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*First Bi-monthly Monetary Policy Statement, 2016-17 by Dr. Raghuram G. Rajan, Governor**

Part A: Monetary Policy

Monetary and Liquidity Measures

On the basis of an assessment of the current and evolving macroeconomic situation, it has been decided to:

- reduce the policy repo rate under the liquidity adjustment facility (LAF) by 25 basis points from 6.75 per cent to 6.5 per cent;
- reduce the minimum daily maintenance of the cash reserve ratio (CRR) from 95 per cent of the requirement to 90 per cent with effect from the fortnight beginning April 16, 2016, while keeping the CRR unchanged at 4.0 per cent of net demand and time liabilities (NDTL);
- continue to provide liquidity as required but progressively lower the average *ex ante* liquidity deficit in the system from one per cent of NDTL to a position closer to neutrality; and
- narrow the policy rate corridor from +/-100 basis points (bps) to +/- 50 bps by reducing the MSF rate by 75 basis points and increasing the reverse repo rate by 25 basis points, with a view to ensuring finer alignment of the weighted average call rate (WACR) with the repo rate;

Consequently, the reverse repo rate under the LAF stands adjusted to 6.0 per cent, and the marginal standing facility (MSF) rate to 7.0 per cent. The Bank Rate which is aligned to the MSF rate also stands adjusted to 7.0 per cent.

Assessment

2. Since the sixth bi-monthly statement of February 2016, global economic activity has been quiescent. Perceptions of downside risks to recovery in some advanced economies (AEs) at the beginning of 2016 have eased, while major emerging market economies (EMEs) continue to contend with weak growth and still elevated inflation amidst tighter financial conditions. World trade remains subdued due to falling import demand from EMEs and stress in mining and extractive industries. In the US, consumer spending was underpinned by a strengthening labour market, but flagging exports proved to be a drag on growth in Q4 and cloud the near-term outlook. In the Euro area, tailwinds in the form of aggressive monetary policy accommodation and still low energy prices have supported activity in an environment beset with uncertainties from the migrant crisis, intensifying stress in the banking sector, and possible Brexit. While Japan escaped recession in Q4 of 2015, a combination of weak consumer spending, business investment and exports has slowed the economy in Q1 of 2016. In China, sluggish industrial production, contracting exports, capital outflows and substantial excess capacity in factories and the property market remain formidable headwinds, notwithstanding significant monetary and fiscal policy stimulus. EME commodity exporters have benefited recently from the firming up of commodity prices and risk-on investor sentiment has appreciated their currencies. Across EMEs, however, weak domestic fundamentals, lacklustre external demand and country-specific constraints continue to restrain growth.

3. Global financial markets have recouped the losses suffered in the turbulence at the beginning of the year. From mid-February, a firming up of crude prices buoyed market sentiment, allaying fears of global recessionary risks. With China reducing reserve requirements, the

* Released on April 05, 2016.

ECB expanding accommodation and the Fed providing dovish guidance while staying on hold, equity markets rallied. In bond markets across AEs and EMEs, yields gradually eased, with country-specific variations. The US dollar has retreated from January peak and has eased further in the aftermath of the FOMC's March meeting. On the other hand, the euro and the yen have appreciated, reacting perversely to exceptional accommodation. Currencies across EMEs have also appreciated as portfolio flows returned cautiously to local debt and equity markets. Gold prices have jumped 16 per cent in Q1 of 2016 on safe haven demand. Commodity prices, including oil, have picked up recently, though they still remain soft. However, the uneasy calm that prevails in financial markets could be dispelled easily by a sudden return of risk-off investor sentiment on incoming data, especially pertaining to China or to US inflation.

4. On the domestic front, gross value added (GVA) in agriculture and allied activities moderated in H2 of 2015-16, pulled down by the contraction in Q3 due to the year-on-year decline in *kharif* production. Turning to Q4, second advance estimates of the Ministry of Agriculture indicate that despite acutely low reservoir levels and a deficient north-east monsoon, *rabi* foodgrains production increased over its level a year ago – mainly in wheat and pulses – and compensated partly for the shortfall in *kharif* output. Unseasonal rains and hail in March are likely to have damaged some winter crops, particularly wheat, although full estimates of the crop loss await advance estimates. On the other hand, fertiliser production has picked up, and horticulture as well as allied activities have remained resilient, suggesting that the implicit estimate of GVA for agricultural and allied activities in Q4 in the CSO's advance estimates is likely to be achieved, if not revised upwards.

5. Value added in industry accelerated in H2, led by manufacturing which benefited from the sustained softness in input costs. By contrast, industrial production remained flat with manufacturing output shrinking since November. Robust expansion in coal output has buoyed both mining activity and electricity generation and stemmed the weakening of industrial output. However, capital goods production fell into deep contraction since November, even after excluding lumpy and volatile items like rubber insulated cable. Weak demand and competition from imports have muted the capex cycle. Consumer non-durables production has been shrinking, with a pronounced decline in Q4. This reflects the continuing slack in rural demand. On the other hand, consumer durables remained strong, even after abstracting from favourable base effects, which suggests that urban demand is holding up. With improved perceptions on overall economic conditions and income, the Reserve Bank's Consumer Confidence Survey of March 2016 shows marginal improvement in consumer sentiments. The March manufacturing purchasing managers' index (PMI) continued in expansionary mode on the back of new orders, including exports. The Reserve Bank's industrial outlook survey suggests that business expectations for Q1 of 2016-17 continue to be positive.

6. Services sector activity expanded steadily through the year, with trade, hotels, transport, communication and public administration, defence and related services turning out to be the main drivers in H2. The construction sector continues to be overburdened by unsold inventory in the residential space, although commercial real estate is being boosted by demand from information technology (IT) and IT-enabled services. Road construction has accelerated, including in terms of new awards. Cement production appears to have gained traction during H2, while steel consumption has increased at a steady pace. Various lead and coincident indicators such as air passenger traffic, air cargo volumes, foreign tourist arrivals and auto sales increased, while railway freight traffic marginally contracted. The services PMI remained in expansion mode during H2 on new business and expectations.

The outlook for services in surveys is upbeat for Q1 of 2016-17.

7. Retail inflation measured by the consumer price index (CPI) dropped sharply in February after rising for six consecutive months. This favourable development was due to a larger than anticipated decline in vegetable prices, helped by prices of pulses starting to come off the surge that began in August, and effective supply management that helped limit cereal price increases. Accordingly, food inflation eased for the first time in the second half of 2015-16. Notably, this occurred on a decline in prices rather than favourable base effects, which were at work in the first half of the year. Inflation in the fuel group moderated across electricity, kerosene, cooking gas and firewood, the latter easing pressures on rural inflation. Three months ahead household inflation expectations declined to a single digit for the second consecutive round of the survey in response to these dynamics.

8. CPI inflation excluding food and fuel edged up in February, mainly under housing, education, personal care and transport and communication, suggesting capacity constraints in the services sector. Excluding petrol and diesel from this category, inflation stayed elevated and persistent at or above 5 per cent, indicating a possible resistance level for further downward movements in the headline. The stubborn underlying inflation momentum is unlikely to be helped by the 7th Pay Commission award and the effects of the one-rank-one-pension (OROP) award, or by the cost-push effect of the increase in the service tax rate. However, rural wage growth as well as the rate of increase in corporate staff costs was moderate. Also, input and output prices polled in purchasing managers' surveys rose modestly for manufacturing and services.

9. Liquidity conditions, which had tightened since mid-December, were stretched further by the larger-than-usual accumulation of cash balances by the Government, unusually heightened and persistent demand for currency, a pick-up in bank credit and flatter deposit mobilisation at this time relative to past years. The Reserve Bank undertook liquidity operations to quell these pressures and supplemented normal operations with large amounts of liquidity injected through fine-tuning variable rate repo auctions in tenors ranging between overnight and 56 days. The average daily liquidity injection (including variable rate overnight and term repos) increased from ₹ 1,345 billion in January to ₹ 1,935 billion in March. Besides, durable liquidity was also provided through open market operations (OMOs) of the order of ₹ 514 billion and ₹ 375 billion through buy-back operations in February and March. The Reserve Bank also started conducting reverse repo and MSF operations on holidays in Mumbai to enable the frictionless functioning of the payment and settlement system.

10. Effective April 2, 2016 the statutory liquidity ratio (SLR) of scheduled commercial banks was reduced by 25 basis points from 21.5 per cent to 21.25 per cent of their NDTL. Also, from February 2016, banks were allowed to reckon additional government securities held by them up to 3 per cent of their NDTL within the mandatory SLR requirement as level 1 high quality liquid assets (HQLA) for the purpose of computing their liquidity coverage ratio (LCR), thereby taking the total carve-out from SLR available to banks equivalent to 10 per cent of their NDTL. These measures will create space for banks to increase their lending to productive sectors on competitive terms so as to support investment and growth.

11. FCNR(B) deposits and associated swaps undertaken in September 2013 are expected to mature starting September this year. It is important to note that these swaps are fully covered by the Reserve Bank's forward purchases. Moreover, the Reserve Bank will monitor developments closely to contain any unanticipated market volatility associated with the repayment.

12. While exports declined in February in US dollar terms for the fifteenth successive month, the rate of contraction narrowed to a single digit for the first time

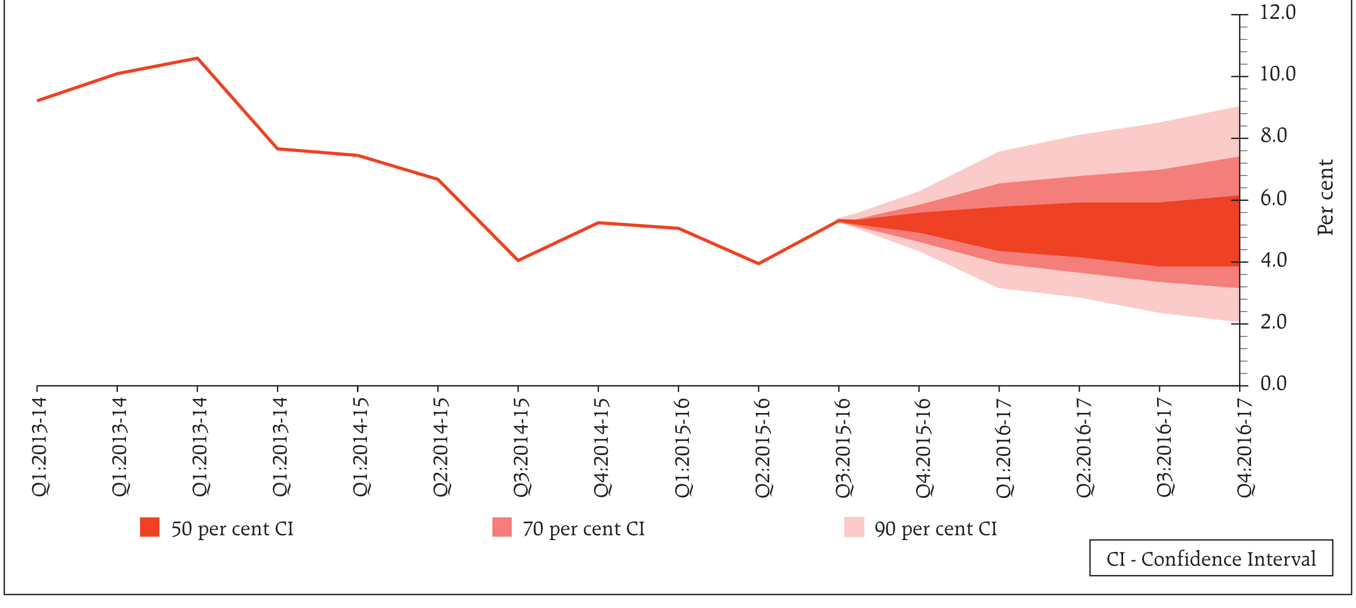
in this period and volume growth turned positive. The decline in non-POL exports was even smaller, with gems and jewellery, drugs and pharmaceuticals, electronics and chemicals driving the upturn. The prolonged contraction in imports also slowed significantly, and non-POL non-gold import growth turned positive for the first time after seven months. This reflected a sizable upsurge in imports of machinery, supported by a pick-up in imports of pearls and precious stones and electronic goods. With gold imports falling in February and March, the continuing softness in crude prices working favourably in terms of conserving the POL import bill and some gains in terms of trade, the trade deficit narrowed to its lowest monthly level since September 2013. In turn, this has likely lowered the current account deficit (CAD) in Q4 below 1.3 per cent of GDP recorded in Q3, despite a moderation in net receipts from services exports and remittances. Net inflows in the form of foreign direct investment (FDI) were robust in Q4 (up to January), more than sufficient to fund the external financing requirement. Foreign portfolio investors (FPIs), who were net sellers in the domestic capital market up to February, became net buyers in March in both equity and debt segments.

