MA-SV: Moving Average Model with Stochastic Volatility; VAR: Vector Autoregression; VARX: VAR with exogenous variable; BVAR: Bayesian VAR; BVARX: Bayesian VAR with exogenous variable.
3. Average, TVW and TV-GDW are combination models with simple average, time varying weights and time varying geometrically decaying weights, respectively, of the individual models.

Source: RBI staff estimates.

(contd.)

⁷ The VAR and BVAR models have three endogenous variables [output growth, CPI inflation and the policy repo rate], while the VARX and BVARX models have four variables [three endogenous variables (as defined previously) and one exogenous (oil prices) variable]. For a truly pseudo-real out-of-sample comparative assessment, the exogenous variables (oil price in the VARX/BVARX models and output gap in the Phillips curve model) for the out-of-sample forecasting horizon are modelled as AR processes.

results suggest that (a) performance-based forecast combinations improve over both individual models and simple averaging; (b) the relative forecasting performance improves considerably as the horizon is extended from one quarter to four quarters, a feature especially helpful from the monetary policy perspective, given transmission lags. Overall, the results suggest that combining forecasts from a range

of models outperforms an individual model. This is the approach that RBI staff adopts, as explained in the September 2015 MPR.

Reference:

Hubrich, K. and F. Skudelny (2017), "Forecast Combination for Euro Area Inflation: A Cure in Times of Crisis?", *Journal of Forecasting*, DOI: 10.1002/for.2451.

headline inflation is explored in Section I.3. The proposed introduction of the goods and services tax (GST) in 2017-18 also poses some uncertainty for the baseline inflation path, particularly on account of one-off but somewhat uncertain duration of price effects that are typically associated with the introduction of taxes on value added in the cross-country experience (see the October 2016 MPR for a review).

I.2 The Outlook for Growth

With the effects of demonetisation turning out to be short-lived and modest relative to some doomsday expectations, the outlook for 2017-18 has been brightened considerably by a number of factors. First, with the accelerated pace of remonetisation, discretionary consumer spending held back by

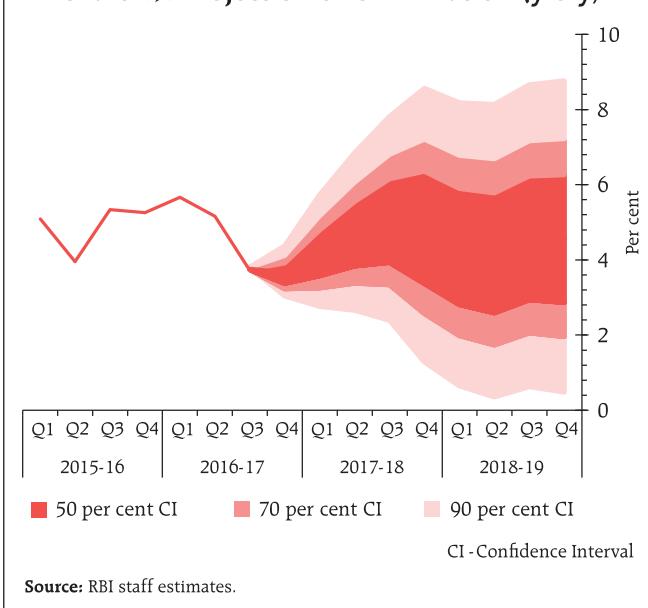
demonetisation is expected to have picked up from Q4:2016-17 and will gather momentum over several quarters ahead. The recovery will also likely be aided by the reduction in banks' lending rates due to large inflows of current and savings accounts (CASA) deposits, although the fuller transmission impact might be impeded by stressed balance sheets of banks and the tepid demand for bank credit.

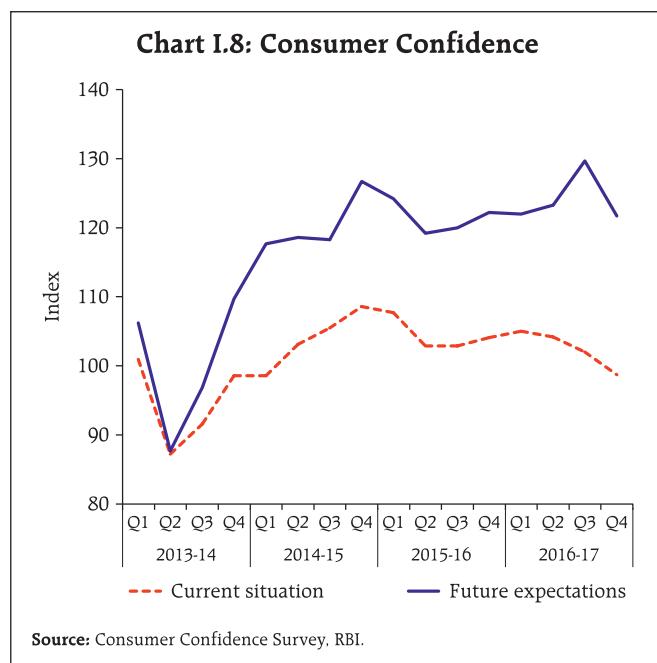
Second, various proposals in the Union Budget 2017-18 are expected to be growth stimulating: stepping up of capital expenditure; boosting the rural economy and affordable housing; the planned roll-out of the GST; and steps to attract higher foreign direct investment (FDI) through initiatives like abolishing the Foreign Investment Promotion Board (FIPB).

Third, global trade and output are expected to expand at a stronger pace in 2017 and 2018 than in recent years, easing the external demand constraint on domestic growth prospects. However, the recent increase in the global commodity prices, if sustained, could have a negative impact on our net commodity importing domestic economy. Finally, the pace of economic activity would critically hinge upon the outturn of the south-west monsoon, especially in view of the rising probability being assigned to an *el niño* event in July-August, 2017.

Turning to forward-looking surveys, the consumer confidence moderated in the March 2017 round of Reserve Bank's survey (Chart I.8). Respondents were less optimistic about the prospects for economic conditions, employment, and income a year ahead.

Chart I.7: Projection of CPI Inflation (y-o-y)





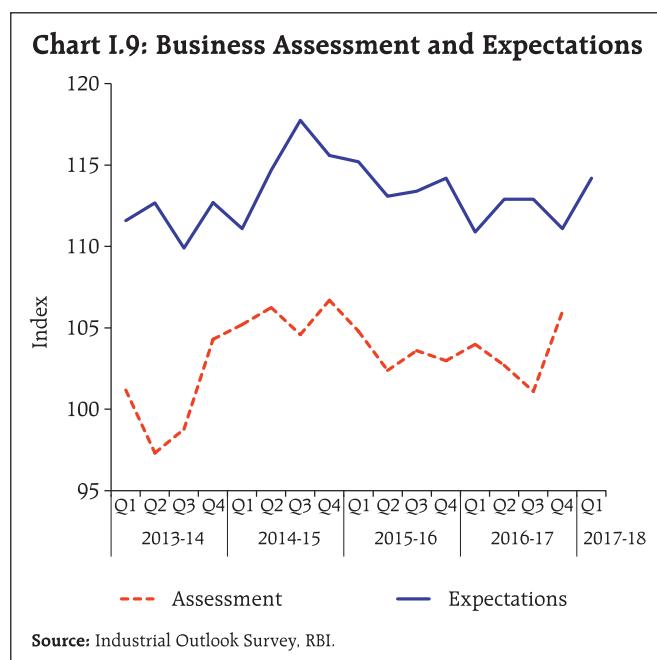
Sentiment in the corporate sector improved during January-March 2017, according to the Reserve Bank's industrial outlook survey (Chart I.9). The improvement was led by optimism on future production, order books, exports, employment, financial situation, selling prices and profit margin. Amounts mobilised through initial public offerings (IPOs) in recent months and filings of red herring

Table I.2: Business Expectations Surveys

Item	NCAER Business Confidence Index (January 2017)	FICCI Overall Business Confidence Index (January 2017)	Dun and Bradstreet Composite Business Optimism Index (January 2017)	CII Business Confidence Index (January 2017)
Current level of the index	112.0	58.2	65.4	56.5
Index as per previous Survey	133.3	67.3	80.0	58.0
% change (q-o-q) sequential	-16.0	-13.5	-18.3	-2.6
% change (y-o-y)	-14.0	2.6	-23.9	4.8

prospectuses with the Securities and Exchange Board of India (SEBI) have been higher, which suggest investment optimism in the period ahead. Both manufacturing and services firms expected output to be higher a year from now, according to the purchasing managers' survey for March 2017. Surveys conducted by other agencies indicate a decline in optimism over their previous rounds (Table I.2).

Professional forecasters surveyed by the Reserve Bank in March 2017 expected real GVA growth to accelerate from 6.5 per cent in Q4:2016-17 to 7.6 per cent in Q4:2017-18, led by growth in services and industry (Chart I.10 and Table I.3).

**Chart I.10: Professional Forecasters' Projected Growth in GVA**

Quarter	Projected Growth (%)	Actual Growth (%)
Q1 2013-14	6.5	6.5
Q2 2013-14	7.3	7.3
Q3 2013-14	6.8	6.8
Q4 2013-14	4.8	4.8
Q1 2014-15	7.5	7.5
Q2 2014-15	8.0	8.0
Q3 2014-15	6.2	6.2
Q4 2014-15	6.2	6.2
Q1 2015-16	8.5	8.5
Q2 2015-16	7.0	7.0
Q3 2015-16	6.2	6.2
Q4 2015-16	8.2	8.2
Q1 2016-17	6.8	6.8
Q2 2016-17	6.5	6.5
Q3 2016-17	7.5	7.5
Q4 2016-17	7.5	7.5
Q1 2017-18	7.6	7.6

Source: Survey of Professional Forecasters, RBI.

Table I.3: Reserve Bank's Baseline and Professional Forecasters' Median Projections

(Per cent)

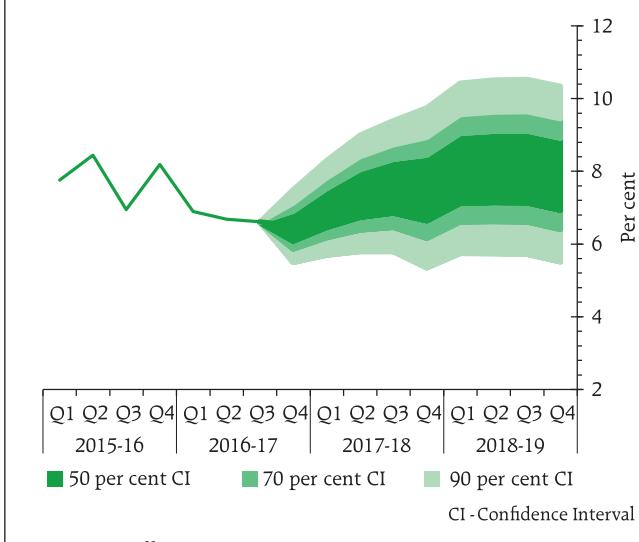
	2016-17	2017-18	2018-19
Reserve Bank's Baseline Projections			
Inflation, Q4 (y-o-y)	3.6	4.9	4.6
Real Gross Value Added (GVA) Growth	6.7	7.4	8.1
Assessment of Survey of Professional Forecasters^a			
Inflation, Q4 (y-o-y)	3.6	5.3	
GVA Growth	6.7	7.3	
Agriculture and Allied Activities	4.2	3.5	
Industry	6.1	7.0	
Services	7.6	8.5	
Gross Domestic Saving (per cent of GNDI)	31.5	31.8	
Gross Fixed Capital Formation (per cent of GDP)	27.0	28.8	
Money Supply (M3) Growth	7.5	10.5	
Credit Growth of Scheduled Commercial Banks	6.0	10.0	
Combined Gross Fiscal Deficit (per cent of GDP)	6.5	6.3	
Central Government Gross Fiscal Deficit (per cent of GDP)	3.5	3.2	
Repo Rate (end period)	6.25	6.00	
CRR (end period)	4.00	4.00	
Yield of 91-day Treasury Bills (end period)	6.0	6.3	
Yield of 10-year Central Government Securities (end period)	6.8	6.7	
Overall Balance of Payments (US \$ bn.)	20.8	32.2	
Merchandise Exports Growth	2.8	5.9	
Merchandise Imports Growth	-2.0	7.1	
Merchandise Trade Balance (per cent of GDP)	-5.0	-5.1	
Current Account Balance (per cent of GDP)	-0.9	-1.2	
Capital Account Balance (per cent of GDP)	1.8	2.4	

@: Median forecasts; GNDI: Gross National Disposable Income.

Sources: RBI staff estimates; and Survey of Professional Forecasters (March 2017).

Considering the baseline assumptions, the fast pace of remonetisation, survey indicators and updated model forecasts, RBI staff's baseline scenario projects that real GVA growth will improve from 6.6 per cent in Q3:2016-17 and 6.5 per cent in Q4 to 7.0 per cent in Q1:2017-18 and 7.4-7.6 per cent in the remaining three quarters of 2017-18, with risks evenly balanced around this baseline path (Chart I.11). Looking beyond 2017-18 and assuming a normal monsoon, a congenial global environment, no policy induced structural change and no supply shocks, structural model estimates yield real GVA growth of 8.1 per cent in 2018-19.

Chart I.11: Projection of Growth (y-o-y) in Real Gross Value Added



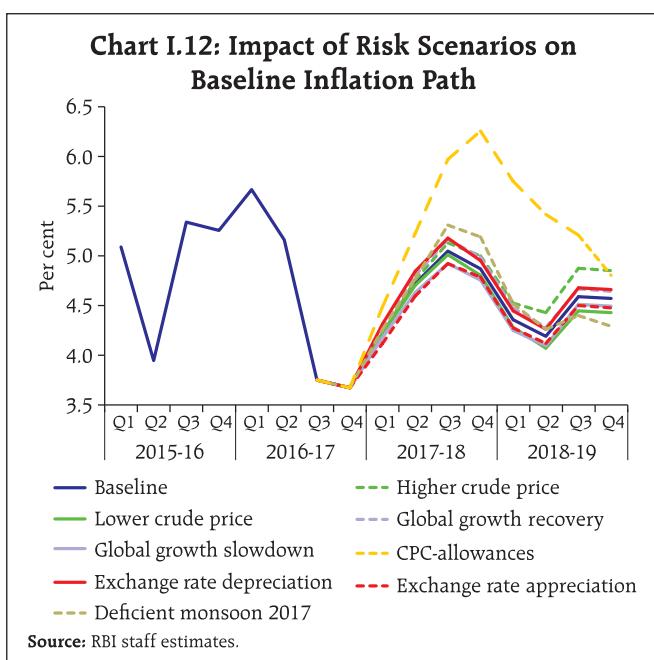
I.3 Balance of Risks

The baseline projections of growth and inflation presented in the preceding section are based on the assumptions set out in Table I.1. As usual, there are uncertainties surrounding these assumptions which could produce deviations from baseline projections. This section assesses the sensitivity of the projected baseline paths of growth and inflation to plausible alternate scenarios.

(i) International Crude Oil Prices

The September 2016 announcement by OPEC of agreement on production cuts by members was met with scepticism. The signing of the agreement in end-November, however, led to a sharp jump in global crude oil prices. If OPEC sticks to the agreed production cuts of 1.2 mb/day till the next review of the agreement in May 2017, and the global crude oil production balance moves to a deficit by Q1:2017-18,⁸ upside risk to the crude oil trajectory over baseline estimates will heighten. Any supply disruptions due to geo-political developments could accentuate these upside risks. Assuming that crude prices increase to

⁸ Oil Market Report, February 2017, International Energy Agency.



around US\$ 60 per barrel under this scenario, inflation could be higher by around 30 bps and growth could be weaker by around 10 bps (Charts I.12 and I.13).

Conversely, if some of the OPEC members do not adhere to the agreed production cuts and/or the shale gas producers continue to ramp up production, global prices could soften below the baseline. Should crude

prices slip under this scenario to around US\$ 45 per barrel by 2017-18, inflation could moderate by around 15 bps with growth benefitting by around 5 bps.

(ii) Global Demand

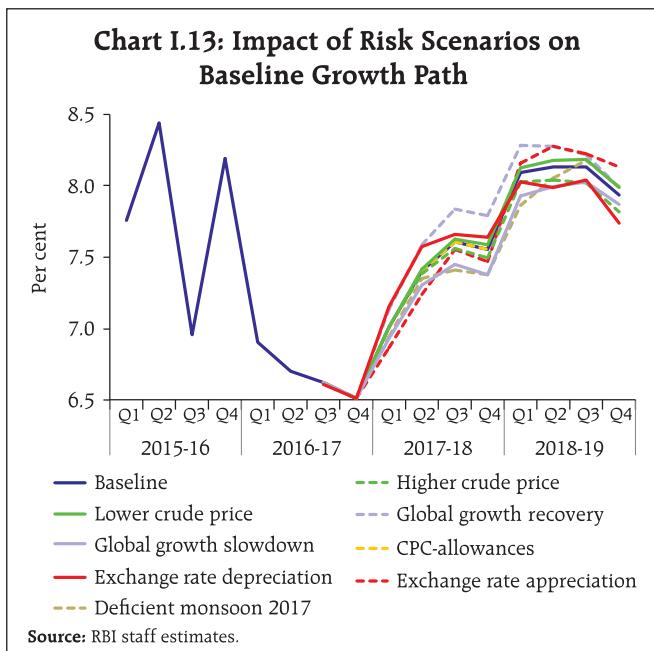
The baseline scenario assumes that global growth will accelerate during 2017 and 2018. Risks to the baseline could emanate from: (a) US fiscal expansion being less than expected or marked by delays; (b) the Federal Reserve's monetary policy response to expansionary fiscal policy being larger than expected, especially in the context of a recent assessment that the US economy is "closing in on full employment"; (c) the now pervasive spectre of protectionism affecting global trade; (d) continued concerns over the Chinese credit cycle; (e) volatile global crude oil and commodity prices; and (f) the implications of all these factors for international financial markets. Feedback loops can exaggerate the impact of several of these factors on global growth.⁹

Assuming that global growth in 2017 and 2018 remains the same as was recorded in 2016 (*i.e.*, 30-50 bps below the baseline assumption), real GVA growth and inflation could turn out to be around 20 bps and 10 bps, respectively, below the baseline.

The pace of global economic activity could be higher if the policy stimulus in the US turns out to be larger than currently expected. In this scenario, assuming global growth is 50 bps higher, domestic growth could turn out to be around 25 bps above the baseline. Inflation could be higher by around 10 bps on the back of higher domestic demand as also imported impulses from higher global commodity prices.

(iii) Seventh Central Pay Commission Allowances

The 7th CPC recommended an increase in house rent allowance (HRA) of 8-24 per cent of basic pay. The higher HRA would have a direct and immediate



⁹ Kose, M. Ayhan, Csilla Lakatos, Franziska Ohnsorge and Marc Stocker (2017), "The Global Role of the U.S. Economy: Linkages, Policies and Spillovers", Policy Research Working Paper 7962, World Bank.

impact on headline CPI through an increase in housing inflation. Assuming a rate of increase in the HRA as proposed by the 7th CPC is implemented from early 2017-18 onwards and the State Governments implement a similar order of increase with a lag of one quarter, CPI inflation could be 100-150 bps higher than the baseline for 2017-18.¹⁰ The HRA impact on inflation is expected to persist for 6-8 quarters, with the peak effect occurring around 3-4 quarters from implementation. In addition, indirect effects could occur from elevated inflation expectations.

(iv) Exchange Rate

Recognising that the domestic foreign exchange market witnessed heightened volatility in the aftermath of the US presidential elections, the risk of renewed turbulence in global financial markets on account of global downsides materialising and associated volatility in domestic financial markets remains a clear and present danger to the Indian economy. A five per cent depreciation of the Indian rupee, relative to the baseline assumption, could push up inflation by 10-15 bps in 2017-18. The depreciation, however, could have a favourable impact on growth in 2017-18 through a boost to net exports. In contrast, the combination of a benign global macroeconomic and financial environment, the expected acceleration in domestic growth and the policy initiatives to attract FDI flows can lead to an appreciation of the domestic

currency, with a soothing impact on domestic inflation. A five per cent appreciation of the Indian rupee, relative to the baseline assumption, could soften inflation by 10-15 bps in 2017-18.

(v) Deficient Monsoon

Rainfall dependence of Indian agriculture makes the broader economy vulnerable to monsoon outcomes. The India Meteorological Department (IMD) is yet to release its forecast of the south-west monsoon for 2017. Hence, the baseline scenario assumes a normal south-west monsoon. However, the occurrence of *el niño* is assuming a rising probability, as stated earlier, dampening the prospects of agricultural production.¹¹ Assuming the growth of output of agriculture and allied activities suffers by one percentage point, overall GVA growth could be lower by around 20 bps in 2017-18. The concomitant increase in food prices could result in headline inflation rising 30 bps above the baseline.

To sum up, economic activity should recover in 2017-18 on the back of the fast pace of remonetisation and the government's focus on capital expenditure, rural economy and housing. The global economic environment may improve modestly, *albeit* amidst several uncertainties. Headline inflation is projected to increase during 2017-18, calling for close vigilance and readiness for an appropriate monetary policy response, if warranted.

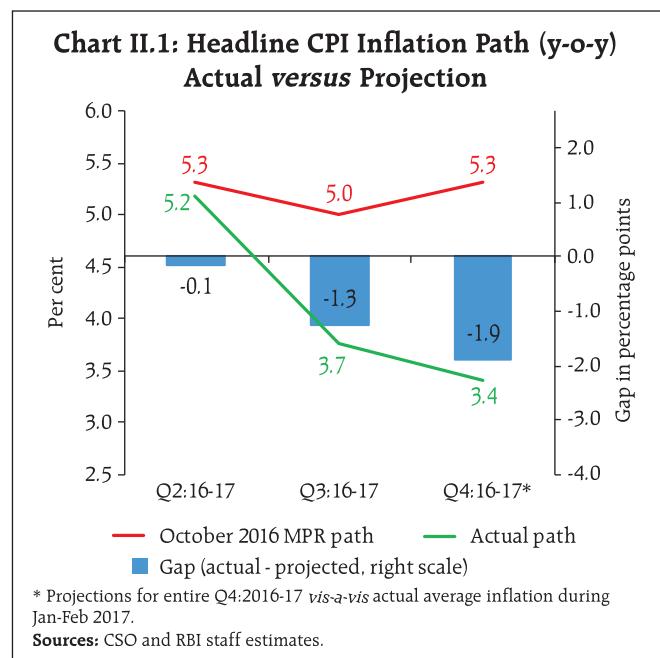
¹⁰ This increase in inflation will be the statistical direct effect of higher HRA, as house rents have a weight of 9.5 per cent in the CPI.

¹¹ In March 2017, the US National Oceanic and Atmospheric Administration (NOAA) indicated increasing odds (50-55 per cent) for *el niño* forming towards the second half of 2017, while the Australian Bureau of Meteorology assessed the likelihood of *el niño* forming in 2017 at approximately 50 per cent.

II. Prices and Costs

Consumer price inflation has eased significantly, mainly due to the large decline in food inflation, especially vegetables. Excluding food and fuel, however, inflation has remained sticky. Input costs have firmed up and pose upside risks to the path of inflation going forward.

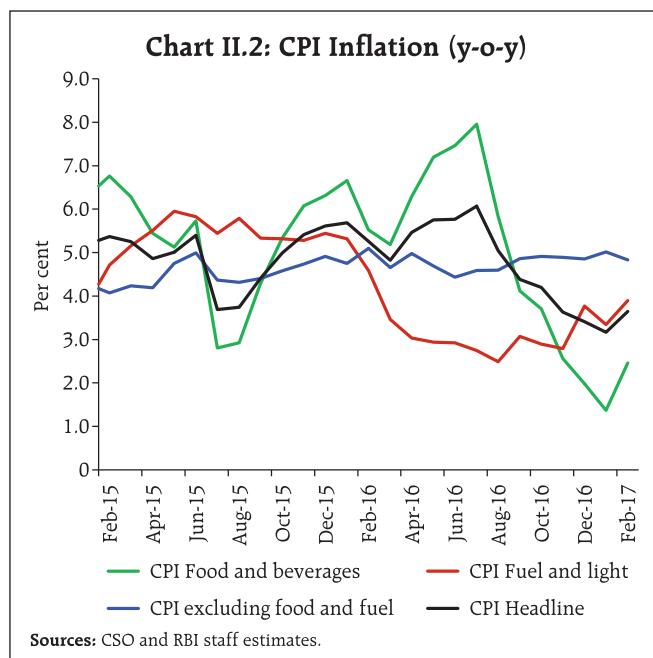
The MPR of October 2016 had projected CPI inflation¹ moving in a narrow range of 5.0 to 5.3 per cent during Q3 and Q4 of 2016-17, on expectations of food inflation moderating and crude prices remaining benign. Food inflation came off its July 2016 peak and eased during August-October 2016. The shock of demonetisation, however, veered the inflation trajectory sharply below its projected path, essentially on account of an abrupt compression in food inflation. Prices of vegetables sank into deflation and pulled down headline inflation during November 2016-January 2017. Notwithstanding the hardening of global crude oil prices in the wake of the agreement on production cuts by OPEC in late November, the negative wedge between actual and projected inflation widened through the second half of 2016-17 (Chart II.1).



II.1 Consumer Prices

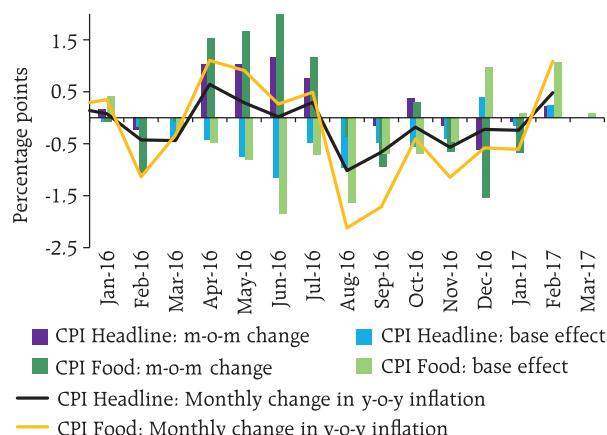
Headline inflation fell off its July cliff and was already traversing a declining trajectory during August through October when demonetisation hit in November. It triggered a downward spiral that took inflation down to 3.2 per cent in January 2017, an all-time low in the history of all India CPI-Combined (Chart II.2). The entire fall in inflation during November 2016 to January 2017 can be explained by the deflation in prices of vegetables and pulses. As a result, unfavourable base effects, which should have raised headline inflation during December 2016 to January 2017, were overwhelmed by a collapse in the month-on-month (m-o-m) momentum, bringing down headline inflation by around 100 basis points (Chart II.3). In February, however, the drag from these transitory effects began to ebb and headline inflation edged up on a pickup in food and fuel price pressures.

Despite the sharp fall in food inflation in the second half of the year, the distribution of inflation across all categories was largely centred around 4.5 per cent with continuing high kurtosis and a positive skew (Chart II.4). Diffusion indices for goods, services and



¹ Headline inflation is measured by year-on-year changes in all-India CPI Combined (Rural+Urban).

Chart II.3: CPI Headline and Food Inflation Momentum and Base Effects



Note: Change in CPI y-o-y inflation between any two months can be approximated as the difference between the current m-o-m change in the price index (momentum) and the m-o-m change in the price index 12 months earlier (base effect). For more details see Box I.1 of the MPR, September 2014.

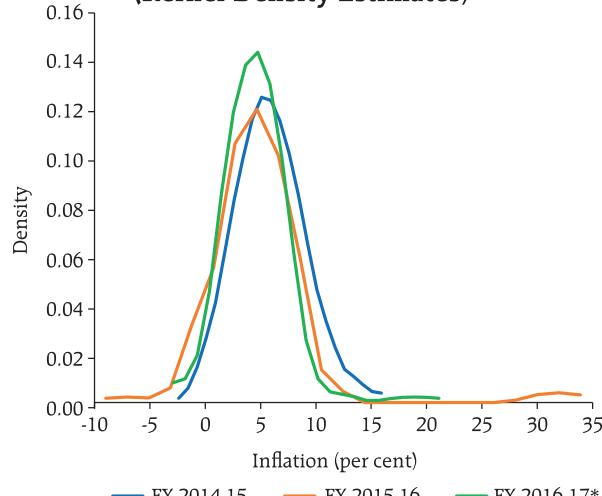
Sources: CSO and RBI staff estimates.

the overall CPI were all well above 50 over the financial year, suggesting that even as headline inflation fell to a historic low, it was not broad-based (Chart II.5).

II.2 Drivers of Inflation

In retrospect, a historical decomposition shows that it was the large shock delivered by demonetisation and the associated wage shock that explained much of the overall change in the inflation trajectory in

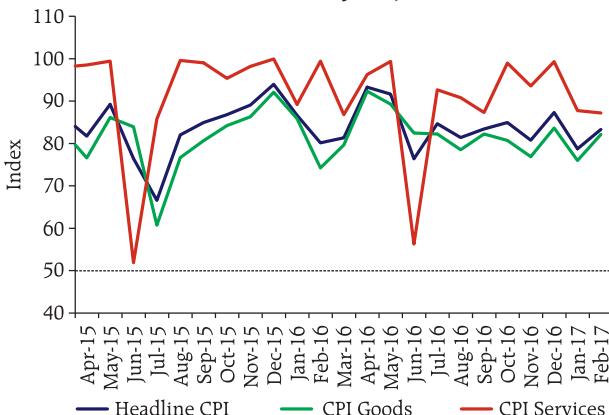
Chart II.4: Average CPI (y-o-y) Inflation (Kernel Density Estimates)



*Based on CPI data up to February 2017.

Sources: CSO and RBI staff estimates.

Chart II.5: Diffusion Indices*: CPI (m-o-m Seasonally Adjusted)



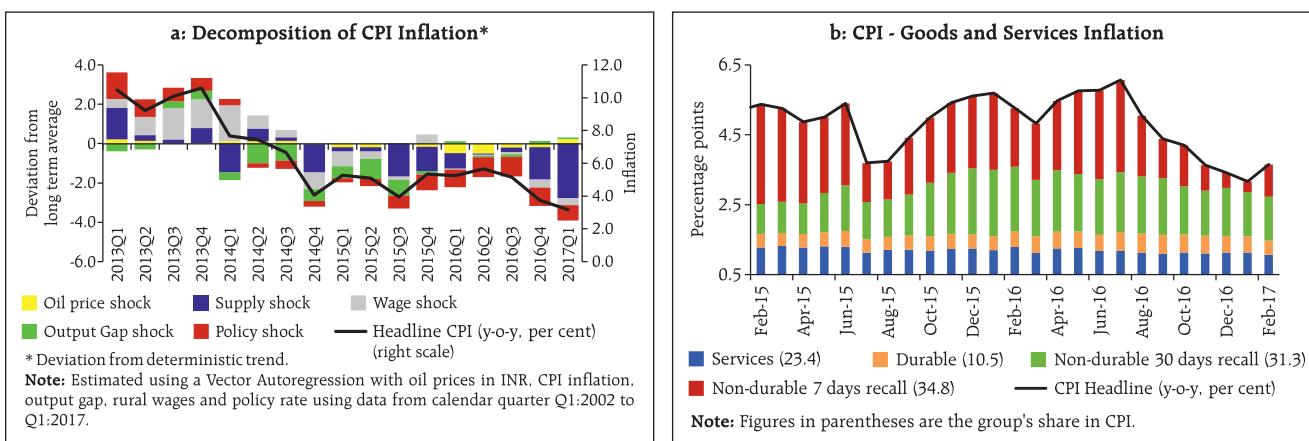
* The CPI diffusion index, a measure of dispersion of price changes, categorises items in the CPI basket according to whether their prices are rising, stagnant or falling over the previous month. A reading above 50 for the diffusion index signals a broad expansion or the extent of generalisation of price increases and a reading below 50 signals a broad-based deflation.

Sources: CSO and RBI staff estimates.

the second half of 2016-17. Past monetary policy tightening continued to have visceral effects in containing inflation (Chart II.6a). In contrast, firmer crude prices and gradually closing output gap turned out to be sources of upside pressures, masked by the size of the demonetisation shock. Non-food inflation remained stubbornly sticky, hardened by the unchanging contribution of durable goods and services to overall inflation for much of the financial year (Chart II.6b). Inflation in the food and beverages category (with a weight of 46 per cent of CPI) turned out to be the active component of overall inflation in the second half of 2016-17.

Four factors stand out in the recent experience:

First, prices of perishables played the most decisive role, even during the three months preceding demonetisation. In the months immediately following demonetisation, perishables became even more prominent, with vegetable price movements becoming pivotal after a decline of 21 per cent during November 2016 to February 2017. Transactions in fruits and vegetables have always been cash intensive. Anecdotal evidence points to distress sales by farmers, given their perishable nature. Vegetable prices usually do exhibit a seasonal moderation during November–February every year; during the 2016-17 season,

Chart II.6: Drivers of Inflation

Sources: CSO and RBI staff estimates.

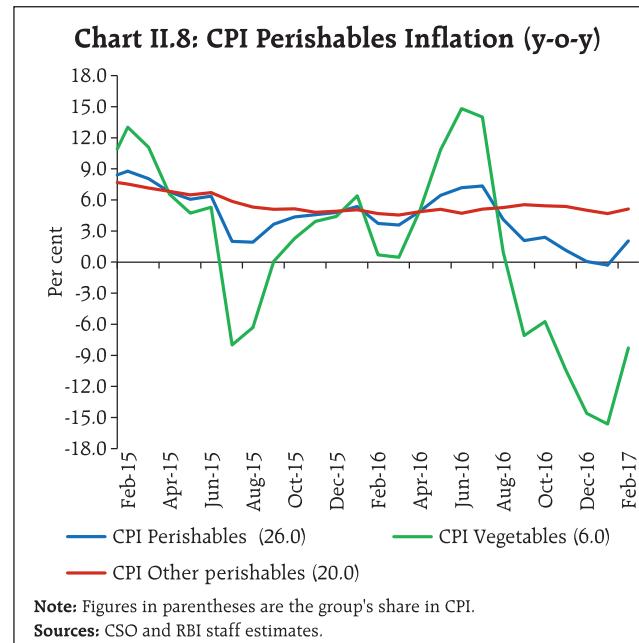
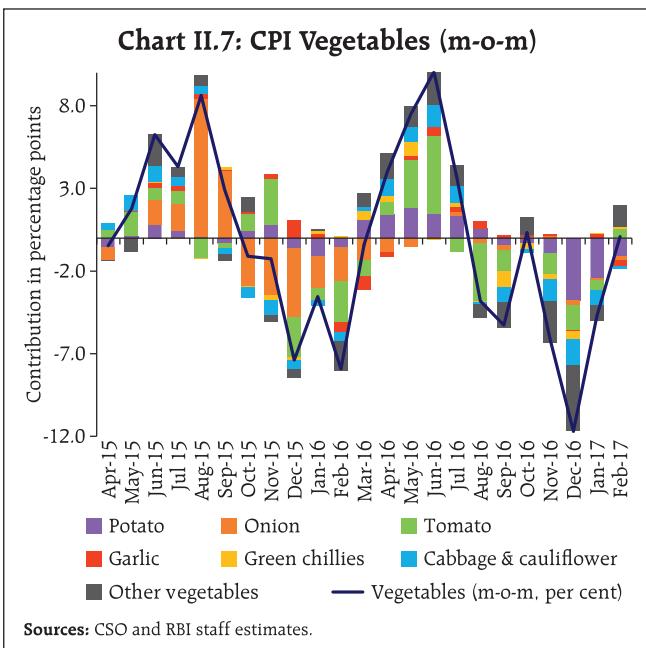
however, the decline in vegetable prices was more pronounced than in previous years.

Second, the vegetable prices decline troughed in January 2017 and thereafter showed a m-o-m increase of 0.1 per cent in February.

Third, the seasonal decline in prices of vegetables is typically driven by potato, onion and tomato prices, which together constitute close to 40 per cent of the vegetables index. This time around, potato and tomato prices did exhibit seasonal easing but what was noteworthy was the plunge in the prices of other

vegetables – cabbage, cauliflower, *palak*/other leafy vegetables, brinjal, gourd, peas and beans – which usually contribute little to the observed seasonality (Chart II.7).

Fourth, inflation in perishables excluding vegetables averaged 5 per cent since November, considerably above the average headline inflation (Chart II.8).²



² The perishables index in CPI (weight of around 26 per cent) was constructed as a sub-index of frequently purchased items (with 7-day recall period) and includes items such as vegetables, egg, meat and fish, milk and products, fruits, and processed foods. Other perishables exclude vegetables.

The spatial and temporal dynamics of food prices post-demonetisation show that within the food group, the decline in vegetable prices was particularly large and seen across states and across wholesale and retail

markets (Box II.1). *Excluding vegetables, food inflation would have been higher by 2.7 percentage points and headline inflation by 1.3 percentage points during November 2016 to January 2017.*

Box II.1: Anatomy of Food Deflation: Post Demonetisation

State-wise CPI food inflation data for the period January 2013 to January 2017 were analysed at a monthly frequency in a panel framework in order to make a comparative assessment of spatial, temporal and intra-food group fixed effects in driving food inflation. Dynamic panel estimation¹ was conducted on seasonally adjusted annualised m-o-m CPI food inflation. The results showed that while fixed effects were insignificant for most states, heterogeneity in inflation rates in sub-categories of food groups was significant. Even if the fiscal year 2016-17 alone is considered, intra-food group fixed effects continued to remain significant for most groups. However, vegetables and pulses stood out in terms of magnitude and direction when compared with the usual patterns (Chart 1a and 1b). In the context of demonetisation, the panel analysis also showed significant time fixed effects for November 2016 brought about by vegetables, suggesting unusual decline in prices post demonetisation.

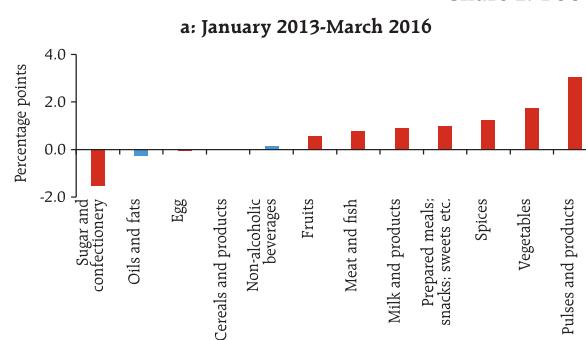
Furthermore, the fall in retail vegetable prices seemed to have broadly mirrored the fall in wholesale prices

post demonetisation. Daily seasonally adjusted prices of potato and tomato, available for 88 centres across India, were used for analysing vegetable price margins post demonetisation (9 November - 31 December 2016), and remonetisation (January - February 2017).

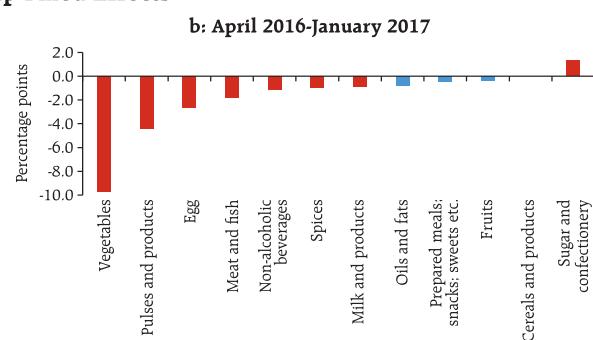
Using cluster analysis based on k-means clustering technique, the wholesale and retail prices were grouped into three major clusters – low, medium and high price clusters – based on the data of the pre-demonetisation period (September-October 2016). Post demonetisation, price moderation was observed across medium and high price clusters in the wholesale and retail markets. With progressive remonetisation, the prices in these vegetables started rising in both the wholesale and retail markets.

The 45 degree line in Chart 2 represents the level where wholesale and retail prices are equal. In the case of tomato, retail prices fell even below wholesale prices for some centres, indicating a fall in retail margin post demonetisation. In the case of potato prices, the movement was mostly along and above the 45 degree line implying that margins were not impacted.

Chart 1: Food Group Fixed Effects

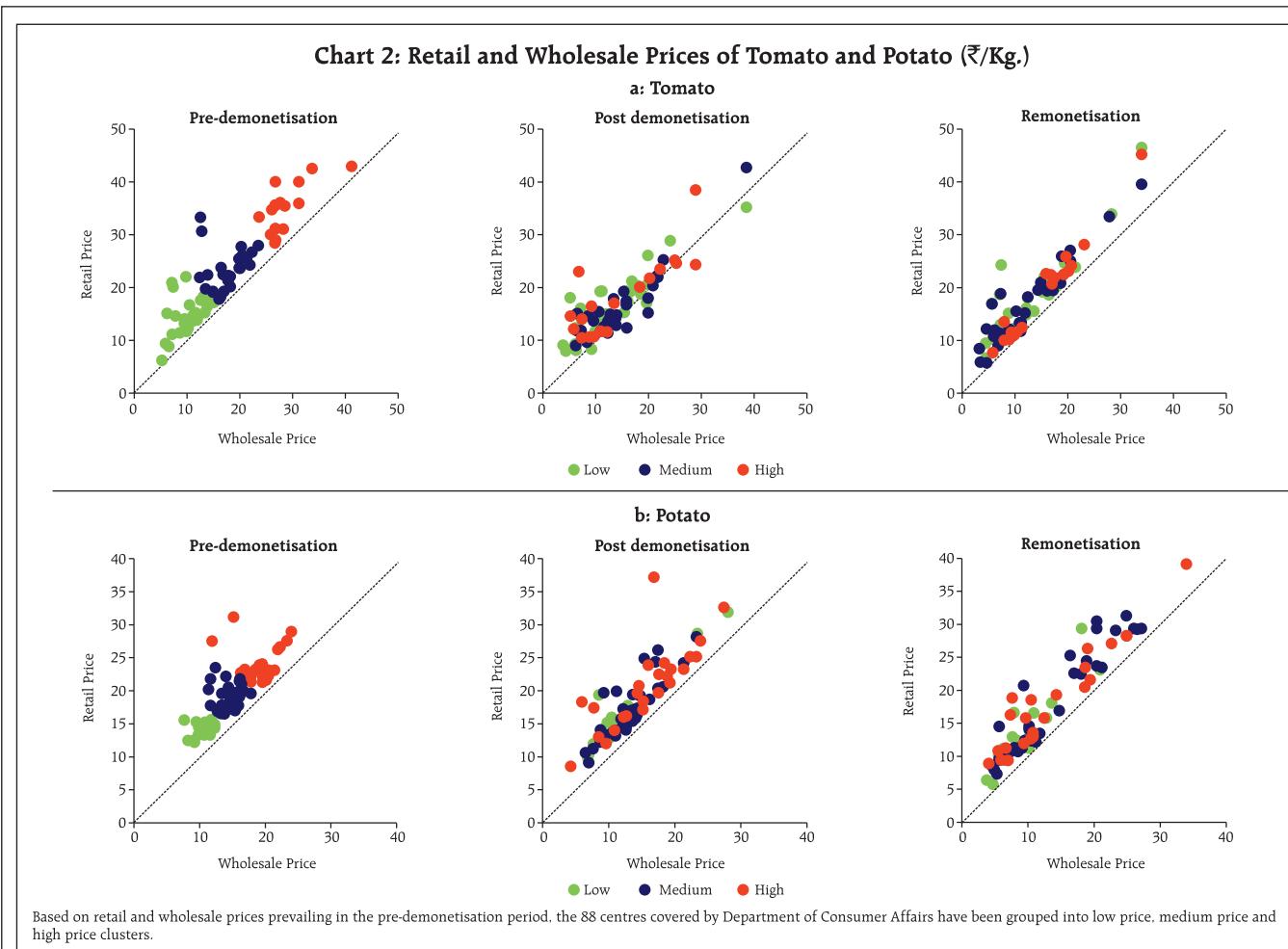


Red bars in charts 1a and 1b denote statistically significant fixed effects.