Policy Stance and Rationale

13. Inflation has evolved along the projected trajectory and the target set for January 2016 was met with a marginal undershoot. Going forward, CPI inflation is expected to decelerate modestly and remain around 5 per cent during 2016-17 with small inter-quarter variations (Chart 1). There are uncertainties surrounding this inflation path emanating from recent unseasonal rains, the likely spatial and temporal distribution of monsoon, the low reservoir levels by historical averages, and the strength of the recent upturn in commodity prices, especially oil. The persistence of inflation in certain services warrants watching, while the implementation of the 7th Central Pay Commission awards will impart an upside to the baseline through direct and indirect effects. On the other hand, there will be some offsetting downside pressures stemming from tepid demand in the global economy, Government's effective supply side measures keeping a check on food prices, and the Central Government's commendable commitment to fiscal consolidation.

14. The uneven recovery in growth in 2015-16 is likely to strengthen gradually into 2016-17, assuming a

Chart 1: Quarterly Projection of CPI Inflation (y-o-y) for Q4:2015-16 to Q4:2016-17

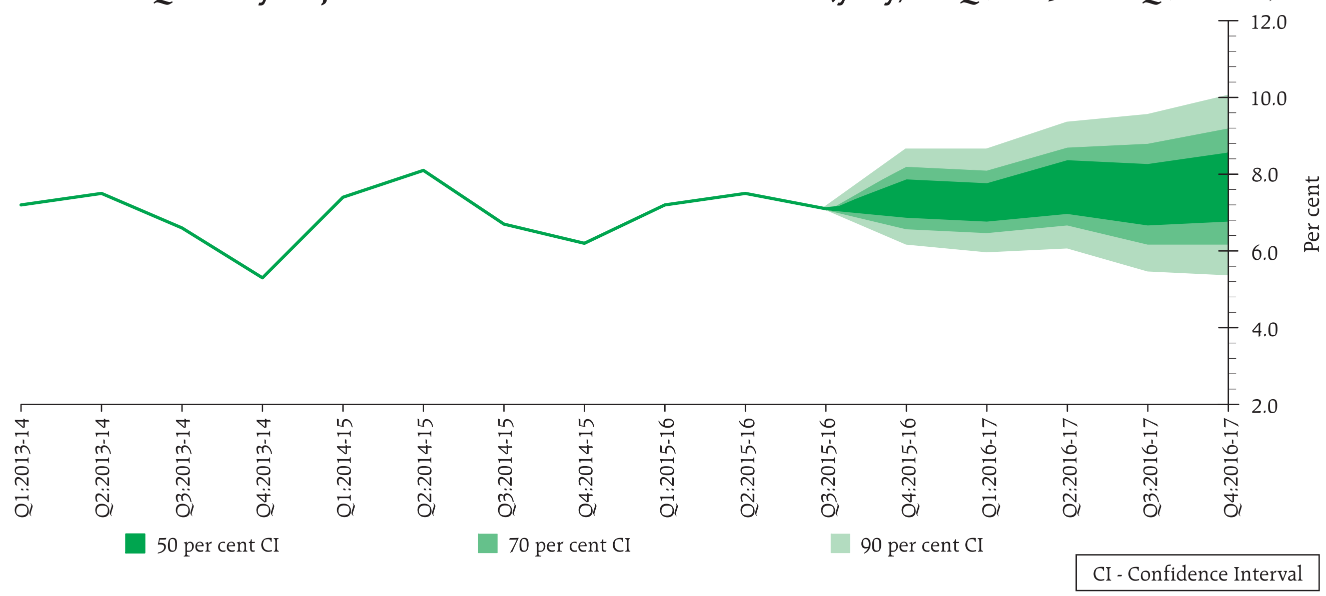


normal monsoon, the likely boost to consumption demand from the implementation of the 7th Pay Commission recommendations and OROP, and continuing monetary policy accommodation. After two consecutive years of deficient monsoon, a normal monsoon would work as a favourable supply shock, strengthening rural demand and augmenting the supply of farm products that also influence inflation. On the other hand, the fading impact of lower input costs on value addition in manufacturing, persisting corporate sector stress and risk aversion in the banking system, and the weaker global growth and trade outlook could impart a downside to growth outcomes going forward. The GVA growth projection for 2016-17 is accordingly retained at 7.6 per cent, with risks evenly balanced around it (Chart 2).

15. In its bi-monthly monetary policy statement of February 2, 2016, the Reserve Bank indicated that it awaits further data on inflation as well as on structural reforms in the Union Budget that boost growth while controlling spending. Given recent data, forecasts in Chart 1 indicate that inflation will trend towards the 5 per cent target in March 2017 under reasonable assumptions. The changes to the RBI Act to create a Monetary Policy Committee will further strengthen monetary policy credibility. In the Union Budget for 2016-17, the Government has adhered to the path of fiscal consolidation and this will support the disinflation process going forward. The Government has also set out a comprehensive strategy for reinvigorating demand in the rural economy, enhancing the economy's social and physical infrastructure, and improving the environment for doing business and deepening institutional reform. The implementation of these measures should improve supply conditions and allow efficiency and productivity gains to accrue. Given weak private investment in the face of low capacity utilisation, a reduction in the policy rate by 25 bps will help strengthen activity and aid the Government's initiatives.

16. Perhaps more important at this juncture is to ensure that current and past policy rate cuts transmit to lending rates. The reduction in small savings rates announced in March 2016, the substantial refinements in the liquidity management framework announced in this policy review and the introduction of the marginal

Chart 2: Quarterly Projection of Growth in GVA at Basic Prices (y-o-y) for Q4:2015-16 to Q4:2016-17



cost of funds based lending rate (MCLR) should improve transmission and magnify the effects of the current policy rate cut. The stance of monetary policy will remain accommodative. The Reserve Bank will continue to watch macroeconomic and financial developments in the months ahead with a view to responding with further policy action as space opens up.

Part B: Developmental and Regulatory Policies

17. This part of the Statement reviews the progress on various developmental and regulatory policy measures announced by the Reserve Bank in recent policy statements and also sets out new measures to be taken for further refining the liquidity management framework; strengthening the banking structure; broadening and deepening financial markets and extending the reach of financial services to all.

I. Liquidity Framework for Monetary Policy Operations

18. The Reserve Bank's liquidity framework was changed significantly in September 2014 in order to implement key recommendations of the Expert Committee to Revise and Strengthen the Monetary Policy Framework (Chairman: Dr. Urjit R. Patel). With over six quarters of implementation history, it is appropriate to review the experience, with a view to making necessary adjustments as well as to more fully implement the report of the Expert Committee.

19. Liquidity management is driven by two objectives: first, the need to supply or withdraw short term liquidity from the market so as to accommodate seasonal and frictional liquidity needs such as the build-up of Government balances and demand for cash; and second, the need to supply durable liquidity in the economy so as to facilitate growth, while ensuring that the monetary policy stance is supported.

20. The Reserve Bank has kept the system in an *ex ante* deficit mode on average, with a liquidity shortfall equivalent to one per cent of banks' NDTL. The rationale has been that the banking system would borrow from the Reserve Bank's liquidity facilities, ensuring that the repo rate guided short term money market rates and thereby was effective as the policy rate.

21. The first objective of meeting short term liquidity needs has been accomplished through the provision of liquidity by the Reserve Bank under its regular facilities - variable rate 14-day/7-day repo auctions equivalent to 0.75 per cent of banking system NDTL, supplemented by daily overnight fixed rate repos (at the repo rate) equivalent to 0.25 per cent of bank-wise NDTL. Frictional and seasonal mismatches that move the system away from normal liquidity provision are addressed through fine-tuning operations, including variable rate repo/reverse repo auctions of varying tenors. The weighted average call money rate has tracked the policy rate more closely than in the past, suggesting that short term liquidity needs have been adequately met.

22. The Reserve Bank aims to meet the second objective by modulating net foreign assets (NFA) and net domestic assets (NDA) growth over the course of the year, broadly consistent with the demand for liquid assets to meet transaction needs of the economy. This will ensure adequate availability of durable liquidity, regardless of short term seasonal and frictional fluctuations. The Reserve Bank tries to smooth this growth over the year. So, for example, in periods when the Reserve Bank purchases significant quantities of NFA, the growth of NDA may have to be commensurately lower and may even have to be negative through the open market sale of domestic bonds.

23. Experience suggests that the provision of short term liquidity does not substitute fully for needed durable liquidity, though durable liquidity can substitute for short term liquidity needs. Going forward, the Reserve Bank intends to first meet requirements of durable liquidity, and then use its fine-tuning operations to make short term liquidity

conditions consistent with the intended policy stance. This may result in seemingly anomalous situations in which the Reserve Bank injects durable liquidity even when it is using short term instruments to withdraw excess short term liquidity, but such actions will be consistent with our dual objectives of liquidity management.

24. Finally, given that new instruments such as variable rate reverse repo auctions allow the Reserve Bank to suck out excess short term liquidity from the system without the excess liquidity being deposited with the Reserve Bank through overnight fixed rate reverse repo, it is possible for the Reserve Bank to keep the system closer to balance on average without the operational rate falling significantly. Thus, the past rationale for keeping the system in significant average liquidity deficit no longer is as compelling, especially when the policy stance is intended to be accommodative. Moreover, given that the Reserve Bank's market operations rather than depositing or borrowing at standing facilities determine the operational interest rate, the policy rate corridor can be narrowed, as suggested by the Expert Committee.

25. Therefore, it has been decided to:

i. smooth the supply of durable liquidity over the year using asset purchases and sales as needed;

ii. progressively lower the average *ex ante* liquidity deficit in the system to a position closer to neutrality;

iii. narrow the policy rate corridor from +/-100 bps to +/- 50 bps, with a view to ensuring finer alignment of the WACR with the repo rate;

iv. ease liquidity management for banks without abandoning liquidity discipline by reducing the minimum daily maintenance of CRR from 95 per cent of the requirement to 90 per cent with effect from the fortnight beginning April 16, 2016;

v. allow substitution of securities in market repo transactions in order to facilitate development of the term money market; and

vi. consult with the Government on how to moderate the build-up of cash balances with the Reserve Bank.

Detailed guidelines are being issued separately. The Reserve Bank will monitor the consequences of these changes as it modernises the country's liquidity framework.

II. Banking Structure

26. Large Exposures: Taking into account the views and suggestions received from stakeholders on the discussion paper on 'Large Exposures Framework and Enhancing Credit Supply through Market Mechanism', a fresh discussion paper will be issued by April 30, 2016 on large borrowers meeting a part of their funding requirements from markets. A draft circular on the Large Exposures Framework will be issued for public comments in June 2016 (to be implemented by January 1, 2019).

27. Revision of regulatory framework: The Basel Committee on Banking Supervision (BCBS) has issued final standards on the standardised approach for measuring counterparty credit risk (SA-CCR), a revised framework for the capital treatment of bank exposures to central counterparties (CCPs) and final rules on revised Pillar 3 disclosure requirements. These standards will be implemented by January 1, 2017 by BCBS member jurisdictions. The Reserve Bank proposes to issue draft guidelines on these standards by May 31, 2016. The Reserve Bank will also undertake revision of the guidelines on the securitisation framework in the light of the BCBS revisions to the securitisation framework which is to be implemented by January 2018. It is proposed to issue draft guidelines on the revised securitisation framework by June 2016.

28. Rationalisation of Branch Authorisation Policy: Currently, banks provide services through a variety of business outlets – branches; extension counters; satellite offices; mobile branches; ultra small branches and the like. The current policy approach is to facilitate adequate outreach of banking outlets in unbanked areas while at the same time providing autonomy to banks to decide their business strategy. Given that regulations are written in terms of branches, with a view to facilitating financial inclusion and providing flexibility on the choice of delivery channel, it is proposed to redefine branches and permissible methods of outreach keeping in mind the various attributes of the banks and the types of services that are sought to be provided.

29. Differentiated Licensing of Banks: In addition to recently licensed differentiated banks such as payments banks and small finance banks, the Reserve Bank will explore the possibilities of licensing other differentiated banks such as custodian banks and banks concentrating on whole-sale and long-term financing. A paper in this regard will be put out for comments by September 2016.

30. Margin Requirements for Over the Counter (OTC) Derivatives: In March 2015, the BCBS and the International Organisation of Securities Commissions (IOSCO) finalised a framework on margin requirements for non-centrally cleared derivatives. A consultative paper outlining the Reserve Bank's approach to implementation of these requirements will be issued by end-April 2016 with a target of finalising the framework by end-July 2016.

31. Countercyclical Capital Buffers (CCCB): A review and empirical testing of CCCB indicators was carried out by the Reserve Bank to assess whether activation of the CCCB is warranted and it has been decided that it is not necessary to activate CCCB at this point in time.

32. Supervisory Enforcement Framework: Changes in the domestic and international financial sector environment necessitate formalisation of an improved supervisory framework for taking enforcement action against scheduled commercial banks for non-compliance of instructions and guidelines issued by the Reserve Bank. The framework, which is intended to meet the principles of natural justice and global standards of transparency, predictability, standardisation, consistency, severity and timeliness of action, will be formalised by June 2016.

33. Cyber Risks - Supervisory Assessment of Preparedness of Banks: The Reserve Bank has commenced detailed examination of IT used by banks on a pilot basis during the current year. IT examination reports are being issued separately so as to strengthen the information security preparedness of banks as well as to assess the effectiveness of IT adoption by banks. Moving forward, it is planned to cover major banks in 2016-17 and all banks from 2017-18. The Reserve Bank has constituted an Expert Panel (Chairperson: Smt. Meena Hemachandra) on IT Examination and Cyber Security to provide broad guidance on its approach.

34. Technology Support to Urban Cooperative Banks (UCBs): As a part of the Memorandum of Understanding with the State Governments/Central Government on UCBs, the Reserve Bank had agreed to provide technology support to UCBs with the objective of financial inclusion and ensuring implementation of standardised core banking solutions (CBS). It has been decided to prescribe standards and benchmarks for CBS in UCBs and provide financial assistance and technical support through the Institute for Development and Research in Banking Technology (IDRBT). The initial set-up cost in this regard will be borne by the Reserve Bank while the recurring cost will be borne by the UCBs. A circular in this regard is being issued separately.

III. Financial Markets

35. Introduction of Money Market Futures: The Working Group on Enhancing Liquidity in the Government Securities and Interest Rate Derivatives (Chairman: Shri R. Gandhi) had recommended introduction of interest rate futures based on the overnight call money borrowing rate. It is important to develop such market segments which could signal expectations of market participants, while allowing hedging of asset-liability mismatches. It has been decided to allow futures on an appropriate money market rate. The contract specifications will be decided in consultation with market participants and the Securities and Exchange Board of India (SEBI) by end-September 2016.

36. **Easier Market Access to Gilt Account Holders:** With a view to easing the process of investment by gilt account holders, it will be made incumbent on custodians to provide all gilt account holders access to the NDS-OM web facility to enable them to trade directly on the platform. A similar facility is also proposed to be extended to foreign portfolio investors (FPIs). Detailed guidelines in this regard will be issued by end-June 2016.

37. **Broadening Market Participation - Electronic Trading Platforms:** In order to broaden participation in OTC derivatives and to provide a safe trading environment, it is proposed to put in place a policy framework for authorisation of electronic platforms with linkage to an approved central counterparty for settlement. The framework will also cover forex platforms to facilitate hedging by small and retail customers. The draft framework will be placed on the website for wider feedback by end-September 2016. Furthermore, in order to make participation in OTC derivative markets through electronic platforms more broad-based, it is proposed to review the existing guidelines on OTC derivatives. Guidelines will be issued by end-May 2016.

38. **Tripartite Repo in Government Securities Market:** The Working Group on Enhancing Liquidity in the Government Securities and Interest Rate Derivatives (Chairman: Shri R. Gandhi) had recommended introduction of tripartite repo to develop a term repo market. In this context, it has been decided to undertake a comprehensive review of collateralised money market segments, including introduction of tripartite repo, in consultation with market participants. The review will be placed on the Reserve Bank's website by September 2016 for wider feedback.

39. **Review of Guidelines for Commercial Paper (CP):** With a spurt in the issuance of CPs, market participants and the Fixed Income Money Market and Derivatives Association (FIMMDA) have expressed the need for greater transparency and better dissemination of information. Accordingly, it is proposed to undertake a comprehensive review of guidelines with the objective of, *inter alia*, strengthening disclosure requirements by issuers of CPs, reviewing the role of issuing and paying agents (IPAs) and putting in place an information dissemination mechanism. Draft guidelines in this regard will be issued by end-July 2016 for wider feedback.

40. **Guidelines for Accounting of Repo/Reverse Repo Transactions with the Reserve Bank:** It is proposed to align the accounting norms to be followed by market participants for repo/reverse repo transactions under the liquidity adjustment facility (LAF) and the marginal standing facility (MSF) with the accounting guidelines prescribed for market repo transactions. Guidelines in this regard will be issued by end-May 2016.

41. **Easing of Restrictions on Plain Vanilla Forex Options:** Currently, plain vanilla currency options require adherence to stringent suitability and appropriateness norms although they are considered a generic product, while forward contracts are exempt from the same. It is proposed to bring plain vanilla forex options bought by bank clients at par with forex forwards on regulatory requirements. Detailed guidelines will be issued by end-September 2016.

42. **Forex Benchmark-RBI Reference Rate:** The Reserve Bank calculates and notifies the reference rate of the rupee (INR) against the US dollar and also

publishes INR rates against the euro, the pound sterling and the yen every day around 1:30 P.M. These rates are based on quotes polled from a select list of contributing banks. As recommended by the Committee on Financial Benchmarks (Chairman: Shri P. Vijaya Bhaskar), it has been decided to move over to a process of determining the reference rate based on actual market transactions on volume weighted basis with effect from May 2, 2016.

43. Allowing Non-Resident Indians (NRIs) to Participate in the Exchange Traded Currency Derivatives (ETCD) Market: It has been decided to permit NRIs to participate in the ETCDs, subject to limits and other conditions that are stipulated by the exchanges recognised by the SEBI. Guidelines in this regard will be issued by the Reserve Bank in consultation with the SEBI by end-June 2016.

44. Initiatives for Start-ups: In the Sixth Bi-Monthly Monetary Policy Statement for 2015-16 and the press release dated February 2, 2016 the Reserve Bank had highlighted the steps being taken with respect to the Government's initiatives to promote ease of doing business for start-ups. Guidelines/clarifications have already been issued in areas such as online submission of Form A2 for outward remittances up to certain thresholds, issue of shares without cash payments and acceptance of payments by the Indian start-ups on behalf of their overseas subsidiaries. In addition, guidelines in respect of deferred payment through escrow/ indemnity arrangement for transfer of shares, enabling investment by foreign venture capital investors (FVCIs) in start-ups and overseas investment operations for start-ups will be issued soon in consultation with the Government. Furthermore, the simplification of process for dealing with delayed reporting of FDI transactions and provisions for an enabling external commercial borrowing regime for start-ups are being examined by the Government and the Reserve Bank.

IV. Non-banking Financial Sector, Financial Inclusion and Payment and Settlement

45. Simplification of Process of Registration of New Non-banking Financial Companies (NBFCs): In order to make the process of registration of new NBFCs smoother and hassle free, it has been decided to simplify and rationalise the process of registering new NBFCs. The new application forms will be simpler and the number of documents required to be submitted will be reduced to a minimum.

46. Peer to Peer Lending (P2P): P2P lending has shown accelerated growth over the last one year. While encouraging innovations, the Reserve Bank cannot be oblivious to the risks posed by such institutions to the system. A Concept Note on P2P lending will be put up on the Reserve Bank's website for public comments by April 30, 2016 and based on the feedback, the contours of regulating P2P lending will be decided in consultation with the SEBI.

47. Strengthening Business Correspondent (BC) Infrastructure: The BC model offers significant scope for further strengthening. Accordingly, the following initiatives are proposed:

i. In order to ensure the competence of BCs and to promote quality delivery of financial services, a graded certification/training programme for BCs is proposed to be introduced. This would enable BCs with a good track record and advanced training to be entrusted with more complex tasks such as handling/delivery of financial products that go beyond deposit and remittance. The Reserve Bank will issue the necessary framework for establishing a certification programme for BCs by end-June 2016. Based on the framework, the Indian Banks' Association (IBA) will be requested to put in place a system of training and certification of BCs in coordination with external training institutes.

ii. In order to have a tracking system of BCs, it is proposed to create a registry covering all BCs, both existing and new. The registration will be online and will capture basic details including location of fixed point BCs, nature of operations and the like. This database will be updated on a quarterly basis. The necessary enabling framework would be issued by the Reserve Bank by end-June 2016 and the IBA will be requested to put in place a registry of BC agents in consultation with all stakeholders.

48. Micro, Small and Medium Enterprises (MSMEs): The Reserve Bank will lay down a framework by September 2016 for accreditation of credit counsellors who can act as facilitators for entrepreneurs to access the formal financial system with greater ease and flexibility. Credit counsellors will also assist MSMEs in preparing project reports in a professional manner which would, in turn, help banks make more informed credit decisions.

49. Payment and Settlement Systems in India – Vision 2018: The Reserve Bank will publish Vision 2018 for the payment and settlement systems in the country by end-April 2016. Vision 2018 will continue to focus on migrating to a 'less-cash' and more digital society. The endeavour would be to make regulations more responsive to technological developments and innovations in the payments space. This would be complemented by enhanced supervision of payment system operators, improvement in customer grievance redressal mechanisms and for the strengthening of the payments infrastructure.

50. The second bi-monthly monetary policy statement will be announced on June 7, 2016; the third bi-monthly monetary policy statement on August 9, 2016; the fourth bi-monthly monetary policy statement on October 4, 2016; the fifth bi-monthly monetary policy statement on December 6, 2016; and the sixth bi-monthly monetary policy statement on February 7, 2017.

I. Macroeconomic Outlook

Headline CPI inflation is projected to moderate in 2016-17 to around 5 per cent while real GDP growth is projected to improve gradually to 7.6 per cent in 2016-17. Heightened global financial market volatility continues to pose major risks to these projections.

Two landmark developments in the period since the September 2015 Monetary Policy Report (MPR) will fundamentally shape the institutional architecture of monetary policy in India. First, the inflation target of 6 per cent for January 2016 set for itself by the Reserve Bank and subsequently adopted formally under the Monetary Policy Framework Agreement (MPFA) was achieved. With inflation targets having been met consecutively since January 2015, it entrenches credibility in the commitment to the flexible inflation targeting (FIT) framework. Inflation is currently within the 4 ± 2 per cent band adopted for FIT. The path to the mid-point of the band will, however, be calibrated so that the output effects of disinflation are smoothed. Accordingly, the next milestone is set at 5 per cent for inflation by the end of 2016-17. Second, in his speech presenting the Union Budget for 2016-17, the Union Finance Minister announced that the Reserve Bank of India Act is being amended to provide statutory basis for a monetary policy framework and a monetary policy committee (MPC) (Chapter XII of the Finance Bill provides specific features of the proposal). Committee-based decision making will mark a watershed in the historical evolution of monetary policy in India. As stated by the Finance Minister, it is expected to add value and transparency to the monetary policy decisions. As the processes leading up to the functioning of the MPC are set in motion, they will bring in their train significant changes in institutional design and greater accountability.