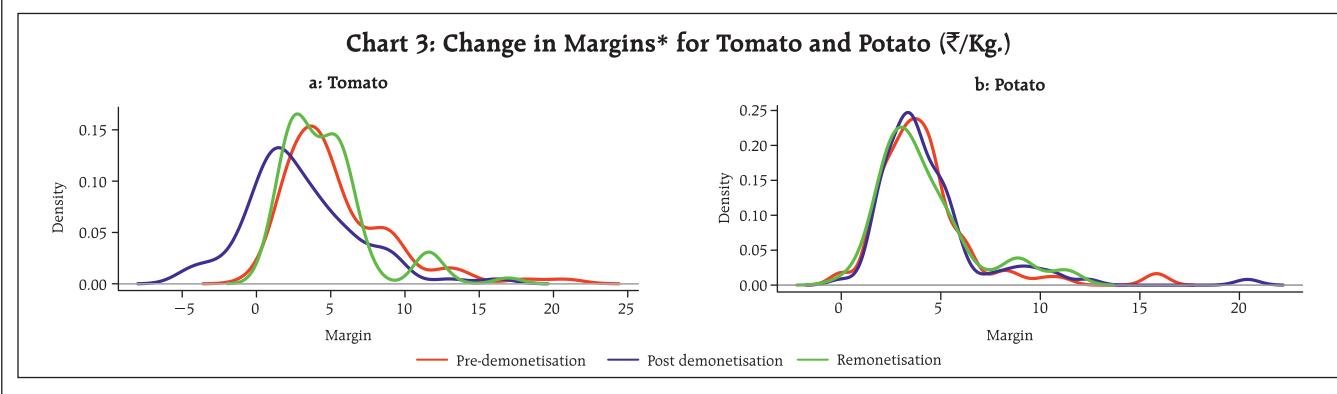
1: Estimated using Arellano-Bover/Blundell-Bond "system" Generalised Method of Moments estimators.

(contd.)



The movement in margins* can also be seen from Chart 3. In the case of tomato, margins collapsed post demonetisation. As remonetisation progressed, margins rose again. These movements in margins were statistically significant**. In the case of potato, the

analysis also showed that some centres experienced higher retail prices post demonetisation compared with wholesale prices, suggesting that in some cases the widening of retail-wholesale margins was centre-specific.



*: Margin is measured as the difference between retail and wholesale prices.

**: The decline in margin for tomato is statistically significant at 1 per cent level.

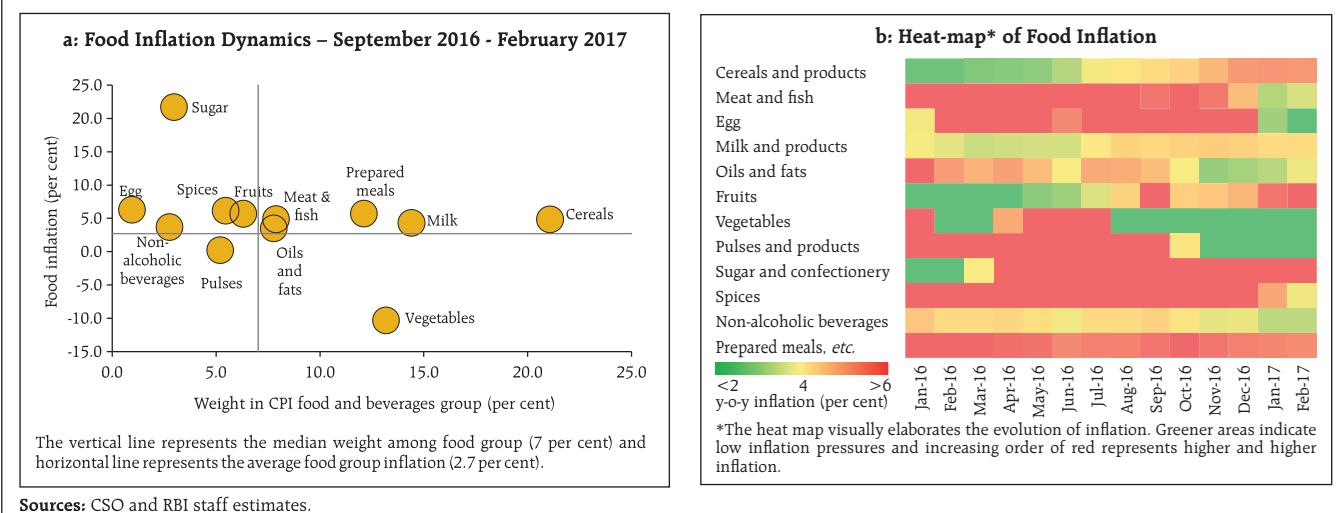
No commentary on inflation in the food and beverages category in the second half of 2016-17 would be complete without incorporating an analysis of the extraordinary developments in prices of pulses. With a weight of 5.2 per cent in the food group and only 2.4 per cent in the CPI, pulses contributed 13 per cent of the rising CPI inflation trajectory during the first half 2016-17. In the second half so far, prices of pulses turned into deflation and, with a contribution of (-) 2.5 per cent, aided in bringing down headline inflation to historic low in the CPI series. Inflation in *arhar* and *urad*, which had spiked pulses inflation during 2015-16 and the beginning of 2016-17, declined sharply during September 2016 to February 2017 so much so that *arhar* prices at the *mandi* level in the major producing states of Maharashtra, Madhya Pradesh, Gujarat and Karnataka dropped below the minimum support price (MSP). *Gram* prices, on the other hand, were an outlier, with inflation in this item rising dramatically before moderating in Q4:2016-17. After two consecutive years of production shortfall, adequate rainfall and better area coverage drove up pulses output during 2016-17 and mitigated price pressures considerably. Favourable supply side measures taken by the government such as imports at

zero import duty³, extension in stock limit of pulses, raising MSPs in order to incentivise pulses production and maintaining buffer stocks also helped in reining in price pressures.

Within the food group, there were upside price pressure points in sugar, cereals and other food items such as prepared meals. Slippage in production during 2015-16 and 2016-17 caused double-digit inflation in sugar prices during the year (Chart II.9a and b). Under cereals, inflation in respect of rice has eased during October 2016 - January 2017, while inflation in wheat continued to firm up. A number of price control measures have been undertaken by the government for containing the price rise in the case of sugar and edible oil, including imposition of stock-holding limits, discouraging exports, and reduction in import duty on certain edible oils.

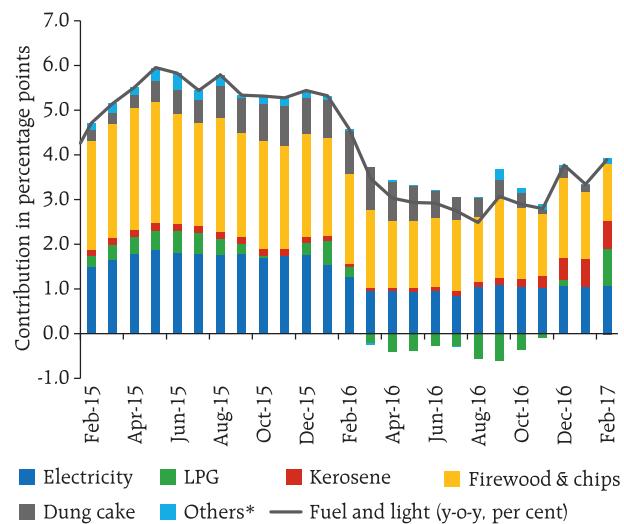
In the fuel group, the moderation in inflation in the first half of the financial year reversed and it picked up from December 2016, driven by LPG and kerosene. The rise in LPG broadly mirrored the turnaround in international LPG prices. In the case of kerosene, the uptick was driven by the increase in subsidised kerosene prices by a calibrated ₹0.25 per litre per month during July 2016 to February 2017, in

Chart II.9: Drivers of Food Inflation



Sources: CSO and RBI staff estimates.

³ In case of *tur*, the import duty has been increased to 10 per cent.

Chart II.10: Drivers of Fuel Group Inflation

* Include diesel (litre) [excl. conveyance], coke, coal, charcoal and other fuel.

Sources: CSO and RBI staff estimates.

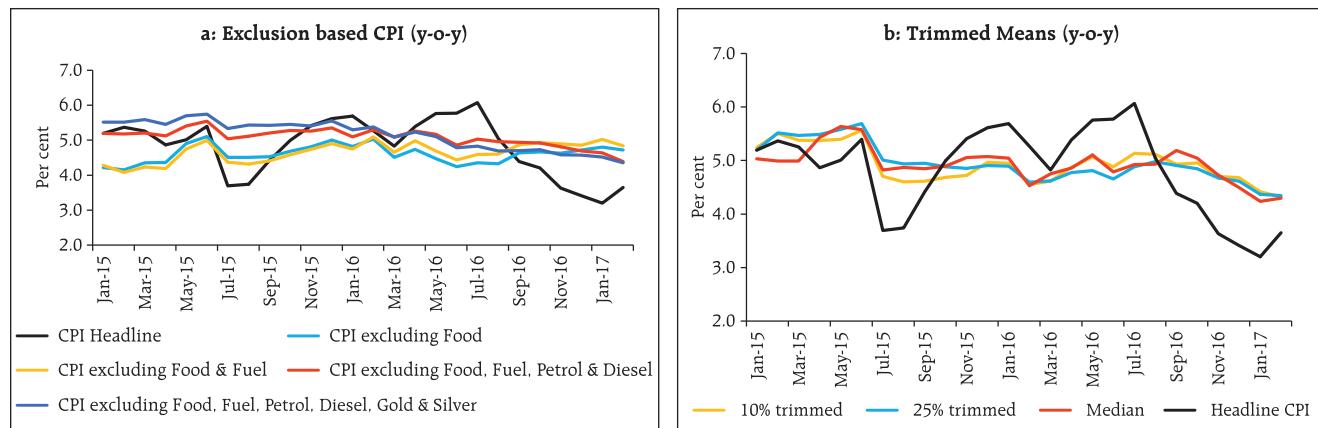
addition to rising international prices. The weighted contribution of firewood and chips to overall fuel inflation remained broadly unchanged (Chart II.10), underscoring the persistence in fuel inflation across rural areas.

CPI inflation excluding food and fuel remained sticky at around 5 per cent during most of the second half of 2016-17 (Chart II.11a). Housing and 'clothing and footwear' sub-groups were the main contributors,

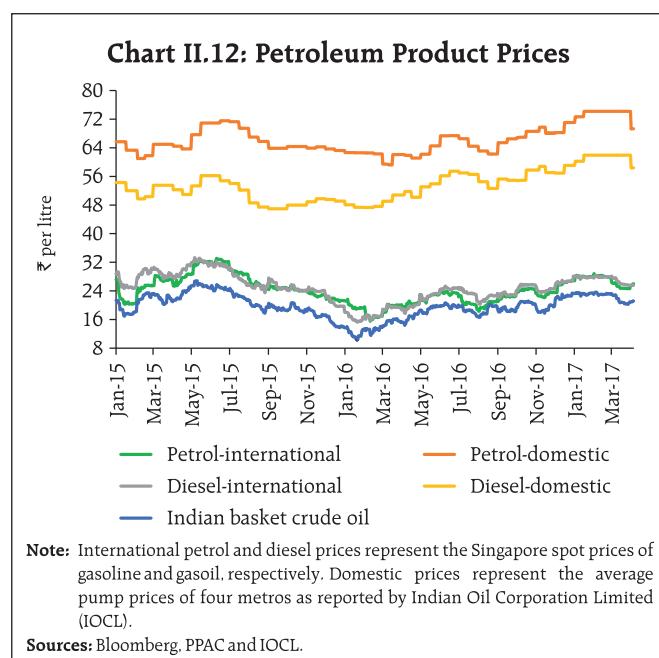
accounting for 36.2 per cent of inflation in the category as a whole.

Other upside pressures in the group emanated from the firming up of international crude oil prices since December 2016 and the lagged pass-through to domestic prices of petrol and diesel that are embedded in transport and communication. With excise duty increase of around ₹12 per litre for both petrol and diesel under additional revenue mobilisation (ARM) measures, the mark-up of domestic over global prices has become more pronounced. With softening of international crude oil prices since early February 2017, domestic pump prices of petrol and diesel were reduced with a lag in the beginning of April 2017 (Chart II.12).

Excluding volatile components such as petrol and diesel, inflation in this group (CPI, excluding food and fuel) averaged 4.7 per cent between September 2016 and February 2017 (Chart II.11a). Some moderation in February came about on account of the goods component in this category – gold and silver in 'personal care and effects'; pharmaceuticals in health; and garments in the clothing sub-groups – although more readings need to be monitored to assess whether this softening will endure (Chart II.13a). By contrast, the contribution of the services component in all

Chart II.11: Exclusion Based CPI and Trimmed Means

Sources: CSO and RBI staff estimates.



these sub-groups remained sticky, especially housing and education services (Chart II.13b).

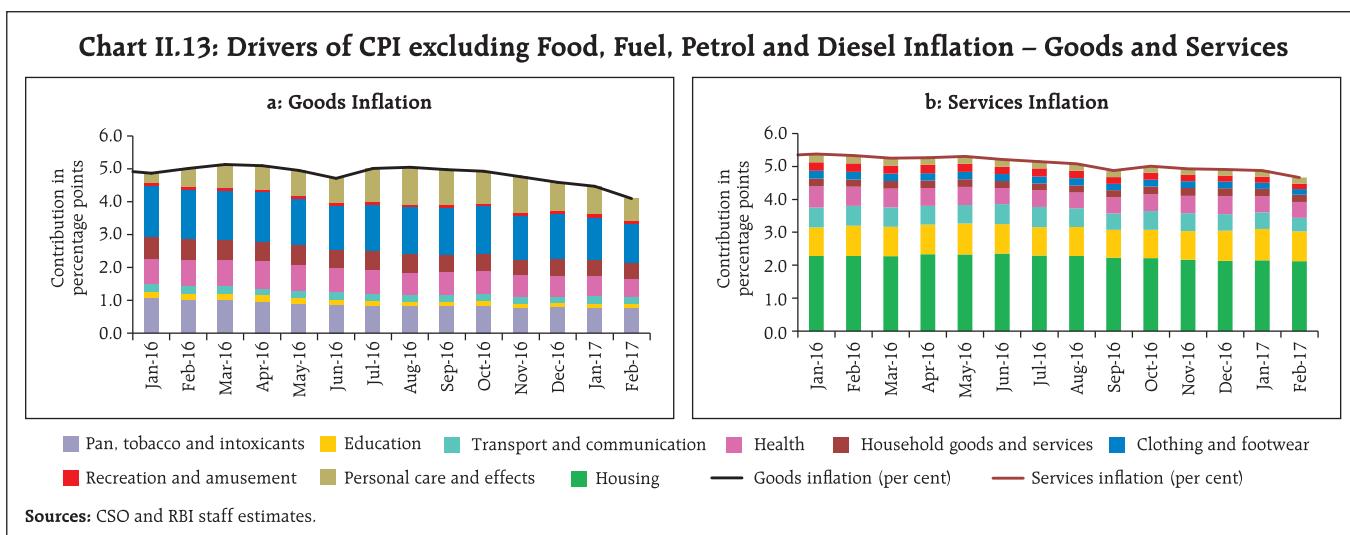
Given the incidence of large and frequent supply shocks on food and non-food items, trimming the inflation distribution by removing specific portions of upper and lower tails of the distribution is widely used to assess underlying inflation movements, with the weighted median being a specific case of trimming. Trimmed means, the weighted median and exclusion-based measures of CPI inflation revealed a central

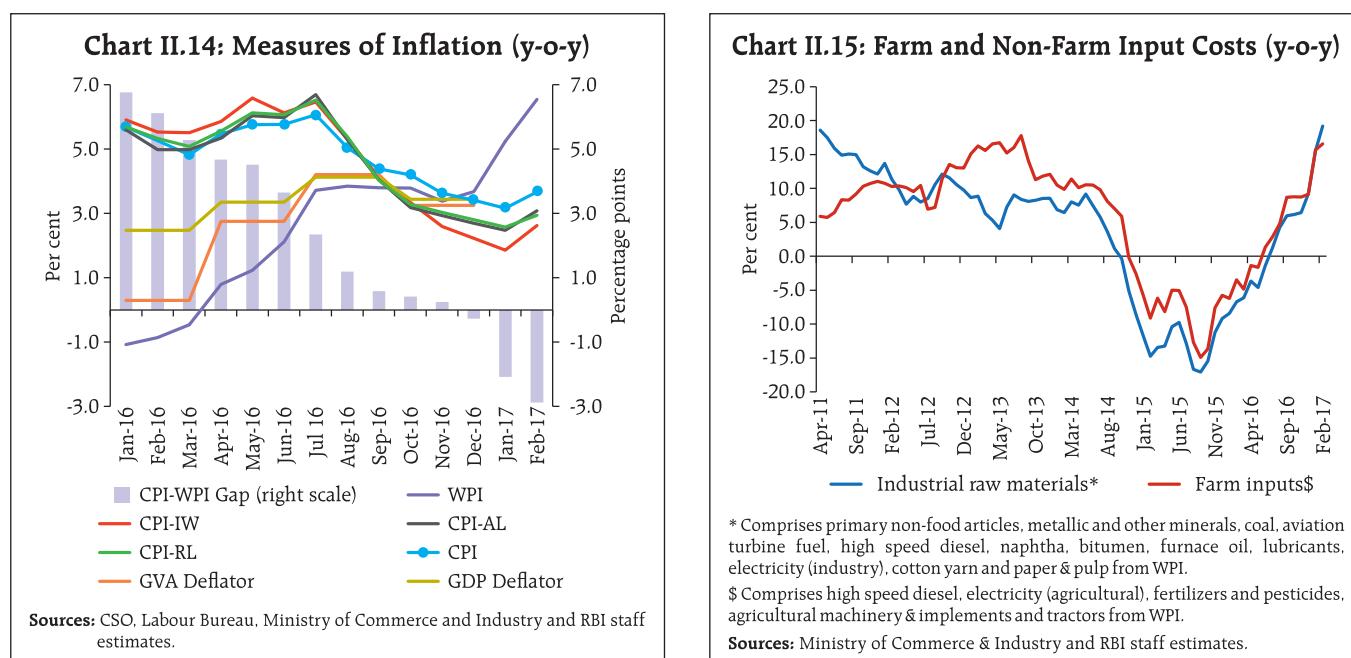
tendency of 4.7 per cent during September 2016 to February 2017 (Chart II.11b).

Notwithstanding some moderation in February, the downward inflexibility in inflation excluding food and fuel has infused significant upside risks into the near-term outlook. The direct and indirect impact on housing inflation of the 7th CPC house rent allowance award – once implemented by the Government – and the size and duration of the 'GST effect' are other upside risks to inflation in CPI in this category.

Other Measures of Inflation

An important development in the second half of 2016-17 is the divergence that has set in between inflation measured by the CPI and by other measures. This conveys valuable insights into the profile of CPI inflation as it evolves in the months ahead. Inflation measured by the sectoral consumer price indices undershot headline CPI inflation, reflecting, *inter alia*, the higher weight of food in the former as also the absence of items such as gold and silver that were recent pressure points. Inflation in terms of the wholesale price index (WPI) was closely co-moving with CPI inflation during October-December 2016, but it shot up in January and further in February to close to three percentage points above CPI inflation, driven by a sharp pick-up in international commodity





prices. GDP and GVA deflators rose in the beginning of the year, but edged down closer to CPI inflation from Q3:2016-17 (Chart II.14).

II.3 Costs

Even as retail inflation and its measurement by other metrics has shrugged off the transitory drag of demonetisation and revealed its underlying trajectory in the February 2017 reading, cost push pressures appear to be coalescing. Domestic farm and non-farm input costs escalated significantly in the second half of 2016-17 on account of the rise in global crude oil prices, the firming up of metal prices and expectations of expansionary US fiscal spending (Chart II.15).

Coal inflation surged in January and February, with Coal India Limited linking its premium quality coal to international prices which hardened on account of supply disruptions in Australia and China towards the end of 2016. Substantial price pressures were also observed in high speed diesel, naphtha, furnace oil, cotton yarn and fibres all of which drove up inflation in industrial input costs to the highest level since early 2011. In the farm sector, price increases relating to high speed diesel and pesticides, particularly weedicides, largely contributed to the upturn in farm input costs. An analysis based on the

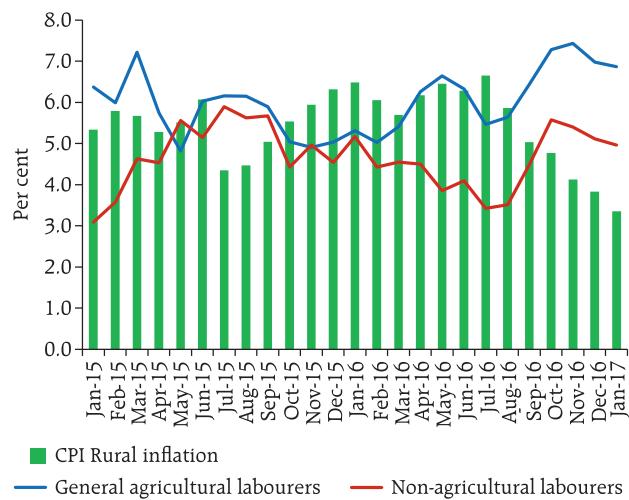
Supply and Use Table (SUT) of the Central Statistics Office (CSO) comprising 140 products/services and 66 industries shows that a one per cent increase in crude oil, metals and coal prices could translate into an increase in WPI inflation by 15 bps, 20 bps and 5 bps, respectively, and in CPI inflation by 6 bps, 7 bps and 2 bps, respectively.⁴

Turning to wages and staff costs, rural wage growth for both agricultural and non-agricultural labourers picked up through October-November 2016 before moderating in December and January (Chart II.16). The divergence between agricultural and non-agricultural wage growth remains wide, reflecting the increase in demand for farm labour due to the invigoration of agricultural activity.

In the organised sector, corporate sector performance points to a moderation in per employee staff cost of listed private sector companies (Chart

⁴ Using SUT, the first round pass-through impact of 1 per cent increase in domestic prices of certain commodities (due to international price pressure), is estimated on WPI inflation. Onward transmission from wholesale to retail inflation is then estimated in a vector autoregression (VAR) framework with the interest rate, WPI headline inflation and CPI headline inflation as endogenous variables. Bhanumurthy, N. R., S. Das, and S. Bose. (2012), Oil Price Shock, Pass-through Policy and its Impact on India, National Institute of Public Finance and Policy, New Delhi, Working Paper Series, 99(2), 1-10.

Chart II.16: Wage Growth and Inflation in Rural Areas (y-o-y)



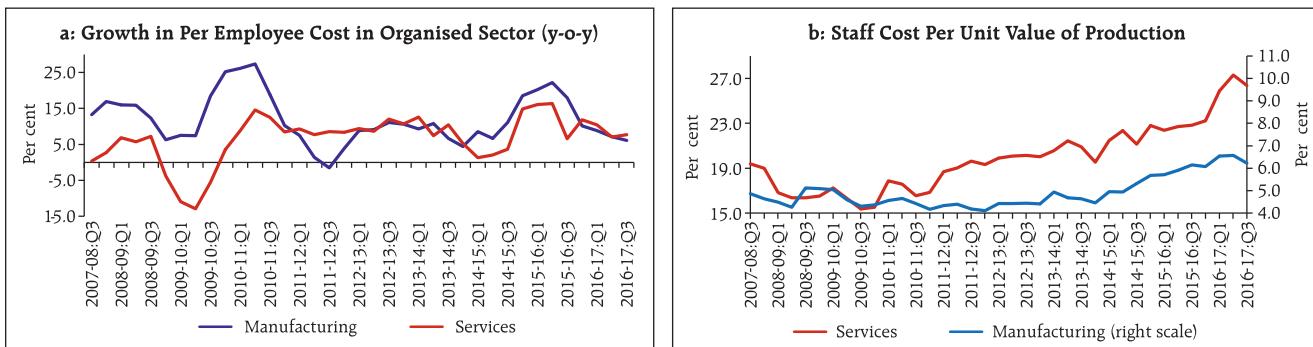
Sources: CSO, Labour Bureau and RBI staff estimates.

II.17a). A caveat in interpreting these developments is that the value of production grew at a slower pace than staff costs pushing up unit labour costs (*i.e.*, the ratio of staff cost to value of production) for both manufacturing and services companies, notwithstanding the moderation seen in the latest reading (Chart II.17b). Firms polled in the Reserve Bank's industrial outlook survey reported a sharp pick-up in the cost of raw materials as also in staff cost. Most of the firms expect to pass on the increase in costs into selling prices. Similar sentiments about acceleration in input costs were reported by both manufacturing

firms and service providers in purchasing managers' indices. Polled companies expect that the increase in costs will strengthen output price inflation.

Going forward, the inflation path will be shaped by the implementation of house rent allowances under the 7th CPC award and the introduction of the GST; both these developments are likely to provide a push to headline inflation, the impact of which could last for 12-18 months. Moreover, several parts of the corporate sector, which have been struggling with balance sheet stress for a protracted period, await a recovery in demand that will rekindle pricing power of firms so that they can rebuild their bottom lines. While input costs have firmed up, the outlook for inflation will hinge upon a reasonably accurate assessment of the quantum of input price increases that the firms may pass through to their output prices. Further, should the recent softening in crude oil prices – caused by build-up in oil stocks in the US, legacy oversupply from OPEC last year, and possible failure of production controls by OPEC and Russia – continue, inflation trajectory could soften. Finally, with the rising probability of *el niño*, as discussed in Chapter 1, the path of food inflation may be impacted by the outcome of the monsoon in the coming year and in this regard, supply management measures that have successfully led to deceleration in food inflation from double digits in 2012-13 and 2013-14 to close to 5 per cent in 2016-17 so far, will play a crucial role.

Chart II.17: Labour Cost in Manufacturing and Services



Note: Per employee cost = Total employee cost/total number of employees.

The notification of Ministry of Corporate Affairs (MCA) for adoption of India accounting standard (Ind AS) by listed companies having net worth more than ₹500 crores is applicable since Q1: 2016-17 and hence, the ratios may not be strictly comparable. The data may be treated accordingly.

Sources: Capitaline data base and RBI staff estimates.

III. Demand and Output

The slowdown in aggregate demand, which set in at the beginning of H2:2015-16, became accentuated in H2: 2016-17, although consumption demand remained resilient. Aggregate supply conditions were underpinned by the robust performance of agriculture and steady government expenditure.

Economic activity has been losing momentum since H2:2015-16 on a combination of structural and cyclical factors; in H2:2016-17, this trajectory was dented further by the transient impact of demonetisation. Both private and government consumption demand have held up well against this slowdown, together accounting for 90 per cent of real gross domestic product (GDP) growth in H2:2016-17 on a weighted contribution basis. Investment demand, which had sunk into contraction in H1, recovered from Q3:2016-17. Net exports have been growing strongly since Q3:2015-16 but in Q3:2016-17, they turned negative with imports starting to expand at a higher pace than exports as domestic demand strengthened. The ebullient rebound in agricultural activity on the back of normal monsoon and record foodgrains production have boosted rural incomes and supported consumption. In contrast, the modest pick-up in industry in H2:2016-17 and the slower growth in services suggests that investment demand is still sluggish. Going forward, implementation of the Goods and Services Tax (GST) and the measures taken in the Union Budget to boost the rural economy, infrastructure, micro, small and medium enterprises (MSMEs) and low cost housing should help invigorate domestic demand. However, a sustained revival of investment holds the key to stepping up the pace of economic activity closer to its medium-term potential.

¹ Keeping in view the provision made by the Central Government for additional expenditure on account of pay and pension in its budget for 2016-17, its overall impact was estimated at around 30 bps in the GVA projected by the Reserve Bank for 2016-17 (RBI Annual Report, 2015-16).

III.1. Aggregate Demand

Aggregate demand measured by y-o-y changes in real GDP at market prices moderated through 2016-17, with the slowdown being pronounced in the second half of the year. Fiscal stimulus in the form of the 7th Central Pay Commission's (7th CPC) award supported aggregate demand strongly; without the support of government final consumption expenditure (GFCE), GDP growth would have slumped to 5.9 per cent in H2:2016-17 as against the headline print of 7.0 per cent¹. Private consumption remained the mainstay of domestic demand, notwithstanding some deceleration expected in the last quarter of the year. On a seasonally adjusted basis, however, q-o-q growth suggests that the slowdown in aggregate demand bottomed out in Q3 and an upturn commenced in Q4 on the back of a tentative recovery in exports and investment (Chart III.1, Table III.1).

III.1.1 Private Final Consumption Expenditure

Private final consumption expenditure remains the bedrock of domestic demand, contributing over half of overall GDP growth in H2:2016-17 (Chart III.2). Its underlying resilience stood out in the face of cash constraints of demonetisation, with data pointing to

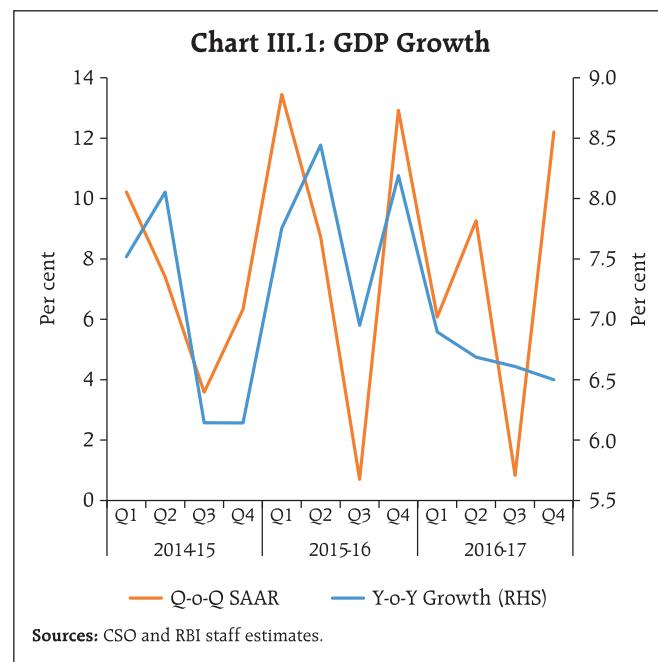


Table III.1: Real GDP Growth

(Per cent)

Item	2015-16	2016-17 (SAE)	Weighted contribution to growth in 2016-17 (percentage points)*	2015-16				2016-17			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4#
Private Final Consumption Expenditure	7.3	7.2	4.0	4.9	6.7	6.8	10.6	7.2	5.1	10.1	6.5
Government Final Consumption Expenditure	2.9	17.0	1.7	0.5	3.9	3.7	3.6	15.5	15.2	19.9	18.1
Gross Fixed Capital Formation	6.1	0.6	0.2	9.6	12.4	3.2	0.0	-2.2	-5.3	3.5	6.5
Net Exports	13.9	62.0	0.7	-1.1	-4.9	27.0	89.6	70.4	74.5	-23.4	-
Exports	-5.4	2.3	0.5	-5.7	-4.3	-9.0	-2.5	2.1	-0.9	3.4	4.4
Imports	-5.9	-1.2	-0.3	-5.2	-3.6	-10.2	-4.4	-2.7	-7.4	4.5	1.4
GDP at Market Prices	7.9	7.1	7.1	7.8	8.4	6.9	8.6	7.2	7.4	7.0	7.0

SAE: Second Advance Estimates. #: Implicit growth.

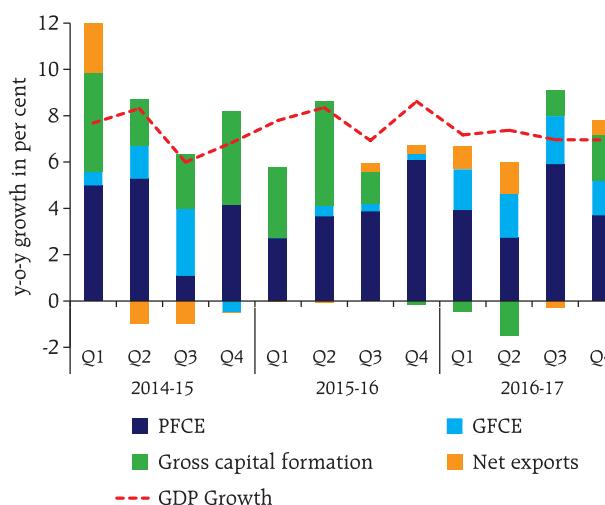
*: Component-wise contributions to growth do not add up to GDP growth in the table because change in stocks, valuables and discrepancies are not included.

Source: Central Statistics Office (CSO).

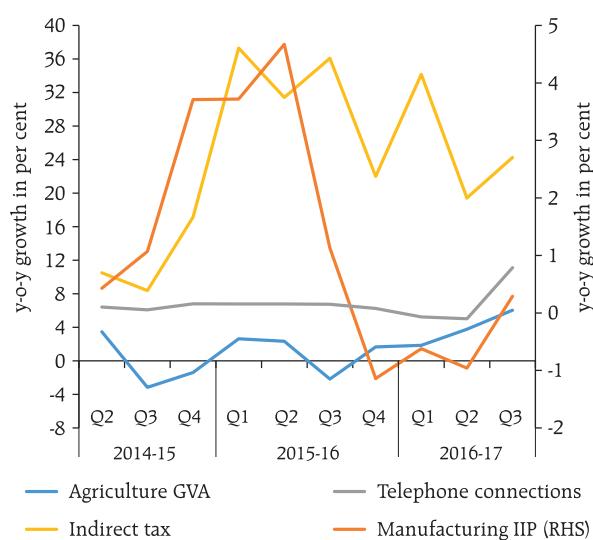
an acceleration of growth in this period on a sequential basis. The expansion of consumer purchasing power in this period can be explained by a combination of factors: improved rural consumption demand due to (i) robust agricultural activity; (ii) sharp uptick in Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) expenditure (15 per cent for 2016-17); and (iii) rural wages remaining steady; implementation of 7th CPC recommendations and

One Rank One Pension (OROP) which buoyed already strong urban consumption demand and a significant fall in overall consumer inflation.

In terms of lead indicators for estimating private final consumption expenditure, the surge in private consumption finds reflection in the acceleration in agriculture GVA, telephone connections, indirect tax collections and manufacturing index of industrial production (IIP) (Chart III.3).

Chart III.2: Weighted Contribution of the Components to GDP Growth

Sources: CSO and RBI staff estimates.

Chart III.3: Indicators of Consumption Demand

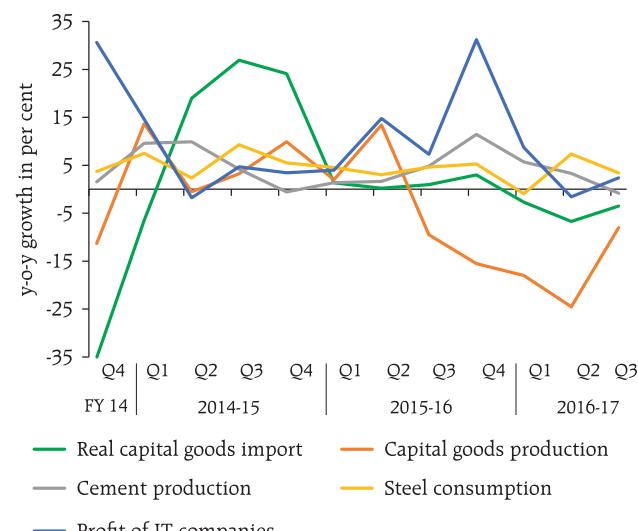
Sources: RBI staff estimates based on CSO, TRAI, CGA data and MOCI.

III.1.2 Gross Fixed Capital Formation

After four consecutive quarters of either sharp deceleration or contraction, gross fixed capital formation turned around in Q3 and accelerated further in Q4². On the basis of lead indicators, this reversal in investment demand in spite of demonetisation effects can be explained by the pick-up in capital goods imports and moderation in the pace of contraction in domestic capital goods production as also improvement in profits of software companies (Chart III.4). Some momentum in investment activity is also visible in sectors such as electricity transmission, roads and renewable power.

Nonetheless, it may be premature to interpret these proximate developments as green shoots of durable revival of investment demand. A wider scan shows that capex spending, especially in large brownfield projects in sectors such as iron and steel, construction, textiles and power, remains weak amidst an environment of uncertainty surrounding growth, both global and domestic, and over-indebtedness as well as excess capacity in many sectors. According to the Centre for Monitoring Indian Economy (CMIE), new investment proposals, which capture the future pace of investment activity, has recovered in Q4 from

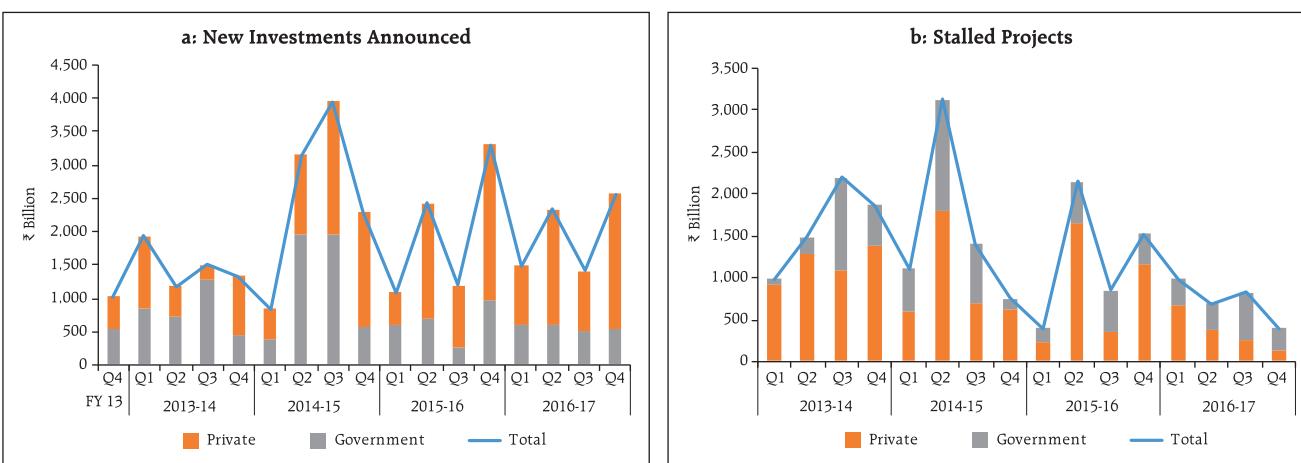
Chart III.4: Lead Indicators of Investment Demand



Source: RBI data on corporate finance, CSO, DGCI&S, MOCI and JPC.

its decadal low level in Q3, driven by government projects. The new investment projects increased to ₹2.57 trillion in Q4 as against an average of ₹2.16 trillion in the preceding nine quarters (Chart III.5a). The value of stalled projects decreased by 51 per cent during the quarter, mainly accounted for by government sector projects (Chart III.5b). The problem of stalled projects continues mainly because of lack of environmental and non-environmental clearances.

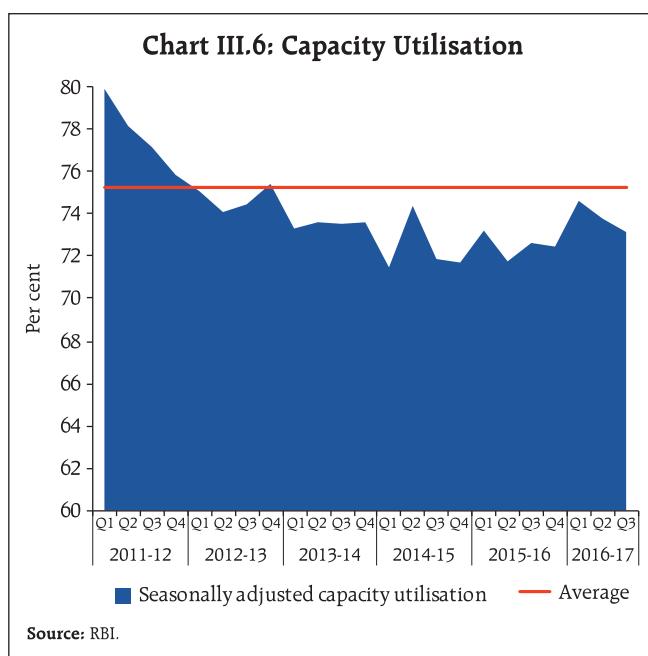
Chart III.5: Investment Announced and Stalled Projects



Source: CMIE.

² Implicit, from the latest available data of the CSO for Q1-Q3 and second advance estimates of annual GVA.

Seasonally adjusted capacity utilisation has remained below its average (since Q1:2013-14), reflecting weak demand and raising concerns on the sustainability of the recent pick-up in private investment (Chart III.6). Decomposition of time series into trend and cycles of various frequencies, juxtaposed with a Markov switching exercise to detect regime shifts also suggests that the recent upturn may not yet confirm a definitive reversal in investment demand (Box III.1). Going forward, an increase in allocation of capital expenditure by 10.7 per cent in the Union Budget 2017-18 is expected to generate some multiplier effects, but the catalytic effects of fiscal crowding in setting off a turnaround in the investment cycle is largely contingent on revival in private investment appetite. A binding constraint is the heightened risk aversion among



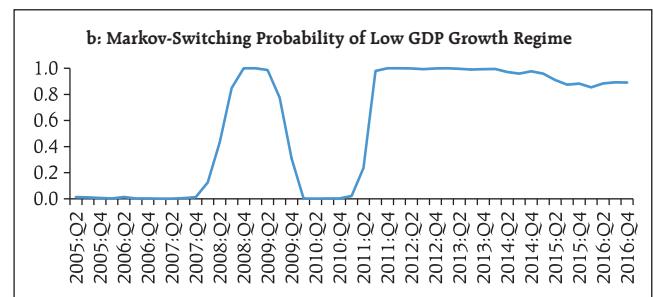
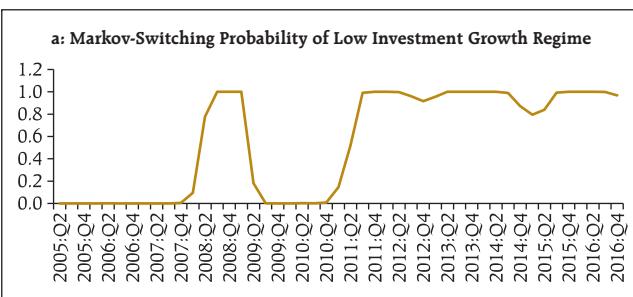
Box III.1: Investment Cycle in India: Some Insights from Wavelet Analysis

Gross domestic investment in India has been muted in a prolonged phase that set in during the post global financial crisis (GFC) period. Capacity utilisation has remained low and industrial activity depressed in an environment characterised by subdued global and domestic demand. Consequently, when gross fixed capital formation (GFCF) posted positive growth in Q3:2016-17 after three consecutive quarters of contraction, one question has evoked considerable interest: Is the recent upturn indicating a turning point in the investment cycle and what are the implications for growth?

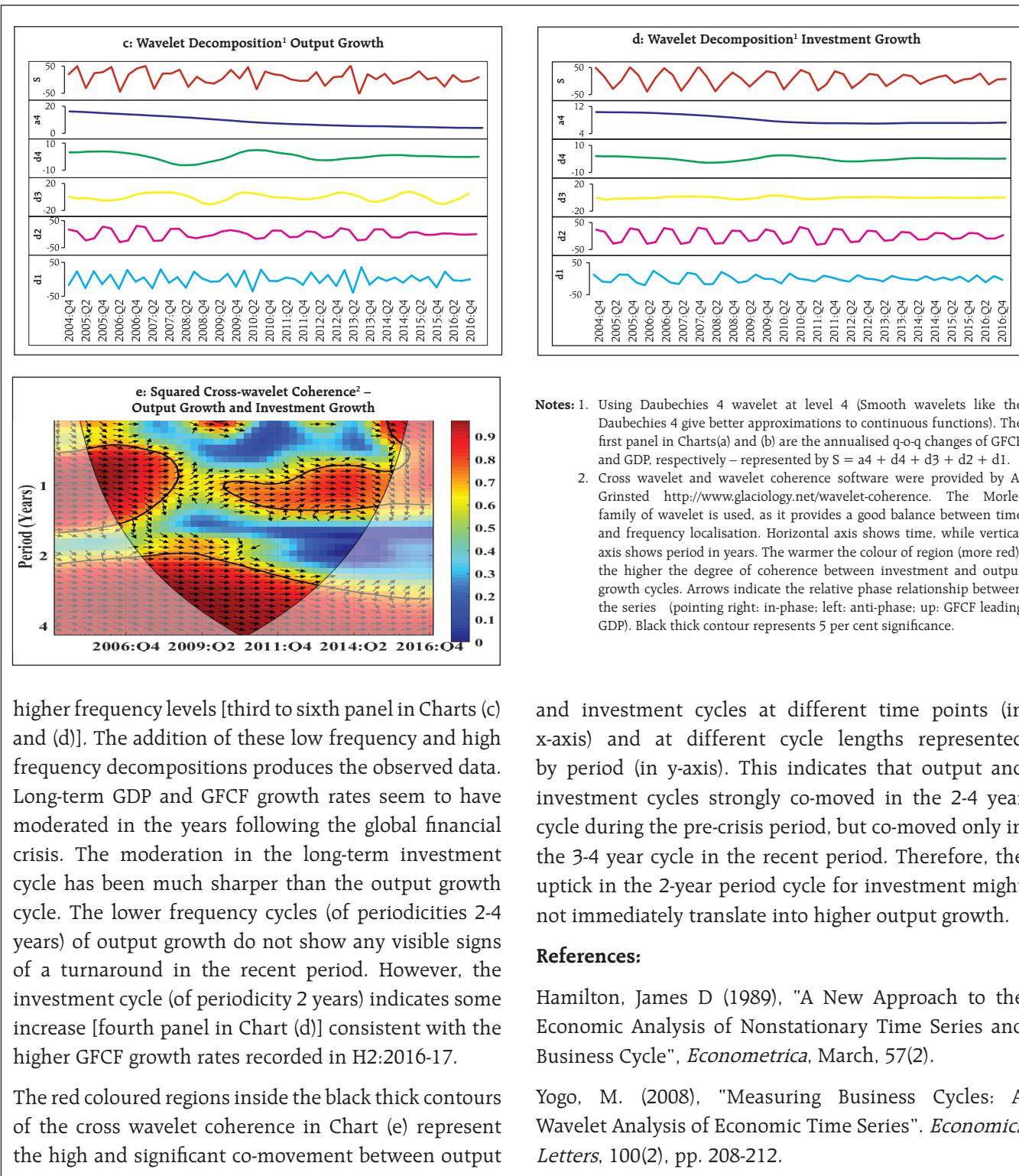
The Markov switching model of Hamilton (1989) was applied on growth rates (annualised seasonally adjusted q-o-q) of investment [chart (a)] to check whether the recent surge in the investment growth rate is, in fact,

a turning point. Markov-switching probabilities suggest that the inflexion point in the investment cycle to a higher growth regime has still not materialised. Similar exercise on GDP growth rates [chart (b)] also does not suggest any turnaround.

Furthermore, output and investment growth cycles (annualised q-o-q) are also examined using Wavelet analysis which offers the possibility of decomposing the time series data into several series of orthogonal sequences of scales representing different periodicities/frequencies. Charts (c) and (d) present the wavelet transformation of GDP and GFCF growth rates [first panel in Charts (c) and (d)] into a low frequency scale that represents the long-run trend in the growth rates [second panel in Charts (c) and (d)] and four relatively



(contd.)



higher frequency levels [third to sixth panel in Charts (c) and (d)]. The addition of these low frequency and high frequency decompositions produces the observed data. Long-term GDP and GFCF growth rates seem to have moderated in the years following the global financial crisis. The moderation in the long-term investment cycle has been much sharper than the output growth cycle. The lower frequency cycles (of periodicities 2-4 years) of output growth do not show any visible signs of a turnaround in the recent period. However, the investment cycle (of periodicity 2 years) indicates some increase [fourth panel in Chart (d)] consistent with the higher GFCF growth rates recorded in H2:2016-17.

The red coloured regions inside the black thick contours of the cross wavelet coherence in Chart (e) represent the high and significant co-movement between output

and investment cycles at different time points (in x-axis) and at different cycle lengths represented by period (in y-axis). This indicates that output and investment cycles strongly co-moved in the 2-4 year cycle during the pre-crisis period, but co-moved only in the 3-4 year cycle in the recent period. Therefore, the uptick in the 2-year period cycle for investment might not immediately translate into higher output growth.

References:

- Hamilton, James D (1989), "A New Approach to the Economic Analysis of Nonstationary Time Series and Business Cycle", *Econometrica*, March, 57(2).
- Yogo, M. (2008), "Measuring Business Cycles: A Wavelet Analysis of Economic Time Series". *Economics Letters*, 100(2), pp. 208-212.

banks, many laden with double-digit percentage of stressed assets to gross advances, to finance sectors that are excessively leveraged. Sector-specific slack

and demand substitution through cheaper imports in some segments due to excess global capacity are other drags on the revival in investment.

III.1.3 Government Expenditure

Another key component of aggregate demand – government final consumption expenditure (GFCE) – continued to provide strong support to aggregate demand in H2:2016-17 due to the implementation of the 7th CPC award and OROP. Lower spending on all major subsidies – food, fertilisers and petroleum – contained Central Government's revenue expenditure at the budgeted level for 2016-17. Although there was a shortfall in realisation of budgeted receipts from disinvestment and spectrum auctions, buoyant indirect tax collections and non-tax revenues helped in realising the fiscal deficit target even as capital expenditure did not experience any cutbacks, unlike in previous years (Table III.2). In fact, the revised estimates (RE) of capital expenditure were 13.3 per cent higher than budgeted estimates (BE), reflecting improvement in expenditure quality.

Union excise duty collections grew by 34.5 per cent on a y-o-y basis on account of the upward revision in clean environment cess, imposition of infrastructure cess on certain motor vehicles, additional excise duty on jewellery articles and increase in excise duty on tobacco products. Receipts from the service tax grew by 17.1 per cent due to imposition of *Krishi Kalyan* cess at 0.5 per cent from June 1, 2016. Relatively

robust indirect tax collections and lower spending on subsidies also entailed a wider divergence between GVA and GDP growth rates.

The Union Budget, 2017-18 deferred the target for the gross fiscal deficit (GFD) to GDP ratio of 3.0 per cent to 2018-19 from 2017-18. Nevertheless, the government remained committed to the spirit of fiscal consolidation as the Centre's GFD is budgeted to decline by 0.3 percentage point to 3.2 per cent in 2017-18 through an increase in non-debt receipts, particularly tax revenues and disinvestment proceeds. This makes room for enhanced budgetary allocation for the farm and rural sectors, social and physical infrastructure, and employment generation. Future fiscal consolidation is contingent upon efficient revenue mobilisation – broadening the tax base; and incentivising digital payments.

The latest available data in respect of 21 States suggest an increase in GFD to gross state domestic product (GSDP) ratio to 3.4 per cent in 2016-17 (RE) against 3.0 per cent budgeted. Net of Ujal DISCOM Assurance Yojana (UDAY) bonds, however, the ratio was lower at 3.0 per cent. For 2017-18 (BE), The GFD-GSDP ratio of 21 states works out to 2.6 per cent (Table III.3). The deterioration in State finances during 2016-17 will impact the overall fiscal position of the general government.

The Centre's borrowing programme was conducted as per the planned issuance schedule within the overall contour of debt management

Table III.2: Key Fiscal Indicators - Central Government Finances

Item	Per cent to GDP		
	2016-17 (BE)	2016-17 (RE)	2017-18 (BE)
1. Revenue Receipts	7.9	9.3	9.0
a. Tax Revenue (Net)	6.3	7.1	7.3
b. Non-Tax Revenue	1.7	2.2	1.7
2. Non Debt Capital Receipts	0.4	0.4	0.5
3. Revenue Expenditure	11.5	11.4	10.9
4. Capital Expenditure	1.6	1.8	1.8
5. Total Expenditure	13.1	13.2	12.7
6. Gross Fiscal Deficit	3.5	3.5	3.2
7. Revenue Deficit	2.3	2.0	1.9
8. Primary Deficit	0.3	0.3	0.1

Source: Union Budget, 2017-18.

Note: BE: Budget Estimates RE: Revised Estimates

Table III.3: Major Deficit Indicators of State Governments

Item	2016-17 (BE)	2016-17 (RE)	2017-18 (BE)	(Per cent of GSDP)
Revenue Deficit		-0.1	0.2	-0.1
Gross Fiscal Deficit		3.0	3.4	2.6
Gross Fiscal Deficit (<i>Excluding UDAY</i>)	-		3.0	-
Primary Deficit		1.3	1.7	0.9

Notes: 1. Negative (-) sign indicates surplus.

2. Data pertain to 21 out of 29 States.

3. UDAY data as per RBI records.

Source: Budget Documents of State Governments.

Table III.4: Government Market Borrowings

Item	(₹ billion)					
	2015-16			2016- 17		
	Centre	States	Total	Centre	States	Total
Net Borrowings	4,406.3	2,611.9	7,018.2	4,082.0	3,426.5	7,508.5
Gross Borrowings	5,850.0	2,945.6	8,795.6	5,820.0	3,819.8	9,639.8

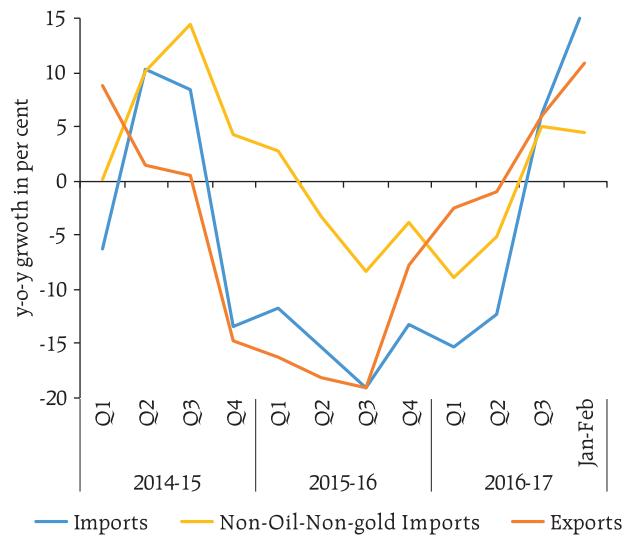
strategy. Combined gross market borrowings of the Centre and States (dated securities) during 2016-17 increased by 9.6 per cent over the previous year (Table III.4). Increased borrowing by the state governments may exert pressure on the finite pool of investible resources and crowd out private investment.

III.1.4 External Demand

After making positive contribution to GDP in the last four quarters, net exports contracted sharply and pulled down GDP growth in Q3:2016-17. Growth in merchandise exports as well as imports turned positive for the first time in eight quarters; however, a stronger pick-up in imports than in exports expanded the trade deficit in Q3 and the first two months of Q4.

Notwithstanding the slowdown in global demand, evident in weak imports by advanced economies (AEs), India's exports to AEs resisted this slowdown and actually increased in Q2 and Q3:2016-17 alongside the pick-up in exports to emerging market economies (EMEs) which had accounted for a large part of the decline in India's exports over the last two years. In fact, export shipments to EMEs registered positive growth for the first time since Q3:2014-15.

Significantly, the turnaround in India's export growth in Q3 was led by non-oil exports with almost the entire increase in oil exports accounted for by the increase in international crude oil prices. Exports of some labour-intensive sectors such as ready-made garments, gems and jewellery, and leather and products experienced transient pressures from demonetisation. All broad categories of imports, *viz.* oil, gold and non-oil non-gold imports, increased during October-February 2016-17 (Chart III.7). Gold imports,

Chart III.7: Merchandise Imports and Exports

Source: DGCIS.

which rose in November after demonetisation and declined sharply in the next two months, increased in February 2017 due to domestic stockpiling ahead of festive (*Akshaya Tritiya*) and wedding season. Strong price effects caused by Organisation of the Petroleum Exporting Countries (OPEC) production cut pushed up the growth of oil imports in nominal terms even as import volumes declined in recent months.

Net services exports moderated in H2:2016-17 (October 2016 - January 2017) in relation to the corresponding period of 2015-16. Among services exports, India's software exports face uncertainty from global headwinds, especially from the likely restrictions relating to the H1-B visas. A higher flow of tourist arrivals augured well for exports of travel services. The net outgo due to investment income payments in Q3, however, was marginally lower than in the corresponding period of 2015-16. Private transfer receipts, mainly representing remittances by Indians employed overseas, declined by 3.8 per cent in Q3 from their level a year ago. Despite a lower merchandise trade deficit, current account deficit at 1.4 per cent of GDP in Q3 was almost at the same level as a year ago, though higher than the preceding two quarters.

While net FDI inflows at US\$ 13.2 billion in H2:2016-17 (October 2016 - January 2017) moderated from the level a year ago, net portfolio flows turned positive in Q4. On a cumulative basis, net FDI inflows, however, rose to US\$ 33.9 billion in April-January 2016-17 as compared with US\$ 31.6 billion a year ago, suggesting India is becoming a preferred investment destination. The bout of global risk aversion that caused net outflow of foreign portfolio investment (FPI) during November 2016 to January 2017 subsided subsequently as foreign portfolio investors turned net buyers in response to the Union Budget proposals and the change in the monetary policy stance of the Reserve Bank. FPIs in both the equity and debt segments recorded net inflow of US\$ 11.6 billion in February and March 2017. FPIs have been more bullish about the continuance of the domestic reforms, especially after decisive outcomes in recent State elections. Inflows in the debt segment were largely influenced by domestic and global interest rate differentials. Higher repayments caused net outflow of external commercial borrowings during April-February of 2016-17. Net outflow of US\$ 18.0 billion of non-resident deposits during October 2016 to January 2017 reflected the redemption of FCNR (B) deposits.

III.1.5 Discrepancies in GDP

In India, real economic activity gets more comprehensively captured through Gross Value Added (GVA) at basic prices across all the sectors of the economy. Real GDP at market prices is derived by adding net indirect taxes (product taxes minus product subsidies) to real GVA at basic prices. Independently estimated private and government final consumption, gross fixed capital formation and net exports do not add up to this total, resulting in discrepancies in GDP, especially in quarterly estimates.

III.2 Aggregate Supply

III.2.1 Output Growth

Output growth in terms of GVA at basic prices decelerated in H2:2016-17 relative to H1 and a year ago, with the impact of demonetisation on manufacturing and services sector activity turning out to be smaller and transient relative to the underlying moderation that has been in evidence since H2:2015-16 (Table III.5). The agriculture sector remained resilient and rebounded on the strength of a normal monsoon after two consecutive years of near drought conditions, vigorous sowing activity and effective supply management by the Government.

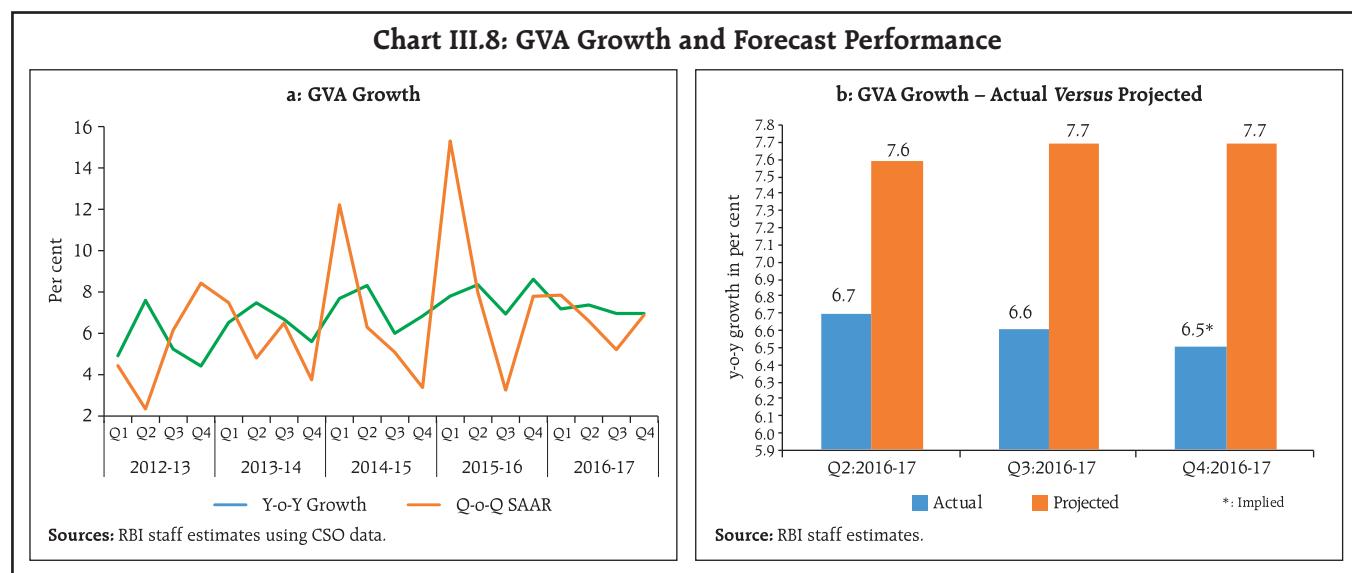
Table III.5: Sector-wise Growth in GVA

(Per cent)

Sector	Contribution-Weighted 2016-17	2015-16	2016-17 (SAE)	2015-16				2016-17			
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4#
Agriculture & Allied Activities	0.7	0.8	4.4	2.6	2.3	-2.2	1.7	1.9	3.8	6.0	5.0
Industry	1.6	10.3	6.7	8.3	10.3	12.0	10.6	7.6	5.6	8.0	5.6
Mining & quarrying	0.0	12.3	1.3	11.2	13.9	13.3	11.5	-0.3	-1.3	7.5	-0.7
Manufacturing	1.4	10.6	7.7	8.5	10.3	12.8	10.8	9	6.9	8.3	6.8
Electricity, gas, water supply and other utilities	0.1	5.1	6.6	2.5	5.9	4.1	7.8	9.6	3.8	6.8	6.4
Services	4.4	8.8	7.2	8.8	9	8.5	9.1	7.8	7.6	6.3	7.3
Construction	0.3	2.8	3.1	4.8	0.0	3.2	3.0	1.7	3.4	2.7	4.8
Trade, hotels, transport, communication	1.4	10.7	7.3	10.6	8.9	9.6	13.2	8.2	6.9	7.2	7.0
Financial, real estate & professional services	1.4	10.8	6.5	10.2	13.1	10.4	8.9	8.7	7.6	3.1	5.9
Public administration, defence and other services	1.4	6.9	11.2	6.3	7.2	7.5	6.7	9.9	11	11.9	11.7
GVA at Basic Prices	6.7	7.8	6.7	7.8	8.4	7.0	8.2	6.9	6.7	6.6	6.5

SAE: Second Advance Estimates. #: Implicit

Source: Central Statistics Office (CSO).



Seasonally adjusted q-o-q annualised GVA movements also confirm the weakening of growth in H2:2016-17 vis-à-vis H1 (Chart III.8a). For H2, the October MPR had projected GVA growth of 7.7 per cent. It had noted that the actual outcome for Q1 had matched projections given in the April 2016 MPR. The CSO's estimates for Q2: 2016-17 GVA at 6.7 per cent undershot RBI staff's April projections sizeably, suggesting greater than expected loss of momentum (Chart III.8b). The projected pace of acceleration in agriculture on the back of favourable base effects did not materialise and output from allied activities slowed more than expected. Furthermore, the anticipation of an investment-driven boost to electricity generation and mining and quarrying was belied. Construction activity also weakened more than projected on weaker demand.

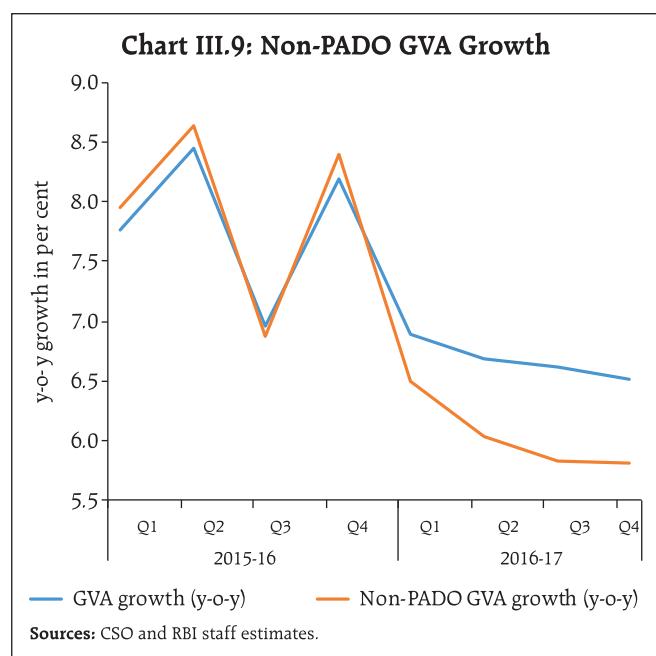
The sharper loss of momentum was further evident in CSO's subsequent data releases. The rise in crude oil prices, which adversely affected corporate bottom lines, also contributed. In addition, the knock-on effects of demonetisation, especially in the industrial sector and some sub-components of the services sector pulled down GVA growth out of alignment with the October MPR projections, but these effects were much more muted and transitory than the loss of momentum in Q2 on the more

endemic factors described earlier. Moreover, large unanticipated data revisions relating to 2014-16 also contributed to the deviations from the October MPR projections. These developments were closely monitored and reassessments were made in the December 2016 and February 2017 MPC resolutions in which the annual GVA growth projection was pared to 7.1 and 6.9 per cent, respectively.

The impact of demonetisation on the overall GVA growth was mitigated by a significantly higher growth in agriculture and public administration and defence and other services (PADO) components of the services sector. Even after excluding government spending, the momentum of GVA growth remained broadly unchanged in Q3: 2016-17 (Chart III.9).

III.2.2 Agriculture

The growth of agriculture and allied activities accelerated in H2: 2016-17 on a y-o-y basis as well as sequentially, reflecting the record foodgrains production. Furthermore, adequate soil moisture, a reasonable northeast monsoon in the initial part of the season and comfortable reservoir levels (above the 10-year average) resulted in an increase in sowing of *rabi* crops by 5.7 per cent over a year ago. Higher sowing, particularly in wheat, pulses and oilseeds, coupled with other factors such as



timely announcement of minimum support prices (MSPs) (especially for pulses) and availability of key agricultural inputs supported agricultural activity. It is important to note that *rabi* sowing in all subsequent weeks after the announcement of demonetisation remained higher than a year ago – except for the week ended November 18, 2016 – suggesting that there was no impact on sowing activity *per se*.

The dwindling of wheat stocks below the quarterly buffer norm during August 2016 till date prompted an increase in wheat imports. Import of pulses also grew significantly during the year. The record production of wheat and pulses in 2016-17 is expected to augment stocks substantially and keep prices under check.

The strong performance in foodgrains was not, however, matched by the horticulture sector. Its growth decelerated during 2016-17 as per advance estimates. Yet, livestock, barring wool production, grew at a robust pace, providing an alternate source of income to the rural population and supporting GVA from agriculture and allied activities as a whole.

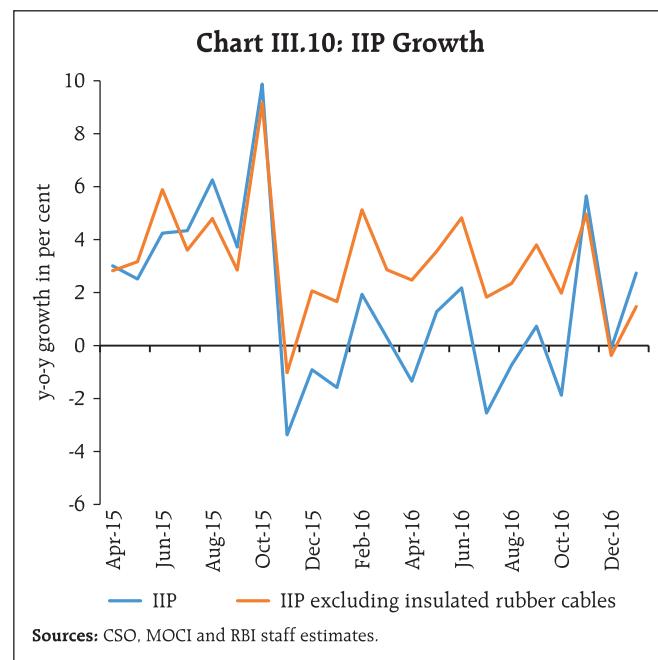
III.2.3 Industrial Sector

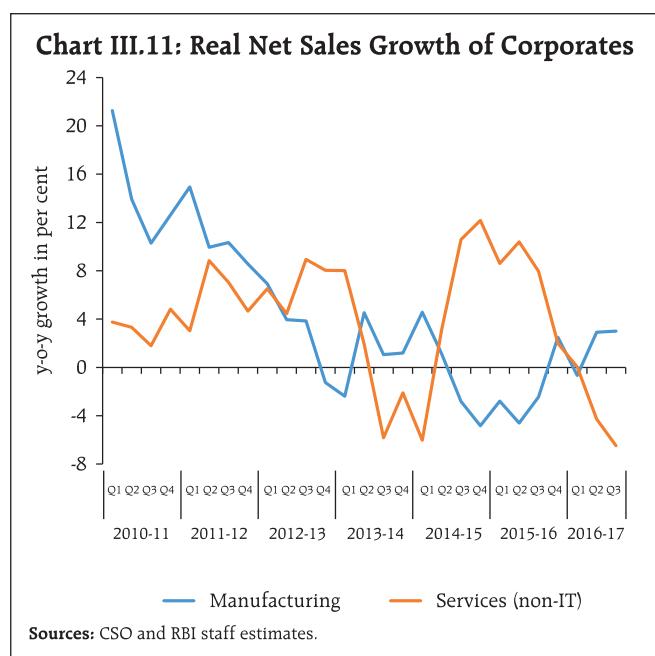
Value added in the industrial sector decelerated in H2:2016-17 on a y-o-y basis, led by manufacturing.

Sequentially, however, activity in the sector gained momentum in the same period, buoyed mainly by the better performance of the mining and quarrying sectors. Organised industry remained largely resilient in the face of demonetisation. The deceleration in the industrial sector was discernible even before the demonetisation – the IIP contracted by 0.3 per cent in the period April-October 2016 as compared with a growth of 4.8 per cent in the same period of the previous year. This deceleration was partly on account of the negative base effect relating to insulated rubber cables, which pulled down IIP (Chart III.10). Trimmed off insulated rubber cables, IIP growth during April-October 2016 was 3.0 per cent. The subsequent waning of the negative base effect helped in propping up IIP, aided by a pick-up in momentum.

The mining and quarrying segment slowed down from the beginning of 2016-17, mainly reflecting tepid coal production. Post demonetisation, the growth of the mining and quarrying sector, which is less cash intensive, accelerated sequentially. This was on account of improvement in coal production, although natural gas and crude oil production continued to contract.

The impact of demonetisation on the manufacturing sector was transient – after contracting





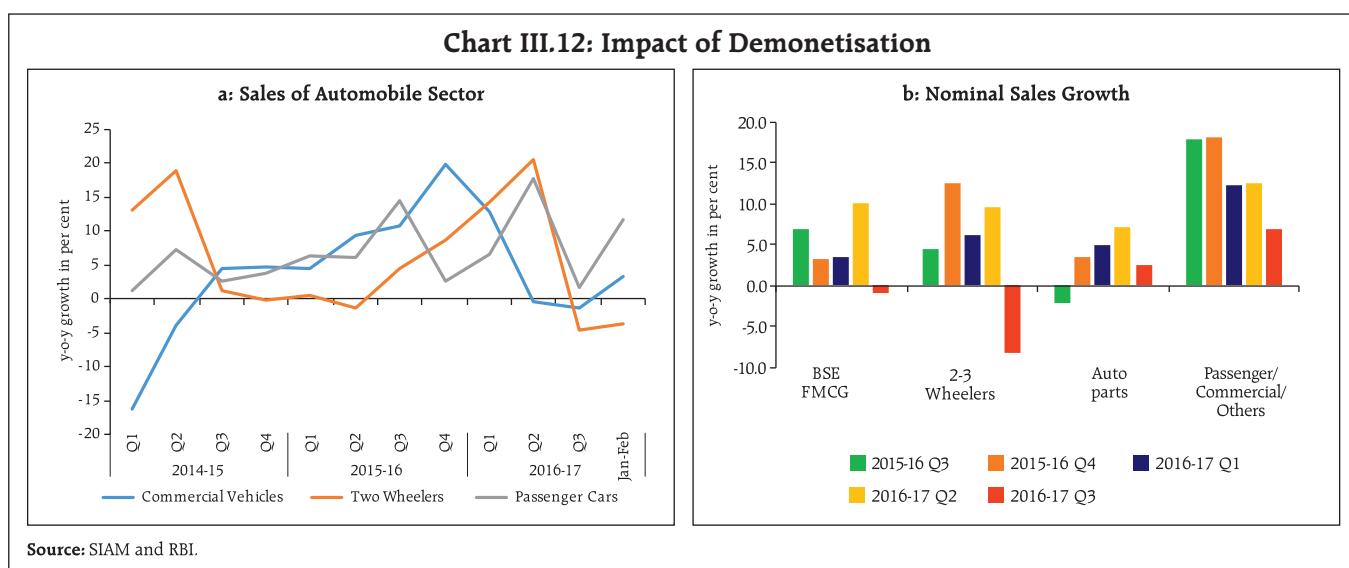
in December 2016, manufacturing output bounced back in January 2017. The manufacturing PMI, which had slipped in the contractionary zone in December 2016, expanded in January-March 2017. The performance of listed private companies remained resilient as sales and net profit growth improved at the aggregate level, although the performance of non-information technology (non-IT) service sector companies continued to be lacklustre (Chart III.11). Sales in cash intensive sectors such as fast moving

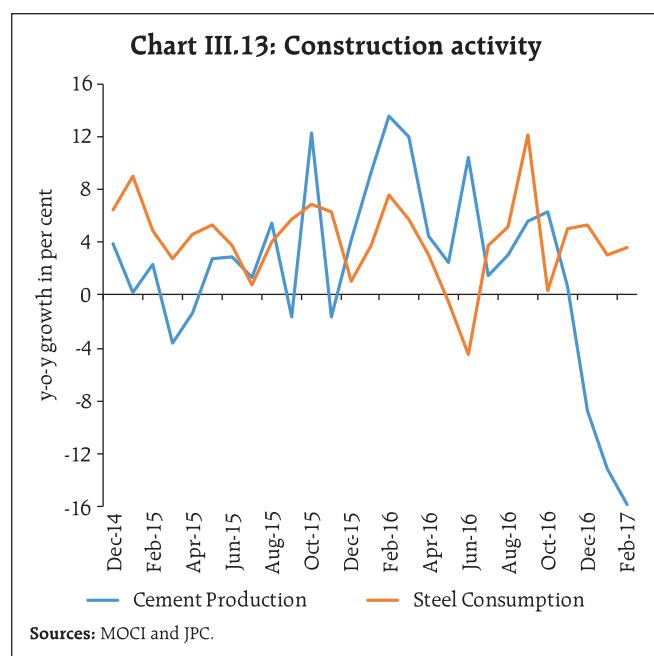
consumer goods (FMCG) and motor vehicles declined in Q3 *vis-à-vis* the previous quarter (Chart III.12a and b). However, lead indicators such as passenger car sales and consumer durables suggest that this impact was short-lived.

The electricity sector recorded a sharp increase in H2:2016-17 on a y-o-y basis. Although thermal electricity production remained weak, non-conventional sources such as solar and wind energy have registered higher production while pulling down the price. With India taking significant strides in expanding non-conventional sources of energy, helped by an enabling policy environment, and with the expected improvement in the financial health of power distribution companies (DISCOMs) after implementation of the Ujwal DISCOM Assurance Yojana (UDAY) scheme, the outlook for electricity generation has brightened considerably.

III.2.4 Services

The slowdown in the services sector, which became evident from Q1:2016-17, was sharper in H2:2016-17. Some services sectors were adversely impacted by demonetisation, *albeit* temporarily, especially construction and realty. The implicit CSO data for Q4, however, suggests that these effects to be waning. Steel consumption and cement production





– lead indicators of construction activity – remained positive from Q2:2016-17, although there was a sharp decline in cement production since December (Chart III.13).

The government's continuing thrust on building infrastructure – as evident from a significant increase in both road projects awarded and constructed – and rural housing, should revive the construction sector in the period ahead. Trade, hotels, transport and communication are the other sectors, which are shrugging off the effects of demonetisation and gearing up for a revival. Tourist arrivals have picked up strongly in recent months. In the transport segment, major lead indicators such as commercial and passenger vehicles sales have revived from the lows of November/December 2016.

Financial, real estate and business services have faced subdued conditions for the past four quarters as constraints on account of slowing bank credit pulled down its growth. Credit growth has continued to remain tepid, although insurance premiums witnessed a surge. The real estate segment, which largely reflects value addition by listed real estate companies, was impacted by demonetisation as evident in a sharp fall

in the BSE realty index. Subsequently, these losses have been recouped as these transitory effects wore off.

The business services segment largely reflects the performance of IT companies. Sales and profit of these companies remained robust. Nonetheless, the outlook for this segment is clouded by uncertainty in view of growing protectionist and anti-globalisation sentiments in the US. As alluded to earlier, public administration and defence continued to exhibit robust growth throughout 2016-17 due to higher expenditure on account of the 7th CPC award and OROP. Given the commitment to fiscal consolidation, however, double digit growth in these segments may not sustain in 2017-18.

Overall, for the services sector, lead/coincident indicators suggest some recovery in Q4 from a prolonged downturn and the more immediate hit from demonetisation.

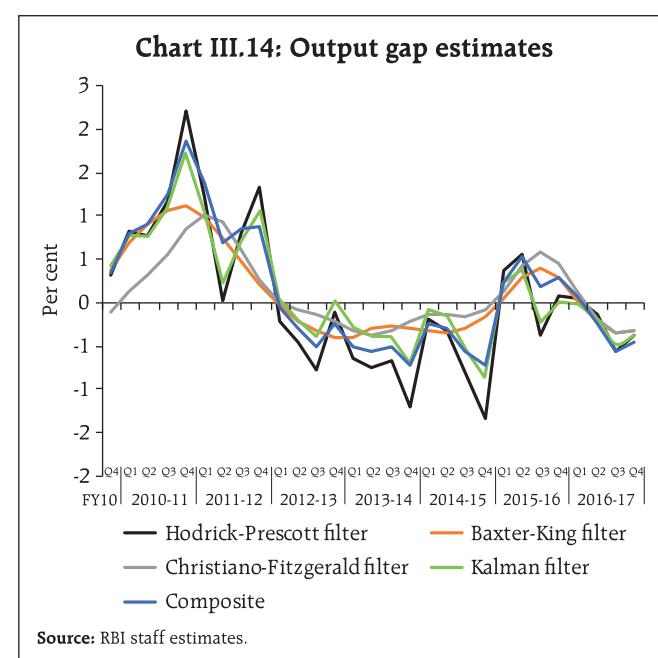
III.3 Output Gap

The efficacy of monetary policy critically depends on an accurate assessment of resource utilisation. In this context, a good fix on potential output is vital but challenging since it is unobservable. Estimation of potential output has to deal with uncertainty as real time measures of aggregate activity contain a considerable amount of noise and are often subject to significant revisions. The introduction of a new base year for national accounts (2011-12) and the continuing unavailability of a time series for previous years for ensuring appropriate degrees of freedom in econometric estimation are major impediments in this endeavour. Demonetisation added some uncertainty to the growth outlook, but its impact was transitory.

For a fair assessment of the output gap for India, which indicates deviation of actual output from its potential level and expressed as percentage of potential output, the revised GVA data were augmented with forecasts applying different univariate filters such as

the Hodrick-Prescott filter, the Baxter-King filter, the Christiano-Fitzgerald filter and a Multivariate Kalman (MKV) filter³. A MKV filter is particularly useful as it juxtaposes demand conditions with movements in inflationary pressures. The estimated output gap measures were aggregated by using principal components to get a composite measure, which indicates that the output gap (actual *minus* potential), is gradually closing (Chart III.14).

Growth prospects are expected to strengthen in 2017-18 on account of several factors. First, discretionary consumer demand held down by demonetisation is expected to bounce back. Second, economic activity in cash-intensive sectors such as retail trade, hotels and restaurants, transportation as well as in the unorganised sector is getting rapidly restored. Third, demonetisation-induced ease in bank funding conditions has led to a sharp improvement in transmission of past policy rate reductions into marginal cost-based lending rates, and in turn, to lending rates for healthy borrowers, which should



spur a pick-up in both consumption and investment demand. Fourth, the emphasis in the Union Budget for 2017-18 on the rural economy and affordable housing should also be positive for growth.

³ Hodrick, R. J., & Prescott, E. C. (1997). "Postwar US Business Cycles: An Empirical Investigation". *Journal of Money, Credit, and Banking*, pp.1-16.

Baxter, M., & King, R. G. (1999). "Measuring Business Cycles: Approximate Band-Pass Filters for Economic Time Series". *Review of Economics and Statistics*, 81(4), pp.575-593.

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IV. Financial Markets and Liquidity Conditions

Domestic market segments were shaped by local factors in an environment of heightened volatility in global financial markets. Large surplus liquidity in the money market post-demonetisation was managed with a mix of conventional and unconventional instruments. Volatility in the foreign exchange market remained contained, notwithstanding portfolio outflows. Credit growth, particularly to industry, remained depressed on asset quality concerns and weak investment demand. Equity and debt markets exhibited episodic price movements before stabilising by the end of the year.

Since the October 2016 Monetary Policy Report (MPR), the appetite for risk in global financial markets has been punctuated by bouts of volatility triggered by the largely unanticipated US presidential election results in November, apprehensions of intensified protectionist measures by the US, and monetary policy tightening with unexpected hawkish guidance by the Fed in December. Thereafter, markets responded positively to the expectations of a significant reset of the policy mix in the US by the new administration sharpening focus on the fiscal policy. The strengthening of the US dollar, hardening of bond yields, a surge in equity markets on easing global deflation risks and a stronger growth outlook for advanced economies (AEs) triggered capital outflows from emerging market economies (EMEs). Consequently, fixed income markets and exchange rates in EMEs came under pressure. Volatility in markets of most EMEs, however, remained contained, unlike during the taper tantrum. More recently, EMEs have witnessed a resumption of portfolio flows.

Domestic financial markets were impacted by twin shocks – demonetisation and the US presidential election results. The Union Budget announcements, the shift in the monetary policy stance of the Reserve

Bank and new data releases relating to inflation and economic activity also influenced market movements. Demonetisation drove a wall of liquidity into the money market. War-time liquidity management by the Reserve Bank, however, limited the extent of softening of money market rates relative to the policy repo rate within the liquidity adjustment facility (LAF) corridor. G-sec yields moved in either direction, driven by different factors. While the announcement of a policy rate cut in October and demonetisation imparted a softening bias, tightening of monetary policy in the US, application of the incremental cash reserve ratio (ICRR) to absorb surplus liquidity, the *status quo* on monetary policy by the Reserve Bank in December and the shift in the monetary policy stance in February 2017 to neutral hardened yields. The rupee displayed two-way movements up to mid-January, but since then, it has appreciated on resumption of portfolio inflows in both the debt and equity segments. Surplus liquidity conditions impelled and lubricated the transmission of monetary impulses to deposit and lending rates. However, credit growth, particularly to industry, remained sluggish on risk aversion by banks due to high levels of stressed assets and weak demand in view of the depressed investment cycle and the presence of spare capacity in manufacturing.

IV.1 Financial Markets

IV.1.1 Money Market: In Q3 of 2016-17, the October policy repo rate cut was transmitted fully in the money market, amidst easy liquidity conditions. The unprecedented surge of liquidity after the announcement of demonetisation (details set out in Section IV.3) shocked the market. The efficacy of liquidity absorption operations by the Reserve Bank can be gauged from the fact that the weighted average call money rate (WACR) – the operating target of monetary policy – traded at only about 14 bps below the repo rate between November 9, 2016 and end-December 2016; it coursed 6 bps below during October 2016 to November 8, 2016.

In Q4, the stepped-up pace of remonetisation resulted in some reduction in the liquidity surplus, which was still massive relative to the historical experience. A calibrated change in the mix of instruments for liquidity absorption from open market operations (OMOs) under the market stabilisation scheme (MSS) to reverse repo operations under the Reserve Bank's LAF imparted a further softening bias to the WACR, which traded at 25 bps below the repo rate, on average. The usual year-end liquidity pressure stemming from banks' balance sheet adjustments and tax payments to the Government did not spike money market rates, as the post-demonetisation liquidity overhang remained substantial. Other overnight money market rates, *viz.*, collateralised borrowing and lending obligation (CBLO) and market repo, also traded in sync with the WACR, *albeit* with a downside bias of about 35 bps (Chart IV.1).