Domestically, the macroeconomic situation has evolved broadly in line with the September baseline scenario, with real gross value added (GVA) growth and inflation trajectories moving in alignment with staff's forecasts. Chapters II and III describe forecasts and outcomes.

Two developments warrant a re-assessment of forecasts (Chart I.1). First, the significant softening of crude oil prices since November 2015 together with the signals in futures prices suggest a lower crude oil price for 2016-17 in this MPR's baseline scenario (Table I.1). Secondly, prospects for external demand for 2016 are now weaker than envisaged six months back, with downside risks amplified by the worsening macroeconomic outlook and tighter financial conditions for emerging market economies (EMEs). Overall, global risks have increased significantly.

Chart I.1: Evolution of Baseline Assumptions since September 2015 MPR

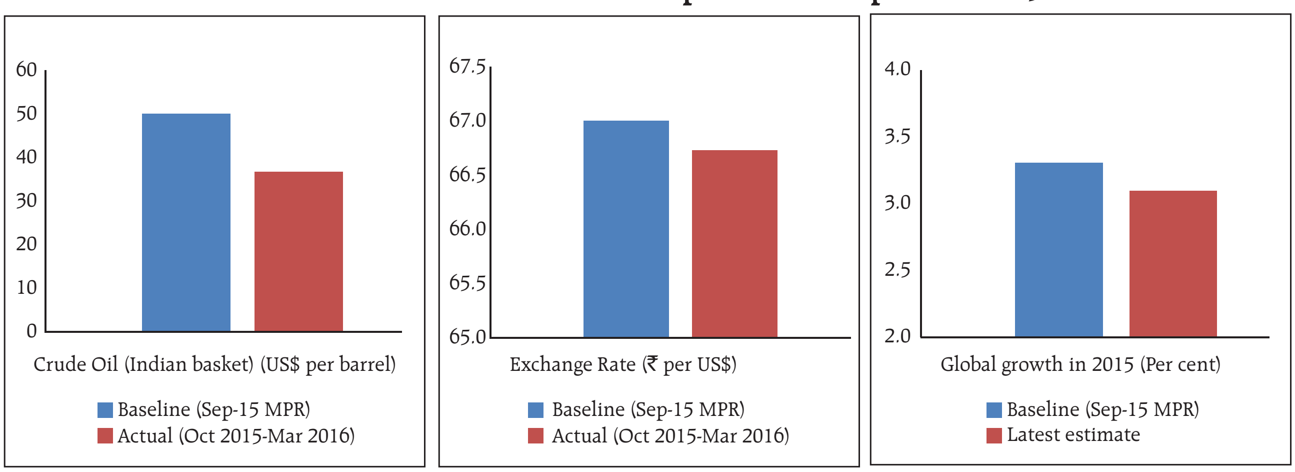


Table I.1: Baseline Assumptions for Near-Term Projections

Variable	September 2015 MPR	Current (April 2016) MPR
Crude Oil (Indian Basket)*	US$ 50 per barrel in H2:2015-16	US$ 40 per barrel during FY 2016-17
Exchange rate **	₹ 66/US$ (the then prevailing level)	Current level
Monsoon	86 per cent of long-period average (LPA) in 2015	Normal for 2016
Global growth ***	3.3 per cent in 2015 3.8 per cent in 2016	3.4 per cent in 2016 3.6 per cent in 2017
Fiscal deficit	To remain within BE 2015-16 (3.9 per cent)	To remain within BE 2016-17 (3.5 per cent)
Domestic macroeconomic/ structural policies	No major change	No major change

Note:

*: 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 72:28.

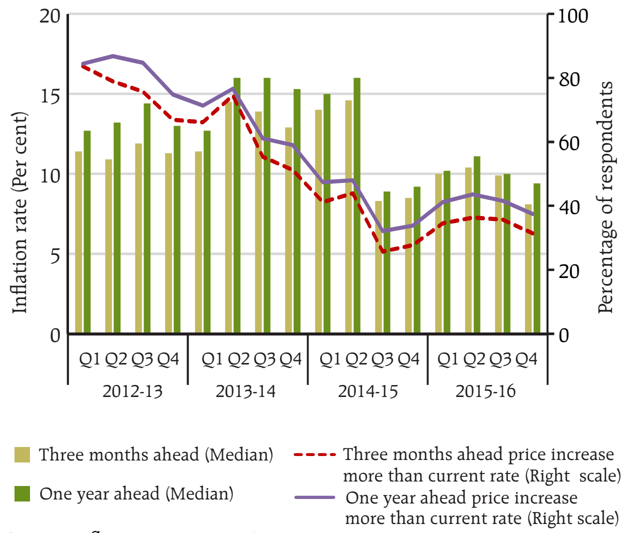
**: The exchange rate path assumed here is for the purpose of generating staff's baseline growth and inflation projections and does not indicate any 'view' on the level of the exchange rate. The Reserve Bank is guided by the need to contain volatility in the foreign exchange market and not by any specific level/ band around the exchange rate.

***: Based on projections in the July 2015 and January 2016 updates of the IMF's World Economic Outlook.

I.1 Outlook for Inflation

Inflation expectations of households, corporations and financial market participants are largely adaptive in their formation. Consequently, most recent inflation developments, and particularly those relating to salient items in consumption baskets, tend to influence these expectations. The January-March 2016 round of the Reserve Bank's inflation expectations survey of urban households indicates some softening of inflation perceptions and expectations[1]. The decline in current perceptions and three months ahead expectations - by almost 2 percentage points below the results for the previous round - was more pronounced than in one year ahead expectations (0.6 percentage points). Both

Chart I.2: Inflation Expectations of Households



Source: Inflation Expectations Survey, RBI.

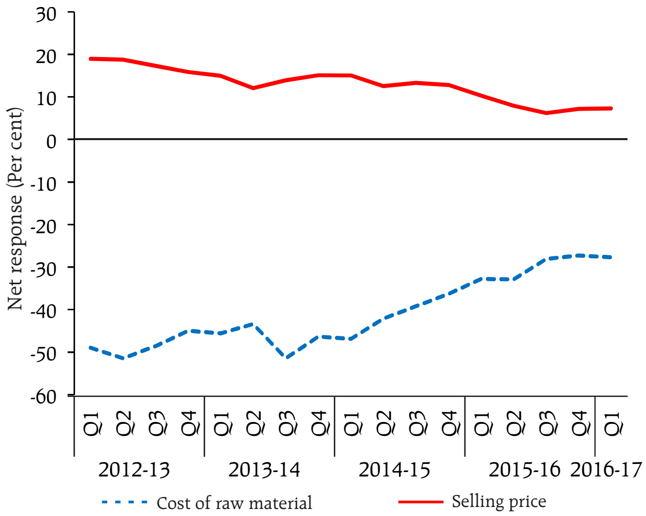
current perceptions (7.9 per cent) and three months ahead expectations (8.1 per cent) in the March 2016 round were the lowest since September 2009. Nevertheless, one year ahead inflation expectations (9.4 per cent) continue to show hysteresis and various expectations measures rule above actual inflation. The proportion of respondents expecting prices to rise by more than the current rate fell in the March 2016 round (Chart I.2).

In the March 2016 round of the *Nikkei's* manufacturing purchasing managers' survey, input costs and factory gate prices picked up. On the other hand, the January-March 2016 round of the Reserve Bank's industrial outlook survey points to expectations of stable output prices on the back of softer cost conditions (Chart I.3). Growth in staff costs in the organised sector, both manufacturing and services, decelerated during 2015-16:Q3. The Reserve Bank's industrial outlook survey suggests some salary pressures going forward. Rural wage growth exhibited moderation in 2015-16:Q4.

Professional forecasters (March 2016 round of the survey) expect inflation to remain around 5.2-5.3 per cent during 2016-17. Their medium- and long-run

[1] The survey was expanded to cover 18 cities and around 5,500 households effective March 2015, up from 16 cities (5,000 households) in the previous rounds.

Chart I.3: Expectations of Cost of Raw Material and Selling Prices



Source: Industrial Outlook Survey, RBI.

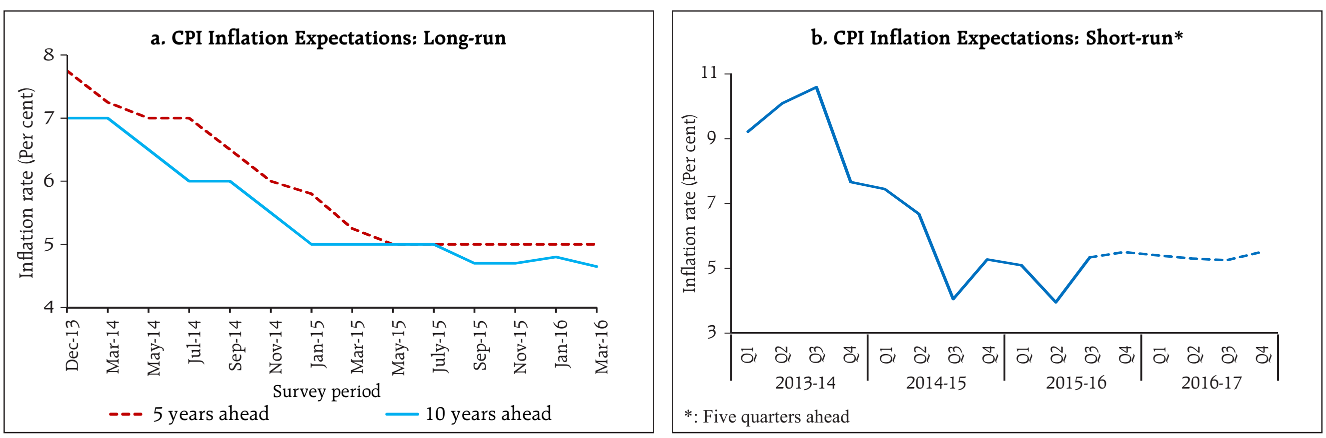
expectations (5 years and 10 years ahead, respectively) were 5.0 per cent and 4.8 per cent, respectively (Chart I.4). These poll results may be indicative of the anchoring of inflation expectations around the Reserve Bank's inflation target.

Information on the final target of monetary policy, *i.e.*, inflation, is typically lagged and provisional when it arrives. The central bank's own forecast, however, contains all the information relevant to the outlook for inflation, including the policymaker's preferences regarding the short-run trade-off between output and inflation as well as the estimated effects of shocks working their way through the economy. This inflation forecast, therefore, provides an ideal intermediate target for monetary policy, mirroring the behaviour of the final target over the relevant policy horizon.

Inflation forecast targeting frameworks have helped in containing inflation and anchoring inflation expectations in both advanced and emerging market economies. Importantly, they have also been associated with a lowering of the variability of inflation outcomes. The experiences of Canada (an advanced economy) and Czech Republic (an emerging economy) attest to these gains (Chart I.5). Enhanced credibility in the Reserve Bank's commitment to its inflation objective can play an important role in the transmission of monetary policy responses to inflation and output shocks (Box I.1).