Country practices on the width of the policy corridor point to a considerable diversity, suggesting that the choice of the width of the corridor is time- and country-specific (Table IV.1). In the Indian context, the recent overhang of large surplus liquidity – despite full absorption through the use of both conventional and

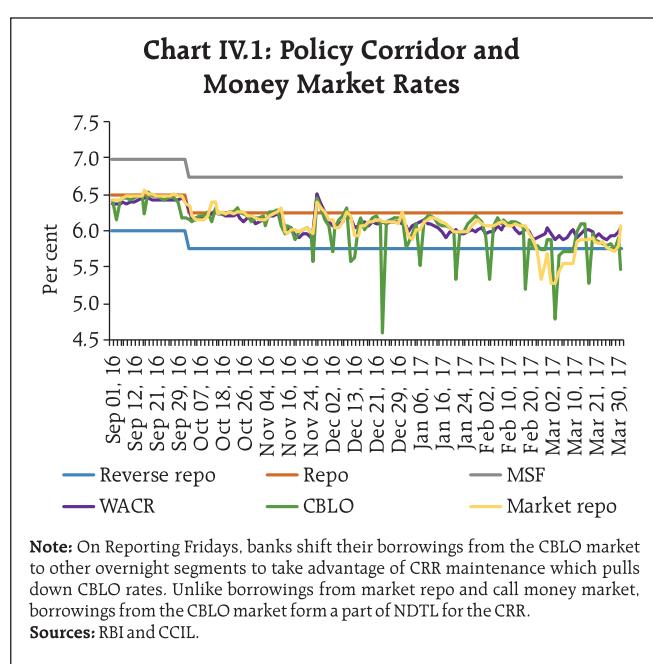
Table IV.1: Monetary Policy Interest Rate Corridors of Select Countries

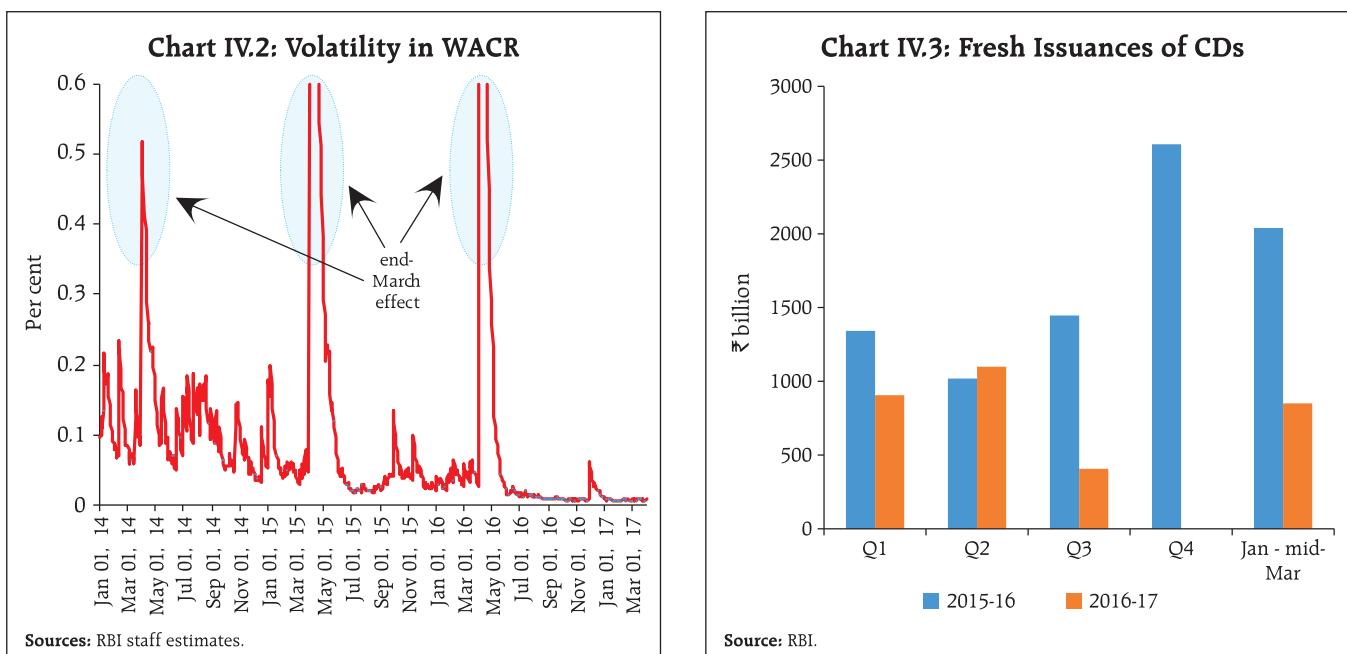
Country	Monetary Policy Corridor Width (bps)	Country	Monetary Policy Corridor Width (bps)
Australia	50 (+/- 25)	Malaysia	50 (+/- 25)
Canada	50 (+/- 25)	New Zealand	50 (+50/0)
Euro System	65 (+25/-40)	Philippines	100 (+/- 50)
India	100 (+/- 50)	Sweden	150 (+/- 75)
Indonesia	150 (+/- 75)	Thailand	100 (+/- 50)
Japan	40 (+30/-10)	United Kingdom	50 (+50/0)
Korea	200 (+/- 100)	United States	50 (+50/0)

Sources: Central Bank websites of respective countries.

unconventional instruments – has imparted a persistent downside bias to money market rates relative to the policy repo rate, which has spilled over to even 3-month money market rates, as discussed subsequently. The 3-month treasury bill (T-bill) rate has often stayed closer to the fixed reverse repo rate – or the floor of the LAF corridor – rather than the policy repo rate. Narrowing of the LAF corridor under such conditions can help in finer alignment of the operating target to the repo rate. This, in turn, could make overall money market conditions more consistent with the monetary policy stance.

Demonetisation-induced surplus liquidity conditions also impacted the market micro structure, which had a bearing on volumes and rates. In the call money market, lending volumes of co-operative banks increased significantly. Their share in average daily call volumes rose to more than 50 per cent post-demonetisation (up to February 2017), from the average of 36 per cent during April-October 2016. These reported trades, as opposed to the transaction-based Negotiated Dealing System-Call (NDS-CALL) rates, pulled down the overall WACR, especially during later hours of the trading days. In the collateralised segments, mutual funds increased their lending in both the CBLO and market repo segments, enabled by large mobilisation of short-term funds, and consequently, collateralised rates traded below the WACR. Banks were active on the borrowing side in both the CBLO and



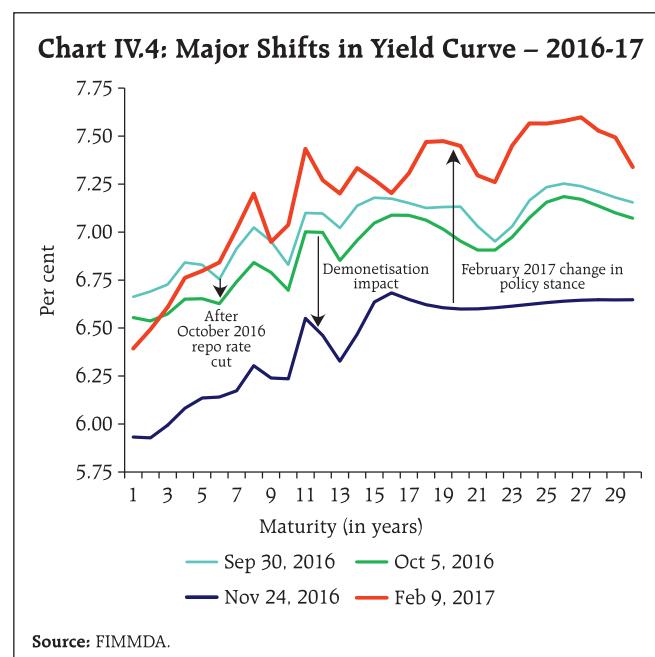


market repo segments (accounting for about 74 per cent and 79 per cent of total daily average volumes, respectively, in February 2017), taking advantage of their lower cost of funds. Although many banks arbitrated between the various segments of the money market and the Reserve Bank's LAF window, persistently high structural surplus liquidity heavily weighed on money market rates. Nonetheless, volatility in the WACR estimated from an IGARCH¹ (1,1) model has been muted (Chart IV.2).

In view of surplus liquidity, banks reduced recourse to certificates of deposit (CDs), issuance of which declined sharply to ₹407 billion and ₹850 billion during Q3 and Q4 (up to March 17, 2017) of 2016-17 as against ₹1,446 billion and ₹2,607 billion, respectively, during Q3 and Q4 of previous year (Chart IV.3). Liquidity also imparted a softening bias to the weighted average discount rates in primary issuance markets for commercial paper (CP). In the secondary markets, 3-month CD and 91-day T-bill rates softened by about

25 and 63 bps, respectively, while the 3-month CP rate declined by 30 bps.

IV.1.2 Government Securities Market: Yields in the government securities (G-sec) market remained volatile in H2, induced by three major events (Chart IV.4). First, G-sec yields softened in October 2016 following the 25 bps policy repo rate cut by the Reserve Bank and the



¹ To model time varying conditional volatility recognising persistence of shocks to volatility, an Integrated Generalised Autoregressive Conditional Heteroscedasticity (IGARCH) model is used which is a restricted version of the GARCH model, where the persistence parameters sum up to one.

yield curve shifted downwards. Later during the month, however, yields moved up marginally tracking rising global yields on expectations of a Fed rate hike in December 2016.

Second, G-sec yields softened significantly after the announcement of demonetisation and the resultant surge of liquidity in the system (Chart IV.5). The yield on the benchmark 10-year paper dropped from 6.80 per cent on November 8, 2016 to 6.19 per cent on November 24, 2016 (touching an intra-day low of 6.11 per cent on November 25, 2016, *i.e.*, below the policy repo rate). Yields aligned with the policy rate in the first week of December 2016. Trading volumes in the secondary market reached an all-time high of ₹2,051 billion on November 21, 2016. In the primary market, 91-day T-bill yields plummeted to 5.86 per cent on November 23, 2016.

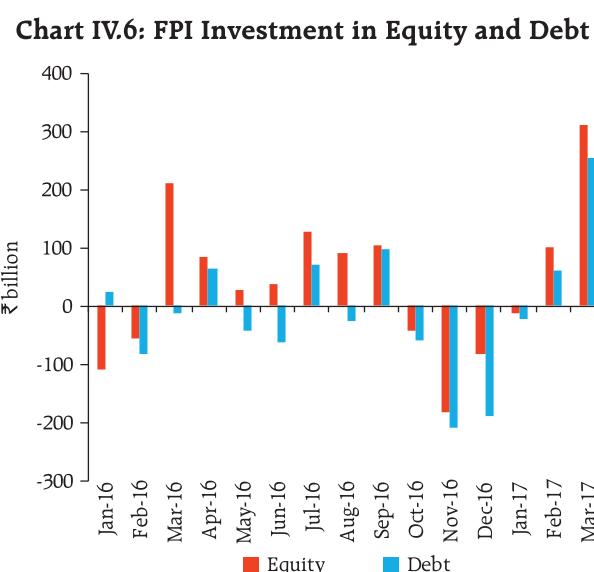
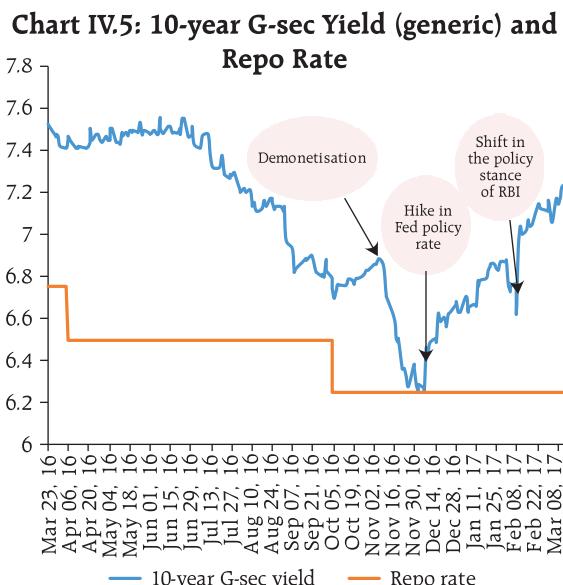
Yields hardened in December 2016 due to a number of factors: imposition of incremental CRR to absorb surplus liquidity in the banking system; portfolio outflows from the debt market following the hike in interest rate by the US Fed accompanied by the hawkish statement about future rate hikes; expectations of fiscal stimulus in the US (which pushed up US bond

yields); rising crude oil prices; and the *status quo* on monetary policy announced by the Reserve Bank.

Third, G-sec yields hardened in February 2017 and the yield curve steepened in response to the unexpected shift in the monetary policy stance of the Reserve Bank from accommodative to neutral, higher CPI inflation excluding food and fuel, and bunching of Ujwal DISCOM Assurance Yojana (UDAY) bonds with State Development Loans (SDLs) issuances, as discussed subsequently. The generic 10-year yield rose on the date of announcement of the change in the monetary policy stance in February by 31 bps to 6.93 per cent. The average daily closing of generic 10-year yield increased from 6.96 per cent in February 2017 to 7.13 per cent in March 2017.

Higher domestic yields since February, *inter alia*, have contributed to the return of portfolio flows to the debt market (Chart IV.6). From October 2016 to January 2017, there were net FPI outflows of around ₹336 billion from the Indian G-sec market. Since February, however, there have been net FPI inflows of about ₹229 billion.

Fiscal developments had a bearing on G-sec yields during Q4. The Central Government reduced its market borrowings in Q4 of 2016-17 by ₹180 billion through



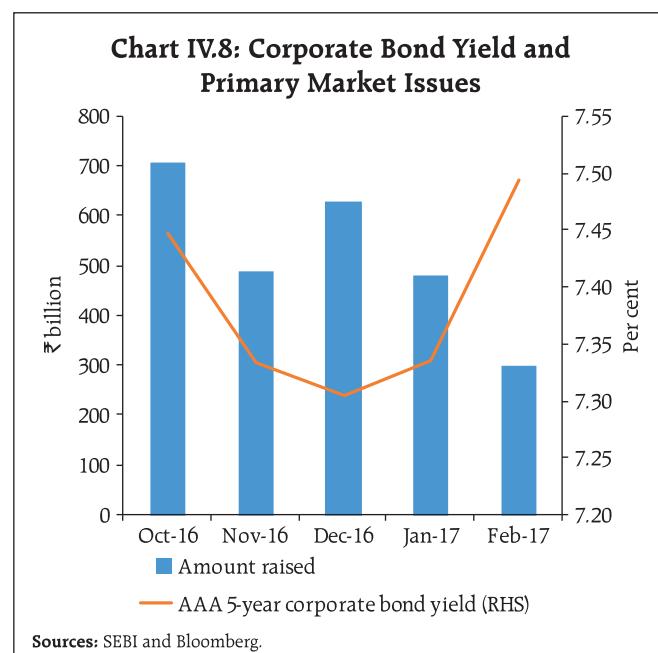
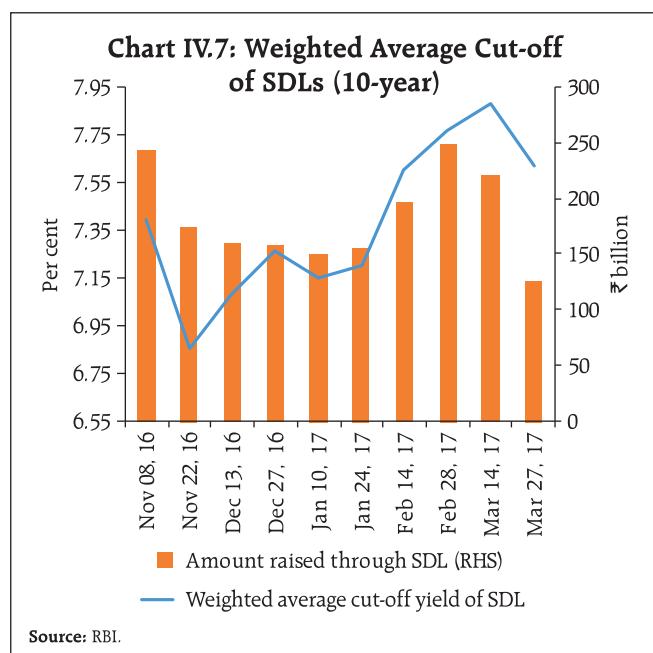
dated securities and ₹510 billion through T-bills, which reduced the supply of sovereign paper in the market. The Government announced net market borrowings for 2017-18 in the Union Budget at ₹4,232 billion (BE), which included planned buyback of securities of ₹750 billion. The Union Budget has also provided for ₹250 billion for switching of securities, which is a debt management strategy that aims at reducing near-term redemption pressure and elongating the maturity of debt.

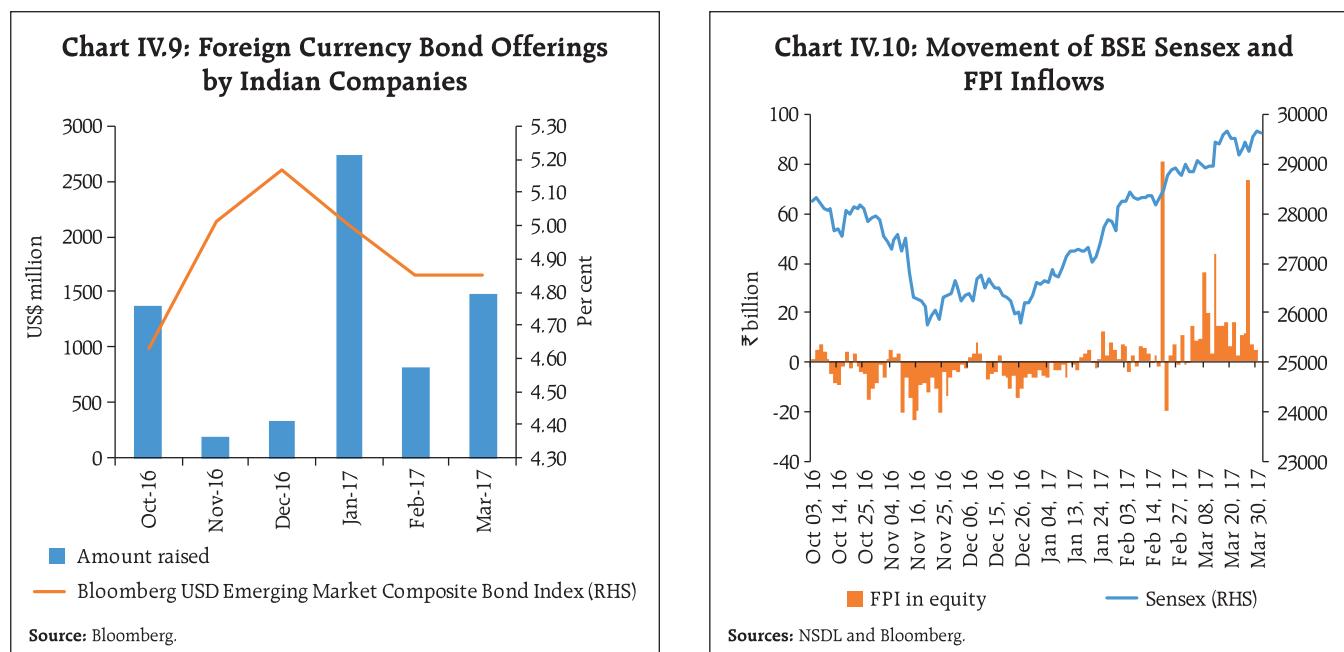
State Governments' reliance on market borrowings for funding their fiscal deficit has increased steadily in recent years. Large issuances of SDLs by States have been exerting upward pressure on yields (Chart IV.7). The spread of SDLs cut-off over the 10-year G-sec increased persistently in the second half of 2016-17 – from 28-49 bps in October 2016 to 86-114 bps in March 2017. As regards UDAY bonds, issuances during the previous year were at a fixed spread of 75 bps over the corresponding/10-year FIMMDA G-sec yields. The spreads for issuances of UDAY bonds during 2016-17, however, came down to the range of 35-75 bps, following the modification in the issuance strategy to invite bids from all the market participants.

IV.1.3 Corporate Bond Market: The corporate bond yield (AAA 5-year benchmark) softened from 7.52 per cent in October 2016 to 7.33 per cent in January 2017, tracking the movements in G-sec yields on surplus liquidity conditions after demonetisation. However, after the February monetary policy announcement, the corporate bond yield hardened to 7.65 per cent before declining to 7.56 per cent at end-March 2017.

Taking advantage of low yields and tight credit market conditions because of stressed assets in the banking system, corporates mobilised higher resources from the corporate bond market, *i.e.*, ₹2,502 billion during October 2016 – February 2017 as against ₹1,957 billion during the corresponding period of the previous year (Chart IV.8). Private placements constituted 97.8 per cent of the total amount mobilised. Indian corporates also raised large resources by way of bonds from international markets (Chart IV.9).

Foreign portfolio investment in the corporate bond market declined during November 2016 to January 2017 on account of risk-off strategies followed by international investors. Portfolio flows turned positive from February due to global risk-on portfolio shifts and also to take advantage of higher domestic yields. Several measures





were announced to deepen the corporate bond market: (i) enhancing the aggregate limit of partial credit enhancement (PCE) provided by banks to 50 per cent; (ii) permitting brokers in corporate bond repos; and (iii) allowing consolidation and re-issuance of corporate bonds. The turnover in the corporate bond market (in terms of amount) increased by 63.8 per cent during H2, which was a record high. In US dollar terms, the turnover increased from US\$ 6.0 billion in H2:2015-16 to US\$ 9.7 billion in H2: 2016-17.

IV.1.4 Stock Market: The stock market (BSE Sensex) gained by 6.3 per cent in H2:2016-17 (Chart IV.10). In October 2016, the stock market remained volatile due to factors such as increasing prospects of an interest rate hike by the US Fed in December and consequent portfolio outflows, and mixed corporate results for Q2. Following the 25 bps cut in the repo rate by the Reserve Bank in October 2016, it gained modestly. During November 2016, the BSE Sensex plunged by 4.6 per cent on uncertainty over the impact of demonetisation on economic growth and corporate earnings and also portfolio equity outflows triggered by the risk-off market reactions to the US presidential election results. Demonetisation had a relatively greater impact on cash

sensitive sectors such as FMCG, consumer durables, auto and realty *vis-a-vis* the overall Sensex. The downward bias persisted during December on sustained selling by foreign institutional investors, subdued auto sales data for November, persisting concerns about Q3 earnings, and the interest rate increase by the US Fed but with unexpected hawkish guidance.

The stock market revived in January 2017 due to value buying by domestic institutional investors, better than expected quarterly corporate results for Q3, revival of foreign portfolio equity investment from mid-January and positive cues from global markets. The recovery continued in February 2017 on proposals made in the Union Budget, particularly a lower fiscal deficit target for 2017-18, exemption of category I and category II foreign portfolio investors from taxation on indirect transfers, and an unchanged capital gains tax rate for the capital market. FPIs stepped up buying following the *status quo* maintained by the US Fed and positive cues from global equity markets. The impact of demonetisation on sectoral indices was transitory as they have recovered their losses and scaled higher than their pre-demonetisation levels.

In March, the stock market gained further on better than expected Q3 GDP growth estimates in India released by the CSO, PMI for both manufacturing and services for the month of February pointing to expansion after the demonetisation-induced contraction, and approval of the draft Central GST (CGST) and Integrated GST (IGST) bills by the GST Council.² Despite the Fed rate increase in March, which was already priced in by markets, the dovish stance improved appetite for risk assets, including in EMEs. On expectations that the State election results would provide the impetus for reforms, the BSE Sensex (29,974) and Nifty (9,265) closed at all time highs on April 5, 2017.

IV.1.5 Foreign Exchange Market: In the foreign exchange market, the rupee moved in a narrow range against the US dollar and appreciated against the euro and pound sterling in H2 of 2016-17 (Chart IV.11). In Q3, the weakness of the rupee against the US dollar mainly reflected the strengthening of the dollar following the US presidential election outcome; FPI outflows (both in equity and debt); increased demand

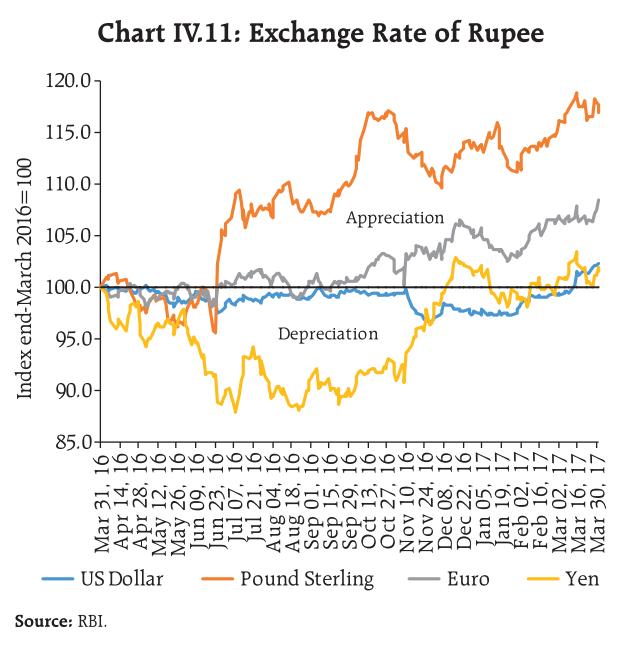
from oil importers for foreign currency; FCNR(B) redemption pressures; and the policy rate cut in October 2016. The US dollar strengthened in anticipation of an expansionary fiscal policy and tighter monetary policy by the Fed. Consequently, the rupee depreciated against the US dollar by 2.9 per cent (from ₹66.71 per US dollar on November 8 to ₹68.72 on November 28). The rupee regained about half of the lost ground by the first week of December 2016, but came under renewed downward pressure till end-January 2017 in response to the Fed policy rate hike.

From February 2017 onwards, the rupee has appreciated due to equity portfolio inflows on policy announcements made in the Union Budget and easing of concerns about the speed of Fed policy rate hikes. Factors such as India's low current account deficit, the emphasis of monetary policy on the 4 per cent inflation target, the transient impact of demonetisation on economic activity, and the commitment to fiscal prudence announced in the Union Budget provided stability to the exchange rate. The rupee gained further in March as FPI inflows, especially equity, were boosted by the outcome of State elections, which augur well for accelerating the pace of reforms.

In terms of both 36-currency nominal effective exchange rate (NEER) and real effective exchange rate (REER), the rupee appreciated by 6.3 per cent and 7.9 per cent, respectively, between end-March 2017 and end-March 2016 (Table IV.2).

Table IV.2: Nominal and Real Effective Exchange Rates: Trade-Based (Base: 2004-05=100)

Item	Index: March 31, 2017 (P)	Appreciation (+) / Depreciation (-) (per cent)	
		Mar 31, 2017 over Mar 31, 2016	Mar 31, 2017 over Sep 30, 2016
36-currency REER	119.3	7.9	4.2
36-currency NEER	78.3	6.3	5.2
6-currency REER	132.2	7.8	5.0
6-currency NEER	70.8	6.3	6.1
₹/ US\$ (As on March 31, 2017)	64.8	2.3	2.8



² This marked a crucial step in the run up to the planned introduction of GST by July 1, 2017, which will replace the existing numerous central and state taxes.

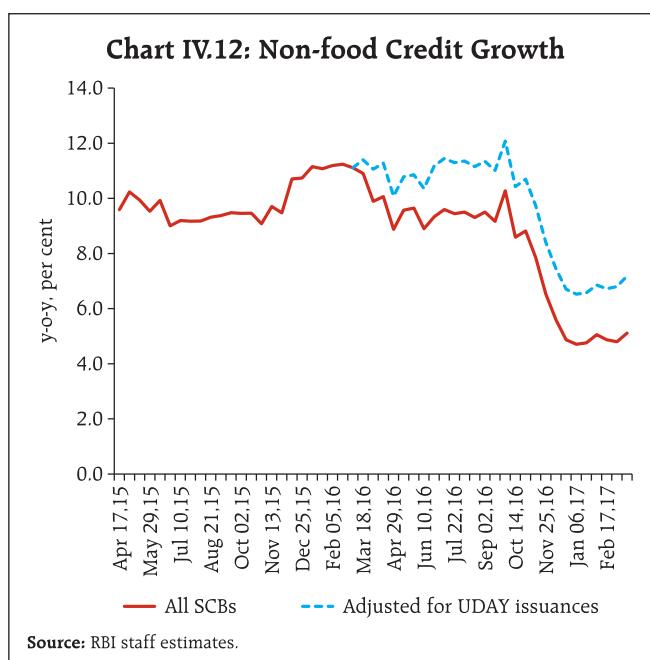
P: Provisional.

Note: REER figures are based on Consumer Price Index (Combined).

Source: RBI.

IV.1.6 Credit Market: In the credit market, y-o-y growth in non-food credit decelerated through H2 to a low of 4.7 per cent in early January before picking up to 5.1 per cent by March 17, 2017. Several factors, however, overstate this slowdown. As outlined in the October 2016 MPR, credit flows were impacted by loan write-offs and swapping of bank credit into special securities under the UDAY (Chart IV.12). In addition, the use of specified bank notes (SBNs) for repaying loans would have also dampened the growth rate of bank credit. From the demand side, a depressed investment cycle, persisting excess capacity in manufacturing, and deleveraging on the part of corporates to improve their credit ratings (as explained in Chapter III) have contributed to the slowdown in credit growth.

The deceleration in credit growth also highlights the role of supply side factors – stressed assets and



capital constraint – in hindering a revival in the credit cycle (Box IV.1 and Chart IV.13).

Box IV.1: Stressed Assets, Capital Constraints and Supply of Credit

The "capital crunch hypothesis", *i.e.*, capital constrained banks cutting back on lending, was highlighted as a key factor that worsened the US recession in the early 1990s (Bernanke and Lown, 1991). Since then, theoretical and empirical literature has firmly established the role of a "capital channel" that operates from the supply side of credit, as opposed to the typical focus of monetary policy transmission on the demand side (Rivera, 2015).

Two arguments are highlighted in the debate on the role of bank capital in conditioning the credit cycle. First is the endogenous money view, which indicates that banks can always fully meet the demand for loans from all credit-worthy borrowers, and no funding constraint (posed by the composition of liabilities in terms of equity versus debt) can prevent banks from doing so. This macro view is in sync with the Modigliani and Miller argument on the irrelevance of capital structure as applied to banks, *i.e.*, the composition of liabilities

of banks should not influence the price and quantity of credit.

Second, the post-Keynesian emphasis on credit rationing under which borrowers, that cannot meet tighter credit standards set by banks (say, amidst a recession or heightened uncertainty that may change the risk assessment of banks), fail to access credit. Thus, not all demand for credit is met. When banks face a loss of confidence (arising, for example from unanticipated large increase in stressed assets), they need more capital to bolster their loss absorbing capacity. Raising capital from equity holders, however, becomes difficult, costlier and unattractive in such a situation, forcing banks to deleverage instead. This may also reflect the natural eventual outcome of the lack of market and regulatory discipline and the tendency to evergreen bad loans. An adverse feedback loop sets in, under which inadequate capital leads to cut backs on lending to viable projects. In turn, this deepens a

(contd..)

recession, which increases stressed assets and reduces capital further.

Using panel data for the Indian banking system (quarterly data of 66 banks for the period Q1 of 2009 to Q4 of 2016) and applying four different models (*i.e.*, fixed effects, random effects, difference and system generalised method of moments (GMM) following Arellano-Bond/Bond-Bover) to check for the robustness of estimates, it is found that the gross non-performing assets (GNPA) and capital to risk weighted assets ratio (CRAR) significantly influence credit growth. While better capitalised banks exhibit higher credit growth, banks with higher GNPsAs experience weaker credit growth (Table 1).

Low net interest margin (NIM) is an indicator of efficient intermediation. However, when faced with large stressed assets, banks may either (i) strive to maintain/increase their NIMs and/or (ii) reduce supply of credit. Panel data (quarterly data of 72 banks for the

Table 1: Determinants of Bank Lending
(Dependent variable: $\Delta credit$)

	Random Effect Model	Fixed Effect Model	AB-Diff. GMM	AB-System GMM
$\Delta credit_{t-1}$	-0.12*** (-1.7)	-0.15** (-2.2)	-0.18* (-3.0)	-0.15** (-2.1)
$gnpa_t$	-0.64* (-7.6)	-0.64* (-5.1)	-0.56* (-4.5)	-0.63* (-7.5)
$crar_t$	0.16* (5.9)	0.25* (5.3)	0.36** (3.3)	0.16* (6.0)
No. of Observations	1848	1848	1782	1848
ar1 (p-value)			0.01	0.01
ar2 (p-value)			0.20	0.30
Hansen (p-value)			1.00	1.00

Notes:

$\Delta credit$: credit growth (q-o-q); $gnpa$: gross non-performing assets to advances ratio; $crar$: capital to risk weighted assets ratio.

Estimations are controlled for seasonality, nominal GVA growth, return on equity and repo rate adjustments.

Figures in parentheses are z-statistics;

ar1 and ar2 are tests for first-order and second-order serial correlation, respectively.

Hansen tests are for checking the over-identifying restrictions for the GMM estimators.

*,**,***: Significant at 1 per cent, 5 per cent and 10 per cent levels, respectively.

Table 2: Determinants of Net Interest Margin

	AB - Difference GMM	AB - System GMM
NIM(-1)	0.542*	0.568*
Stressed Assets	0.011*	0.008*
CRAR	0.003*	0.003*
Bank Fixed Effects	No	Yes
No. of observations	1944	1944

Notes:

NIM = (Interest income *minus* interest expense) to total assets (in per cent).

Stressed assets = (Restructured assets *plus* gross NPAs) to total assets (in per cent).

The regressions are controlled for seasonality, credit growth, bank size, return on assets, operating expense, non-interest income, investment in SLR securities, GVA growth and inflation.

Hansen test for over identification restrictions and Arellano-Bond test for residual auto correlations are found to be satisfactory.

*:Significant at 1 per cent level.

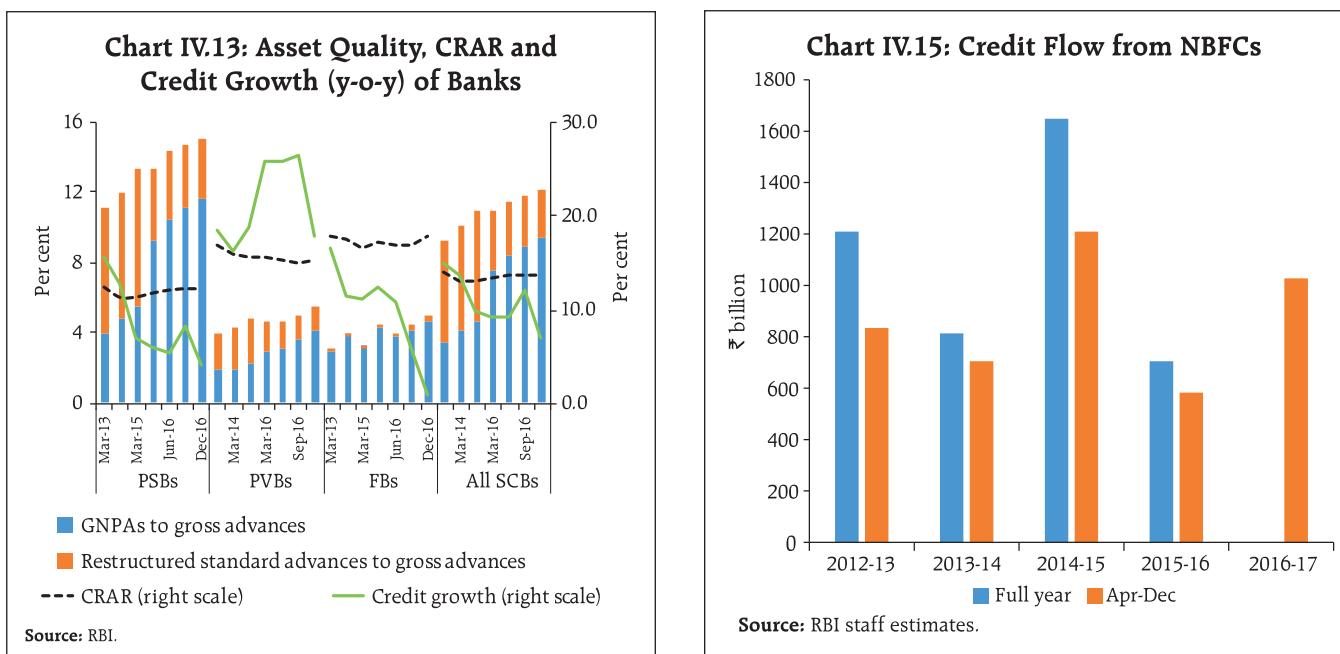
period Q2 of 2010 to Q4 of 2016) regression results suggest that credit risk proxied by the stressed assets (*i.e.*, restructured assets plus gross NPAs) to total assets ratio has a positive and statistically significant relationship with NIM of banks as a percentage of their total assets (Table 2). Regression results also indicate that one (positive) standard deviation shock to stressed assets could lead to about 0.15 standard deviation increase in NIM.

It is observed that banks could protect their NIM up to Q3:2014-15. Thereafter, however, their NIM declined, which also coincided with the sustained deceleration in credit growth. After the Asset Quality Review initiated in April 2015, decline in income associated with the explicit recognition of NPAs lowered the NIM. This amplified risk aversion and led to further deceleration of credit growth.

References:

Bernanke, Ben S and Cara S Lown (1991), "The Credit Crunch", *Brooking Papers on Economic Activity*, 2.

Rivera, Alvaro Santos (2015), "Bank Capital and Endogenous Money: Liquidity Preference and Capital Constraints as Determinants of Credit Rationing", ECB, October.



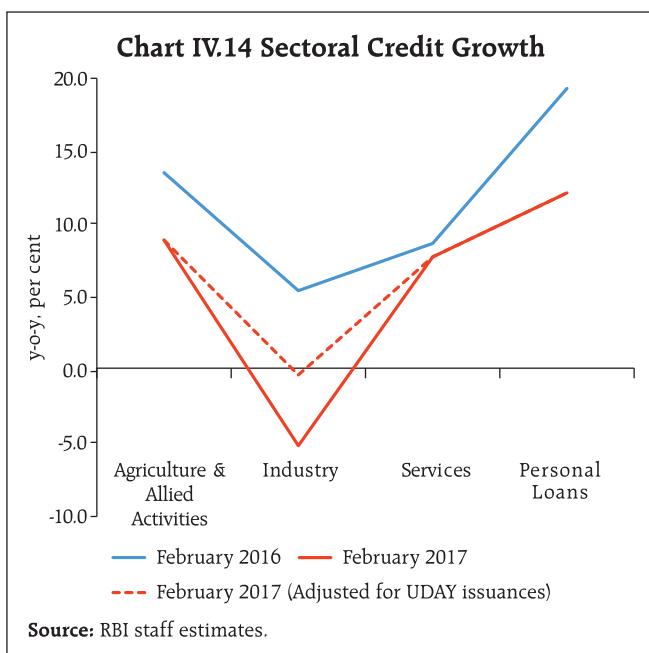
Sectoral data on flow of credit indicate that deceleration in credit, though broad-based, was characterised by a sharp contraction in exposure to industry (Chart IV.14). There was decline in credit in 12 of the 18 major industry sub-groups on a y-o-y basis as of February 2017. While the availability of funding from banks remained weak, the flow of credit from

NBFCs³ during the first three quarters of 2016-17 was about 50 per cent higher than in the whole of 2015-16 (Chart IV.15).

However, the overall flow of financial resources to the commercial sector in 2016-17 (up to mid-March) was lower than in the corresponding period of the previous year due to lower lending from banks. Among non-bank sources, funding from foreign sources increased due to marginally higher FDI inflows and a sharp increase in short-term credit. Financing through domestic sources increased primarily due to higher funding from NBFCs, subscription to commercial paper by non-banks and private placement by non-financial entities, notwithstanding diminished public issues (Table IV.3).

IV.2 Monetary Policy Transmission

Monetary policy transmission strengthened in H2 of 2016-17, aided by the surfeit of liquidity. The share of low cost current account and savings account (CASA)



³ Data pertain to loans and advances extended by about 400 NBFCs (NBFCs-D and NBFCs-ND-SI that submit quarterly returns to RBI) and adjusted for their borrowings from banks, financial institutions and through CPs.

Table IV.3: Flow of Financial Resources to the Commercial Sector

(₹ billion)

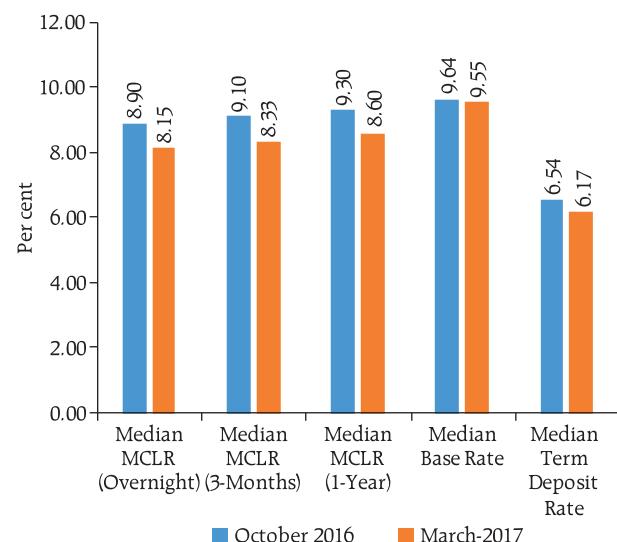
Item	April 1 to March 17			
	2015-16		2016-17	
	₹ billion	% of Total	₹ billion	% of Total
A. Adjusted Non-food Bank Credit (NFC)	7,754	54.8	4,818	38.2
i) Non-Food Credit	7,024	49.6	3,655	29.0
ii) Non-SLR Investment by SCBs	731	5.2	1,164	9.2
B. Flow from Non-banks (B1+B2)	6,403	45.2	7,802	61.8
B1. Domestic Sources	4,479	31.6	5,511	43.7
1 Public issues by non-financial entities @	363	2.6	120	1.0
2 Gross private placements by non-financial entities @	985	7.0	1,599	12.7
3 Net issuance of CPs subscribed to by non-banks	1,173	8.3	1,467	11.6
4 Net Credit by housing finance companies #	706	5.0	849	6.7
5 Total accommodation by the 4 RBI regulated All India Financial Institutions @	459	3.2	218	1.7
6 NBFCs-D and NBFCs-ND-SI (net of borrowings from banks/FIs/CPs) #	583	4.1	1,027	8.1
7 LIC's net investment in corporate debt, infrastructure and social sector *	210	1.5	230	1.8
B2. Foreign Sources	1,924	13.6	2,290	18.1
1 External Commercial Borrowings / FCCB @	-329	-2.3	-412	-3.3
2 ADR/GDR Issues excluding banks and financial institutions @	0	0.0	0	0.0
3 Short-term credit from abroad #	-274	-1.9	167	1.3
4 Foreign Direct Investment to India *	2,527	17.8	2,535	20.1
C. Total Flow of Resources (A+B)	14,157	100.0	12,620	100.0

Note: Data are provisional. #: Up to December. *:Up to January. @: Up to February.

Sources: RBI, LIC, NABARD and SEBI.

deposits in aggregate deposits with the SCBs went up to 39.2 per cent (as on March 17, 2017) – an increase of 4.0 percentage points relative to the pre-demonetisation period. Given the prevailing risk aversion, banks reduced their term deposit rates. The median term deposit rate and the weighted average domestic term deposit rate (WADTDR) fell by 37 bps and 32 bps, respectively, during November 2016-March 2017.⁴ Combined with the sharp increase in CASA deposits, the overall cost of borrowings declined, creating space for banks to cut their marginal cost of funds based lending rates (MCLRs). The one-year median MCLR declined by a cumulative 70 bps since November 2016, even as the policy rate remained unchanged. This is significant, given that the decline during the preceding seven months (April-October 2016) – when the repo rate was cut by 50 bps – was only 15 bps (Chart IV.16). Post-demonetisation (up to

March 2017), 27 public sector banks have reduced their one-year median MCLR in the range of 50 to 105 bps, and 19 private sector banks have done so in the range of 25 to 148 bps.

Chart IV.16: Transmission Post Demonetisation

Source: RBI.

⁴ WADTDR pertains to November 2016 to February 2017.

In comparison with deposit rates and the MCLR, transmission to actual lending rates has been less complete during the post-demonetisation period. During November 2016 – February 2017, the weighted average lending rate (WALR) of banks in respect of fresh rupee loans declined by 69 bps, whereas the WALR on outstanding rupee loans declined by 13 bps only over the same period. Transmission to lending rates for outstanding rupee loans *vis-à-vis* fresh rupee loans has been limited essentially on account of two factors. First, a major portion of loans contracted prior to the introduction of MCLR (*i.e.*, April, 2016) has continued to be priced at the base rate⁵; in fact, loans contracted at the base rate still constitute about 67 per cent of banks' loan portfolios. Second, even under the MCLR-based pricing of credit, the interest rate is typically reset on the existing loans on an annual basis, implying that most loans under the MCLR regime contracted up to December 2016 would not have benefited from the sharp reduction in the MCLR.

An analysis of factors hindering transmission using quarterly bank level data (for the first three quarters of 2016-17) suggested the presence of a positive correlation between the spread (*i.e.*, WALR on outstanding/fresh rupee loans over MCLR) and stressed assets of banks, implying that banks charge additional risk premiums on their performing assets to compensate for the interest income losses from NPAs. Among the various components of the MCLR, it is only the term deposit rates that are seen to respond to the changes in policy rate.

Another factor which has impeded monetary policy transmission is the interest rates on small savings which are not in alignment with movements in market interest rates. Although the government has announced to revise the interest rates on small savings in line with the change in G-sec yields, this is not fully implemented (Box IV.2).

⁵ Individual borrowers can, however, migrate to MCLR based pricing of loans from erstwhile BPLR/base rate based pricing on mutually acceptable terms.

IV.3 Liquidity Conditions and the Operating Procedure of Monetary Policy

The amended RBI Act 1934 requires the Reserve Bank to place the operating procedure relating to the implementation of monetary policy and changes thereto from time to time, if any, in the public domain. This operating procedure – embodied in the Reserve Bank's liquidity management framework – was published in Box IV.I of the April 2015 MPR. The operating procedure is guided by the objective of aligning the operating target of monetary policy – the weighted average call money rate (WACR) – to the repo rate through active liquidity management, consistent with the stance of monetary policy. The framework was modified in April 2016, details of which were presented in the October 2016 MPR. Consistent with the assurance given on proactive management of both permanent and frictional liquidity under the modified liquidity management framework of April 2016, and the guidance of moving the system from an average deficit equivalent to one per cent of net demand and time liabilities (NDTL) to a position of neutrality, the Reserve Bank injected permanent liquidity to the tune of ₹1.9 trillion during April-October 2016, primarily through open market purchase auctions of ₹1.1 trillion. The balance reflected the liquidity impact of forex market operations of the Reserve Bank and repurchase of securities by the Government.

Following the announcement of demonetisation on November 8, 2016 and the subsequent surge in bank deposits, the Reserve Bank expanded the range of instruments for absorbing a record level of surplus liquidity. At the beginning of Q3, injection of permanent liquidity consistent with the assurance given under the modifications to liquidity management framework in April 2016, had already moved the system to an average surplus of ₹293 billion in Q2. As cash balances of the government increased and festival related currency demand drained liquidity out of the banking system, the average system wide surplus declined to ₹63 billion

Box IV.2: Transmission to Small Savings Rates

Although G-sec yields (10-year maturity) declined through 2016-17 (by about 79 bps), small savings rates remained unchanged for Q2 and Q4:2016-17, and were reduced only by 10 bps each for Q3:2016-17 and Q1:2017-18. At the time of the introduction of the formula based reset of rates linked to G-sec yields for Q1:2016-17, interest rates on small savings were broadly aligned to the interest rates derived from the formula for fixing the interest rate on small savings.

This spread between the actual rate of interest and the formula based interest rate increased to a range of 61 to 95 bps in Q1:2017-18 for different savings instruments (Table). The wide spread between small savings rates and bond yields makes small savings more attractive *vis-à-vis* bank deposits and discourages banks to fully adjust their deposit interest rates on fear of losing deposits, thereby hampering monetary transmission.

Table: Interest Rates on Small Savings Instruments for Q1: 2017-18

Small Savings Scheme	Maturity (years)	Spread (Percentage point)**	Average G-sec yield (Per cent) of corresponding maturity (Dec 2016 to Feb 2017) *	Formula** based rate of interest (Per cent) (applicable to Apr- Jun 2017)	GoI announced rate of interest (Per cent) (applicable to Apr-Jun 2017)	Difference (Percentage point)
(1)	(2)	(3)	(4)	(5) = (3) + (4)	(6)	(7) = (6) - (5)
Savings Deposits	-	-	-	-	4.0	-
Public Provident Fund	15	0.25	6.99	7.24	7.9	0.66
Term Deposits						
1 Year	1	0	6.09	6.09	6.9	0.81
2 Year	2	0	6.20	6.20	7.0	0.80
3 Year	3	0	6.31	6.31	7.2	0.89
5 Year	5	0.25	6.54	6.79	7.7	0.91
Post Office Recurring Deposit Account	5	0	6.31	6.31	7.2	0.89
Post Office Monthly Income Scheme	5	0.25	6.50	6.75	7.6	0.85
Kisan Vikas Patra	113 Months	0	6.99	6.99	7.6	0.61
NSC VIII issue	5	0.25	6.70	6.95	7.9	0.95
Senior Citizens Saving Scheme	5	1.00	6.54	7.54	8.4	0.86
Sukanya Samridhi Account Scheme	21	0.75	6.99	7.74	8.4	0.66

*: Compounding frequency varies across instruments.

**: As announced by the Government of India on February 16, 2016.

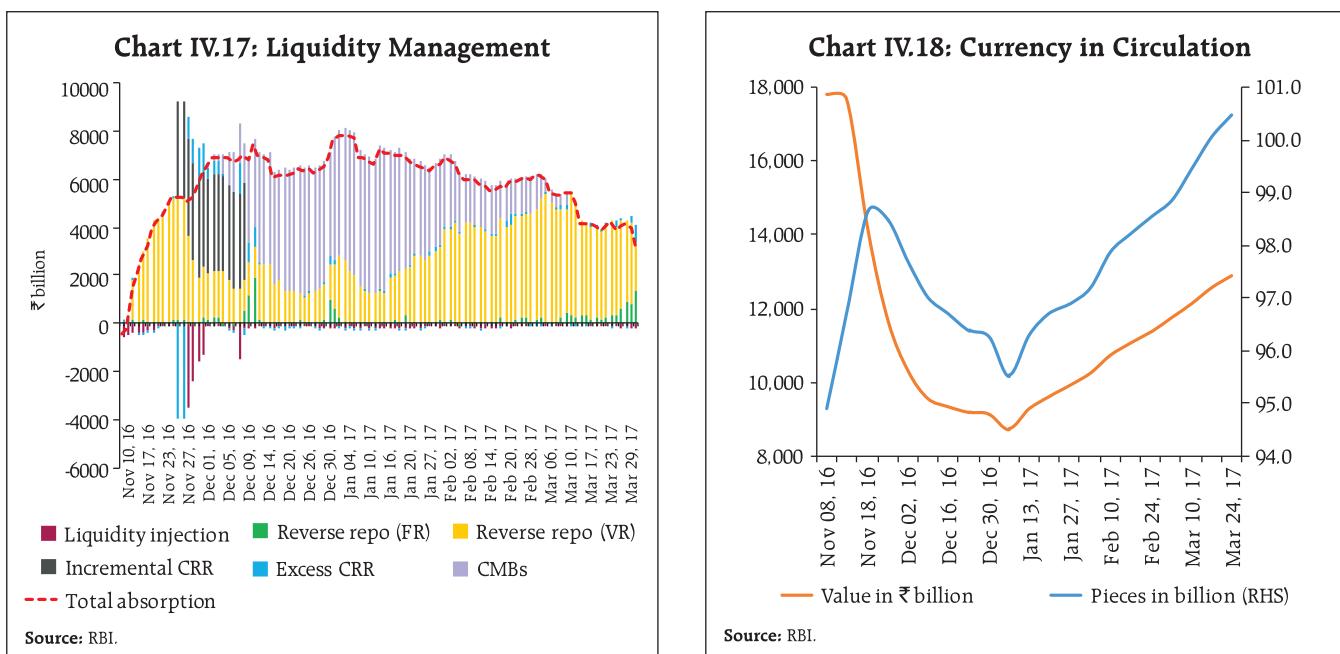
Source: Government of India.

in October. After demonetisation, currency in circulation declined by ₹8,997 billion (up to January 6, 2017).

This sudden increase in liquidity in the banking system, coupled with the weak demand for credit (as explained in Section IV.1), necessitated a significant step up in the liquidity absorption operations by the Reserve Bank so that money market rates remained consistent with the policy repo rate. The Reserve Bank used a mix of both conventional and unconventional instruments, *viz.*, (i) temporary application of an ICRR

of 100 per cent on the increase in NDTL of banks between September 16 and November 11, 2016; (ii) open market sales of cash management bills (CMBs) issued under the MSS to manage the large surplus liquidity; and (iii) variable rate reverse repos of various tenors (Chart IV.17). The peak level of liquidity absorbed reached ₹7,956 billion on January 4, 2017 (₹2,568 billion absorbed through reverse repos and ₹5,466 billion through CMBs under the MSS).

The ICRR was in place for one fortnight (ended on December 9, 2016). It helped in draining excess liquidity

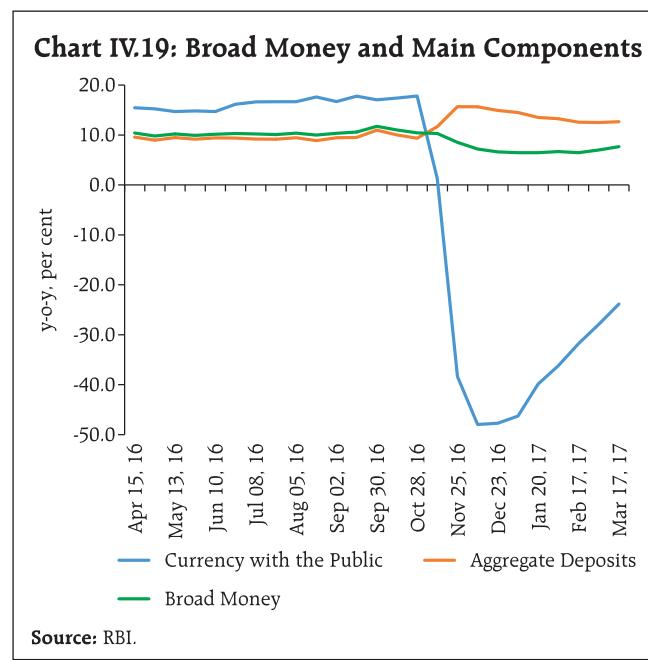


from the system to the extent of about ₹4,000 billion. With the enhancement of the limit on issuance of securities under the MSS from ₹300 billion to ₹6,000 billion on December 2, 2016 by the Central Government, the Reserve Bank withdrew the ICRR. Thereafter, it managed surplus liquidity conditions through the use of fine tuning reverse repos and the MSS. In Q4, remonetisation progressed at an accelerated pace, with currency in circulation increasing cumulatively by about ₹4,373 billion (Chart IV.18). This reduced the liquidity surplus in the system to ₹3,141 billion by end-March 2017.

In anticipation of the liquidity surplus declining further due to remonetisation, the Reserve Bank increasingly resorted to reverse repo operations to absorb the surplus liquidity released by maturing CMBs, especially from January 14, 2017. The Reserve Bank absorbed daily average surplus liquidity of ₹4,024 billion in Q3 (after demonetisation) and ₹5,932 billion in Q4. This ensured the alignment of the WACR with the policy repo rate, *albeit* with a soft bias.

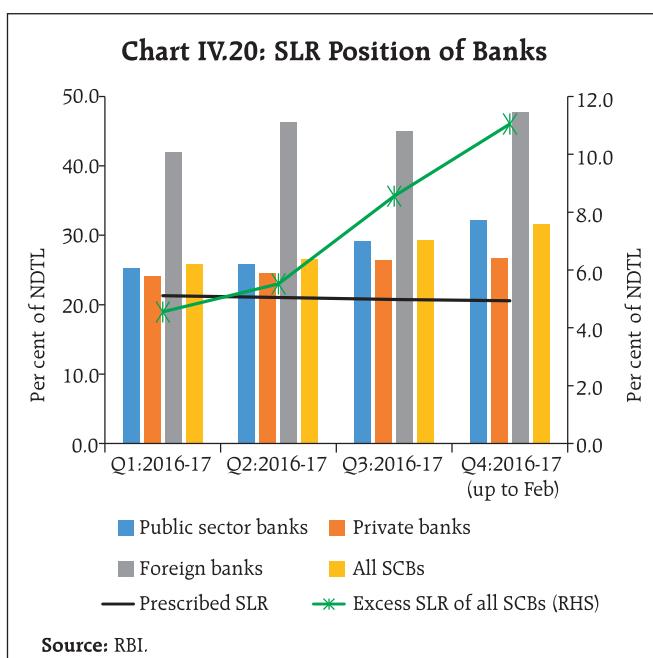
Post-demonetisation, currency in circulation contracted as SBNs were returned by the public and

correspondingly, deposits with banks increased sharply (Chart IV.19). Although a sharp moderation in the currency deposit ratio led to an increase in the money multiplier, it could not offset the impact of the contraction in base money (by about 22 per cent as on March 17, 2017 from the period immediately prior to demonetisation) on broad money (M_3). Structural surplus liquidity enabled banks to meet the liquidity



coverage ratio (LCR) requirement, which was tightened from 70 per cent to 80 per cent in January 2017. The excess statutory liquidity ratio (SLR) position of banks was about 11 per cent on an average in Q4 of 2016-17 (up to February), which included investment in CMBs under the MSS and excess liquidity parked with the Reserve Bank under reverse repo operations (Chart IV.20).

Looking ahead, liquidity conditions are expected to remain in surplus in the short-run, which the Reserve Bank would continue to modulate so that money market rates remain consistent with the operating target and the stance of monetary policy. Progressively greater use of term reverse repos to absorb the surplus liquidity should contribute to the development of the term money market. The change in the monetary policy stance from accommodative to neutral in February 2017 has altered market expectations, but the transmission of past cumulative 175 bps cut in the repo rate to lending rates remains incomplete. Resolution of



stressed assets and recapitalisation of public sector banks will be critical to ease risk aversion by banks. This will enhance the flow of credit to productive sectors and also improve monetary policy transmission.

V. External Environment

Global economic activity and trade picked up modestly from the later part of 2016. The firming up of commodity prices led to some uptick in inflation in major advanced economies (AEs). Recessionary conditions ebbed in key commodity exporting emerging market economies (EMEs), setting the stage for a turnaround in EMEs as a group.

Since the MPR of October 2016, global growth picked up modestly towards end-2016, and is projected to improve further in 2017 by multilateral agencies. Growth in EMEs moderated in 2016, but is set to improve with the ebbing of recessionary conditions in key commodity exporting countries. Even though world trade appeared to have emerged out of a trough, new risks have emerged from an increasing tendency towards protectionist policies and heightened political tensions. Commodity prices have risen since late 2016 on improvement in US economic indicators such as strong labour market and consumer spending; infrastructure spending in China; and geopolitical concerns. Crude oil prices firmed after the OPEC announced curtailment of production. Inflation edged up on expectations of reflationalary fiscal policies in the US, rising energy prices and a mild strengthening of demand.

International financial markets were impacted by the US election results and expectations of monetary policy tightening by the Federal Reserve, underpinned by hawkish forward guidance. Financial markets in EMEs briefly turned volatile after the US election due to large capital outflows leading to plunges in currency and equity markets. Nevertheless, average volatility remained contained by historical standards since Q4:2016. Bond yields hardened across the globe in tandem with US yields, before softening somewhat since mid-March. Strengthening of the US economy further buoyed the equity markets, while the increasing likelihood of more rate hikes by the Federal Reserve in 2017 hardened bond yields in AEs. The US dollar appreciated to a multi-year high in December and remained bullish.

V.1 Global Economic Conditions

The US economy bounced back strongly in Q3:2016, underpinned by robust consumer spending and continuing improvement in the labour market. GDP growth decelerated sharply in Q4:2016 due to a large slippage in net exports, even though retail sales, consumer confidence and the purchasing manufacturers' index (PMI) suggested sustained momentum. Domestic demand grew (q-o-q) at the fastest pace in almost two years. Consumer confidence reached a 16-year high in March, though retail sales had slowed down in February. The Institute for Supply Management's (ISM) index suggested manufacturing expanded at its fastest pace in three years in February.

In the Euro area, GDP growth accelerated in H2:2016. Relatively low oil prices and sustained employment gains have provided support to household incomes. Improving consumer confidence and the PMI, which rose to a six-year high in March, indicate that activity continued to expand in Q1:2017. Nonetheless, the region remains vulnerable to a number of headwinds such as the formal beginning of the Brexit process, upcoming elections in several constituent countries and tightening of financial conditions.

The Japanese economy continued to recover at a modest pace even as the momentum weakened in H2:2016. Increases in private consumption and fixed investment were moderate, although there was some uptick in exports and industrial production towards end-2016. The manufacturing PMI improved during January and February but moderated again in March 2017.

In the UK, economic growth gained momentum in H2:2016, notwithstanding the uncertainties surrounding the negotiations relating to Brexit, as exports rose substantially following the weakening of the pound. However, manufacturing growth weakened for two consecutive months in February, indicating the possibility of a slowdown in 2017 (Table V.1).

Table V.1: Real GDP Growth (q-o-q, saar)

(Per cent)

Country	Q4-2015	Q1-2016	Q2-2016	Q3-2016	Q4-2016	2017 (P)	2018 (P)
Advanced Economies (AEs)							
US	0.9	0.8	1.4	3.5	2.1	2.3	2.5
Euro area	2.0	2.0	1.2	1.6	1.6	1.6	1.6
Japan	-1.0	1.9	2.2	1.2	1.2	0.8	0.5
UK	2.8	0.8	2.4	2.0	2.8	1.5	1.4
Canada	0.5	2.7	-1.2	3.8	2.6	1.9	2.0
Korea	2.8	2.0	3.6	2.0	2.0	3.0	3.1
Emerging Market Economies (EMEs)							
China	6.0	5.2	7.6	7.2	6.8	6.5	6.0
Brazil	-4.8	-2.4	-1.3	-2.9	-3.6	0.2	1.5
Russia*	-3.2	-0.4	-0.5	-0.4	0.3	1.1	1.2
South Africa	0.5	-1.5	3.1	0.4	-0.3	0.8	1.6
Thailand	2.5	4.3	4.2	1.7	1.7	3.3	3.1
Malaysia	4.8	4.0	2.8	5.6	5.6	4.6	4.7
Mexico	1.6	1.9	0.4	4.2	2.8	1.7	2.0
Saudi Arabia*	4.3	2.0	1.5	0.9	1.2	0.4	2.3
Memo:							
				2016 (E)	2017 (P)	2018 (P)	
World Output				3.1	3.4	3.6	
World Trade Volume				1.9	3.8	4.1	

E : Estimate, P : Projection, *: y-o-y growth.

Sources: Bloomberg and IMF.

Economic activity in EMEs continued to be divergent. In China, even though y-o-y GDP growth improved in Q4:2016, supported by policy stimulus

and the rising property market, q-o-q growth showed a sharp loss of momentum. Industrial production and PMI stabilised, but there are rising concerns about high indebtedness and financial stability. Consequently, the growth target for 2017 has been reduced to about 6.5 per cent by the government. In Brazil, the economic situation seems to have improved with the rise in commodity prices and several measures such as reforming the bankruptcy law announced by the authorities to revive growth. Economic contraction has eased in Russia, with the improvement in the mining and manufacturing sectors, rise in oil prices and policy initiatives that included a more flexible exchange rate and bank recapitalisation. In South Korea, Thailand and Mexico, GDP growth lost some momentum in Q3 and Q4:2016. According to the IMF, growth in both AEs and EMEs will pick up in 2017. The OECD's composite leading indicators (CLIs) point to growth accelerating in the US, Japan, China, Brazil and Russia, stable momentum in the Euro area and tentative signs of emerging momentum in the UK. However, manufacturing activity remains weak in some countries as underscored by the PMIs (Chart V.1).

World trade growth improved in Q4:2016, largely supported by EMEs as imports by AEs moderated. In January 2017, exports rebounded sharply in China

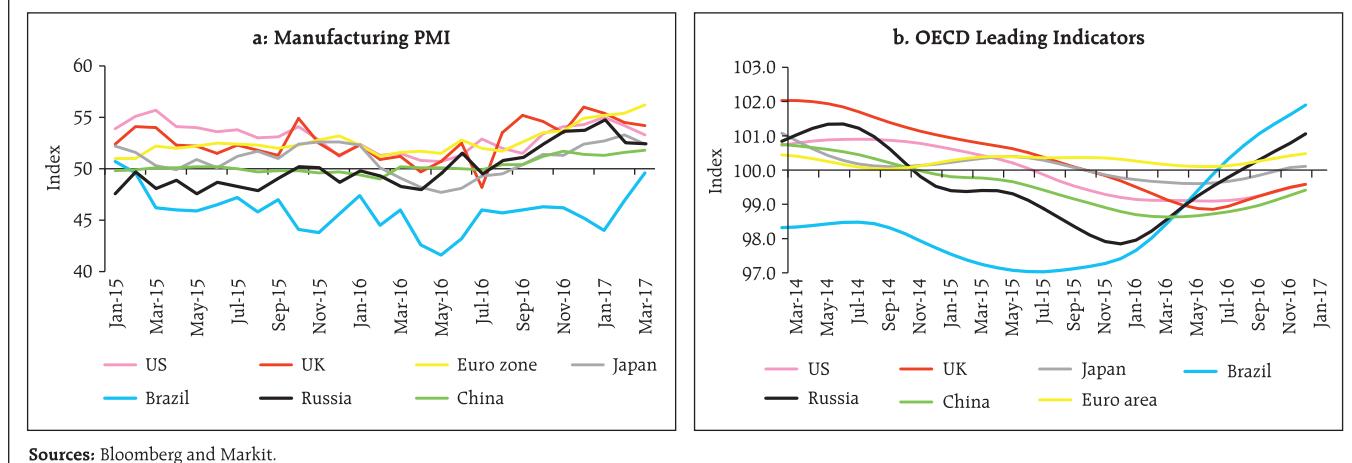
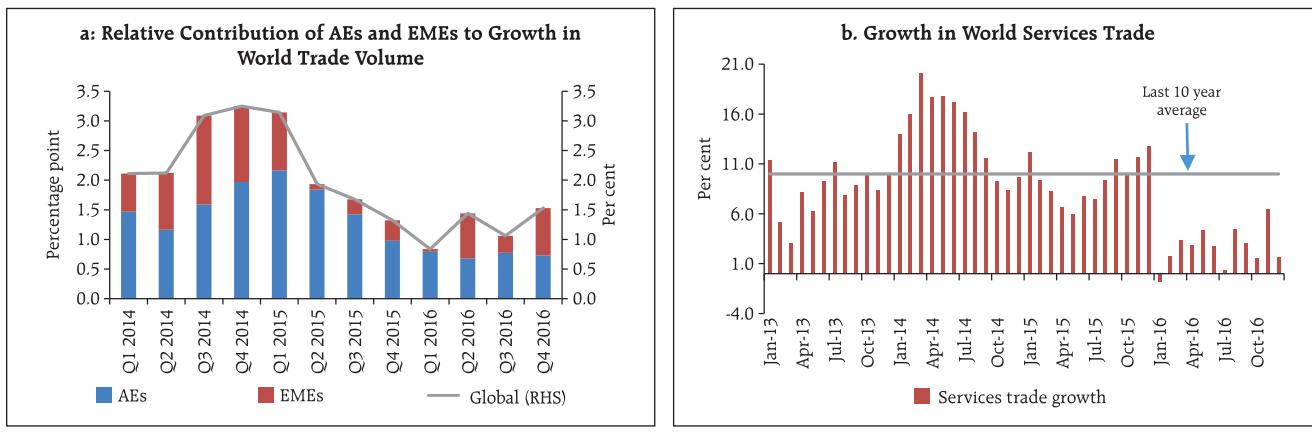
Chart V.1: Leading Indicators

Chart V.2: World Trade

and Brazil. Exports also increased in some East Asian economies. Merchandise and services trade improved (in nominal terms), although it remained below its long-term average (Chart V.2).

The IMF and the World Bank project higher growth in world trade volumes in 2017. The World Trade Outlook Indicator of the World Trade Organisation (WTO) and the global PMI for new export orders also indicate strengthening of world trade growth momentum in Q1:2017. There are, however, several

downside risks emanating from heightened policy uncertainty in the US and the UK from proposals to retreat from multilateral/regional trade agreements, raising of tariffs and non-tariff barriers and consequent retaliation. Furthermore, the medium-term trade outlook is expected to remain weak and is unlikely to revert to its pre-crisis level as several structural factors have led to a decline in the income elasticity of world trade. The recovery in world trade could, however, diverge significantly across various regional blocs (Box V.1).

Box V.1: Global Economic Activity and Trade: A New Normal?

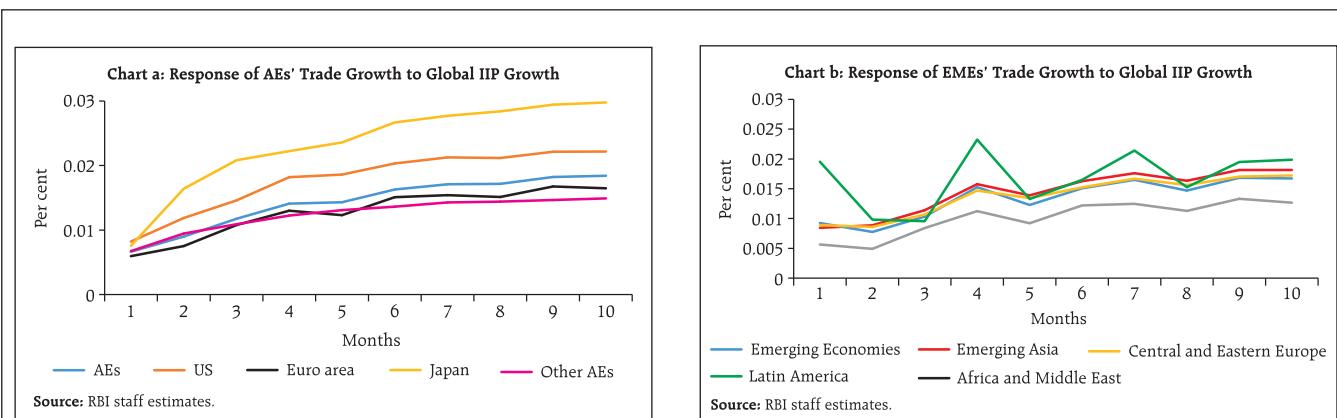
Since the second half of 2011, global trade growth has remained slower than the expansion in world GDP, while in the 25 years before the global financial crisis, trade growth was twice the GDP growth. Thus, the income elasticity of trade has fallen sharply in the post-crisis years. Two main developments with roughly equivalent contributions, *viz.*, compositional effects and structural factors, have been the driving forces in the slowdown in trade *vis-à-vis* economic growth.

Compositional effects include shift in economic activity and trade from AES towards EMEs, the declining share of the import-intensive component of global demand and shift in trade from manufacturing

to services. These factors may not necessarily be structural and could revert in the medium-term when the global economy recovers fully.

Structural factors, which set in well before the global recession, reflect fundamental shifts working through at least three channels. First, lower transportation costs, removal of trade barriers and increase in multilateral global trade agreements, which contributed to expansion in global trade, have waned. Second, global value chains (GVCs) have slowed down sharply, partly due to rising labour costs in EMEs and partly on account of rising protectionism. Third, financial deepening which facilitated export

(contd.)



activity has diminished. The interplay of these factors suggests that the relationship between growth and trade may be approaching a new normal (ECB, 2016).

Following Constantinescu *et al.* (2015), an error correction model (ECM) on monthly data for the period January 2000 to July 2016 was specified as follows:

$$\Delta \ln m_t = \alpha + \beta \Delta \ln y_t + \gamma \ln m_{t-1} + \delta \ln y_{t-1} + \varepsilon_t$$

where Δ denotes first difference, m_t is world trade volume and y_t is income represented by world IIP, α is a constant, and ε_t is the error term. The short-run trade elasticity is represented by β , while the long-run trade elasticity is given by $-\delta/\gamma$.

Bai-Perron tests suggest at least three regimes in the model, *viz.*, January 2000 to October 2008; November 2008 to April 2011; and May 2011 to July 2016, broadly coinciding with the pre-crisis period, the crisis period and the post-crisis period. Over the three regimes, the long-run elasticity continuously declined from 1.9 to 0.8. As for the short-term elasticity, it increased sharply to 0.9 during the crisis period from 0.5 in the pre-crisis

period, before falling to 0.4 in the succeeding regime. Thus, global trade is unlikely to grow as fast as in the past even when global growth recovers fully in the medium-term.

However, recovery in regional trade growth could diverge significantly as shown by a VAR analysis.¹ The impulse response functions (IRFs) of trade to a shock to world IIP growth show: (i) the impact is more on AEs than EMEs; (ii) among AEs, the impact is most on Japan, followed by the US and the Euro area; and (iii) among EMEs, the impact is most in Latin America but highly fluctuating, while Africa and the Middle East are the least affected (Charts a and b).

References:

Cristina Constantinescu, Aaditya Mattoo, and Michele Ruta (2015), "The Global Trade Slowdown: Cyclical or Structural?", IMF Working Paper, WP/15/6.

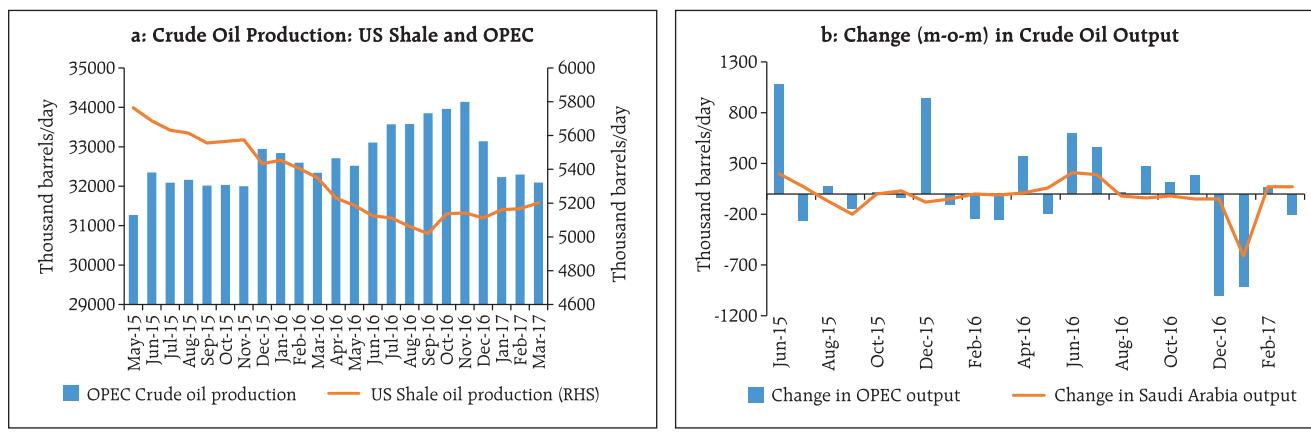
European Central Bank (2016), "Understanding the Weakness in Global Trade: What is the new normal?", Occasional Paper Series, No 178.

V.2 Commodity Prices and Global Inflation

Global supply/demand conditions and expectations of a faster pace of economic recovery continued to drive commodity prices. Crude oil prices rose to a multi-year high in December 2016 after OPEC members agreed to cut production in end-November 2016 (Chart V.3). Since then, crude oil prices have remained largely range bound as shale production is expected to increase on the back of a higher oil rig

count in the US (Chart V.4a). Demand may, however, remain subdued without a sharp turnaround in growth of major oil importing EMEs. Strengthening of the US dollar may also put downward pressure on crude oil prices as there is generally an inverse relationship

¹ It consists of two endogenous variables (world IIP growth and corresponding region trade growth) with three lags based on lag length selection criteria. All variables are seasonally adjusted using X12 ARIMA and in log difference form.

Chart V.3: Crude Oil Output

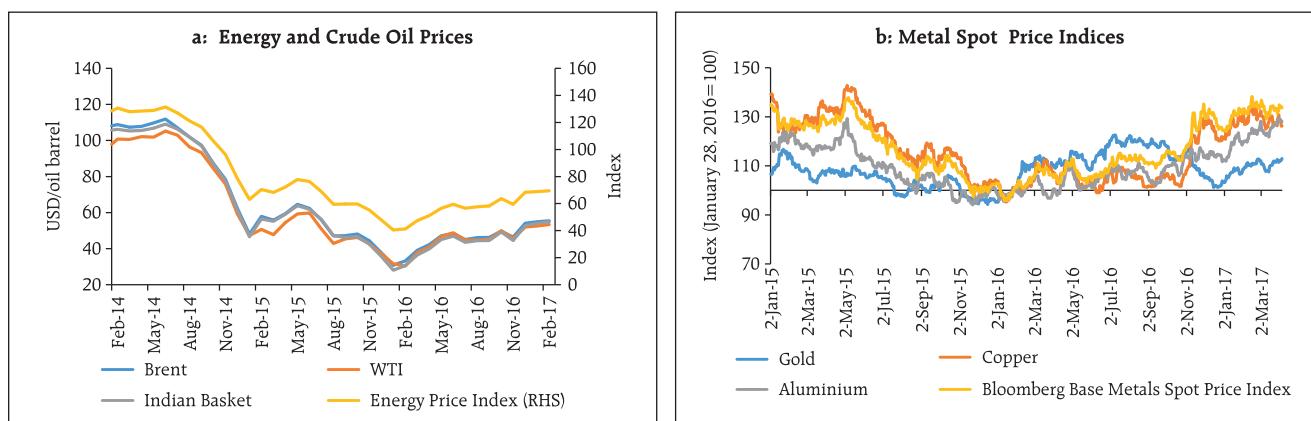
Source: Bloomberg.

between US dollar and oil prices. This is also borne out by recent data from January 1, 2013 to March 31, 2017, which show significant negative correlation of 0.94 between dollar index and crude oil prices (WTI, Brent and Dubai Fateh).

Prices of base metals were also bolstered markedly during November and December 2016 by strong demand from China and expectation of higher infrastructure spending in the US as proposed by the new administration. The Food and Agriculture Organisation (FAO) food price index, which had moderated during Q4:2016, increased markedly in the first two months of 2017, primarily driven by cereal prices.

Gold prices fell significantly in Q4:2016. Expectations of an increase in fiscal spending in the US buoyed risk-on sentiment, leading to a fall in safe haven demand in November. The increase in long-term yields following the rate hike by the Federal Reserve in December led to a further fall in demand for gold. In 2017 so far, gold prices have recovered somewhat on political uncertainties in the US and Europe (Chart V.4b).

With commodity and oil prices rebounding, spare capacity getting absorbed and inflation expectations firming up, there has been some uptick in inflation in major AEs in the recent period. Given the persisting economic slack, however, inflation remained below

Chart V.4: Commodity Prices

Sources: Bloomberg, World Bank and PPAC.

targets in most AEs. In the US, inflation sequentially accelerated in November and December to reach a level that was the highest since September 2014. However, core personal consumption expenditure (PCE) inflation remained stable at around 1.8 per cent during January and February 2017. Furthermore, 1-year USD inflation swap rate, which is an indicator of inflation expectations, has been stable since March 2017.

In the Euro area, inflation accelerated sequentially during December 2016 to February 2017 to 2.0 per cent, the highest since February 2013. However, core inflation remained steady and below 1.0 per cent. Similarly, in the UK, inflation rose to 2.3 per cent in February 2017 from 1.6 per cent in December, the highest since June 2014. By contrast, inflation in Japan, which turned positive in October after six consecutive months of deflation, remained low (Chart V.5a).

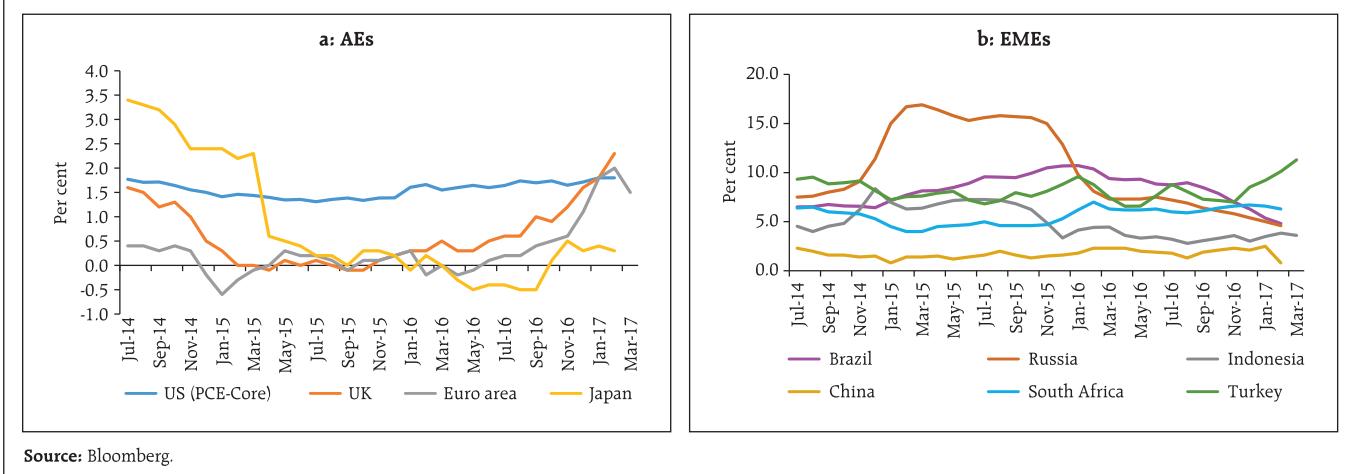
Inflation in major EMEs behaved divergently, driven by exchange rate movements and idiosyncratic factors. In China, Korea, Thailand and Indonesia, inflation remained low and well within the targets of central banks, despite some mild uptick in January due to food prices. In contrast, inflation ebbed in Brazil and Russia, helped by currency appreciation on the backdrop of recovery in commodity prices. In other major EMEs, inflation pressures remain a concern.

In Turkey, high inflation trended further upward in recent months due to currency depreciation. High inflation has persisted in South Africa due to agricultural supply bottlenecks (Chart V.5b).

V.3 Monetary Policy Stance

Even though the monetary policy stance has generally remained accommodative globally, the stimulus provided through asset purchase programmes appears to have passed its peak. With incoming data showing strengthening of the US economy, the Federal Reserve raised the target federal funds rate twice in December 2016 and March 2017. The Federal Reserve expects economic conditions to evolve in a manner that warrant gradual increases in the federal funds rate. In contrast, the ECB extended the bond purchase programme to end-December 2017. For longer-lasting and smoother transmission of monetary stimulus, the extent of monthly purchases was reduced from €80 billion to €60 billion, while reducing the minimum maturity for bond purchases from two years to one year. The ECB has kept its policy rate unchanged since March 2016. The Bank of England has kept its monetary stance unchanged since the last easing effected in August in response to Brexit. The monetary stance was also left unchanged by the Bank of Japan (BoJ) in its meeting in March 2017.

Chart V.5: CPI Inflation (y-o-y) in Select Economies



Source: Bloomberg

In major EMEs, the monetary policy stance has been driven by both domestic factors and the anticipation of a rate hike by the Federal Reserve. China raised its short term rates in March for the third time in three months. Turkey raised its policy rate in November to stem currency depreciation in the midst of domestic political uncertainty. Mexico raised its policy rate four times during November 2016 to March 2017 to counter currency depreciation and contain additional inflationary pressures arising from increase in gasoline prices by the government. In contrast, Brazil cut its policy rate four times between October 2016 and February 2017 to contain economic recession as inflationary pressure eased. Chile also reduced its policy rate in March 2017 (Chart V.6). In sum, monetary policy stance in EMEs has remained divergent.