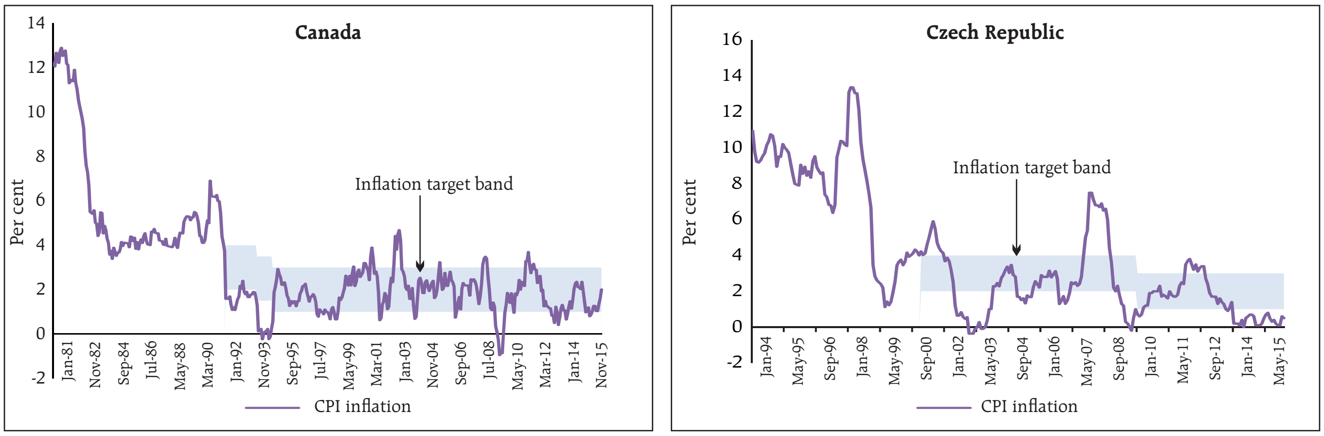
Incorporating signals from various indicators and revisions in assumptions on initial conditions into updated estimates of structural models yields a projection path in which headline CPI inflation decelerates modestly to 5.3 per cent in Q1 of 2016-17, and then abates to 5.1 per cent in Q2, 5.0 per cent in Q3 and 5.1 per cent in Q4. The 2016-17:Q4 projections are placed in a 70 per cent confidence interval of 3.2

Chart I.4: Inflation Expectations of Professional Forecasters



Source: Survey of Professional Forecasters, RBI.

Chart I.5: Inflation Forecast Targeting Experience



Sources: Statistics Canada; Bank of Canada; Czech National Bank.

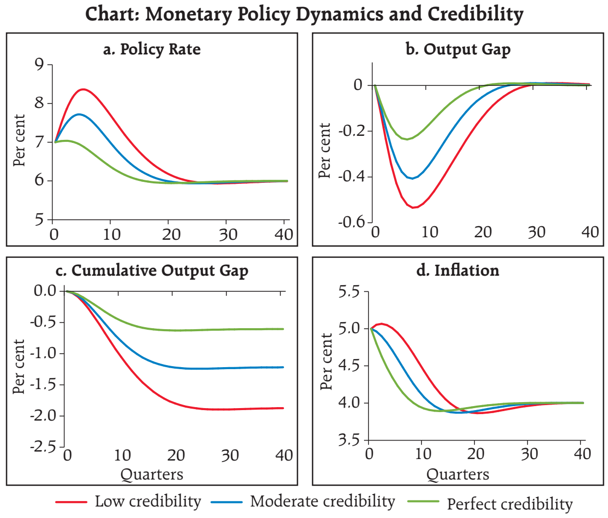
per cent to 7.7 per cent(Chart I.6). Assuming a normal monsoon, further fiscal consolidation in line with the path set out in the Union Budget and no major exogenous or policy shocks, model estimates indicate

Box I.1: Central Bank Credibility and Monetary Policy Dynamics

A monetary policy framework with a commitment to low and stable inflation warrants as a pre-condition that the central bank strengthens its credibility by achieving inflation targets, while recognising and communicating short-run trade-offs. Since January 2014, headline CPI inflation in India has moved broadly in line with the Reserve Bank's disinflation glide path and more recently, inflation expectations in the economy have started to moderate in reflection of gains in the Reserve Bank's credibility.

Optimal monetary policy responses have been calibrated under three alternative credibility scenarios in a model with India specific features - low credibility (0.25); moderate credibility (0.675); and perfect credibility (1.0). Under the low credibility scenario, the central bank has to raise the policy rate aggressively to create slack in the economy for achieving disinflation (Chart). The sacrifice ratio (the cumulative foregone annual output for each percentage point of inflation decline) is about 2.0. At the other end is the perfect credibility scenario in which the public has full confidence in the framework. The disinflation announcement by the central bank itself reduces inflation expectations. Lower expected inflation raises the real interest rate, without any need for an increase in the nominal rate (in fact, in the model, the nominal rate declines with a lag). This opens up a marginal negative output gap and the sacrifice ratio is only about 0.5. In the intermediate case of moderate credibility stock, the nominal interest rate needs to increase, although not as aggressively as in the low credibility case, so as to induce the necessary slack in the economy, with a sacrifice ratio of around 1.25.

Chart: Monetary Policy Dynamics and Credibility



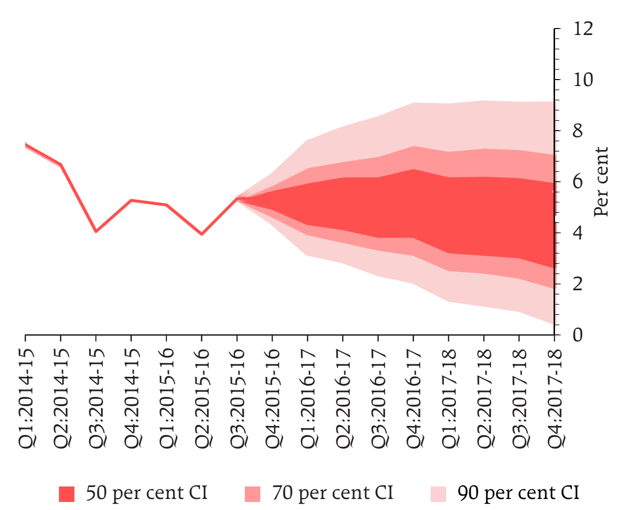
Source: Staff estimates.

References:

Alichi, A., H. Chen, K. Clinton, C. Freedman, M. Johnson, O. Kamenik, T. Kisinbay, and D. Laxton (2009). "Inflation Targeting under Imperfect Policy Credibility", IMF Working Paper, No. 09/94.

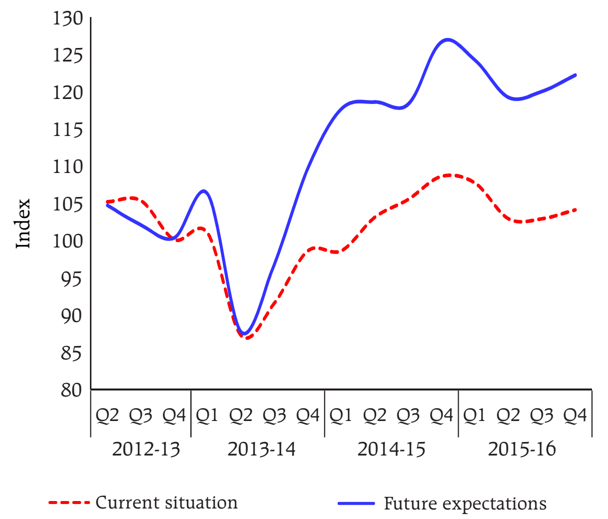
Benes, J., K. Clinton, A. George, J. John, O. Kamenik, D. Laxton, P. Mitra, G.V. Nadhanael, H. Wang and F. Zhang (2016). "Inflation Forecast Targeting for India: An Outline of the Analytical Framework" (Mimeo).

Chart I.6: Quarterly Projection of CPI Inflation (y-o-y)



Source: Staff estimates. CI: Confidence interval

Chart I.7: Consumer Confidence



Source: Consumer Confidence Survey, RBI.

that CPI inflation would moderate to 4.2 per cent in Q4 of 2017-18, with risks tilted to the upside. The implementation of one-rank-one-pension (OROP) for retired defence employees and the 7th Central Pay Commission (CPC) award, particularly with regard to house rent allowances, poses upward risks to the baseline inflation path, especially as state governments also start implementation.

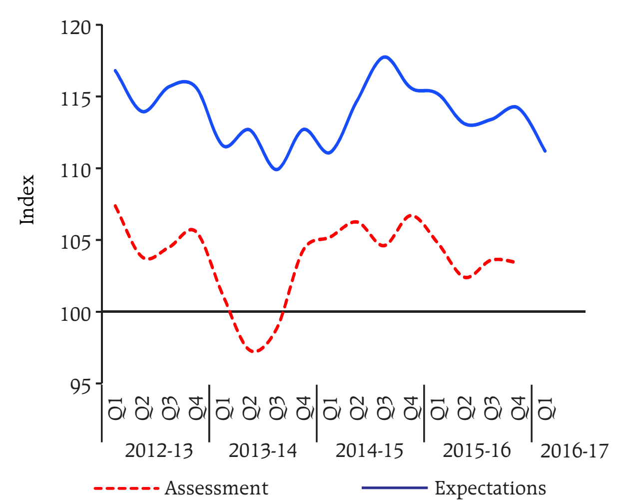
I.2 Outlook for Growth

A number of factors could impinge upon the growth outlook for 2016-17. First, slow investment recovery amidst balance sheet adjustments of corporates is likely to hinder investment demand. Secondly, with capacity utilisation in the organised industrial sector estimated at 72.5 per cent, revival of private investment is expected to be hesitant. Thirdly, global output and trade growth remain tepid, dragging down net exports. On the positive side, the government's "start-up" initiative, strong commitment to fiscal targets, and the thrust on boosting infrastructure could brighten the investment climate. Household consumption demand is expected to benefit from the Pay Commission award, continued low commodity prices, past interest rate cuts, and measures announced in the Union Budget 2016-17 to transform the rural sector.

Consumer confidence remains upbeat, as polled in the March 2016 round of the Reserve Bank's survey, with optimism on prospects for income and economic conditions (Chart I.7). A similar improvement is visible in the MNI India Consumer Sentiment survey, with households optimistic about the purchasing environment.

The corporate sector's expectations of business conditions dipped but remained positive according to the Reserve Bank's industrial outlook survey (Chart I.8).

Chart I.8: Business Assessment and Expectations



Source: Industrial Outlook Survey, RBI.

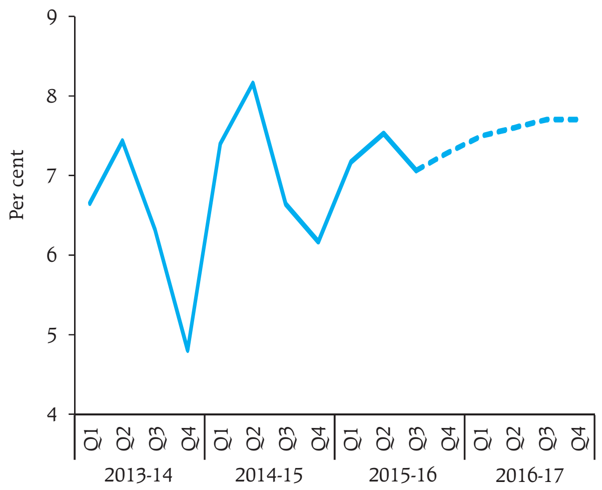
Table I.2: Business Expectations Surveys

	NCAER Business Confidence Index	FICCI Overall Business Confidence Index	Dun and Bradstreet Composite Business Optimism Index	CII Business Confidence Index
	Q3: 2015-16 (January 2016)	Q3: 2015-16 (January-February 2016)	Q1: 2016 (December 2015)	Q3: 2015-16 (January 2016)
Current level of the index	130.3	56.7	85.9	53.9
Index as per previous Survey	129.5	64.1	79.3	53.4
% change (q-o-q) sequential	0.6	-11.5	8.4	0.9
% change (y-o-y)	-12.2	-19.6	2.5	-4.1

Surveys conducted by other agencies indicate a mixed picture (Table I.2).

Professional forecasters surveyed by the Reserve Bank during March 2016 expected output growth to pick up gradually from 7.3 per cent in 2015-16:Q4 to 7.7 per cent in 2016-17:Q4, almost entirely on account of recovery in agriculture and allied activities (Chart I.9 and Table I.3).

Chart I.9: Professional Forecasters' Projected Growth in GVA



Source: Survey of Professional Forecasters, RBI.