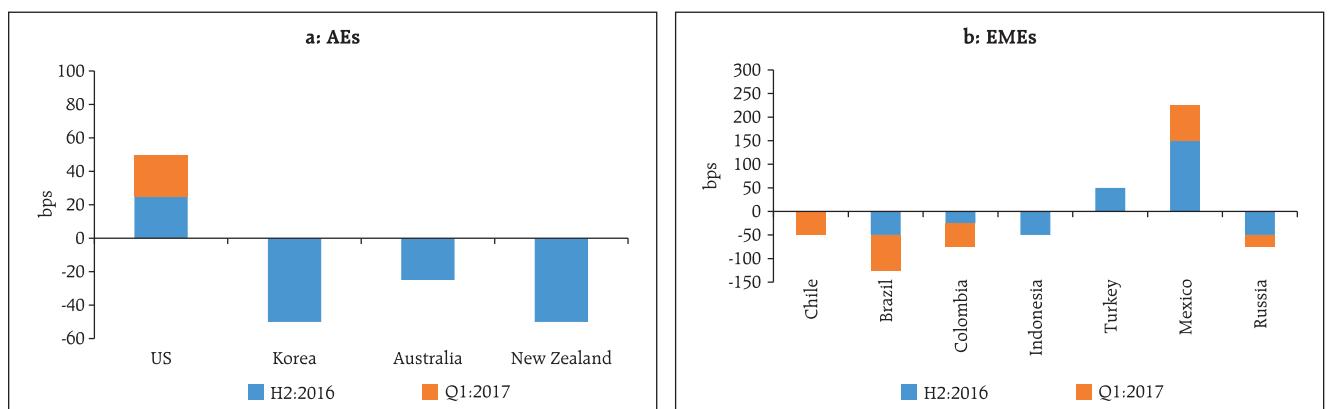
V.4 Global Financial Markets

In a generally improving macroeconomic environment beginning in the second half of 2016, global financial markets were influenced by three events, *viz.*, the US election, expectations and materialisation of the policy rate hike by the Federal Reserve, and uncertainty surrounding the Brexit roadmap.

Sovereign bond yields in AEs rose further in Q4:2016. Expectations of fiscal stimulus and a quicker pace of normalisation in monetary policy led to a significant increase in US Treasury bond yields. Even as term premia increased, market-based measures of inflation compensation also contributed significantly to the rise in yields. In the Euro area, rising bond yields in late 2016 were boosted by the ECB's decision to reduce the quantum of monthly purchase of assets and to resort to purchase of shorter-dated and lower-yielding securities in December 2016. A rise in yield in the US also played a role in firming up of yields in the Euro area. Sovereign yields in the UK rose due to better than expected macroeconomic outcomes that obviated further monetary policy easing, and the rise in inflation following the sharp depreciation in the pound. In contrast, bond yields in Japan remained more or less flat at around zero as a result of active control of the yield curve by the Bank of Japan (Chart V.7a).

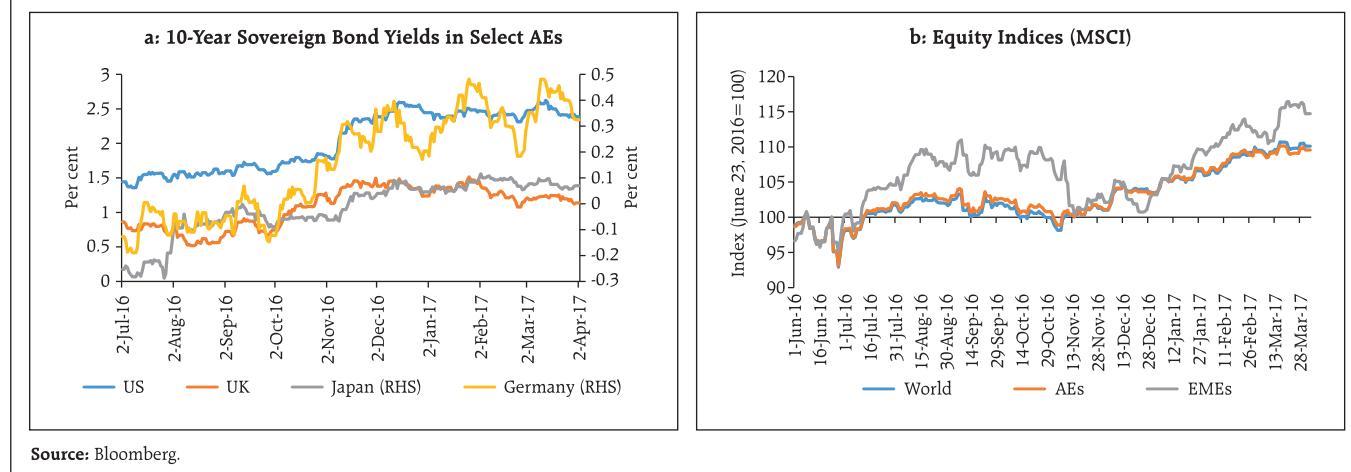
In emerging markets, bond yields behaved divergently. Yields rose in many EMEs after the US election, especially in countries with greater trade linkages with the US such as Mexico. In China, better economic performance and an uptick in inflation also partly fuelled a rise in long-term bond yields. In

Chart V.6: Policy Rate Changes in Select Major Economies – July 2016 to March 2017



Source: Bloomberg

Chart V.7: Bond and Equity Markets



Source: Bloomberg.

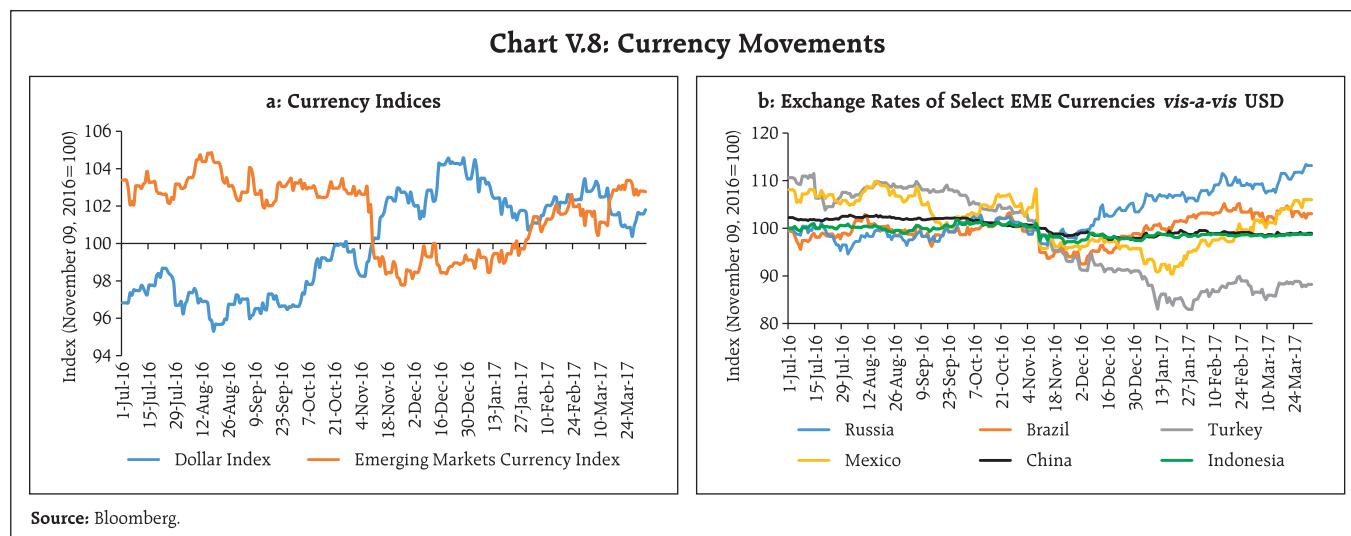
contrast, bond yields declined in Brazil as the central bank cut the policy rate to counter recession. Similarly, bond yields declined in Russia as recovery in oil prices and currency appreciation helped in moderating inflation expectations.

The optimism generated after the US election, alongside the strengthening of the global recovery in the later part of 2016, led to a strong rally in global equity markets. The MSCI World Index, which measures global equity prices, increased by 9.7 per cent between November 1, 2016 and April 3, 2017. In the US, equity prices of financial sector companies registered the largest gains on prospects of less regulation of the sector and higher interest earnings due to rising bond yields. In the Euro area, the improving macroeconomic environment played a major role in the recovery of equity prices, helped by improvement in the financial position of some European banks. In the case of Japan, the depreciation of the yen, which boosted corporate earnings via better export earnings, played a major role. Equity prices in EMEs fell initially due to capital outflows and on concerns of increasing trade protectionism and rising borrowing costs. Subsequently, however, equity prices recovered in most EMEs as capital outflows ceased and then reversed, as the initial exuberance about the US economy subsided and the stance of the Federal

Reserve turned less hawkish. In Brazil and Russia, the recovery in commodity prices also buoyed equity markets (Chart V.7b).

Currency markets have been driven mainly by anticipation of policy initiatives by the new US administration and monetary policy stances in major AEs. The US dollar appreciated against most currencies beginning early November. It reached a 14-year high in December, before some reversal in Q1:2017 on uncertainty in realisation of Trump administration's policy initiatives and expectations of a slower pace of rate hikes by the Federal Reserve. The euro depreciated against the US dollar on political uncertainty. The pound was volatile against the US dollar – it gained during late November and early December on expectations of a favourable deal with the EU, but depreciated in January 2017 on resurfacing of uncertainty in the deal. The Japanese yen depreciated as yield spreads between Japan and the US/Euro area widened, before narrowing somewhat in Q1 of 2017.

The currencies of EMEs have also depreciated sharply since November 2016. Central banks in several EMEs such as Mexico, Malaysia, Indonesia and Turkey intervened in currency markets to stem the depreciation, leading to losses of reserves. Despite intervention, the Mexican peso depreciated sharply due to its close trade and financial linkages with the



US. The Turkish lira depreciated due to its domestic political problems. Initial depreciation of currencies in major commodity exporting EMEs such as Brazil, Russia and South Africa reversed, as the rise in commodity prices provided tailwinds (Chart V.8).

Risk-on and risk-off behaviour and search for yields have been important drivers of portfolio flows in the recent period. During 2016, cross border capital flows were impacted mainly by the heightened uncertainty and abrupt political and policy changes. However, in the most recent period, portfolio flows have returned to EMEs, shrugging off the rise in

interest rates in the US, as EMEs continue to provide attractive bond yields and return on equities.

To sum up, the modest turnaround in global recovery since the latter part of the previous year is projected to strengthen further. While AEs are likely to consolidate economic recovery, the ongoing slowdown in EMEs could reverse. Despite some firming up, inflation in AEs is expected to largely remain stable going by the 1-year inflation swap rate in the US. Economic activity and financial markets will continue to be impacted by political and policy uncertainties as well as monetary policy moves by major AEs.

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

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

No. 1: Select Economic Indicators

Item	2015-16	2015-16		2016-17		
		Q2	Q3	Q2	Q3	
		1	2	3	4	5
1 Real Sector (% Change)						
1.1 GVA at Basic Prices		7.8	8.4	7.0	6.7	6.6
1.1.1 Agriculture		0.8	2.3	-2.2	3.8	6.0
1.1.2 Industry		10.3	10.3	12.0	5.6	8.0
1.1.3 Services		8.8	9.0	8.5	7.6	6.3
1.1a Final Consumption Expenditure		6.6	6.2	6.3	6.9	11.4
1.1b Gross Fixed Capital Formation		6.1	12.4	3.2	-5.3	3.5
	2015-16	2016		2017		
		Jan.	Feb.	Jan.	Feb.	
		1	2	3	4	5
1.2 Index of Industrial Production	2.4	-1.6	1.9	2.7	-	
2 Money and Banking (% Change)						
2.1 Scheduled Commercial Banks						
2.1.1 Deposits		9.3	10.5	9.7	12.7	12.5
2.1.2 Credit		10.9	11.1	11.0	4.3	4.0
2.1.2.1 Non-food Credit		10.9	11.3	11.1	4.3	4.7
2.1.3 Investment in Govt. Securities		5.4	8.4	6.3	27.7	23.0
2.2 Money Stock Measures						
2.2.1 Reserve Money (M0)		13.1	12.1	14.2	-26.9	-22.2
2.2.2 Broad Money (M3)		10.1	10.9	11.1	6.4	6.5
3 Ratios (%)						
3.1 Cash Reserve Ratio	4.00	4.00	4.00	4.00	4.00	4.00
3.2 Statutory Liquidity Ratio	21.50	21.50	21.50	20.50	20.50	
3.3 Cash-Deposit Ratio	4.8	4.8	4.8	4.8	4.8	4.7
3.4 Credit-Deposit Ratio	77.7	76.4	77.0	70.7	71.1	
3.5 Incremental Credit-Deposit Ratio	89.8	74.1	80.9	13.0	18.3	
3.6 Investment-Deposit Ratio	28.1	29.4	28.8	33.3	31.5	
3.7 Incremental Investment-Deposit Ratio	16.9	31.5	25.2	75.6	58.7	
4 Interest Rates (%)						
4.1 Policy Repo Rate	6.75	6.75	6.75	6.25	6.25	
4.2 Reverse Repo Rate	5.75	5.75	5.75	5.75	5.75	
4.3 Marginal Standing Facility (MSF) Rate	7.75	7.75	7.75	6.75	6.75	
4.4 Bank Rate	7.75	7.75	7.75	6.75	6.75	
4.5 Base Rate	9.30/9.70	9.30/9.70	9.30/9.70	9.25/9.65	9.25/9.65	
4.6 MCLR	-	-	-	7.8/8.2	7.8/8.2	
4.7 Term Deposit Rate >1 Year	7.00/7.50	7.0/7.9	7.0/7.9	6.5/7.0	6.5/7.0	
4.8 Savings Deposit Rate	4.00	4.00	4.00	4.00	4.00	
4.9 Call Money Rate (Weighted Average)	7.35	6.89	6.73	5.98	5.95	
4.10 91-Day Treasury Bill (Primary) Yield	7.27	7.31	-	6.23	6.15	
4.11 182-Day Treasury Bill (Primary) Yield	7.17	7.23	-	6.22	6.27	
4.12 364-Day Treasury Bill (Primary) Yield	7.11	7.21	7.28	6.25	6.30	
4.13 10-Year Government Securities Yield	7.42	7.64	7.61	6.87	7.19	
5 RBI Reference Rate and Forward Premiums						
5.1 INR-US\$ Spot Rate (₹ Per Foreign Currency)	66.33	67.88	68.78	68.20	66.84	
5.2 INR-Euro Spot Rate (₹ Per Foreign Currency)	75.10	74.07	76.04	72.75	70.54	
5.3 Forward Premiums of US\$ 1-month (%)	6.78	6.01	8.29	4.40	4.85	
3-month (%)	6.63	6.36	7.36	4.84	5.15	
6-month (%)	6.57	6.22	6.86	4.68	5.00	
6 Inflation (%)						
6.1 All India Consumer Price Index	4.9	5.7	5.3	3.2	3.7	
6.2 Consumer Price Index for Industrial Workers	5.6	5.9	5.5	1.9	2.6	
6.3 Wholesale Price Index	-2.5	-1.1	-0.9	5.3	6.5	
6.3.1 Primary Articles	0.3	4.3	2.0	1.3	5.0	
6.3.2 Fuel and Power	-11.7	-9.9	-7.1	18.1	21.0	
6.3.3 Manufactured Products	-1.1	-1.2	-0.5	4.0	3.7	
7 Foreign Trade (% Change)						
7.1 Imports	-15.0	-10.5	-4.5	10.6	21.8	
7.2 Exports	-15.5	-13.2	-5.3	4.5	17.5	

Reserve Bank of India

No. 2: RBI - Liabilities and Assets *

(₹ Billion)

Item	As on the Last Friday/ Friday						
	2016-17	2016	2017				
		Mar.	Mar. 3	Mar. 10	Mar. 17	Mar. 24	Mar. 31
	1	2	3	4	5	6	7
1 Issue Department							
1.1 Liabilities							
1.1.1 Notes in Circulation	13,101.81	16,512.44	11,737.97	12,212.04	12,556.56	12,881.26	13,101.81
1.1.2 Notes held in Banking Department	0.12	0.16	0.14	0.13	0.15	0.15	0.12
1.1/1.2 Total Liabilities (Total Notes Issued) or Assets	13,101.93	16,512.60	11,738.11	12,212.18	12,556.71	12,881.41	13,101.93
1.2 Assets							
1.2.1 Gold Coin and Bullion	675.08	694.86	696.43	696.43	696.43	696.43	675.08
1.2.2 Foreign Securities	12,422.35	15,804.14	11,036.07	11,510.50	11,855.27	12,180.32	12,422.35
1.2.3 Rupee Coin	4.50	3.14	5.61	5.25	5.01	4.66	4.50
1.2.4 Government of India Rupee Securities	—	10.46	—	—	—	—	—
2 Banking Department							
2.1 Liabilities							
2.1.1 Deposits	10,389.43	6,481.57	11,243.45	10,823.97	10,568.60	10,316.13	10,389.43
2.1.1.1 Central Government	50.00	1.01	1.01	1.01	1.00	1.00	50.00
2.1.1.2 Market Stabilisation Scheme	—	—	989.84	494.62	—	—	—
2.1.1.3 State Governments	0.42	1.99	0.43	29.13	0.42	0.42	0.42
2.1.1.4 Scheduled Commercial Banks	5,087.73	3,906.19	4,322.09	4,532.90	4,256.89	4,240.95	5,087.73
2.1.1.5 Scheduled State Co-operative Banks	55.13	37.97	37.27	37.44	37.97	36.99	55.13
2.1.1.6 Non-Scheduled State Co-operative Banks	18.92	14.07	16.71	16.93	17.37	17.00	18.92
2.1.1.7 Other Banks	279.49	211.08	252.94	254.09	251.47	250.47	279.49
2.1.1.8 Others	4,897.74	2,309.25	5,623.15	5,457.85	6,003.46	5,769.31	4,897.74
2.1.2 Other Liabilities	8,411.18	9,627.82	9,009.48	8,936.01	8,639.32	8,647.22	8,411.18
2.1/2.2 Total Liabilities or Assets	18,800.61	16,109.39	20,252.93	19,759.98	19,207.91	18,963.35	18,800.61
2.2 Assets							
2.2.1 Notes and Coins	0.12	0.16	0.14	0.14	0.15	0.15	0.12
2.2.2 Balances held Abroad	10,263.49	6,553.25	11,969.92	11,451.73	10,863.92	10,584.90	10,263.49
2.2.3 Loans and Advances							
2.2.3.1 Central Government	—	—	—	—	—	—	—
2.2.3.2 State Governments	12.62	11.92	6.18	49.31	52.11	26.81	12.62
2.2.3.3 Scheduled Commercial Banks	218.10	2,465.69	30.15	7.60	24.57	78.00	218.10
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	39.91	145.93	14.88	14.88	23.79	29.05	39.91
2.2.4 Bills Purchased and Discounted							
2.2.4.1 Internal	—	—	—	—	—	—	—
2.2.4.2 Government Treasury Bills	—	—	—	—	—	—	—
2.2.5 Investments	7,528.11	6,122.94	7,494.20	7,494.84	7,495.48	7,496.12	7,528.11
2.2.6 Other Assets	738.26	809.50	737.46	741.48	747.89	748.32	738.26
2.2.6.1 Gold	613.19	631.16	632.58	632.58	632.58	632.58	613.19

* 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
Feb. 1, 2017	14.00	134.22	—	1,060.36	75.00	—	—	—	—	-1,105.58
Feb. 2, 2017	14.00	83.93	—	1,552.05	—	—	—	—	—	-1,621.98
Feb. 3, 2017	16.90	174.04	35.50	1,516.73	—	—	—	—	—	-1,638.37
Feb. 4, 2017	61.00	23.67	—	—	—	—	—	—	—	37.33
Feb. 6, 2017	14.00	29.17	—	1,150.06	3.00	—	—	—	—	-1,162.23
Feb. 7, 2017	51.15	22.13	13.50	484.23	4.25	—	—	—	—	-437.46
Feb. 8, 2017	14.00	33.21	—	739.42	1.50	—	—	—	—	-757.13
Feb. 9, 2017	14.00	28.03	—	471.61	5.00	—	—	—	—	-480.64
Feb. 10, 2017	16.50	36.32	83.25	542.44	3.41	—	—	—	—	-475.60
Feb. 13, 2017	16.00	91.31	—	680.84	—	—	—	—	—	-756.15
Feb. 14, 2017	15.90	38.90	23.00	337.13	0.35	—	—	—	—	-336.78
Feb. 15, 2017	18.75	26.52	—	900.12	—	—	—	—	—	-907.89
Feb. 16, 2017	17.80	70.03	—	944.47	7.00	-3.84	—	0.10	—	-993.64
Feb. 17, 2017	22.35	243.84	0.25	1,687.00	—	2.14	—	—	—	-1,906.10
Feb. 18, 2017	45.83	32.01	—	—	—	—	—	—	—	13.82
Feb. 20, 2017	14.40	83.72	—	1,606.26	3.00	-1.04	—	—	—	-1,673.62
Feb. 21, 2017	—	73.03	—	—	4.10	—	—	—	—	-68.93
Feb. 22, 2017	14.00	68.97	11.50	1,757.39	52.70	1.70	—	—	—	-1,746.46
Feb. 23, 2017	15.00	142.20	2.00	1,898.21	49.50	-2.20	—	—	—	-1,976.11
Feb. 24, 2017	—	102.74	—	—	16.00	—	—	—	—	-86.74
Feb. 27, 2017	14.00	215.56	—	1,731.14	—	0.25	—	—	—	-1,932.45
Feb. 28, 2017	14.00	223.15	1.50	1,489.99	28.95	—	—	—	—	-1,668.69

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

i) Operations in OTC segment

ii) Operations in currency futures segment

Item	2015-16	2016	2017		
		Feb.	Jan.	Feb.	
		1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US \$ Million) (1.1-1.2)		0.00	-970.00	438.00	0.00
1.1 Purchase (+)		9462.00	1,780.00	1,068.00	0.00
1.2 Sale (-)		9462.00	2,750.00	630.00	0.00
2 Outstanding Net Currency Futures Sales (-)/ Purchase (+) at the end of month (US \$ Million)		0.00	-970.00	0.00	0.00

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

Item	As on February 28, 2017		
	Long (+)	Short (-)	Net (1-2)
	1	2	3
1. Upto 1 month	1,861	1,486	375
2. More than 1 month and upto 3 months	4,078	3,102	976
3. More than 3 months and upto 1 year	8,658	5,034	3,624
4. More than 1 year	0	2,133	-2,133
Total (1+2+3+4)	14,597	11,755	2,842

No. 5: RBI's Standing Facilities

Item	As on the Last Reporting Friday							
	2015-16		2016			2017		
			Mar. 18	Oct. 28	Nov. 25	Dec. 23	Jan. 20	Feb. 17
	1	2	3	4	5	6	7	8
1 MSF	0.1	0.1	0.7	4.8	4.2	—	—	19.3
2 Export Credit Refinance for Scheduled Banks	—	—	—	—	—	—	—	—
2.1 Limit	—	—	—	—	—	—	—	—
2.2 Outstanding	—	—	—	—	—	—	—	—
3 Liquidity Facility for PDs	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
3.1 Limit	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
3.2 Outstanding	27.7	27.7	16.8	11.7	12.3	12.3	10.6	14.8
4 Others	—	—	—	—	—	—	—	—
4.1 Limit	—	—	—	—	—	—	—	—
4.2 Outstanding	—	—	—	—	—	—	—	—
5 Total Outstanding (1+2+3.2+4.2)	27.8	27.8	17.5	16.4	16.4	12.3	10.6	34.1

Money and Banking

No. 6: Money Stock Measures

(₹ Billion)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2015-16	2016	2017		
		Feb. 19	Jan. 20	Feb. 3	Feb. 17
	1	2	3	4	5
1 Currency with the Public (1.1 + 1.2 + 1.3 – 1.4)	15,972.5	15,587.3	9,126.8	9,803.0	10,635.3
1.1 Notes in Circulation	16,415.6	16,023.9	9,628.7	10,245.1	11,067.9
1.2 Circulation of Rupee Coin	211.6	209.8	238.7	238.7	238.7
1.3 Circulation of Small Coins	7.4	7.4	7.4	7.4	7.4
1.4 Cash on Hand with Banks	662.1	653.9	748.1	688.3	678.8
2 Deposit Money of the Public	10,052.8	9,668.2	11,933.4	12,022.9	11,955.1
2.1 Demand Deposits with Banks	9,898.3	9,396.9	11,778.1	11,867.0	11,798.7
2.2 ‘Other’ Deposits with Reserve Bank	154.5	271.3	155.3	155.9	156.3
3 M₁ (1 + 2)	26,025.4	25,255.5	21,060.2	21,825.9	22,590.3
4 Post Office Saving Bank Deposits	615.7	606.6	720.6	720.6	720.6
5 M₂ (3 + 4)	26,641.1	25,862.1	21,780.7	22,546.5	23,310.9
6 Time Deposits with Banks	90,150.8	90,353.5	100,500.8	101,167.5	100,492.5
7 M₃ (3 + 6)	116,176.2	115,608.9	121,561.0	122,993.4	123,082.8
8 Total Post Office Deposits	2,084.1	2,039.0	2,277.9	2,277.9	2,277.9
9 M₄ (7 + 8)	118,260.3	117,648.0	123,838.9	125,271.2	125,360.6

No. 7: Sources of Money Stock (M₃)

(₹ Billion)

Sources	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2015-16	2016	2017		
		Feb. 19	Jan. 20	Feb. 3	Feb. 17
	1	2	3	4	5
1 Net Bank Credit to Government	32,384.8	33,389.0	39,293.5	40,659.2	40,412.4
1.1 RBI's net credit to Government (1.1.1–1.1.2)	4,250.0	4,444.8	1,390.8	3,828.7	4,921.7
1.1.1 Claims on Government	6,167.0	5,721.1	7,642.4	7,643.0	7,623.2
1.1.1.1 Central Government	6,162.2	5,689.9	7,623.1	7,624.0	7,614.1
1.1.1.2 State Governments	4.8	31.2	19.3	19.0	9.1
1.1.2 Government deposits with RBI	1,917.0	1,276.3	6,251.6	3,814.3	2,701.5
1.1.2.1 Central Government	1,916.6	1,269.6	6,251.2	3,813.9	2,701.0
1.1.2.2 State Governments	0.4	6.7	0.4	0.4	0.4
1.2 Other Banks' Credit to Government	28,134.9	28,944.3	37,902.6	36,830.5	35,490.7
2 Bank Credit to Commercial Sector	78,030.7	76,999.5	79,671.6	80,404.6	80,462.9
2.1 RBI's credit to commercial sector	200.8	80.2	49.4	49.4	47.7
2.2 Other banks' credit to commercial sector	77,829.9	76,919.3	79,622.2	80,355.2	80,415.2
2.2.1 Bank credit by commercial banks	72,496.1	71,447.8	74,177.8	74,789.9	74,852.5
2.2.2 Bank credit by co-operative banks	5,285.3	5,421.8	5,389.8	5,457.0	5,477.3
2.2.3 Investments by commercial and co-operative banks in other securities	48.4	49.6	54.6	108.3	85.4
3 Net Foreign Exchange Assets of Banking Sector (3.1 + 3.2)	25,337.2	24,938.2	26,444.1	26,360.8	26,218.4
3.1 RBI's net foreign exchange assets (3.1.1–3.1.2)	23,834.8	23,865.9	24,566.9	24,483.5	24,341.1
3.1.1 Gross foreign assets	23,836.8	23,868.0	24,568.9	24,485.5	24,343.2
3.1.2 Foreign liabilities	2.0	2.1	2.0	2.0	2.0
3.2 Other banks' net foreign exchange assets	1,502.5	1,072.3	1,877.3	1,877.3	1,877.3
4 Government's Currency Liabilities to the Public	219.1	217.2	246.2	246.2	246.2
5 Banking Sector's Net Non-monetary Liabilities	19,795.6	19,934.9	24,094.3	24,677.3	24,257.1
5.1 Net non-monetary liabilities of RBI	9,541.7	9,776.9	9,482.7	9,376.5	9,193.0
5.2 Net non-monetary liabilities of other banks (residual)	10,253.9	10,158.1	14,611.6	15,300.9	15,064.1
M₃ (1+2+3+4–5)	116,176.2	115,608.9	121,561.0	122,993.4	123,082.8

No. 8: Monetary Survey

(₹ Billion)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2015-16	2016		2017	
		Feb. 19	Jan. 20	Feb. 3	Feb. 17
	1	2	3	4	5
Monetary Aggregates					
NM ₁ (1.1 + 1.2.1+1.3)	26,025.4	25,255.5	21,060.2	21,825.9	22,590.3
NM ₂ (NM ₁ + 1.2.2.1)	65,238.9	64,521.4	65,636.0	66,715.8	67,182.8
NM ₃ (NM ₂ + 1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	116,156.4	115,557.5	123,398.4	124,781.2	125,036.9
1 Components					
1.1 Currency with the Public	15,972.5	15,587.3	9,126.8	9,803.0	10,635.3
1.2 Aggregate Deposits of Residents	97,039.6	96,654.6	110,835.4	111,622.3	110,893.1
1.2.1 Demand Deposits	9,898.3	9,396.9	11,778.1	11,867.0	11,798.7
1.2.2 Time Deposits of Residents	87,141.2	87,257.7	99,057.3	99,755.3	99,094.4
1.2.2.1 Short-term Time Deposits	39,213.5	39,266.0	44,575.8	44,889.9	44,592.5
1.2.2.1.1 Certificates of Deposit (CDs)	2,068.2	2,182.1	1,505.4	1,499.8	1,475.6
1.2.2.2 Long-term Time Deposits	47,927.7	47,991.7	54,481.5	54,865.4	54,501.9
1.3 ‘Other’ Deposits with RBI	154.5	271.3	155.3	155.9	156.3
1.4 Call/Term Funding from Financial Institutions	2,989.8	3,044.3	3,280.9	3,200.0	3,352.2
2 Sources					
2.1 Domestic Credit	115,922.7	115,809.0	125,622.4	127,976.9	127,822.5
2.1.1 Net Bank Credit to the Government	32,384.8	33,389.0	39,293.5	40,659.2	40,412.4
2.1.1.1 Net RBI credit to the Government	4,250.0	4,444.8	1,390.8	3,828.7	4,921.7
2.1.1.2 Credit to the Government by the Banking System	28,134.9	28,944.3	37,902.6	36,830.5	35,490.7
2.1.2 Bank Credit to the Commercial Sector	83,537.9	82,420.0	86,328.9	87,317.7	87,410.1
2.1.2.1 RBI Credit to the Commercial Sector	200.8	80.2	49.4	49.4	47.7
2.1.2.2 Credit to the Commercial Sector by the Banking System	83,337.0	82,339.7	86,279.5	87,268.4	87,362.4
2.1.2.2.1 Other Investments (Non-SLR Securities)	5,412.0	5,364.3	6,578.0	6,833.5	6,880.0
2.2 Government’s Currency Liabilities to the Public	219.1	217.2	246.2	246.2	246.2
2.3 Net Foreign Exchange Assets of the Banking Sector	21,586.9	21,191.6	23,439.1	23,488.9	23,489.3
2.3.1 Net Foreign Exchange Assets of the RBI	23,834.8	23,865.9	24,566.9	24,483.5	24,341.1
2.3.2 Net Foreign Currency Assets of the Banking System	-2,247.8	-2,674.3	-1,127.7	-994.6	-851.8
2.4 Capital Account	18,310.9	18,684.6	19,081.9	18,953.9	18,782.0
2.5 Other items (net)	3,261.5	2,975.6	6,827.3	7,976.8	7,739.1

No. 9: Liquidity Aggregates

(₹ Billion)

Aggregates	2015-16	2016		2017	
		Feb.	Dec.	Jan.	Feb.
	1	2	3	4	5
1 NM₃	116,156.4	115,557.5	122,462.4	123,398.4	125,036.9
2 Postal Deposits	2,084.1	2,039.0	2,277.9	2,277.9	2,277.9
3 L₁ (1 + 2)	118,240.5	117,596.5	124,740.3	125,676.2	127,314.8
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
5 L₂ (3 + 4)	118,269.8	117,625.9	124,769.6	125,705.5	127,344.1
6 Public Deposits with Non-Banking Financial Companies	394.7	..	451.5
7 L₃ (5 + 6)	118,664.5	..	125,221.0

No. 10: Reserve Bank of India Survey

(₹ Billion)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2015-16	2016		2017	
		Feb. 19	Jan. 20	Feb. 3	Feb. 17
	1	2	3	4	5
1 Components					
1.1 Currency in Circulation	16,634.6	16,241.1	9,874.8	10,491.3	11,314.1
1.2 Bankers' Deposits with the RBI	5,018.3	4,124.9	4,629.8	4,695.6	4,589.8
1.2.1 Scheduled Commercial Banks	4,738.7	3,871.1	4,320.0	4,376.8	4,282.4
1.3 'Other' Deposits with the RBI	154.5	271.3	155.3	155.9	156.3
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 - 2.4 - 2.5)	21,807.4	20,637.3	14,659.9	15,342.8	16,060.2
2 Sources					
2.1 RBI's Domestic Credit	7,295.3	6,331.1	-670.5	-10.4	665.9
2.1.1 Net RBI credit to the Government	4,250.0	4,444.8	1,390.8	3,828.7	4,921.7
2.1.1.1 Net RBI credit to the Central Government (2.1.1.1 + 2.1.1.2 + 2.1.1.3 + 2.1.1.4 - 2.1.1.5)	4,245.6	4,420.3	1,372.0	3,810.1	4,913.0
2.1.1.1.1 Loans and Advances to the Central Government	-	-	-	-	-
2.1.1.1.2 Investments in Treasury Bills	-	-	-	-	-
2.1.1.1.3 Investments in dated Government Securities	6,159.5	5,688.3	7,617.6	7,619.1	7,609.8
2.1.1.1.3.1 Central Government Securities	6,149.0	5,677.8	7,607.2	7,608.6	7,609.8
2.1.1.1.4 Rupee Coins	2.8	1.6	5.5	4.9	4.3
2.1.1.1.5 Deposits of the Central Government	1,916.6	1,269.6	6,251.2	3,813.9	2,701.0
2.1.1.2 Net RBI credit to State Governments	4.3	24.4	18.9	18.6	8.7
2.1.2 RBI's Claims on Banks	2,844.5	1,806.1	-2,110.7	-3,888.4	-4,303.5
2.1.2.1 Loans and Advances to Scheduled Commercial Banks	2,844.5	1,805.7	-2,110.7	-3,888.4	-4,303.5
2.1.3 RBI's Credit to Commercial Sector	200.8	80.2	49.4	49.4	47.7
2.1.3.1 Loans and Advances to Primary Dealers	27.0	22.9	12.3	12.3	10.6
2.1.3.2 Loans and Advances to NABARD	-	-	-	-	-
2.2 Government's Currency Liabilities to the Public	219.1	217.2	246.2	246.2	246.2
2.3 Net Foreign Exchange Assets of the RBI	23,834.8	23,865.9	24,566.9	24,483.5	24,341.1
2.3.1 Gold	1,334.3	1,201.2	1,262.9	1,305.3	1,305.3
2.3.2 Foreign Currency Assets	22,500.6	22,664.9	23,304.2	23,178.4	23,036.0
2.4 Capital Account	8,728.0	9,078.8	8,569.9	8,459.7	8,279.5
2.5 Other Items (net)	813.7	698.1	912.7	916.8	913.5

No. 11: Reserve Money - Components and Sources

(₹ Billion)

Item	Outstanding as on March 31/ last Fridays of the month/ Fridays						
	2015-16	2016		2017			
		Feb. 26	Jan. 27	Feb. 3	Feb. 10	Feb. 17	Feb. 24
	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)	21,807.4	20,450.5	14,971.7	15,342.8	15,782.9	16,060.2	16,460.7
1 Components							
1.1 Currency in Circulation	16,634.6	16,209.8	10,167.2	10,491.3	10,972.7	11,314.1	11,641.5
1.2 Bankers' Deposits with RBI	5,018.3	4,113.2	4,651.1	4,695.6	4,653.2	4,589.8	4,661.4
1.3 'Other' Deposits with RBI	154.5	127.5	153.4	155.9	157.0	156.3	157.7
2 Sources							
2.1 Net Reserve Bank Credit to Government	4,250.0	4,487.7	2,102.5	3,828.7	4,308.4	4,921.7	5,456.9
2.2 Reserve Bank Credit to Banks	2,844.5	1,662.8	-2,519.0	-3,888.4	-3,955.7	-4,303.5	-4,453.5
2.3 Reserve Bank Credit to Commercial Sector	200.8	80.7	47.7	49.4	51.4	47.7	46.1
2.4 Net Foreign Exchange Assets of RBI	23,834.8	23,707.9	24,659.5	24,483.5	24,307.5	24,341.1	24,273.1
2.5 Government's Currency Liabilities to the Public	219.1	217.2	246.2	246.2	246.2	246.2	246.2
2.6 Net Non- Monetary Liabilities of RBI	9,541.7	9,705.7	9,565.1	9,376.5	9,174.8	9,193.0	9,108.1

No. 12: Commercial Bank Survey

Item	(₹ Billion)				
	Outstanding as on last reporting Fridays of the month/ reporting Fridays of the month				
	2015-16	2016	2017		
	1	2	3	4	5
1 Components					
1.1 Aggregate Deposits of Residents	90,263.3	89,898.3	103,509.3	104,212.1	103,469.1
1.1.1 Demand Deposits	8,890.0	8,403.4	10,644.3	10,724.9	10,666.2
1.1.2 Time Deposits of Residents	81,373.4	81,495.0	92,864.9	93,487.2	92,802.9
1.1.2.1 Short-term Time Deposits	36,618.0	36,672.7	41,789.2	42,069.2	41,761.3
1.1.2.1.1 Certificates of Deposits (CDs)	2,068.2	2,182.1	1,505.4	1,499.8	1,475.6
1.1.2.2 Long-term Time Deposits	44,755.4	44,822.2	51,075.7	51,418.0	51,041.6
1.2 Call/Term Funding from Financial Institutions	2,989.8	3,044.3	3,280.9	3,200.0	3,352.2
2 Sources					
2.1 Domestic Credit	104,171.4	103,826.1	116,578.3	116,368.9	115,105.0
2.1.1 Credit to the Government	26,239.3	27,026.5	35,801.8	34,711.6	33,373.8
2.1.2 Credit to the Commercial Sector	77,932.1	76,799.5	80,776.5	81,657.3	81,731.1
2.1.2.1 Bank Credit	72,496.1	71,447.8	74,177.8	74,789.9	74,852.5
2.1.2.1.1 Non-food Credit	71,443.6	70,370.0	73,137.6	73,137.6	73,797.1
2.1.2.2 Net Credit to Primary Dealers	97.8	58.8	81.9	82.2	69.9
2.1.2.3 Investments in Other Approved Securities	15.8	18.3	28.4	41.3	18.4
2.1.2.4 Other Investments (in non-SLR Securities)	5,322.4	5,274.7	6,488.4	6,743.9	6,790.4
2.2 Net Foreign Currency Assets of Commercial Banks (2.2.1–2.2.2–2.2.3)	-2,247.8	-2,674.3	-1,127.7	-994.6	-851.8
2.2.1 Foreign Currency Assets	1,847.4	1,564.2	1,352.1	1,332.4	1,385.2
2.2.2 Non-resident Foreign Currency Repatriable Fixed Deposits	3,009.6	3,095.8	1,443.5	1,412.2	1,398.1
2.2.3 Overseas Foreign Currency Borrowings	1,085.6	1,142.7	1,036.3	914.8	839.0
2.3 Net Bank Reserves (2.3.1+2.3.2–2.3.3)	2,290.1	2,640.4	7,067.7	8,849.8	9,163.6
2.3.1 Balances with the RBI	3,874.4	3,871.1	4,320.0	4,376.8	4,282.4
2.3.2 Cash in Hand	574.4	575.1	637.0	584.6	577.8
2.3.3 Loans and Advances from the RBI	2,158.7	1,805.7	-2,110.7	-3,888.4	-4,303.5
2.4 Capital Account	9,341.1	9,364.1	10,270.3	10,252.6	10,260.8
2.5 Other items (net) (2.1+2.2+2.3–2.4–1.1–1.2)	1,619.5	1,485.4	5,457.9	6,559.4	6,334.6
2.5.1 Other Demand and Time Liabilities (net of 2.2.3)	3,954.8	3,591.4	3,799.3	4,105.4	4,031.6
2.5.2 Net Inter-Bank Liabilities (other than to PDs)	-256.0	-372.2	-372.6	-478.5	-366.7

No. 13: Scheduled Commercial Banks' Investments

Item	As on March 18, 2016	(₹ Billion)				
		2016		2017		
		Feb. 19	Jan. 20	Feb. 03	Feb. 17	
		1	2	3	4	5
1 SLR Securities	26,255.1	27,044.8	35,725.3	34,752.8	33,392.2	
2 Commercial Paper	817.9	818.3	1,248.9	1,254.8	1,312.1	
3 Shares issued by						
3.1 PSUs	77.1	80.6	80.0	91.3	90.6	
3.2 Private Corporate Sector	435.5	431.3	500.5	513.4	522.7	
3.3 Others	55.9	45.7	44.3	44.7	44.7	
4 Bonds/Debentures issued by						
4.1 PSUs	930.7	835.9	1,141.8	1,098.1	1,100.9	
4.2 Private Corporate Sector	1,324.4	1,261.3	1,528.1	1,479.7	1,466.4	
4.3 Others	511.2	591.9	625.5	712.0	692.9	
5 Instruments issued by						
5.1 Mutual funds	641.7	685.4	893.5	885.4	897.3	
5.2 Financial institutions	629.0	622.1	652.8	664.2	662.5	

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			
	2015-16	2016	2017		2015-16	2016	2017	
		Feb.	Jan.	Feb.		Feb.	Jan.	Feb.
	1	2	3	4	5	6	7	8
Number of Reporting Banks	214	214	219	219	147	147	148	148
1 Liabilities to the Banking System	2,312.4	2,211.3	2,237.6	2,175.8	2,250.3	2,149.7	2,165.7	2,108.6
1.1 Demand and Time Deposits from Banks	1,583.2	1,614.3	1,744.3	1,671.1	1,522.1	1,553.8	1,673.9	1,605.0
1.2 Borrowings from Banks	645.0	532.4	449.7	453.9	644.0	531.2	449.0	452.8
1.3 Other Demand and Time Liabilities	84.2	64.7	43.5	50.8	84.2	64.7	42.8	50.8
2 Liabilities to Others	103,899.7	104,074.0	116,149.1	117,070.8	101,303.1	101,492.7	113,164.6	114,015.8
2.1 Aggregate Deposits	95,756.3	95,671.3	107,517.5	107,814.2	93,272.9	93,205.0	104,650.2	104,888.5
2.1.1 Demand	9,095.8	8,854.9	11,124.1	11,037.9	8,890.0	8,654.2	10,851.1	10,769.1
2.1.2 Time	86,660.5	86,816.4	96,393.4	96,776.3	84,382.9	84,550.8	93,799.1	94,119.4
2.2 Borrowings	3,011.5	3,426.9	3,600.1	3,880.2	2,989.8	3,395.3	3,576.1	3,848.7
2.3 Other Demand and Time Liabilities	5,131.9	4,975.7	5,031.5	5,376.3	5,040.4	4,892.4	4,938.3	5,278.5
3 Borrowings from Reserve Bank	2,324.7	1,775.0	132.0	103.3	2,324.7	1,774.6	132.0	103.3
3.1 Against Usance Bills /Promissory Notes	—	—	—	—	—	—	—	—
3.2 Others	2,324.7	1,775.0	132.0	103.3	2,324.7	1,774.6	132.0	103.3
4 Cash in Hand and Balances with Reserve Bank	4,571.0	4,609.8	5,135.0	5,088.5	4,448.8	4,491.3	4,986.4	4,944.6
4.1 Cash in Hand	586.7	640.3	670.5	612.0	574.38	628.8	644.6	590.6
4.2 Balances with Reserve Bank	3,984.4	3,969.5	4,464.5	4,476.6	3,874.4	3,862.5	4,341.9	4,354.0
5 Assets with the Banking System	2,980.4	2,929.6	2,938.3	3,119.1	2,604.0	2,566.0	2,451.2	2,609.9
5.1 Balances with Other Banks	1,759.6	1,842.3	1,913.8	2,012.0	1,616.8	1,703.1	1,731.2	1,811.4
5.1.1 In Current Account	124.9	127.2	156.8	147.8	108.8	109.4	132.2	126.1
5.1.2 In Other Accounts	1,634.7	1,715.1	1,757.0	1,864.2	1,508.0	1,593.7	1,599.0	1,685.3
5.2 Money at Call and Short Notice	513.6	333.6	275.1	326.1	348.9	188.4	61.2	107.8
5.3 Advances to Banks	273.3	288.6	310.5	342.7	260.5	278.6	309.0	331.9
5.4 Other Assets	433.8	465.0	438.8	438.3	377.8	395.9	349.9	358.9
6 Investment	27,000.9	27,663.3	35,767.8	34,046.3	26,255.1	26,902.8	34,858.1	33,076.6
6.1 Government Securities	26,981.7	27,641.4	35,738.8	33,980.9	26,239.3	26,883.9	34,836.1	33,058.4
6.2 Other Approved Securities	19.2	21.9	29.0	65.4	15.8	18.9	22.0	18.1
7 Bank Credit	74,689.6	73,893.2	76,222.8	76,993.2	72,496.1	71,729.8	73,971.3	74,619.8
7a Food Credit	1,215.2	1,223.1	1,208.1	772.0	1,052.5	1,060.4	1,045.4	609.3
7.1 Loans, Cash-credits and Overdrafts	72,492.8	71,665.4	74,173.9	74,914.2	70,337.2	69,536.4	71,973.9	72,594.6
7.2 Inland Bills-Purchased	264.3	264.1	212.2	217.4	257.1	258.2	198.0	202.5
7.3 Inland Bills-Discounted	1,313.5	1,341.4	1,220.6	1,241.6	1,288.7	1,319.1	1,190.3	1,209.9
7.4 Foreign Bills-Purchased	205.5	201.8	228.2	233.7	204.4	200.3	227.7	231.1
7.5 Foreign Bills-Discounted	413.6	420.5	388.0	386.3	408.8	415.8	381.4	381.7

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

(₹ Billion)

Item	Outstanding as on				Growth (%)	
	Mar. 18, 2016	2016	2017		Financial year so far	Y-o-Y
		Feb. 19	Jan. 20	Feb. 17	2016-17	2017
	1	2	3	4	5	6
1 Gross Bank Credit	66,500	65,779	67,113	67,754	1.9	3.0
1.1 Food Credit	1,031	1,041	886	886	-14.0	-14.9
1.2 Non-food Credit	65,469	64,738	66,228	66,867	2.1	3.3
1.2.1 Agriculture & Allied Activities	8,829	8,564	9,202	9,330	5.7	9.0
1.2.2 Industry	27,307	27,455	25,866	26,014	-4.7	-5.2
1.2.2.1 Micro & Small	3,715	3,759	3,496	3,562	-4.1	-5.2
1.2.2.2 Medium	1,148	1,144	1,037	1,005	-12.5	-12.2
1.2.2.3 Large	22,444	22,552	21,333	21,448	-4.4	-4.9
1.2.3 Services	15,411	14,970	15,923	16,120	4.6	7.7
1.2.3.1 Transport Operators	997	986	1,030	1,039	4.2	5.3
1.2.3.2 Computer Software	191	188	176	174	-9.0	-7.5
1.2.3.3 Tourism, Hotels & Restaurants	371	375	376	380	2.5	1.4
1.2.3.4 Shipping	104	106	119	118	13.1	11.6
1.2.3.5 Professional Services	1,046	1,041	1,258	1,243	18.8	19.4
1.2.3.6 Trade	3,811	3,730	3,868	3,943	3.5	5.7
1.2.3.6.1 Wholesale Trade	1,686	1,686	1,776	1,800	6.8	6.7
1.2.3.6.2 Retail Trade	2,125	2,044	2,093	2,143	0.9	4.9
1.2.3.7 Commercial Real Estate	1,776	1,766	1,782	1,781	0.3	0.9
1.2.3.8 Non-Banking Financial Companies (NBFCs)	3,527	3,311	3,239	3,195	-9.4	-3.5
1.2.3.9 Other Services	3,587	3,467	4,076	4,247	18.4	22.5
1.2.4 Personal Loans	13,922	13,749	15,236	15,403	10.6	12.0
1.2.4.1 Consumer Durables	178	171	199	202	13.8	18.1
1.2.4.2 Housing	7,468	7,359	8,216	8,202	9.8	11.4
1.2.4.3 Advances against Fixed Deposits	667	680	597	588	-11.8	-13.4
1.2.4.4 Advances to Individuals against share & bonds	64	59	47	49	-23.2	-16.0
1.2.4.5 Credit Card Outstanding	377	385	498	493	30.9	28.2
1.2.4.6 Education	682	682	719	720	5.6	5.6
1.2.4.7 Vehicle Loans	1,529	1,432	1,678	1,692	10.7	18.2
1.2.4.8 Other Personal Loans	2,958	2,982	3,282	3,456	16.9	15.9
1.2A Priority Sector	22,259	21,853	22,655	22,889	2.8	4.7
1.2A.1 Agriculture & Allied Activities	8,826	8,560	9,171	9,302	5.4	8.7
1.2A.2 Micro & Small Enterprises	8,476	8,380	8,315	8,437	-0.5	0.7
1.2A.2.1 Manufacturing	3,715	3,759	3,496	3,562	-4.1	-5.2
1.2A.2.2 Services	4,761	4,621	4,819	4,875	2.4	5.5
1.2A.3 Housing	3,423	3,416	3,564	3,572	4.4	4.6
1.2A.4 Micro-Credit	188	188	181	185	-1.9	-1.6
1.2A.5 Education Loans	601	605	609	611	1.6	1.1
1.2A.6 State-Sponsored Orgs. for SC/ST	5	5	6	6	20.6	24.5
1.2A.7 Weaker Sections	4,774	4,703	5,192	5,208	9.1	10.8
1.2A.8 Export Credit	424	371	456	435	2.7	17.4

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

(₹ Billion)

Industry	Outstanding as on				Growth (%)	
	Mar. 18, 2016	2016	2017		Financial year so far	Y-o-Y
		Feb. 19	Jan. 20	Feb. 17	2016-17	2017
	1	2	3	4	5	6
1 Industry	27,307	27,455	25,866	26,014	-4.7	-5.2
1.1 Mining & Quarrying (incl. Coal)	390	392	336	332	-14.9	-15.2
1.2 Food Processing	1,501	1,534	1,309	1,329	-11.4	-13.3
1.2.1 Sugar	400	380	293	303	-24.3	-20.3
1.2.2 Edible Oils & Vanaspati	199	196	169	166	-16.6	-15.1
1.2.3 Tea	36	36	35	35	-2.8	-2.6
1.2.4 Others	866	923	812	826	-4.7	-10.5
1.3 Beverage & Tobacco	181	185	167	168	-7.5	-9.4
1.4 Textiles	2,058	2,044	1,870	1,903	-7.5	-6.9
1.4.1 Cotton Textiles	1,035	1,029	905	924	-10.7	-10.2
1.4.2 Jute Textiles	22	22	21	21	-3.9	-4.2
1.4.3 Man-Made Textiles	208	209	194	196	-6.0	-6.4
1.4.4 Other Textiles	793	784	749	763	-3.8	-2.7
1.5 Leather & Leather Products	105	104	100	99	-5.2	-4.4
1.6 Wood & Wood Products	95	96	99	98	3.4	1.9
1.7 Paper & Paper Products	355	358	339	341	-4.0	-4.9
1.8 Petroleum, Coal Products & Nuclear Fuels	512	475	492	527	2.9	10.9
1.9 Chemicals & Chemical Products	1,645	1,589	1,433	1,520	-7.6	-4.4
1.9.1 Fertiliser	285	256	243	303	6.5	18.6
1.9.2 Drugs & Pharmaceuticals	535	518	466	446	-16.5	-13.8
1.9.3 Petro Chemicals	365	354	317	368	0.7	4.0
1.9.4 Others	461	462	406	402	-12.6	-12.8
1.10 Rubber, Plastic & their Products	374	368	360	367	-1.8	-0.3
1.11 Glass & Glassware	89	88	78	78	-12.0	-11.5
1.12 Cement & Cement Products	543	537	546	546	0.5	1.7
1.13 Basic Metal & Metal Product	4,160	4,145	4,118	4,147	-0.3	0.1
1.13.1 Iron & Steel	3,115	3,090	3,099	3,135	0.6	1.4
1.13.2 Other Metal & Metal Product	1,046	1,055	1,020	1,013	-3.2	-4.0
1.14 All Engineering	1,542	1,539	1,472	1,475	-4.3	-4.1
1.14.1 Electronics	382	382	346	343	-10.3	-10.1
1.14.2 Others	1,159	1,157	1,125	1,132	-2.3	-2.1
1.15 Vehicles, Vehicle Parts & Transport Equipment	690	678	711	724	4.9	6.7
1.16 Gems & Jewellery	727	728	674	690	-5.1	-5.2
1.17 Construction	745	746	799	818	9.8	9.8
1.18 Infrastructure	9,648	9,944	9,025	8,984	-6.9	-9.7
1.18.1 Power	5,799	6,045	5,312	5,258	-9.3	-13.0
1.18.2 Telecommunications	913	939	818	822	-10.0	-12.4
1.18.3 Roads	1,775	1,794	1,802	1,797	1.2	0.2
1.18.4 Other Infrastructure	1,161	1,166	1,092	1,107	-4.6	-5.0
1.19 Other Industries	1,945	1,904	1,936	1,867	-4.1	-2.0

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

Item	Last Reporting Friday (in case of March)/Last Friday/ Reporting Friday						(₹ Billion)	
	2015-16	2015		2016				
		Nov, 27	Oct, 14	Oct, 28	Nov, 11	Nov, 25		
		1	2	3	4	5	6	
Number of Reporting Banks	32	32	30	30	30	30	30	
1 Aggregate Deposits (2.1.1.2+2.2.1.2)	433.2	399.6	440.8	453.8	461.4	479.7		
2 Demand and Time Liabilities								
2.1 Demand Liabilities	152.1	143.4	156.9	151.0	157.6	169.8		
2.1.1 Deposits								
2.1.1.1 Inter-Bank	33.7	30.3	38.7	35.2	36.4	42.6		
2.1.1.2 Others	78.2	70.3	73.4	75.1	84.4	90.8		
2.1.2 Borrowings from Banks	9.5	8.3	14.3	10.3	10.0	10.0		
2.1.3 Other Demand Liabilities	30.6	34.5	30.5	30.4	26.9	26.4		
2.2 Time Liabilities	840.7	832.0	835.6	850.9	848.4	883.2		
2.2.1 Deposits								
2.2.1.1 Inter-Bank	479.1	489.2	460.0	464.0	463.5	486.7		
2.2.1.2 Others	355.1	329.3	367.4	378.7	377.0	388.8		
2.2.2 Borrowings from Banks	0.0	5.7	0.0	0.0	0.0	0.0		
2.2.3 Other Time Liabilities	6.5	7.8	8.2	8.2	7.9	7.7		
3 Borrowing from Reserve Bank	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
4 Borrowings from a notified bank / Government	435.4	427.7	435.3	445.0	451.0	438.1		
4.1 Demand	164.0	157.6	141.1	147.5	152.5	152.7		
4.2 Time	271.5	270.1	294.2	297.5	298.5	285.4		
5 Cash in Hand and Balances with Reserve Bank	46.1	41.2	44.6	44.4	55.2	69.0		
5.1 Cash in Hand	2.4	2.6	2.6	2.4	13.7	28.4		
5.2 Balance with Reserve Bank	43.8	38.6	42.0	42.0	41.5	40.5		
6 Balances with Other Banks in Current Account	6.8	6.2	5.8	5.7	7.8	10.4		
7 Investments in Government Securities	298.8	286.6	286.2	293.0	282.0	281.6		
8 Money at Call and Short Notice	191.3	208.3	226.5	235.2	230.5	253.0		
9 Bank Credit (10.1+11)	480.8	425.1	474.9	465.6	463.3	458.3		
10 Advances								
10.1 Loans, Cash-Credits and Overdrafts	480.8	425.1	474.9	465.6	463.3	458.2		
10.2 Due from Banks	727.9	722.7	721.7	731.5	735.5	717.4		
11 Bills Purchased and Discounted	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	2015-16			Rural			Urban			Combined		
	Rural	Urban	Combined	Feb. 16	Jan. 17	Feb. 17	Feb. 16	Jan. 17	Feb. 17	Feb. 16	Jan. 17	Feb. 17
	1	2	3	4	5	6	7	8	9	10	11	12
1 Food and beverages	129.2	129.8	129.4	130.3	133.7	133.7	129.1	132.0	132.1	129.9	133.1	133.1
1.1 Cereals and products	125.3	123.9	124.9	127.1	133.1	133.3	124.8	132.2	132.8	126.4	132.8	133.1
1.2 Meat and fish	130.9	132.1	131.3	133.7	137.8	138.4	135.1	138.9	139.8	134.2	138.2	138.9
1.3 Egg	122.1	120.5	121.5	127.7	131.9	129.4	130.3	132.6	129.3	128.7	132.2	129.4
1.4 Milk and products	129.2	128.2	128.8	130.7	136.7	137.2	129.6	133.1	133.5	130.3	135.4	135.8
1.5 Oils and fats	115.7	107.6	112.7	118.5	122.0	122.1	108.4	114.0	114.3	114.8	119.1	119.2
1.6 Fruits	132.7	125.6	129.4	130.4	136.0	138.8	118.6	129.6	131.4	124.9	133.0	135.3
1.7 Vegetables	142.1	148.5	144.2	130.9	119.8	119.1	129.2	118.7	120.2	130.3	119.4	119.5
1.8 Pulses and products	146.4	166.1	153.0	162.8	161.7	157.0	176.4	155.1	143.1	167.4	159.5	152.3
1.9 Sugar and confectionery	96.0	91.7	94.5	98.7	114.8	116.3	99.1	117.3	119.5	98.8	115.6	117.4
1.10 Spices	125.9	134.7	128.8	130.6	136.9	136.0	139.7	144.9	144.0	133.6	139.6	138.7
1.11 Non-alcoholic beverages	122.3	119.2	121.0	124.8	129.0	129.4	120.6	123.2	123.4	123.0	126.6	126.9
1.12 Prepared meals, snacks, sweets	133.2	132.6	132.9	136.4	143.9	144.4	135.2	141.6	141.9	135.8	142.8	143.2
2 Pan, tobacco and intoxicants	130.9	135.6	132.2	134.4	143.1	143.6	140.0	145.6	146.3	135.9	143.8	144.3
3 Clothing and footwear	130.2	123.5	127.5	133.4	140.0	140.2	125.3	129.0	129.3	130.2	135.6	135.9
3.1 Clothing	130.7	124.3	128.2	133.9	140.7	140.9	126.2	130.2	130.5	130.9	136.6	136.8
3.2 Footwear	127.0	118.7	123.6	129.8	135.8	135.8	120.1	122.3	122.5	125.8	130.2	130.3
4 Housing	--	121.7	121.7	--	--	--	124.4	129.6	130.5	124.4	129.6	130.5
5 Fuel and light	124.4	115.3	121.0	127.5	132.1	133.2	116.0	118.0	119.2	123.1	126.8	127.9
6 Miscellaneous	118.9	116.3	117.6	120.9	126.6	127.0	117.2	122.1	122.4	119.1	124.4	124.8
6.1 Household goods and services	124.5	120.4	122.6	127.1	133.2	133.6	121.8	125.1	125.3	124.6	129.4	129.7
6.2 Health	121.9	117.3	120.1	124.3	129.9	130.1	119.5	122.6	122.9	122.5	127.1	127.4
6.3 Transport and communication	113.7	109.7	111.5	113.9	119.1	119.5	109.1	115.2	115.6	111.4	117.0	117.4
6.4 Recreation and amusement	119.6	117.4	118.4	122.3	127.0	127.7	118.8	122.0	122.2	120.3	124.2	124.6
6.5 Education	124.2	125.4	124.9	127.1	134.6	134.9	126.3	132.4	132.4	126.6	133.3	133.4
6.6 Personal care and effects	114.0	113.4	113.7	116.8	122.3	123.2	116.2	120.9	121.7	116.6	121.7	122.6
General Index (All Groups)	126.1	123.0	124.7	127.9	132.4	132.6	123.8	127.8	128.2	126.0	130.3	130.6

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

No. 19: Other Consumer Price Indices

Item	Base Year	Linking Factor	2015-16		2016		2017	
			1	2	3	4	5	6
1 Consumer Price Index for Industrial Workers	2001	4.63		265		267	274	274
2 Consumer Price Index for Agricultural Labourers	1986-87	5.89		835		843	870	869
3 Consumer Price Index for Rural Labourers	1986-87	—		839		849	876	874

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

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

Item	2015-16		2016		2017	
			Feb.	Jan.	Feb.	
	1	2				
1 Standard Gold (₹ per 10 grams)	26,534		28,252		28,746	29,265
2 Silver (₹ per kilogram)	36,318		36,917		41,140	42,914

Source: Business Standard/Business Line/The Economic Times, Mumbai for Gold and Silver prices in Mumbai.

No. 21: Wholesale Price Index

(Base: 2004-05 = 100)

Commodities	Weight	2015-16	2016		2017	
			Feb.	Dec.	Jan. (P)	Feb. (P)
			1	2	3	4
1 ALL COMMODITIES	100.000	176.7	174.1	183.3	184.6	185.5
1.1 PRIMARY ARTICLES	20.118	249.6	245.8	257.9	255.7	258.1
1.1.1 Food articles	14.337	262.1	260.5	269.9	267.2	267.5
1.1.1.1 Food Grains	4.090	253.0	261.2	293.2	279.2	272.8
1.1.1.1.1 Cereals	3.373	235.2	241.2	260.8	254.9	255.9
1.1.1.1.2 Pulses	0.717	336.7	355.2	445.8	393.4	352.4
1.1.1.2 Fruits & Vegetables	3.843	254.0	229.7	219.2	220.3	230.9
1.1.1.2.1 Vegetables	1.736	268.5	221.1	205.5	196.2	203.3
1.1.1.2.2 Fruits	2.107	242.0	236.8	230.5	240.2	253.7
1.1.1.3 Milk	3.238	250.6	251.7	261.2	261.3	261.6
1.1.1.4 Eggs, Meat & Fish	2.414	288.0	298.2	304.7	308.6	309.5
1.1.1.5 Condiments & Spices	0.569	342.6	357.2	351.5	357.4	334.6
1.1.1.6 Other Food Articles	0.183	245.1	246.8	258.1	258.8	254.1
1.1.2 Non-Food Articles	4.258	219.5	220.4	225.4	231.3	234.8
1.1.2.1 Fibres	0.877	207.2	211.3	233.5	246.6	252.4
1.1.2.2 Oil Seeds	1.781	214.9	209.6	210.6	211.3	211.1
1.1.2.3 Other Non-Food Articles	1.386	233.8	235.7	246.3	248.9	251.7
1.1.2.4 Flowers	0.213	215.7	249.2	179.5	221.5	249.4
1.1.3 Minerals	1.524	216.2	179.2	235.8	215.5	234.8
1.1.3.1 Metallic Minerals	0.489	286.3	238.4	307.7	277.6	295.3
1.1.3.2 Other Minerals	0.135	203.8	197.4	212.2	211.7	211.8
1.1.3.3 Crude Petroleum	0.900	180.0	144.4	200.4	182.3	205.4
1.2 FUEL & POWER	14.910	179.8	168.4	192.1	201.2	203.8
1.2.1 Coal	2.094	189.9	189.9	191.3	217.3	226.1
1.2.2 Mineral Oils	9.364	179.5	162.1	199.6	208.3	210.4
1.2.3 Electricity	3.452	174.3	172.3	172.3	172.3	172.3
1.3 MANUFACTURED PRODUCTS	64.972	153.4	153.2	158.2	158.8	158.8
1.3.1 Food Products	9.974	174.2	178.0	194.0	194.5	194.5
1.3.1.1 Dairy Products	0.568	206.7	204.8	213.0	214.5	215.6
1.3.1.2 Canning, Preserving & Processing of Food	0.358	165.1	165.9	170.2	170.7	169.2
1.3.1.3 Grain Mill Products	1.340	178.7	184.4	215.3	216.3	212.9
1.3.1.4 Bakery Products	0.444	150.5	149.5	152.0	152.0	151.8
1.3.1.5 Sugar, Khandasari & Gur	2.089	167.1	180.1	209.2	211.5	216.4
1.3.1.6 Edible Oils	3.043	148.6	149.1	158.3	158.2	157.6
1.3.1.7 Oil Cakes	0.494	250.4	258.1	250.0	244.5	245.7
1.3.1.8 Tea & Coffee Processing	0.711	192.8	179.9	192.7	194.7	189.6
1.3.1.9 Manufacture of Salt	0.048	201.5	199.8	199.8	199.8	192.8
1.3.1.10 Other Food Products	0.879	207.9	217.3	236.7	236.7	235.5
1.3.2 Beverages, Tobacco & Tobacco Products	1.762	206.5	208.6	222.0	221.9	221.5
1.3.2.1 Wine Industries	0.385	137.5	137.1	149.9	149.9	150.3
1.3.2.2 Malt Liquor	0.153	181.3	184.2	189.3	189.3	185.7
1.3.2.3 Soft Drinks & Carbonated Water	0.241	167.7	169.3	180.7	181.4	183.3
1.3.2.4 Manufacture of Bidi, Cigarettes, Tobacco & Zarda	0.983	247.0	250.1	265.5	265.1	264.4
1.3.3 Textiles	7.326	140.2	139.9	142.0	142.3	142.6
1.3.3.1 Cotton Textiles	2.605	156.6	155.9	162.0	162.3	162.2
1.3.3.1.1 Cotton Yarn	1.377	166.2	164.3	173.8	174.5	174.3
1.3.3.1.2 Cotton Fabric	1.228	145.8	146.5	148.8	148.8	148.6
1.3.3.2 Man-Made Textiles	2.206	131.3	129.3	129.2	129.8	130.9
1.3.3.2.1 Man-Made Fibre	1.672	130.1	127.6	127.2	127.3	127.8
1.3.3.2.2 Man-Made Fabric	0.533	134.9	134.6	135.6	137.7	140.5
1.3.3.3 Woollen Textiles	0.294	153.3	151.1	152.2	152.2	152.1
1.3.3.4 Jute, Hemp & Mesta Textiles	0.261	219.2	235.9	231.6	233.5	232.7
1.3.3.5 Other Misc. Textiles	1.960	115.8	116.2	116.2	116.1	116.1
1.3.4 Wood & Wood Products	0.587	195.7	196.7	194.0	192.6	191.8
1.3.4.1 Timber/Wooden Planks	0.181	164.5	165.9	163.4	158.5	158.5
1.3.4.2 Processed Wood	0.128	193.9	193.7	199.2	199.2	199.2
1.3.4.3 Plywood & Fibre Board	0.241	227.3	228.7	221.5	221.9	220.0
1.3.4.4 Others	0.038	150.0	150.7	147.5	147.5	146.8

No. 21: Wholesale Price Index (Concl.)

(Base: 2004-05 = 100)

Commodities	Weight	2015-16	2016		2017	
			Feb.	Dec.	Jan. (P)	Feb. (P)
	1	2	3	4	5	6
1.3.5 Paper & Paper Products	2.034	154.5	155.4	157.6	157.7	157.7
1.3.5.1 Paper & Pulp	1.019	151.3	151.0	152.5	152.5	152.5
1.3.5.2 Manufacture of boards	0.550	135.6	135.1	134.0	134.2	133.7
1.3.5.3 Printing & Publishing	0.465	184.3	189.2	196.9	196.9	197.5
1.3.6 Leather & Leather Products	0.835	144.9	146.2	145.9	145.5	145.1
1.3.6.1 Leathers	0.223	116.1	115.5	113.0	112.1	113.4
1.3.6.2 Leather Footwear	0.409	160.6	162.3	165.5	165.2	164.4
1.3.6.3 Other Leather Products	0.203	144.9	147.7	142.5	142.6	141.1
1.3.7 Rubber & Plastic Products	2.987	147.2	145.1	148.3	148.6	148.9
1.3.7.1 Tyres & Tubes	0.541	176.8	176.1	178.9	178.9	178.8
1.3.7.1.1 Tyres	0.488	177.5	176.4	179.0	179.0	178.8
1.3.7.1.2 Tubes	0.053	170.6	173.3	178.4	178.4	178.4
1.3.7.2 Plastic Products	1.861	136.3	133.5	135.3	135.8	136.0
1.3.7.3 Rubber Products	0.584	154.6	153.3	161.6	161.3	162.1
1.3.8 Chemicals & Chemical Products	12.018	150.5	149.5	150.7	150.9	151.5
1.3.8.1 Basic Inorganic Chemicals	1.187	155.3	154.4	155.5	155.6	155.6
1.3.8.2 Basic Organic Chemicals	1.952	140.2	136.8	144.3	147.1	149.2
1.3.8.3 Fertilisers & Pesticides	3.145	155.0	155.8	153.8	153.4	152.9
1.3.8.3.1 Fertilisers	2.661	158.2	158.7	155.9	155.4	155.0
1.3.8.3.2 Pesticides	0.483	137.7	140.2	142.2	142.2	141.3
1.3.8.4 Paints, Varnishes & Lacquers	0.529	152.2	152.1	152.5	152.3	152.4
1.3.8.5 Dyestuffs & Indigo	0.563	141.9	142.6	143.5	143.8	143.7
1.3.8.6 Drugs & Medicines	0.456	129.6	128.5	128.6	128.3	128.4
1.3.8.7 Perfumes, Cosmetics, Toiletries etc.	1.130	163.2	163.2	164.4	164.2	164.6
1.3.8.8 Turpentine, Plastic Chemicals	0.586	154.1	153.3	156.0	155.5	155.8
1.3.8.9 Polymers including Synthetic Rubber	0.970	146.0	145.6	145.5	144.4	145.2
1.3.8.10 Petrochemical Intermediates	0.869	150.1	143.2	143.7	143.8	146.3
1.3.8.11 Matches, Explosives & other Chemicals	0.629	153.9	153.0	154.7	155.2	155.3
1.3.9 Non-Metallic Mineral Products	2.556	177.3	177.3	178.7	178.6	178.8
1.3.9.1 Structural Clay Products	0.658	198.4	200.8	202.0	202.2	201.0
1.3.9.2 Glass, Earthenware, Chinaware & their Products	0.256	141.5	142.9	144.2	144.4	144.0
1.3.9.3 Cement & Lime	1.386	173.6	172.4	174.6	174.3	175.2
1.3.9.4 Cement, Slate & Graphite Products	0.256	179.2	177.7	175.2	175.5	176.1
1.3.10 Basic Metals, Alloys & Metal Products	10.748	154.6	150.7	158.4	161.2	160.4
1.3.10.1 Ferrous Metals	8.064	141.7	135.9	145.5	148.6	147.3
1.3.10.1.1 Iron & Semis	1.563	139.4	131.9	138.4	143.6	140.7
1.3.10.1.2 Steel: Long	1.630	148.8	142.6	146.5	149.9	148.5
1.3.10.1.3 Steel: Flat	2.611	132.5	125.1	142.8	146.9	144.9
1.3.10.1.4 Steel: Pipes & Tubes	0.314	127.8	123.2	128.3	128.9	129.7
1.3.10.1.5 Stainless Steel & alloys	0.938	160.6	157.7	164.8	165.4	164.8
1.3.10.1.6 Castings & Forgings	0.871	144.0	142.0	142.3	142.4	143.8
1.3.10.1.7 Ferro alloys	0.137	149.8	148.4	190.3	190.3	200.1
1.3.10.2 Non-Ferrous Metals	1.004	164.2	162.8	165.1	165.4	165.8
1.3.10.2.1 Aluminium	0.489	137.3	134.6	139.3	139.4	140.1
1.3.10.2.2 Other Non-Ferrous Metals	0.515	189.7	189.7	189.6	190.1	190.3
1.3.10.3 Metal Products	1.680	210.4	214.5	216.9	219.1	220.2
1.3.11 Machinery & Machine Tools	8.931	135.0	135.0	135.6	135.4	135.4
1.3.11.1 Agricultural Machinery & Implements	0.139	149.1	149.0	153.9	153.9	154.0
1.3.11.2 Industrial Machinery	1.838	153.5	153.5	154.0	153.9	153.9
1.3.11.3 Construction Machinery	0.045	141.5	141.5	141.6	141.6	141.6
1.3.11.4 Machine Tools	0.367	167.6	175.8	175.2	170.9	170.0
1.3.11.5 Air Conditioner & Refrigerators	0.429	120.8	121.2	121.3	121.3	121.3
1.3.11.6 Non-Electrical Machinery	1.026	127.6	127.6	128.4	128.4	128.5
1.3.11.7 Electrical Machinery, Equipment & Batteries	2.343	138.2	138.0	138.9	138.9	138.9
1.3.11.8 Electrical Accessories, Wires, Cables etc.	1.063	155.5	153.1	153.6	153.4	154.1
1.3.11.9 Electrical Apparatus & Appliances	0.337	121.8	122.0	124.1	124.0	124.0
1.3.11.10 Electronics Items	0.961	89.2	89.4	89.2	89.2	88.9
1.3.11.11 IT Hardware	0.267	91.7	91.7	91.7	92.0	92.0
1.3.11.12 Communication Equipments	0.118	99.0	99.6	99.2	99.2	99.3
1.3.12 Transport, Equipment & Parts	5.213	138.1	139.0	139.9	139.8	140.5
1.3.12.1 Automotives	4.231	137.1	138.3	139.3	139.2	139.9
1.3.12.2 Auto Parts	0.804	140.3	140.2	140.4	140.4	141.1
1.3.12.3 Other Transport Equipments	0.178	151.0	150.6	150.6	150.7	150.7

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

No. 22: Index of Industrial Production (Base:2004-05=100)

Industry	Weight	2014-15	2015-16	April-January		January	
				2015-16	2016-17	2016	2017
	1	2	3	4	5	6	7
General Index	100.00	176.9	181.1	179.0	180.0	186.2	191.3
1 Sectoral Classification							
1.1 Mining and Quarrying	14.16	126.5	129.3	126.6	128.4	138.8	146.1
1.2 Manufacturing	75.53	186.1	189.8	187.6	187.3	194.8	199.2
1.3 Electricity	10.32	178.6	188.7	188.5	198.0	188.3	195.6
2 Use-Based Classification							
2.1 Basic Goods	45.68	167.8	173.8	172.3	179.9	178.8	188.2
2.2 Capital Goods	8.83	258.0	250.5	249.4	211.9	212.2	234.8
2.3 Intermediate Goods	15.69	153.8	157.6	156.1	159.6	162.8	159.1
2.4 Consumer Goods	29.81	178.9	184.3	180.7	181.6	202.1	200.1
2.4.1 Consumer Durables	8.46	231.0	257.2	252.1	264.4	260.5	268.1
2.4.2 Consumer Non-Durables	21.35	158.3	155.4	152.3	148.8	178.9	173.2

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

Government Accounts and Treasury Bills

No. 23: Union Government Accounts at a Glance

(Amount in ₹ Billion)

Item	Financial Year	April–February			
		2016-17 (Revised Estimates)	2016-17 (Actuals)	2015-16 (Actuals)	Percentage to Revised Estimates
					2016-17
		1	2	3	4
1 Revenue Receipts		14,235.6	10,941.8	9,470.5	76.9
1.1 Tax Revenue (Net)		10,887.9	8,852.7	7,357.8	81.3
1.2 Non-Tax Revenue		3,347.7	2,089.1	2,112.7	62.4
2 Capital Receipts		5,908.5	6,588.4	6,088.2	111.5
2.1 Recovery of Loans		110.7	141.8	174.3	128.1
2.2 Other Receipts		455.0	390.4	185.2	85.8
2.3 Borrowings and Other Liabilities		5,342.7	6,056.1	5,728.7	113.4
3 Total Receipts (1+2)		20,144.1	17,530.2	15,558.7	87.0
4 Non-Plan Expenditure		14,306.0	12,714.8	11,586.6	88.9
4.1 On Revenue Account		13,320.2	11,853.8	10,615.8	89.0
4.1.1 Interest Payments		4,830.7	4,039.8	3,794.9	83.6
4.2 On Capital Account		985.8	861.1	970.8	87.3
5 Plan Expenditure		5,838.1	4,815.4	3,972.2	82.5
5.1 On Revenue Account		4,025.4	3,528.5	2,762.8	87.7
5.2 On Capital Account		1,812.7	1,286.9	1,209.4	71.0
6 Total Expenditure (4+5)		20,144.1	17,530.2	15,558.7	87.0
7 Revenue Expenditure (4.1+5.1)		17,345.6	15,382.2	13,378.6	88.7
8 Capital Expenditure (4.2+5.2)		2,798.5	2,148.0	2,180.1	76.8
9 Revenue Deficit (7-1)		3,110.0	4,440.4	3,908.1	142.8
10 Fiscal Deficit {6-(1+2.1+2.2)}		5,342.7	6,056.1	5,728.7	113.4
11 Gross Primary Deficit [10-4.1.1]		512.1	2,016.3	1,933.9	393.8
					209.1

Source: Controller General of Accounts, Ministry of Finance, Government of India.

No. 24: Treasury Bills – Ownership Pattern

(₹ Billion)

Item	2016-17	2016		2017					
		Feb. 26		Jan. 20	Jan. 27	Feb. 3	Feb. 10	Feb. 17	Feb. 24
		1	2	3	4	5	6	7	8
1 91-day									
1.1 Banks		323.7	386.6	229.3	230.5	189.3	198.2	212.6	228.4
1.2 Primary Dealers		243.5	268.2	210.1	224.9	204.8	175.2	147.7	150.8
1.3 State Governments		146.2	514.9	554.1	659.1	583.1	573.1	513.1	438.1
1.4 Others		343.4	356.0	669.8	633.9	675.3	678.0	672.1	633.1
2 182-day									
2.1 Banks		216.2	181.9	293.1	272.2	258.3	250.2	244.4	219.0
2.2 Primary Dealers		316.5	415.8	321.3	393.2	382.9	368.9	309.8	354.2
2.3 State Governments		193.6	62.8	174.4	174.4	174.4	174.4	174.4	194.4
2.4 Others		120.9	104.9	131.7	61.1	85.3	87.4	152.2	113.3
3 364-day									
3.1 Banks		512.3	467.5	677.6	644.8	602.6	616.5	608.7	581.4
3.2 Primary Dealers		551.8	652.2	430.3	526.2	501.5	565.5	500.3	506.5
3.3 State Governments		26.3	19.6	26.9	26.9	26.9	26.9	26.9	26.9
3.4 Others		326.4	340.7	387.8	324.8	371.4	293.4	346.5	367.6
4 14-day Intermediate									
4.1 Banks		—	—	—	—	—	—	—	—
4.2 Primary Dealers		—	—	—	—	—	—	—	—
4.3 State Governments		1,560.6	1,046.2	1,307.2	1,324.6	1,328.8	1,181.7	1,312.0	1,326.3
4.4 Others		5.1	15.8	8.4	5.6	9.2	6.3	5.7	5.8
Total Treasury Bills (Excluding 14 day Intermediate T Bills) #		3,320.8	3,771.0	4,106.5	4,172.0	4,055.7	4,007.7	3,908.8	3,813.6

14D intermediate T-Bills are non-marketable unlike 91D, 182D and 364D T-Bills. These bills are ‘intermediate’ by nature as these are liquidated to replenish shortfall in the daily minimum cash balances of State Governments

No. 25: Auctions of Treasury Bills

(Amount in ₹ 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						
		1	2	3	4	5	6	7	8	9			
91-day Treasury Bills													
2016-17													
Jan. 25	60	85	866.13	130.62	51	59.98	130.62	190.60	98.47	6.2322			
Feb. 1	60	86	779.79	22.66	27	59.99	22.66	82.65	98.48	6.1908			
Feb. 8	60	77	500.92	7.32	31	60.00	7.32	67.32	98.50	6.1081			
Feb. 15	60	70	1,009.04	3.54	24	60.00	3.54	63.54	98.48	6.1908			
Feb. 22	60	65	1,111.89	16.04	28	60.00	16.04	76.04	98.49	6.1495			
182-day Treasury Bills													
2016-17													
Jan. 25	40	72	368.29	0.07	10	39.98	0.07	40.05	96.99	6.2239			
Feb. 8	40	56	191.00	10.00	36	40.00	10.00	50.00	96.99	6.2239			
Feb. 22	40	62	240.60	20.00	25	40.00	20.00	60.00	96.97	6.2665			
364-day Treasury Bills													
2016-17													
Jan. 4	40	78	208.02	0.02	17	39.98	0.02	40.00	94.13	6.2532			
Jan. 18	40	97	341.83	0.04	13	39.98	0.04	40.02	94.13	6.2532			
Feb. 1	40	83	348.72	0.02	15	39.98	0.02	40.00	94.17	6.2079			
Feb. 15	40	73	180.27	—	38	40.00	—	40.00	94.09	6.2985			

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
February	1, 2017	4.75-6.30	6.05
February	2, 2017	4.75-6.25	5.95
February	3, 2017	4.80-6.25	5.99
February	4, 2017	4.75-6.25	5.96
February	6, 2017	4.80-6.25	5.98
February	7, 2017	4.75-6.25	6.09
February	8, 2017	4.75-6.25	6.02
February	9, 2017	4.75-6.25	6.06
February	10, 2017	4.75-6.25	6.11
February	13, 2017	4.80-6.25	6.08
February	14, 2017	4.80-6.25	6.01
February	15, 2017	4.80-6.25	5.98
February	16, 2017	4.75-6.25	6.00
February	17, 2017	4.75-6.25	6.04
February	18, 2017	4.50-6.25	6.08
February	20, 2017	4.75-6.25	5.98
February	22, 2017	4.75-6.23	5.89
February	23, 2017	4.75-6.25	5.92
February	27, 2017	4.75-6.25	5.93
February	28, 2017	4.75-6.25	5.95
March	1, 2017	4.75-6.25	6.04
March	2, 2017	4.75-6.25	5.95
March	3, 2017	4.30-6.25	5.89
March	4, 2017	4.60-6.25	6.04
March	6, 2017	4.70-6.25	5.94
March	7, 2017	4.60-6.30	5.97
March	8, 2017	4.60-6.25	5.92
March	9, 2017	4.50-6.80	5.98
March	10, 2017	4.45-6.25	6.00
March	14, 2017	4.50-6.25	5.92
March	15, 2017	4.50-6.25	5.97

Note: Includes Notice Money.