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

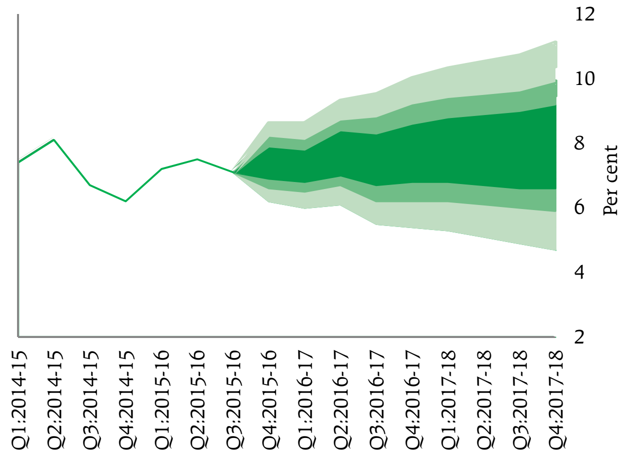
(Per cent)

	2015-16	2016-17	2017-18
Reserve Bank's Baseline Projections			
Inflation, Q4 (y-o-y)	5.4	5.1	4.2
Real Gross Value Added (GVA) Growth	7.3	7.6	7.9
Assessment of Survey of Professional Forecasters @			
GVA Growth	7.3	7.7	
Agriculture and Allied Activities	1.1	2.6	
Industry	7.5	7.4	
Services	9.0	9.1	
Gross Domestic Saving (per cent of GNDI)	30.7	30.8	
Gross Fixed Capital Formation (per cent of GDP)	29.4	30.0	
Money Supply (M3) Growth	11.6	12.7	
Bank Credit of Scheduled Commercial Banks Growth	11.4	12.3	
Combined Gross Fiscal Deficit (per cent of GDP)	6.5	6.2	
Central Government Gross Fiscal Deficit (per cent of GDP)	3.9	3.5	
Repo Rate (end period)	6.75	6.25	
CRR (end period)	4.00	4.00	
Yield of 91-days Treasury Bills (end period)	7.2	6.8	
Yield of 10-years Central Government Securities (end period)	7.6	7.4	
Overall Balance of Payments (US $ bn.)	24.7	35.0	
Merchandise Exports Growth	-16.2	1.7	
Merchandise Imports Growth	-13.5	4.4	
Merchandise Trade Balance (per cent of GDP)	-6.3	-6.4	
Current Account Balance (per cent of GDP)	-1.0	-1.3	
Capital Account Balance (per cent of GDP)	2.2	2.9	

@: Median forecasts. GNDI: Gross National Disposable Income.
Source: 39th Round of Survey of Professional Forecasters (March 2016)

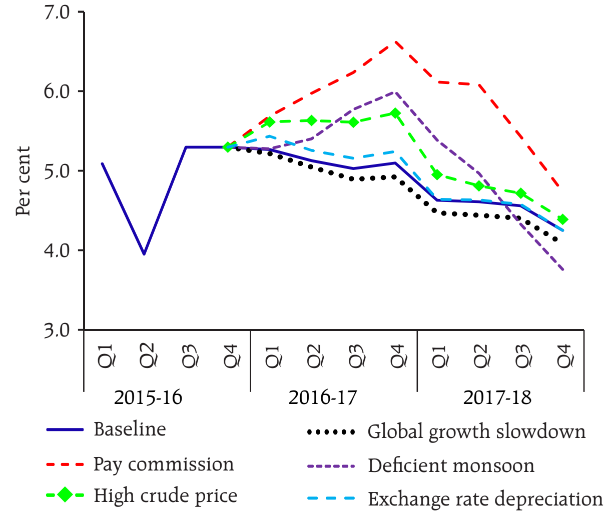
Staff projects GVA growth to improve gradually during 2016-17 to 7.6 per cent, with quarterly growth in a range of 7.3-7.7 per cent and risks evenly balanced around this baseline projection (Chart I.10). These estimates incorporate revisions in assumptions on initial conditions, structural model estimates and off-model adjustments prompted by lead and coincident indicators of economic activity, results from forward-looking surveys, and an assessment of the impact of the 7th CPC and the Union Budget. For 2017-18, real growth in GVA is projected at 7.9 per cent, assuming a

Chart I.10: Quarterly Projection of Growth in GVA at Basic Prices(y-o-y)



Source: Staff estimates. CI: Confidence interval

Chart I.11: Impact of Risk Scenarios on Baseline Inflation Path



Source: Staff estimates.

normal monsoon, continued boost to consumption from the Pay Commission award and no policy induced structural change or any major supply shock.

I.3 Balance of Risks

The baseline projections of growth and inflation are subject to several risks. Plausible alternate scenarios in which some of the risks, both downside and upside, materialise are presented below.

(i) Implementation of the Seventh Pay Commission Award

The implementation of the CPC's recommendations could impact inflation and growth through: a) the direct impact of the proposed increase in the house rent allowance (HRA); b) indirect effects operating through consumption to aggregate demand; and c) inflation expectations channel (see Chapter 2). With propagation to states, there is likely to be an amplification of the total impact on the housing inflation component and hence on overall CPI. The impact is expected to persist up to 24 months. Assuming that the Government implements the Commission's recommendations by the second quarter of 2016-17, CPI inflation could be, on average, 100-150 bps higher than the baseline in 2016-17 and 2017-18 (Chart I.11). Of course, the Government's decision on implementation of the 7th CPC is still awaited.

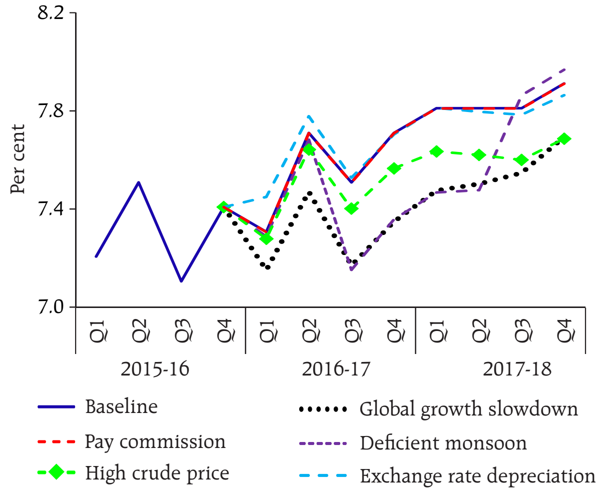
(ii) Weaker Global Growth

Recent developments point towards a weakening of global economic activity. If it materialises, unsettled financial markets could generate spillovers to the broader global economy. A widening of the slack in the global economy by 1 percentage point over the baseline will result in growth in India turning out to be 20-40 bps below the baseline (Chart I.12). Inflation would also be lower by 10-20 bps as lower demand would result in a fall in global commodity prices.

(iii) Exchange Rate

While the macroeconomic fundamentals of Indian economy remain strong, volatility in the foreign exchange market on account of external developments can impact both

Chart I.12: Impact of Risk Scenarios on Baseline Growth Path



Source: Staff estimates.

growth and inflation trajectories. A 5 per cent depreciation relative to the baseline assumption could lead to inflation turning up by 10-15 bps above the baseline forecast for 2016-17 and real GVA growth by around 5-10 bps above the baseline.

(iv) Deficient Monsoon

El Nino conditions continue to pose a risk to the south-west monsoon. About 90 per cent of all *El Nino* years have led to below normal rainfall and 65 per cent of *El Nino* years have brought droughts. Assuming a deficiency of 20 per cent in the monsoon, lower agriculture output could lower the overall GVA growth by around 40 bps in 2016-17. Food prices could consequently increase, leading to inflation rising above the baseline by 80-100 bps in 2016-17, even assuming effective government policies relating to food stocks, procurement and minimum support prices (MSPs).

(v) Rise in Crude Oil Prices

There is considerable amount of uncertainty on oil prices in view of political forces impacting oil market dynamics. Supply disruptions from geo-political developments could lead to spikes in oil prices, while weaker global demand could push prices further down. If oil prices rise to around US$50 per barrel, and assuming full pass-through to domestic fuel prices, inflation could be higher by 40-60 bps and growth could be weaker by 20-30 bps. On the other hand, a reduction in crude oil prices to around US$ 20 per barrel could reduce inflation by 80-120 bps, while boosting real GVA growth by 40-60 bps.

Sustained disinflation is beginning to have a moderating impact on inflationary expectations. Along with the favourable baseline outlook on crude oil and other commodity prices, and a still negative output gap, inflation is expected to remain inertial but quiescent over 2016-17 and 2017-18. Deviations of the south-west monsoon from normal, upside shocks to oil prices and weak growth in a number of advanced and emerging economies would pose downside risks to the baseline projections of growth and inflation set out in this MPR.

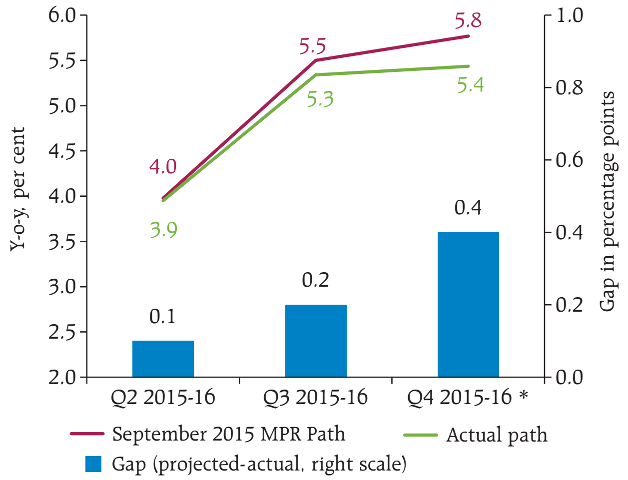
II. Prices and Costs

Consumer price inflation rose in the second half of 2015-16 before dropping in February with a sharp decline in food prices. Farm and non-farm cost pressures abated and wage growth in rural areas as well as in the organised sector remained weak.

The September 2015 MPR projected headline CPI inflation[1] to rise from 4.5 per cent in that month to an average of 5.5 per cent in Q3 and 5.8 per cent in Q4 of 2015-16. Actual inflation outcomes have closely followed this projected trajectory, and especially the turning points, *albeit* with a marginal undershoot that has become somewhat pronounced in February 2016 (Chart II.1).

Factors that explain the slightly softer than projected inflation readings are: (i) cereal inflation remaining contained by astute supply management; (ii) softening of crude oil prices from December onwards to below US$ 30 per barrel in January 2016, a 12-year low; and (iii) sharp fall in vegetable prices since December 2015. In January, headline inflation was 5.7 per cent, within the disinflation target of 6 per cent set for January 2016. A sharper than anticipated seasonal moderation in vegetable prices took inflation down to 5.2 per cent in February. These developments have considerably bolstered the likelihood that the target of 5 per cent set for 2016-17 will be achieved.

Chart II.1: Headline Inflation Path - Projection *versus* Actual



* Projections for entire Q4 2015-16 *vis-a-vis* actual average inflation during Jan.- Feb. 2016.

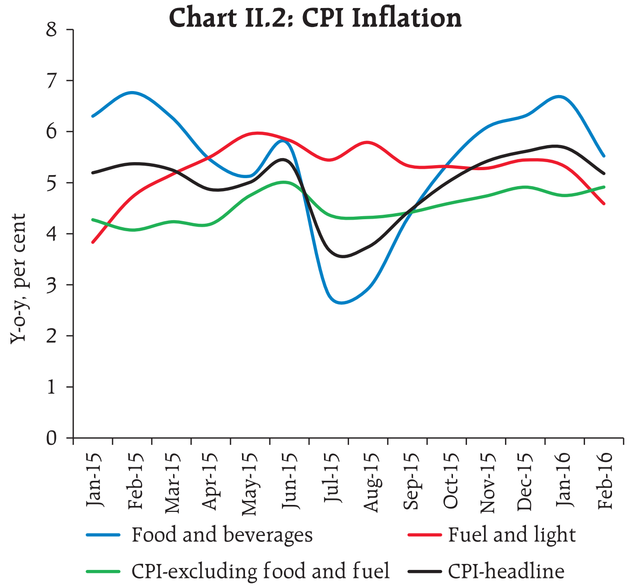
Sources: CSO and staff estimates.

II.1 Consumer Prices

Favourable base effects, which had nudged inflation into a dip during July-August 2015, waned from September and consequently, inflation rose for six months successively before subsiding in February (Chart II.2). This period was marked by persisting momentum in month-on-month (m-o-m) price changes during September-November. Although m-o-m price changes turned negative in December, the impact on overall inflation was overwhelmed by a large unfavourable base in that month. By February, the momentum of inflation declined and reinforced the favourable base effect (Chart II.3). Some food groups, especially pulses, have given the distribution of inflation a high positive skew (Chart II.4).

Even as inflation ebbs, its persistence remains unchanged reflecting the stickiness in prices of pulses

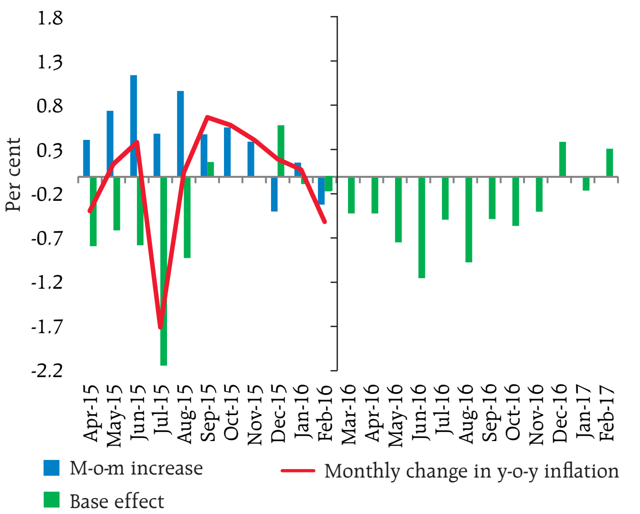
Chart II.2: CPI Inflation



Sources: CSO and staff calculations.

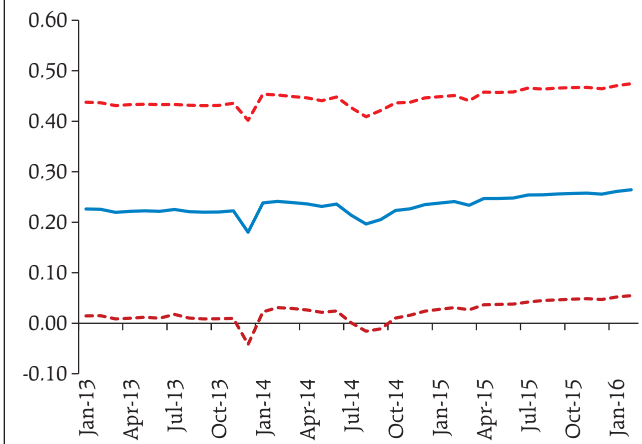
[1] Headline inflation is measured by year-on-year changes in all-India CPI Combined (Rural+Urban).

Chart II.3: CPI Inflation: Momentum and Base Effect



Sources: CSO and staff calculations.

Chart II.5: Inflation Persistence
(Rolling autoregressive coefficients of CPI using a moving window of width 84 months)

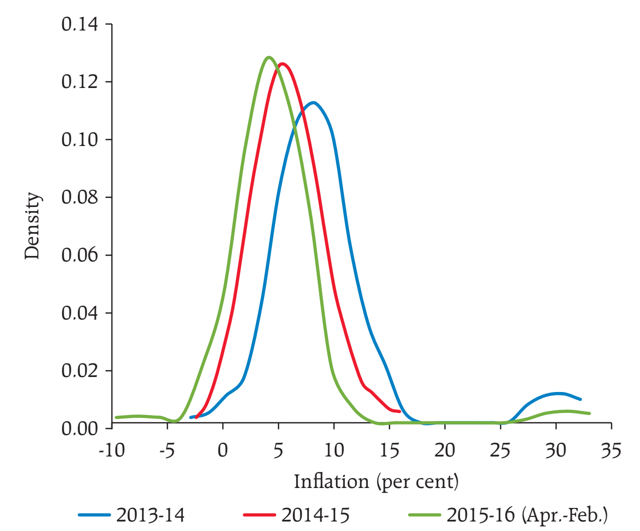


Univariate estimate of persistence along with 95 per cent confidence intervals.

Source: Staff calculations.

and several categories of services (Chart II.5). A diffusion index[2], measuring the tendency of the bulk of prices to move in one direction, shows that for overall CPI as well as constituent goods and services, readings were much above 50 per cent in Q3 and Q4, indicating broad-based price increases. In February, the diffusion index for goods fell, while for services it moved up sharply to close to the 100 per cent mark (Chart II.6).

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

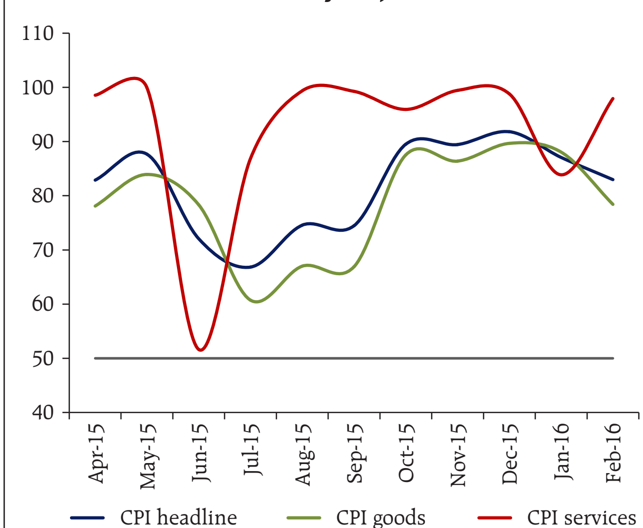


Source: Staff calculations.

II.2 Drivers of Inflation

In 2015-16 so far, services inflation remained sticky, with its average contribution during April-February slightly higher (25.5 per cent) than its weight

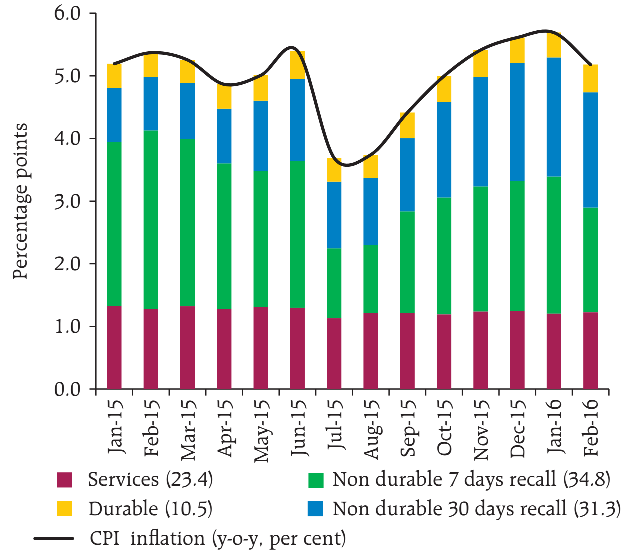
Chart II.6: CPI Diffusion Indices (Seasonally Adjusted)



Sources: CSO and staff calculations.

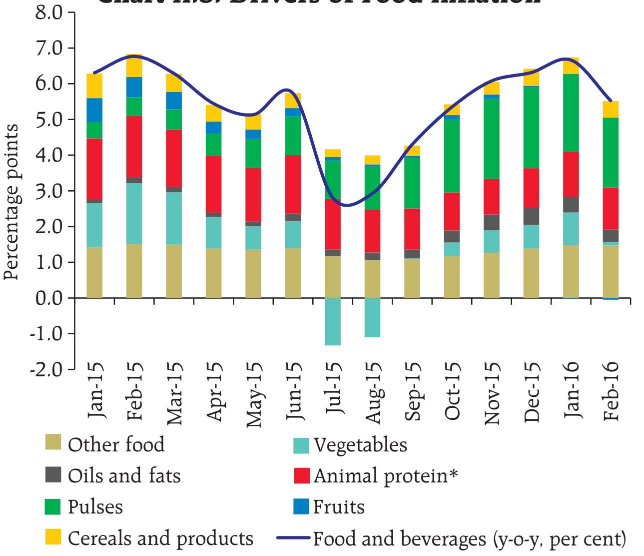
2 The CPI inflation diffusion index categorises items in the CPI basket according to whether their seasonally adjusted prices are rising, stagnant or falling over the previous month.

Chart II.7: Drivers of Headline Inflation



Note: Figures in parentheses are the groups' share in CPI.
Sources: CSO and staff calculations.

Chart II.8: Drivers of Food Inflation



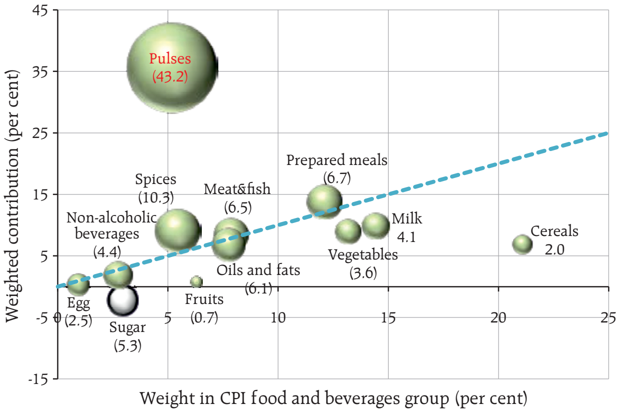
*: Milk, meat, fish and egg.
Sources: CSO and staff calculations.

(23.4) in overall CPI. The contribution of consumer durables to overall inflation has also remained steady (Chart II.7).

The category of food and beverages contributed 53 per cent to the average headline inflation (5.4 per cent). Food inflation rose unrelentingly from September 2015 to January 2016 in a broad-based manner to an intra-year peak before easing in February. With inflation in cereals, fruits and animal based proteins remaining range-bound, the price behaviour of pulses and vegetables largely determined the food inflation trajectory in this period (Chart II.8). Pulses alone contributed to over 35 per cent of food inflation despite a low share of about 5 per cent within the food and beverages group (Chart II.9). The recurrence of high pulses inflation reflects the structural gap in availability relative to demand. India is the largest producer and consumer of pulses, with cross-border trade accounting for barely 15 per cent of India's annual production. The focus of agricultural research needs to shift urgently to pulses with emphasis on developing short-duration pest- and disease-resistant varieties, seed multiplication and measures to boost crop yield so as to start off India's second green revolution.

Vegetables inflation also edged up during November 2015-January 2016 as unseasonal rains and flood in southern states limited the extent of price decline usually seen in winter months. However, as the crop arrival picked up, vegetables prices fell sharply in February, pulling down overall food inflation. In other food items, price pressures were visible in the case of sugar as global prices increased in anticipation

Chart II.9: Food Inflation Dynamics: H2 of 2015-16



The size of the bubble denotes the magnitude of inflation (figures in parentheses). The dotted line indicates that weight and weighted contribution are equal. Movements to the left of the line indicate disproportionately positive contribution to food inflation and vice versa. Data pertains to April-February.
Sources: CSO and staff calculations.

of a shortfall in production. Pressures remained persistent within the protein-rich category, especially meat and fish for which supply has not been able to match up the increasing demand.

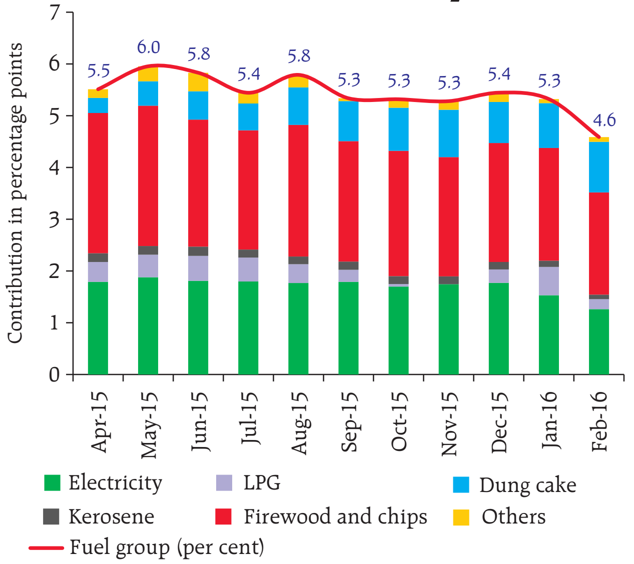
Cereals and products constitute 21.1 per cent of the CPI food basket. Their prices have risen only marginally, despite a second successive year of deficient monsoon. A range of measures were taken by the Government, including lower order of increases in minimum support prices (MSPs) and higher off-take by states to moderate price pressures. Furthermore, there has been a secular fall in world cereals prices since 2013 leading to a 45 per cent correction in global prices from their peaks. Other factors include slowdown in rural wage growth and falling input costs.