No. 27: Certificates of Deposit

Item	2016		2017		
	Feb. 19		Jan. 6	Jan. 20	Feb. 3
	1	2	3	4	5
1 Amount Outstanding (₹ Billion)	2,243.8	1,448.9	1,511.5	1,506.2	1,457.5
1.1 Issued during the fortnight (₹ Billion)	282.4	76.7	83.1	108.4	98.8
2 Rate of Interest (per cent)	7.30-8.51	6.27-6.55	6.40-6.62	6.41-6.90	6.18-6.70

No. 28: Commercial Paper

Item	2016		2017		
	Feb. 29		Jan. 15	Jan. 31	Feb. 15
	1	2	3	4	5
1 Amount Outstanding (₹ Billion)	3,557.8	4,065.9	3,813.7	4,020.3	3,726.7
1.1 Reported during the fortnight (₹ Billion)	671.8	582.9	504.6	1,044.3	772.3
2 Rate of Interest (per cent)	7.33-12.00	6.15-14.19	6.19-14.21	6.03-14.21	6.08-14.19

No. 29: Average Daily Turnover in Select Financial Markets

(₹ Billion)

Item	2016-17	2016		2017				
		Feb. 26	Jan. 20	Jan. 27	Feb. 3	Feb. 10	Feb. 17	Feb. 24
	1	2	3	4	5	6	7	8
1 Call Money	259.0	284.9	215.3	209.9	195.2	246.6	205.4	210.8
2 Notice Money	46.8	11.2	89.8	9.8	88.4	11.0	81.9	12.1
3 Term Money	8.4	6.4	8.8	4.9	6.7	5.4	5.9	6.8
4 CBLO	1,700.2	1,252.6	1,779.6	1,603.8	1,806.6	1,774.2	2,283.4	1,896.1
5 Market Repo	1,753.3	1,265.6	1,969.0	1,366.8	2,073.4	1,606.4	2,291.3	1,669.2
6 Repo in Corporate Bond	2.5	1.5	4.1	2.0	1.3	2.6	2.3	2.0
7 Forex (US \$ million)	55,345	64,117	49,373	56,020	56,746	53,571	50,183	55,158
8 Govt. of India Dated Securities	1,249.1	646.8	917.3	783.2	898.0	943.7	733.1	494.3
9 State Govt. Securities	50.7	45.9	27.9	54.0	19.9	44.5	26.8	45.5
10 Treasury Bills								
10.1 91-Day	45.1	24.6	24.5	22.7	23.0	10.8	46.2	44.3
10.2 182-Day	11.8	12.0	2.8	5.0	7.3	2.6	6.2	1.7
10.3 364-Day	18.3	14.4	5.3	5.3	9.0	13.1	10.7	12.5
10.4 Cash Management Bills	13.8	—	74.2	47.4	59.4	14.8	5.4	6.5
11 Total Govt. Securities (8+9+10)	1,388.8	743.8	1,051.9	917.7	1,016.6	1,029.5	828.3	604.7
11.1 RBI	—	1.1	0.2	187.8	1.1	2.4	1.1	0.4

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

(Amount in ₹ Billion)

Security & Type of Issue	2015-16		2015-16 (Apr.-Feb.)		2016-17 (Apr.-Feb.) *		Feb. 2016		Feb. 2017 *	
	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount	No. of Issues	Amount
	1	2	3	4	5	6	7	8	9	10
1 Equity Shares	87	240.0	70	223.1	87	268.7	6	9.0	8	7.5
1A Premium	78	225.7	64	209.8	84	258.1	5	8.7	8	6.8
1.1 Public	73	142.5	58	130.2	79	248.4	6	9.0	7	1.2
1.1.1 Premium	65	134.2	53	122.7	76	239.7	5	8.7	7	1.0
1.2 Rights	14	97.5	12	92.9	8	20.3	—	—	1	6.3
1.2.1 Premium	13	91.4	11	87.1	8	18.5	—	—	1	5.9
2 Preference Shares	—	—	—	—	—	—	—	—	—	—
2.1 Public	—	—	—	—	—	—	—	—	—	—
2.2 Rights	—	—	—	—	—	—	—	—	—	—
3 Debentures	9	27.1	9	27.1	15	293.5	—	—	—	—
3.1 Convertible	—	—	—	—	—	—	—	—	—	—
3.1.1 Public	—	—	—	—	—	—	—	—	—	—
3.1.2 Rights	—	—	—	—	—	—	—	—	—	—
3.2 Non-Convertible	9	27.1	9	27.1	15	293.5	—	—	—	—
3.2.1 Public	9	27.1	9	27.1	15	293.5	—	—	—	—
3.2.2 Rights	—	—	—	—	—	—	—	—	—	—
4 Bonds	—	—	—	—	—	—	—	—	—	—
4.1 Public	—	—	—	—	—	—	—	—	—	—
4.2 Rights	—	—	—	—	—	—	—	—	—	—
5 Total (1+2+3+4)	96	267.2	79	250.3	102	562.3	6	9.0	8	7.5
5.1 Public	82	169.7	67	157.3	94	542.0	6	9.0	7	1.2
5.2 Rights	14	97.5	12	92.9	8	20.3	—	—	1	6.3

* : Data is Provisional

Source : Securities and Exchange Board of India

External Sector

No. 31: Foreign Trade

Item	Unit	2015-16	2016				2017	
			Feb.	Oct.	Nov.	Dec.	Jan.	Feb.
		1	2	3	4	5	6	7
1 Exports	₹ Billion	17,163.8	1,422.5	1,563.3	1,359.2	1,629.8	1,507.7	1,642.7
	US \$ Million	262,290.1	20,845.7	23,421.7	20,098.8	24,002.9	22,146.5	24,490.3
1.1 Oil	₹ Billion	1,996.4	131.9	188.9	169.0	193.8	183.8	165.4
	US \$ Million	30,582.7	1,933.4	2,829.7	2,499.1	2,853.6	2,699.7	2,466.4
1.2 Non-oil	₹ Billion	15,167.4	1,290.5	1,374.5	1,190.2	1,436.0	1,323.9	1,477.3
	US \$ Million	231,707.4	18,912.4	20,592.0	17,599.7	21,149.3	19,446.8	22,023.9
2 Imports	₹ Billion	24,903.0	1,871.0	2,256.4	2,214.0	2,323.2	2,173.6	2,239.4
	US \$ Million	381,006.6	27,419.0	33,804.9	32,738.9	34,215.3	31,926.9	33,386.6
2.1 Oil	₹ Billion	5,405.0	327.6	478.0	463.3	519.8	554.2	515.2
	US \$ Million	82,944.5	4,800.2	7,161.9	6,850.9	7,655.9	8,140.8	7,681.2
2.2 Non-oil	₹ Billion	19,497.9	1,543.5	1,778.4	1,750.7	1,803.4	1,619.4	1,724.2
	US \$ Million	298,062.2	22,618.8	26,643.0	25,888.0	26,559.4	23,786.1	25,705.4
3 Trade Balance	₹ Billion	-7,739.2	-448.5	-693.1	-854.8	-693.4	-665.9	-596.7
	US \$ Million	-118,716.5	-6,573.3	-10,383.2	-12,640.1	-10,212.4	-9,780.4	-8,896.3
3.1 Oil	₹ Billion	-3,408.7	-195.6	-289.2	-294.3	-326.1	-370.4	-349.8
	US \$ Million	-52,361.8	-2,866.8	-4,332.1	-4,351.8	-4,802.3	-5,441.1	-5,214.8
3.2 Non-oil	₹ Billion	-4,330.5	-252.9	-403.9	-560.5	-367.3	-295.4	-246.9
	US \$ Million	-66,354.8	-3,706.4	-6,051.1	-8,288.3	-5,410.0	-4,339.3	-3,681.5

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

No. 32: Foreign Exchange Reserves

Item	Unit	2016	2017					
			Mar. 25	Feb. 17	Feb. 24	Mar. 3	Mar. 10	Mar. 17
		1	2	3	4	5	6	7
1 Total Reserves	₹ Billion	23,690	24,324	24,256	24,317	24,273	24,056	24,103
	US \$ Million	355,560	362,729	362,793	364,011	364,109	366,781	367,932
1.1 Foreign Currency Assets	₹ Billion	22,091	22,767	22,700	22,738	22,695	22,480	22,526
	US \$ Million	332,147	339,720	339,783	340,360	340,456	343,102	344,235
1.2 Gold	₹ Billion	1,326	1,305	1,305	1,329	1,329	1,329	1,329
	US \$ Million	19,325	19,248	19,248	19,914	19,914	19,914	19,914
1.3 SDRs	SDRs Million	1,066	1,065	1,065	1,065	1,065	1,065	1,065
	₹ Billion	100	97	97	96	96	95	95
	US \$ Million	1,488	1,444	1,444	1,434	1,435	1,445	1,452
1.4 Reserve Tranche Position in IMF	₹ Billion	174	155	155	154	154	152	153
	US \$ Million	2,600	2,317	2,318	2,303	2,305	2,321	2,331

No. 33: NRI Deposits

(US\$ Million)

Scheme	Outstanding					Flows	
	2015-16	2016		2017		2015-16	2016-17
		Feb.	Jan.	Feb.	Apr.-Feb.	Apr.-Feb.	
	1	2	3	4	5	6	
1 NRI Deposits	126,929	121,736	110,085	111,461	13,714	-14,938	
1.1 FCNR(B)	45,316	44,743	20,641	20,573	1,920	-24,743	
1.2 NR(E)RA	71,468	67,518	77,857	79,079	11,012	8,081	
1.3 NRO	10,145	9,475	11,588	11,809	783	1,724	

No. 34: Foreign Investment Inflows

(US\$ Million)

Item	2015-16	2015-16	2016-17	2016	2017	
		Apr.-Feb.	Apr.-Feb.	Feb.	Jan.	Feb.
	1	2	3	4	5	6
1.1 Net Foreign Direct Investment (1.1.1–1.1.2)	36,021	34,490	35,250	2,847	3,804	874
1.1.1 Direct Investment to India (1.1.1.1–1.1.1.2)	44,907	42,165	39,770	3,392	4,657	2,032
1.1.1.1 Gross Inflows/Gross Investments	55,559	51,695	55,822	4,514	5,281	2,656
1.1.1.1.1 Equity	41,112	38,533	42,145	3,229	4,088	1,322
1.1.1.1.1.1 Government (SIA/FIPB)	3,574	3,476	5,818	496	41	16
1.1.1.1.2 RBI	32,494	30,759	28,832	2,379	3,457	908
1.1.1.1.3 Acquisition of shares	3,933	3,300	6,380	241	478	286
1.1.1.1.4 Equity capital of unincorporated bodies	1,111	999	1,115	112	112	112
1.1.1.1.2 Reinvested earnings	10,413	9,380	11,144	1,033	1,033	1,033
1.1.1.1.3 Other capital	4,034	3,781	2,533	253	160	301
1.1.1.2 Repatriation/Disinvestment	10,652	9,530	16,052	1,122	624	624
1.1.1.2.1 Equity	10,524	9,410	15,744	1,114	622	622
1.1.1.2.2 Other capital	128	119	308	8	1	1
1.1.2 Foreign Direct Investment by India (1.1.2.1+1.1.2.2+1.1.2.3–1.1.2.4)	8,886	7,675	4,519	545	853	1,158
1.1.2.1 Equity capital	6,486	5,366	7,153	506	285	654
1.1.2.2 Reinvested Earnings	3,337	3,059	2,912	278	278	278
1.1.2.3 Other Capital	3,382	3,116	3,753	215	485	423
1.1.2.4 Repatriation/Disinvestment	4,320	3,865	9,299	454	196	196
1.2 Net Portfolio Investment (1.2.1+1.2.2+1.2.3–1.2.4)	-4,130	-5,237	-1,065	-1,502	-361	2,483
1.2.1 GDRs/ADRs	373	373	—	—	—	—
1.2.2 FIIs	-4,016	-5,374	-1,299	-1,251	-389	2,454
1.2.3 Offshore funds and others	—	—	—	—	—	—
1.2.4 Portfolio investment by India	487	237	-234	250	-28	-28
1 Foreign Investment Inflows	31,891	29,253	34,185	1,346	3,444	3,357

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

(US\$ Million)

Item	2015-16	2016		2017	
		Feb.	Dec.	Jan.	Feb.
	1	2	3	4	5
1 Outward Remittances under the LRS	4,642.6	449.3	619.1	727.5	570.3
1.1 Deposit	109.9	7.3	21.6	24.3	21.2
1.2 Purchase of immovable property	90.8	8.7	6.3	6.3	9.1
1.3 Investment in equity/debt	317.9	19.9	37.5	33.4	27.0
1.4 Gift	533.0	38.7	55.9	61.6	57.6
1.5 Donations	3.9	0.1	1.3	0.1	0.3
1.6 Travel	651.4	131.5	201.8	217.9	163.2
1.7 Maintenance of close relatives	1,372.1	137.2	160.2	194.6	168.6
1.8 Medical Treatment	17.2	1.1	1.5	1.7	1.1
1.9 Studies Abroad	1,200.0	87.0	120.3	179.1	114.5
1.10 Others	346.4	17.8	12.8	8.5	7.7

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

Item	2014-15	2015-16	2016		2017	
			March	February	March	May
	1	2	3	4	5	
36-Currency Export and Trade Based Weights (Base: 2004-05=100)						
1 Trade-Based Weights						
1.1 NEER	74.08	74.76	73.67	75.86	77.18	
1.2 REER	108.94	112.07	110.61	115.67	117.67	
2 Export-Based Weights						
2.1 NEER	75.22	76.45	75.31	77.68	79.01	
2.2 REER	111.24	114.44	112.96	117.49	119.50	
6-Currency Trade Based Weights						
1 Base: 2004-05 (April-March)=100						
1.1 NEER	68.60	67.52	66.19	68.49	69.81	
1.2 REER	119.92	122.71	121.18	127.80	130.25	
2 Base: 2015-16 (April-March)=100						
2.1 NEER	101.59	100.00	98.03	101.44	103.38	
2.2 REER	97.73	100.00	98.75	104.15	106.14	

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

(Amount in US\$ Million)

Item	2015-16	2016		2017	
		Feb.	Jan.	Feb.	Mar.
	1	2	3	4	5
1 Automatic Route					
1.1 Number	671	65	55	62	
1.2 Amount	13,412	1,023	1,389	1,674	
2 Approval Route					
2.1 Number	46	1	4	3	
2.2 Amount	10,961	330	427	553	
3 Total (1+2)					
3.1 Number	717	66	59	65	
3.2 Amount	24,373	1,353	1,816	2,227	
4 Weighted Average Maturity (in years)	6.20	7.10	6.50	4.50	
5 Interest Rate (per cent)					
5.1 Weighted Average Margin over 6-month LIBOR or reference rate for Floating Rate Loans	1.45	1.70	1.36	1.55	
5.2 Interest rate range for Fixed Rate Loans	0.00-13.00	0.00-11.50	0.00-9.50	0.00-11.20	

No. 38: India's Overall Balance of Payments

Item	(US \$ Million)					
	Oct-Dec 2015 (PR)			Oct-Dec 2016 (P)		
	Credit	Debit	Net	Credit	Debit	Net
1	2	3	4	5	6	
Overall Balance of Payments(1+2+3)	237,940	233,883	4,056	268,138	269,380	-1,242
1 CURRENT ACCOUNT (1.1+ 1.2)	122,575	129,697	-7,121	130,151	138,069	-7,919
1.1 MERCHANDISE	64,937	98,913	-33,975	68,755	102,032	-33,277
1.2 INVISIBLES (1.2.1+1.2.2+1.2.3)	57,638	30,784	26,854	61,395	36,037	25,358
1.2.1 Services	37,904	19,891	18,013	42,148	24,508	17,639
1.2.1.1 Travel	5,761	3,357	2,404	6,187	3,710	2,476
1.2.1.2 Transportation	3,310	3,450	-140	3,797	3,268	529
1.2.1.3 Insurance	449	334	115	522	413	109
1.2.1.4 G.n.i.e.	147	123	25	176	135	40
1.2.1.5 Miscellaneous	28,237	12,627	15,610	31,467	16,981	14,486
1.2.1.5.1 Software Services	19,195	639	18,556	18,967	945	18,021
1.2.1.5.2 Business Services	6,667	7,646	-979	8,319	8,067	253
1.2.1.5.3 Financial Services	958	887	72	1,210	1,624	-414
1.2.1.5.4 Communication Services	483	223	260	559	231	327
1.2.2 Transfers	15,936	687	15,250	15,276	1,382	13,894
1.2.2.1 Official	163	218	-55	110	212	-102
1.2.2.2 Private	15,773	469	15,305	15,166	1,170	13,996
1.2.3 Income	3,798	10,206	-6,408	3,972	10,147	-6,176
1.2.3.1 Investment Income	2,918	9,640	-6,722	2,965	9,516	-6,552
1.2.3.2 Compensation of Employees	880	566	314	1,007	631	376
2 CAPITAL ACCOUNT (2.1+2.2+2.3+2.4+2.5)	115,102	104,187	10,915	137,465	131,310	6,155
2.1 Foreign Investment (2.1.1+2.1.2)	63,614	52,358	11,256	66,972	68,498	-1,527
2.1.1 Foreign Direct Investment	16,982	6,280	10,702	18,567	8,753	9,814
2.1.1.1 In India	16,315	2,399	13,916	18,086	4,871	13,216
2.1.1.1.1 Equity	13,127	2,363	10,763	14,532	4,812	9,720
2.1.1.1.2 Reinvested Earnings	2,631	0	2,631	3,046	0	3,046
2.1.1.1.3 Other Capital	558	36	522	508	59	449
2.1.1.2 Abroad	667	3,881	-3,214	480	3,882	-3,401
2.1.1.2.1 Equity	667	1,934	-1,267	480	2,241	-1,760
2.1.1.2.2 Reinvested Earnings	0	834	-834	0	688	-688
2.1.1.2.3 Other Capital	0	1,113	-1,113	0	953	-953
2.1.2 Portfolio Investment	46,632	46,078	554	48,405	59,746	-11,341
2.1.2.1 In India	46,521	45,957	563	48,250	59,564	-11,314
2.1.2.1.1 FIIs	46,521	45,957	563	48,250	59,564	-11,314
2.1.2.1.1.1 Equity	36,520	37,148	-629	37,637	42,371	-4,733
2.1.2.1.1.2 Debt	10,001	8,809	1,192	10,613	17,194	-6,581
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	111	121	-9	154	181	-27
2.2 Loans (2.2.1+2.2.2+2.2.3)	28,768	31,095	-2,328	31,179	29,495	1,685
2.2.1 External Assistance	1,513	1,175	338	1,601	1,058	543
2.2.1.1 By India	15	129	-113	14	57	-43
2.2.1.2 To India	1,498	1,047	451	1,587	1,001	586
2.2.2 Commercial Borrowings	6,525	7,405	-880	6,121	7,943	-1,822
2.2.2.1 By India	432	200	232	963	280	683
2.2.2.2 To India	6,093	7,205	-1,112	5,158	7,663	-2,505
2.2.3 Short Term to India	20,729	22,515	-1,786	23,457	20,493	2,964
2.2.3.1 Suppliers' Credit > 180 days & Buyers' Credit	20,062	22,515	-2,453	22,700	20,493	2,207
2.2.3.2 Suppliers' Credit up to 180 days	667	0	667	757	0	757
2.3 Banking Capital (2.3.1+2.3.2)	17,348	16,033	1,315	30,610	27,430	3,180
2.3.1 Commercial Banks	17,347	16,033	1,314	30,610	27,427	3,182
2.3.1.1 Assets	3,731	3,941	-211	19,123	107	19,016
2.3.1.2 Liabilities	13,616	12,092	1,524	11,487	27,321	-15,834
2.3.1.2.1 Non-Resident Deposits	11,829	10,279	1,550	7,450	25,980	-18,530
2.3.2 Others	2	0	2	0	2	-2
2.4 Rupee Debt Service	0	0	0	0	0	0
2.5 Other Capital	5,372	4,701	672	8,705	5,888	2,817
3 Errors & Omissions	262	0	262	522	0	522
4 Monetary Movements (4.1+ 4.2)	0	4,056	-4,056	1,242	0	1,242
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	4,056	-4,056	1,242	0	1,242

No. 39: India's Overall Balance of Payments

Item	(₹ Billion)					
	Oct-Dec 2015 (PR)			Oct-Dec 2016 (P)		
	Credit	Debit	Net	Credit	Debit	Net
1	2	3	4	5	6	
Overall Balance of Payments(1+2+3)	15,686	15,418	267	18,079	18,163	-84
1 CURRENT ACCOUNT (1.1+ 1.2)	8,081	8,550	-469	8,775	9,309	-534
1.1 MERCHANDISE	4,281	6,521	-2,240	4,636	6,879	-2,244
1.2 INVISIBLES (1.2.1+1.2.2+1.2.3)	3,800	2,029	1,770	4,140	2,430	1,710
1.2.1 Services	2,499	1,311	1,187	2,842	1,652	1,189
1.2.1.1 Travel	380	221	158	417	250	167
1.2.1.2 Transportation	218	227	-9	256	220	36
1.2.1.3 Insurance	30	22	8	35	28	7
1.2.1.4 G.n.i.e.	10	8	2	12	9	3
1.2.1.5 Miscellaneous	1,861	832	1,029	2,122	1,145	977
1.2.1.5.1 Software Services	1,265	42	1,223	1,279	64	1,215
1.2.1.5.2 Business Services	439	504	-65	561	544	17
1.2.1.5.3 Financial Services	63	58	5	82	110	-28
1.2.1.5.4 Communication Services	32	15	17	38	16	22
1.2.2 Transfers	1,051	45	1,005	1,030	93	937
1.2.2.1 Official	11	14	-4	7	14	-7
1.2.2.2 Private	1,040	31	1,009	1,023	79	944
1.2.3 Income	250	673	-422	268	684	-416
1.2.3.1 Investment Income	192	636	-443	200	642	-442
1.2.3.2 Compensation of Employees	58	37	21	68	43	25
2 CAPITAL ACCOUNT (2.1+2.2+2.3+2.4+2.5)	7,588	6,868	720	9,269	8,854	415
2.1 Foreign Investment (2.1.1+2.1.2)	4,194	3,452	742	4,516	4,618	-103
2.1.1 Foreign Direct Investment	1,120	414	706	1,252	590	662
2.1.1.1 In India	1,076	158	917	1,219	328	891
2.1.1.1.1 Equity	865	156	710	980	324	655
2.1.1.1.2 Reinvested Earnings	173	0	173	205	0	205
2.1.1.1.3 Other Capital	37	2	34	34	4	30
2.1.1.2 Abroad	44	256	-212	32	262	-229
2.1.1.2.1 Equity	44	127	-84	32	151	-119
2.1.1.2.2 Reinvested Earnings	0	55	-55	0	46	-46
2.1.1.2.3 Other Capital	0	73	-73	0	64	-64
2.1.2 Portfolio Investment	3,074	3,038	37	3,264	4,028	-765
2.1.2.1 In India	3,067	3,030	37	3,253	4,016	-763
2.1.2.1.1 FIIs	3,067	3,030	37	3,253	4,016	-763
2.1.2.1.1.1 Equity	2,407	2,449	-41	2,538	2,857	-319
2.1.2.1.1.2 Debt	659	581	79	716	1,159	-444
2.1.2.1.2 ADR/GDRs	0	0	0	0	0	0
2.1.2.2 Abroad	7	8	-1	10	12	-2
2.2 Loans (2.2.1+2.2.2+2.2.3)	1,896	2,050	-153	2,102	1,989	114
2.2.1 External Assistance	100	77	22	108	71	37
2.2.1.1 By India	1	8	-7	1	4	-3
2.2.1.2 To India	99	69	30	107	67	40
2.2.2 Commercial Borrowings	430	488	-58	413	536	-123
2.2.2.1 By India	28	13	15	65	19	46
2.2.2.2 To India	402	475	-73	348	517	-169
2.2.3 Short Term to India	1,367	1,484	-118	1,582	1,382	200
2.2.3.1 Suppliers' Credit > 180 days & Buyers' Credit	1,323	1,484	-162	1,531	1,382	149
2.2.3.2 Suppliers' Credit up to 180 days	44	0	44	51	0	51
2.3 Banking Capital (2.3.1+2.3.2)	1,144	1,057	87	2,064	1,849	214
2.3.1 Commercial Banks	1,144	1,057	87	2,064	1,849	215
2.3.1.1 Assets	246	260	-14	1,289	7	1,282
2.3.1.2 Liabilities	898	797	100	774	1,842	-1,068
2.3.1.2.1 Non-Resident Deposits	780	678	102	502	1,752	-1,249
2.3.2 Others	0	0	0	0	0	0
2.4 Rupee Debt Service	0	0	0	0	0	0
2.5 Other Capital	354	310	44	587	397	190
3 Errors & Omissions	17	0	17	35	0	35
4 Monetary Movements (4.1+ 4.2)	0	267	-267	84	0	84
4.1 I.M.F.	0	0	0	0	0	0
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	0	267	-267	84	0	84

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

(US \$ Million)

Item	Oct-Dec 2015 (PR)			Oct-Dec 2016 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	122,564	129,675	-7,112	130,142	138,049	-7,907
1.A Goods and Services (1.A.a+1.A.b)	102,841	118,804	-15,963	110,903	126,540	-15,637
1.A.a Goods (1.A.a.1 to 1.A.a.3)	64,937	98,913	-33,975	68,755	102,032	-33,277
1.A.a.1 General merchandise on a BOP basis	64,162	89,886	-25,725	69,539	92,220	-22,681
1.A.a.2 Net exports of goods under merchanting	776	0	776	-784	0	-784
1.A.a.3 Nonmonetary gold	0	9,027	-9,027	0	9,812	-9,812
1.A.b Services (1.A.b.1 to 1.A.b.13)	37,904	19,891	18,013	42,148	24,508	17,639
1.A.b.1 Manufacturing services on physical inputs owned by others	24	10	14	22	6	16
1.A.b.2 Maintenance and repair services n.i.e.	37	93	-56	47	72	-25
1.A.b.3 Transport	3,310	3,450	-140	3,797	3,268	529
1.A.b.4 Travel	5,761	3,357	2,404	6,187	3,710	2,476
1.A.b.5 Construction	345	180	165	591	224	367
1.A.b.6 Insurance and pension services	449	334	115	522	413	109
1.A.b.7 Financial services	958	887	72	1,210	1,624	-414
1.A.b.8 Charges for the use of intellectual property n.i.e.	130	1,245	-1,114	144	1,509	-1,366
1.A.b.9 Telecommunications, computer, and information services	19,728	949	18,779	19,614	1,247	18,367
1.A.b.10 Other business services	6,667	7,646	-979	8,319	8,067	253
1.A.b.11 Personal, cultural, and recreational services	261	161	100	328	439	-111
1.A.b.12 Government goods and services n.i.e.	147	123	25	176	135	40
1.A.b.13 Others n.i.e.	86	1,457	-1,371	1,192	3,793	-2,601
1.B Primary Income (1.B.1 to 1.B.3)	3,798	10,206	-6,408	3,972	10,147	-6,176
1.B.1 Compensation of employees	880	566	314	1,007	631	376
1.B.2 Investment income	2,318	9,535	-7,217	2,323	9,365	-7,042
1.B.2.1 Direct investment	1,352	4,062	-2,710	1,174	4,620	-3,445
1.B.2.2 Portfolio investment	42	2,336	-2,294	20	1,656	-1,636
1.B.2.3 Other investment	159	3,136	-2,978	265	3,090	-2,826
1.B.2.4 Reserve assets	766	1	766	865	0	865
1.B.3 Other primary income	600	105	495	641	151	490
1.C Secondary Income (1.C.1+1.C.2)	15,925	665	15,259	15,268	1,362	13,906
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	15,773	469	15,305	15,166	1,170	13,996
1.C.1.1 Personal transfers (Current transfers between resident and/ non-resident households)	15,282	412	14,869	14,579	959	13,620
1.C.1.2 Other current transfers	492	57	435	587	211	376
1.C.2 General government	151	197	-46	101	192	-90
2 Capital Account (2.1+2.2)	64	46	18	59	78	-19
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	10	5	5	15	28	-12
2.2 Capital transfers	54	41	13	44	51	-7
3 Financial Account (3.1 to 3.5)	115,050	108,218	6,831	138,656	131,252	7,404
3.1 Direct Investment (3.1A+3.1B)	16,982	6,280	10,702	18,567	8,753	9,814
3.1.A Direct Investment in India	16,315	2,399	13,916	18,086	4,871	13,216
3.1.A.1 Equity and investment fund shares	15,757	2,363	13,394	17,578	4,812	12,766
3.1.A.1.1 Equity other than reinvestment of earnings	13,127	2,363	10,763	14,532	4,812	9,720
3.1.A.1.2 Reinvestment of earnings	2,631	0	2,631	3,046	0	3,046
3.1.A.2 Debt instruments	558	36	522	508	59	449
3.1.A.2.1 Direct investor in direct investment enterprises	558	36	522	508	59	449
3.1.B Direct Investment by India	667	3,881	-3,214	480	3,882	-3,401
3.1.B.1 Equity and investment fund shares	667	2,768	-2,101	480	2,928	-2,448
3.1.B.1.1 Equity other than reinvestment of earnings	667	1,934	-1,267	480	2,241	-1,760
3.1.B.1.2 Reinvestment of earnings	0	834	-834	0	688	-688
3.1.B.2 Debt instruments	0	1,113	-1,113	0	953	-953
3.1.B.2.1 Direct investor in direct investment enterprises	0	1,113	-1,113	0	953	-953
3.2 Portfolio Investment	46,632	46,078	554	48,405	59,746	-11,341
3.2.A Portfolio Investment in India	46,521	45,957	563	48,250	59,564	-11,314
3.2.1 Equity and investment fund shares	36,520	37,148	-629	37,637	42,371	-4,733
3.2.2 Debt securities	10,001	8,809	1,192	10,613	17,194	-6,581
3.2.B Portfolio Investment by India	111	121	-9	154	181	-27
3.3 Financial derivatives (other than reserves) and employee stock options	3,066	2,788	278	5,931	2,811	3,120
3.4 Other investment	48,370	49,016	-646	64,512	59,943	4,569
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	11,831	10,279	1,552	7,450	25,982	-18,532
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	2	0	2	0	2	-2
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	11,829	10,279	1,550	7,450	25,980	-18,530
3.4.2.3 General government	-	-	-	-	-	-
3.4.2.4 Other sectors	-	-	-	-	-	-
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	13,556	14,334	-778	30,882	10,449	20,433
3.4.3.A Loans to India	13,108	14,005	-897	29,904	10,112	19,793
3.4.3.B Loans by India	447	329	118	978	338	640
3.4.4 Insurance, pension, and standardized guarantee schemes	311	441	-130	229	223	5
3.4.5 Trade credit and advances	20,729	22,515	-1,786	23,457	20,493	2,964
3.4.6 Other accounts receivable/payable - other	1,943	1,447	496	2,494	2,795	-301
3.4.7 Special drawing rights	0	0	0	0	0	0
3.5 Reserve assets	0	4,056	-4,056	1,242	0	1,242
3.5.1 Monetary gold	-	-	-	-	-	-
3.5.2 Special drawing rights n.a.	-	-	-	-	-	-
3.5.3 Reserve position in the IMF n.a.	-	-	-	-	-	-
3.5.4 Other reserve assets (Foreign Currency Assets)	0	4,056	-4,056	1,242	0	1,242
4 Total assets/liabilities	115,050	108,218	6,831	138,656	131,252	7,404
4.1 Equity and investment fund shares	56,431	45,629	10,802	62,010	53,326	8,684
4.2 Debt instruments	56,675	57,086	-411	72,910	75,130	-2,220
4.3 Other financial assets and liabilities	1,943	5,504	-3,560	3,736	2,795	941
5 Net errors and omissions	262	-	262	522	-	522

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

(₹ Billion)

Item	Oct-Dec 2015 (PR)			Oct-Dec 2016 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	8,080	8,549	-469	8,775	9,308	-533
1.A Goods and Services (1.A.a+1.A.b)	6,780	7,832	-1,052	7,478	8,532	-1,054
1.A.a Goods (1.A.a.1 to 1.A.a.3)	4,281	6,521	-2,240	4,636	6,879	-2,244
1.A.a.1 General merchandise on a BOP basis	4,230	5,926	-1,696	4,689	6,218	-1,529
1.A.a.2 Net exports of goods under merchanting	51	0	51	-53	0	-53
1.A.a.3 Nonmonetary gold	0	595	-595	0	662	-662
1.A.b Services (1.A.b.1 to 1.A.b.13)	2,499	1,311	1,187	2,842	1,652	1,189
1.A.b.1 Manufacturing services on physical inputs owned by others	2	1	1	1	0	1
1.A.b.2 Maintenance and repair services n.i.e.	2	6	-4	3	5	-2
1.A.b.3 Transport	218	227	-9	256	220	36
1.A.b.4 Travel	380	221	158	417	250	167
1.A.b.5 Construction	23	12	11	40	15	25
1.A.b.6 Insurance and pension services	30	22	8	35	28	7
1.A.b.7 Financial services	63	58	5	82	110	-28
1.A.b.8 Charges for the use of intellectual property n.i.e.	9	82	-73	10	102	-92
1.A.b.9 Telecommunications, computer, and information services	1,301	63	1,238	1,322	84	1,238
1.A.b.10 Other business services	439	504	-65	561	544	17
1.A.b.11 Personal, cultural, and recreational services	17	11	7	22	30	-7
1.A.b.12 Government goods and services n.i.e.	10	8	2	12	9	3
1.A.b.13 Others n.i.e.	6	96	-90	80	256	-175
1.B Primary Income (1.B.1 to 1.B.3)	250	673	-422	268	684	-416
1.B.1 Compensation of employees	58	37	21	68	43	25
1.B.2 Investment income	153	629	-476	157	631	-475
1.B.2.1 Direct investment	89	268	-179	79	311	-232
1.B.2.2 Portfolio investment	3	154	-151	1	112	-110
1.B.2.3 Other investment	10	207	-196	18	208	-191
1.B.2.4 Reserve assets	51	0	50	58	0	58
1.B.3 Other primary income	40	7	33	43	10	33
1.C Secondary Income (1.C.1+1.C.2)	1,050	44	1,006	1,029	92	938
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	1,040	31	1,009	1,023	79	944
1.C.1.1 Personal transfers (Current transfers between resident and/ non-resident households)	1,007	27	980	983	65	918
1.C.1.2 Other current transfers	32	4	29	40	14	25
1.C.2 General government	10	13	-3	7	13	-6
2 Capital Account (2.1+2.2)	4	3	1	4	5	-1
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	1	0	0	1	2	-1
2.2 Capital transfers	4	3	1	3	3	0
3 Financial Account (3.1 to 3.5)	7,584	7,134	450	9,349	8,850	499
3.1 Direct Investment (3.1A+3.1B)	1,120	414	706	1,252	590	662
3.1.A Direct Investment in India	1,076	158	917	1,219	328	891
3.1.A.1 Equity and investment fund shares	1,039	156	883	1,185	324	861
3.1.A.1.1 Equity other than reinvestment of earnings	865	156	710	980	324	655
3.1.A.1.2 Reinvestment of earnings	173	0	173	205	0	205
3.1.A.2 Debt instruments	37	2	34	34	4	30
3.1.A.2.1 Direct investor in direct investment enterprises	37	2	34	34	4	30
3.1.B Direct Investment by India	44	256	-212	32	262	-229
3.1.B.1 Equity and investment fund shares	44	182	-139	32	197	-165
3.1.B.1.1 Equity other than reinvestment of earnings	44	127	-84	32	151	-119
3.1.B.1.2 Reinvestment of earnings	0	55	-55	0	46	-46
3.1.B.2 Debt instruments	0	73	-73	0	64	-64
3.1.B.2.1 Direct investor in direct investment enterprises	0	73	-73	0	64	-64
3.2 Portfolio Investment	3,074	3,038	37	3,264	4,028	-765
3.2.A Portfolio Investment in India	3,067	3,030	37	3,253	4,016	-763
3.2.1 Equity and investment fund shares	2,407	2,449	-41	2,538	2,857	-319
3.2.2 Debt securities	659	581	79	716	1,159	-444
3.2.B Portfolio Investment by India	7	8	-1	10	12	-2
3.3 Financial derivatives (other than reserves) and employee stock options	202	184	18	400	190	210
3.4 Other investment	3,189	3,231	-43	4,350	4,042	308
3.4.1 Other equity (ADRs/GDRs)	0	0	0	0	0	0
3.4.2 Currency and deposits	780	678	102	502	1,752	-1,250
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)	780	678	102	502	1,752	-1,249
3.4.2.3 General government	-	-	-	-	-	-
3.4.2.4 Other sectors	-	-	-	-	-	-
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	894	945	-51	2,082	705	1,378
3.4.3.A Loans to India	864	923	-59	2,016	682	1,335
3.4.3.B Loans by India	29	22	8	66	23	43
3.4.4 Insurance, pension, and standardized guarantee schemes	20	29	-9	15	15	0
3.4.5 Trade credit and advances	1,367	1,484	-118	1,582	1,382	200
3.4.6 Other accounts receivable/payable - other	128	95	33	168	188	-20
3.4.7 Special drawing rights	0	0	0	0	0	0
3.5 Reserve assets	0	267	-267	84	0	84
3.5.1 Monetary gold	-	-	-	-	-	-
3.5.2 Special drawing rights n.a.	-	-	-	-	-	-
3.5.3 Reserve position in the IMF n.a.	-	-	-	-	-	-
3.5.4 Other reserve assets (Foreign Currency Assets)	0	267	-267	84	0	84
4 Total assets/liabilities	7,584	7,134	450	9,349	8,850	499
4.1 Equity and investment fund shares	3,720	3,008	712	4,181	3,595	585
4.2 Debt instruments	3,736	3,763	-27	4,916	5,066	-150
4.3 Other financial assets and liabilities	128	363	-235	252	188	63
5 Net errors and omissions	17	-	17	35	-	35

No. 42: International Investment Position

(US\$ Million)

Item	As on Financial Year /Quarter End							
	2015-16		2015		2016			
			Dec.		Sep.		Dec.	
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
	1	2	3	4	5	6	7	8
1 Direct Investment Abroad/in India	141,626	293,854	139,038	282,609	140,733	311,691	144,134	318,502
1.1 Equity Capital and Reinvested Earnings	96,961	280,267	95,122	269,456	94,176	297,517	96,623	304,514
1.2 Other Capital	44,665	13,587	43,916	13,153	46,557	14,174	47,511	13,988
2 Portfolio Investment	2,461	224,783	1,710	225,292	2,256	232,086	2,283	221,183
2.1 Equity	1,541	141,864	1,568	141,693	1,943	148,085	2,280	140,567
2.2 Debt	919	82,919	143	83,599	313	84,001	4	80,616
3 Other Investment	45,850	392,571	41,656	386,525	50,396	390,049	36,124	366,419
3.1 Trade Credit	2,913	82,284	4,548	79,551	2,236	81,964	1,949	84,778
3.2 Loan	6,713	170,472	3,683	170,749	6,258	166,897	4,245	160,295
3.3 Currency and Deposits	20,861	127,109	17,322	122,800	26,535	130,220	14,594	110,019
3.4 Other Assets/Liabilities	15,363	12,706	16,103	13,425	15,368	10,968	15,335	11,327
4 Reserves	360,177	—	350,381	—	371,990	—	358,898	—
5 Total Assets/ Liabilities	550,114	911,208	532,786	894,426	565,376	933,826	541,439	906,104
6 IIP (Assets - Liabilities)		-361,094		-361,640		-368,450		-364,664

Payment and Settlement Systems

No. 43: Payment System Indicators

System			Volume (Million)				Value (₹ Billion)	
	2015-16	2016	2017		2015-16	2016	2017	
			Dec.	Jan.			Dec.	Jan.
	1	2	3	4	5	6	7	8
1 RTGS	98.34	8.84	9.33	9.11	1,035,551.64	110,980.33	100,602.54	95,266.75
1.1 Customer Transactions	93.95	8.47	8.98	8.80	700,899.82	72,702.57	68,863.65	66,382.31
1.2 Interbank Transactions	4.37	0.37	0.35	0.31	123,678.19	11,393.90	8,622.42	7,836.50
1.3 Interbank Clearing	0.016	0.002	0.002	0.002	210,973.63	26,883.86	23,116.47	21,047.93
2 CCIL Operated Systems	3.12	0.31	0.32	0.25	807,370.42	95,947.71	88,068.84	75,377.92
2.1 CBLO	0.22	0.02	0.02	0.02	178,335.28	24,112.95	21,189.97	20,269.84
2.2 Govt. Securities Clearing	1.02	0.13	0.12	0.08	269,778.20	38,256.72	34,408.21	27,361.26
2.2.1 Outright	0.88	0.12	0.11	0.07	97,285.41	14,966.26	13,427.04	8,366.97
2.2.2 Repo	0.134	0.015	0.014	0.012	172,492.78	23,290.46	20,981.17	18,994.29
2.3 Forex Clearing	1.89	0.16	0.19	0.16	359,256.94	33,578.04	32,470.67	27,746.83
3 Paper Clearing	1,096.37	138.82	131.17	107.94	81,860.79	7,289.40	7,281.23	6,406.73
3.1 Cheque Truncation System (CTS)	958.39	130.01	118.45	100.44	69,889.15	6,811.91	6,618.44	5,993.95
3.2 MICR Clearing	—	—	—	—	—	—	—	—
3.2.1 RBI Centres	—	—	—	—	—	—	—	—
3.2.2 Other Centres	—	—	—	—	—	—	—	—
3.3 Non-MICR Clearing	137.98	8.81	12.71	7.50	11,971.64	477.49	662.79	412.78
4 Retail Electronic Clearing	3,141.53	418.98	386.31	359.28	91,408.14	12,610.71	12,399.63	11,961.49
4.1 ECS DR	224.75	0.25	0.20	0.19	1,651.50	1.55	1.43	1.31
4.2 ECS CR (includes NECS)	39.00	0.91	0.76	0.68	1,059.44	12.84	10.51	8.04
4.3 EFT/NEFT	1,252.88	166.31	164.19	148.21	83,273.11	11,537.63	11,355.08	10,877.91
4.4 Immediate Payment Service (IMPS)	220.81	52.78	62.42	59.75	1,622.26	431.92	491.25	482.21
4.5 National Automated Clearing House (NACH)	1,404.08	198.72	158.74	150.45	3,801.83	626.76	541.36	592.03
5 Cards	10,038.67	1,162.39	1,154.21	1,039.40	29,397.65	1,742.03	2,335.10	2,573.13
5.1 Credit Cards	791.67	116.46	113.24	95.08	2,437.02	312.37	328.62	286.31
5.1.1 Usage at ATMs	6.00	0.38	0.44	0.42	30.41	0.88	1.54	1.88
5.1.2 Usage at POS	785.67	116.08	112.80	94.66	2,406.62	311.49	327.08	284.43
5.2 Debit Cards	9,247.00	1,045.93	1,040.97	944.32	26,960.63	1,429.65	2,006.48	2,286.81
5.2.1 Usage at ATMs	8,073.39	630.47	712.35	692.57	25,371.36	849.34	1,516.44	1,928.38
5.2.2 Usage at POS	1,173.61	415.46	328.62	251.75	1,589.27	580.31	490.04	358.43
6 Prepaid Payment Instruments (PPIs)	748.02	261.09	295.80	280.02	487.58	97.70	110.01	96.28
6.1 m-Wallet	603.98	213.11	261.67	246.95	205.84	74.48	83.53	69.11
6.2 PPI Cards	143.47	47.93	34.08	33.03	253.77	20.89	24.22	25.19
6.3 Paper Vouchers	0.56	0.05	0.05	0.04	27.97	2.32	2.26	1.98
7 Mobile Banking	389.49	110.64	106.12	95.41	4,040.91	1,498.18	1,383.01	1,279.93
8 Cards Outstanding	686.04	789.44	846.83	869.06	—	—	—	—
8.1 Credit Card	24.51	28.32	28.85	29.08	—	—	—	—
8.2 Debit Card	661.54	761.12	817.98	839.98	—	—	—	—
9 Number of ATMs (in actuals)	212061	219793	220402	221302	—	—	—	—
10 Number of POS (in actuals)	1385668	1767733	2015847	2224977	—	—	—	—
11 Grand Total (1.1+1.2+2+3+4+5+6)	15,126.04	1,990.42	1,977.14	1,795.99	1,835,102.59	201,784.01	187,680.87	170,634.36

Note : Data for latest 12 month period is provisional.

Explanatory Notes to the Current Statistics

Table No. 1

- 1.2 & 6: Annual data are averages of months.
3.5 & 3.7: Relate to ratios of increments over financial year so far.
4.1 to 4.4, 4.8, 4.12 & 5: Relate to the last day 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.
4.9 to 4.11: Relate to the last auction day of the month/financial year.

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

- NM₂ and NM₃ 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.
L₁ and L₂ are compiled monthly and L₃ quarterly.
Wherever data are not available, the last available data have been repeated.

Table No. 13

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

Table No. 15 & 16

Data are provisional and relate to select banks which cover 95 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 & 1.1.1.1.4: 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 2012-13 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.

Table No. 45

(-): represents nil or negligible

The table format incorporates the ownership pattern of State Governments Securities and Treasury Bills along with the Central Government Securities. In addition, State Governments' holding of securities are shown as a separate category for the first time.

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.

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

Name of Publication	Price	
	India	Abroad
1. Reserve Bank of India Bulletin 2017	₹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 ^(@)) ₹2,520 (one year concessional rate ^(@))	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 2015-16	₹550 (Normal) ₹600 (inclusive of postage)	US\$ 22 (inclusive of air mail courier charges)
3. Handbook of Statistics on the Indian Economy 2015-16	₹500 (Normal) ₹550 (inclusive of postage) ₹375 (concessional) ₹425 (concessional with postage)	US\$ 50 (inclusive of air mail courier charges)
4. Report on Currency and Finance 2009-12 Fiscal-Monetary Co-ordination	₹515 (normal) ₹555 (inclusive of postage)	US\$ 16 per copy (inclusive air mail courier charges)
5. Report on Currency and Finance 2003-08 Vol. I to V (Special Issue)	₹1,100 (normal) ₹ 1,170 (inclusive of postage) ₹ 830 (concessional) ₹ 900 (concessional inclusive of postage)	US\$ 55 per copy (inclusive air mail courier charges)
6. State Finances - A Study of Budgets of 2015-16	₹430 per copy (over the counter) ₹480 per copy (including postal charges)	US\$ 22 per copy (inclusive air mail courier charges)
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