In the fuel group, inflation remained steady since September but fell sharply in February (Chart II.10). International prices for kerosene and liquefied petroleum gas (LPG) remained muted and the gap with respect to domestic administered prices of kerosene and LPG closed over the course of the financial year. Electricity inflation decelerated after December. Firewood, with the second largest weight in the fuel group, continued to remain the major inflation driver in the category.

CPI inflation excluding food and fuel edged up gradually from 4.3 per cent in August 2015 to 4.9 per cent in February 2016, largely on account of higher inflation in the sub-groups of transport and communication, and housing. Adjusted for petrol and diesel components of transportation, however, inflation in this category remained sticky with only a modest softening in Q4 print (Chart II.11).

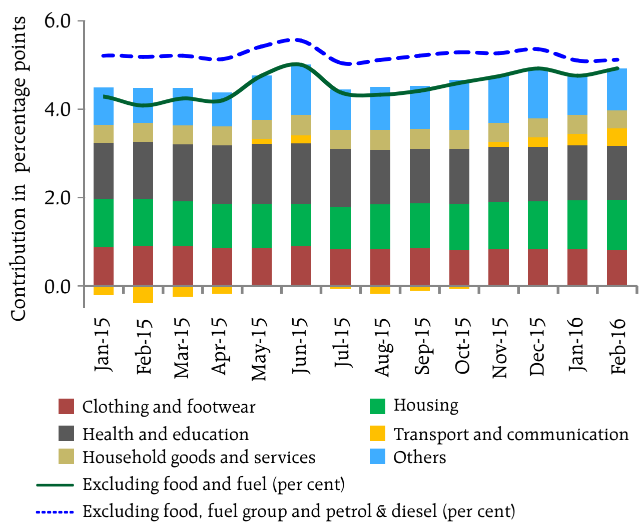
Petrol and diesel prices exhibited a slower rate of deflation from Q3 than in preceding quarters. This was on account of sequential increase in excise duty rates in petrol and diesel since November 2015 (Chart II.12). The cumulative increase in petrol and diesel excise duties by around ₹ 12 per litre and ₹ 14 per litre, respectively, since November 2014 had a direct impact of around 90 basis points on CPI inflation excluding food and fuel and around 40 basis points on headline inflation. Furthermore, in March both petrol and diesel prices increased following the increase in global crude prices.

Chart II.10: Drivers of Fuel Group Inflation

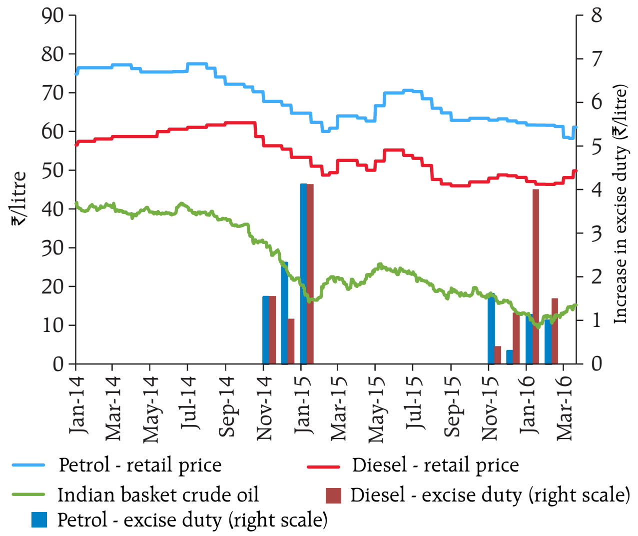


Sources: CSO and staff calculations.

Chart II.11: CPI Excluding Food and Fuel Inflation and its Drivers



Sources: CSO and staff calculations.



Sources: Bloomberg and Petroleum Planning and Analysis Cell.

Housing inflation rose gradually and continuously since September. Going forward, the forthcoming implementation of the 7th Central Pay Commission (CPC) recommendations could significantly alter the trajectory of overall inflation over the medium-term (Box II.1).

Other measures of inflation

Exclusion based measures of CPI inflation remained sticky due to the impact of non-tradable items in the CPI basket (Chart II.13). Trimmed mean measures of CPI inflation, on the other hand, softened in Q4 and remained below headline inflation.

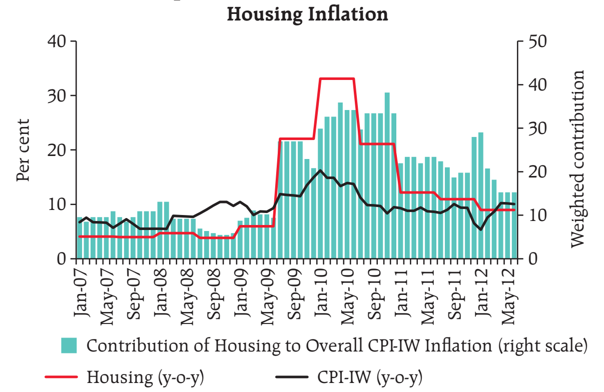
Empirical evidence suggests that food and fuel inflation affects headline inflation in India[3] through formation of high inflation expectations, wage increases

Box II.1: Implication of Central Pay Commission Awards on the Medium-term Inflation Trajectory

The implementation of the 7th Central Pay Commission (CPC) awards can have a significant bearing on the inflation trajectory through both direct and indirect channels.

In case of subsidised housing provided by the Government, rent charged for the dwelling is the house rent allowance (HRA) normally admissible to the employee along with a nominal license fee. An increase in HRA leads to an increase in imputed rent for Government provided accommodation. Such HRA awards, by their construct, seek to bring parity of housing allowances by the Government with the prevailing market rates. Thus, the direct effect on inflation comes through a higher housing index. The indirect effects stem from an increase in private consumption expenditures and through second-round increases in rental rates for housing in general which could embed higher inflation expectations in the public's perception.

The 6th CPC awards were implemented in August 2008 with HRA awards coming into effect from September



2008. On account of the methodology of collecting rental data in CPI-IW[1], the direct impact occurred with a lag during July 2009-January 2010 when the contribution of housing to overall inflation stood in excess of 25 per cent (Chart a). The direct impact of the 6th CPC awards on CPI-IW inflation was estimated at 2.5 percentage points in July 2009, which rose to around 4 percentage points by January 2010. Most of the State-

[1] In CPI-IW, the housing index has a weight of 15.3 per cent. Rental data are collected twice a year using a chain based method and the rent index is calculated once in every six months viz., January and July, and kept constant for the following five months.

(Contd....)

[3] Cashin, Paul and Rahul Anand. Ed. (2016) "Taming Indian Inflation," International Monetary Fund, February.

wise housing indices showed significant increases by July 2010, indicating quick follow-through of CPC increases to States (Table). As a result of the staggered increase in State Government employees' HRA, the rate of increase in housing index remained high till January 2012.

The indirect impact of the 6th CPC award on overall CPI-IW inflation worked out to around 60 basis points based on estimates derived from vector autoregression (VAR) and structural models.

The direct impact of the 7th CPC recommendations on headline inflation is expected to be around 150 basis points. The indirect effects are estimated to be around 40 basis points. The impact of the pay awards is likely to be seen over a period of two years (Chapter 1). Compared to the 6th CPC awards, increase in the housing index would be more quick and continuous[2] and indirect effects are likely to be smaller. Moreover, outgo of arrears under 7th CPC awards would be substantially lower but HRA rates would automatically increase when the dearness allowance of the employees crosses threshold levels[3].

Table: M-o-M Increase (per cent) in CPI-IW Housing During 6th CPC: Select States

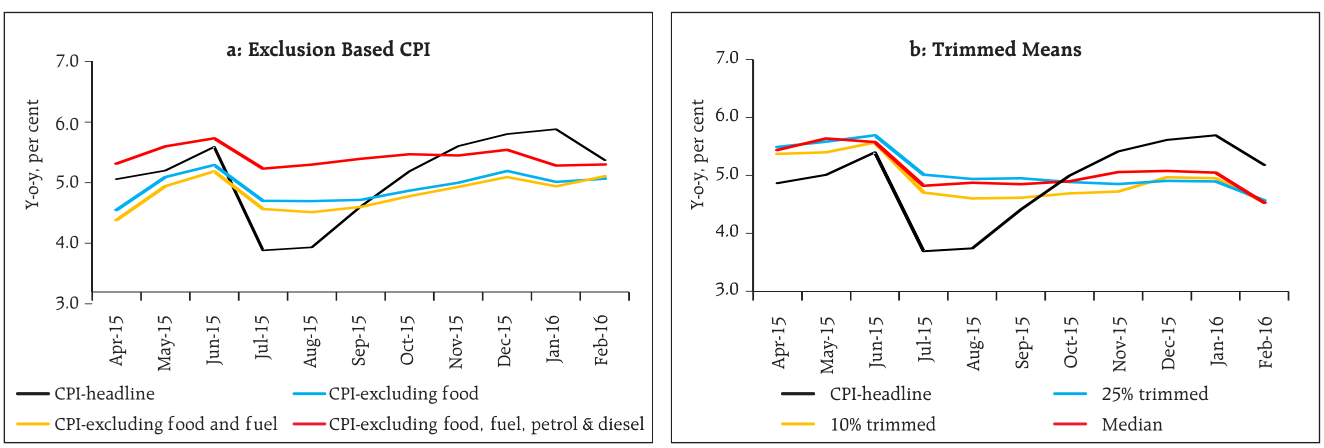
Sr.	State	Jan-09	Jul-09	Jan-10	Jul-10	Jan-11	Jul-11	Jan-12
1	Andhra Pradesh	4.8	13.5	12.4	5.4	6.3	5.3	3.2
2	Assam	1.6	5.1	4.4	1.2	1.6	9.3	5.4
3	Bihar	2.0	23.5	22.2	6.1	5.3	4.7	1.9
4	Gujarat	2.7	15.2	13.0	6.1	6.5	7.6	3.5
5	Haryana	3.7	15.3	16.0	8.1	5.0	3.1	1.9
6	Karnataka	7.6	12.9	9.7	2.5	2.4	2.4	3.1
7	Kerala	4.5	14.9	8.1	1.9	2.8	4.1	2.5
8	Madhya Pradesh	2.3	17.2	20.5	6.5	5.3	2.5	2.6
9	Maharashtra	3.2	12.0	9.5	10.0	11.2	5.8	2.9
10	Odisha	6.2	36.5	17.0	8.3	7.8	6.0	2.0
11	Punjab	6.3	18.9	12.7	4.7	4.0	3.1	2.1
12	Rajasthan	3.9	16.3	16.4	3.6	2.1	6.5	1.9
13	Tamil Nadu	4.8	10.7	8.0	6.2	2.0	1.6	2.4
14	Uttar Pradesh	7.0	29.4	21.9	5.5	3.5	3.2	2.4
15	West Bengal	3.5	15.0	12.0	4.4	7.9	8.7	6.6

[2] In CPI all India, one sixth of the housing stock in the sample is visited every month and moving rent relative method is used for monthly updation of the house rent index.

[3] The HRA rates would increase from 24 per cent, 16 per cent and 8 per cent of the Basic Pay for Class X, Y and Z cities respectively to 27 per cent, 18 per cent and 9 percent when DA crosses 50 per cent of basic, and further revised to 30 per cent, 20 per cent and 10 per cent when DA crosses 100 per cent.

and rise in other commodity prices. The spill-over from food to non-food inflation is found to be stronger during healthy domestic demand conditions[4]. Understanding the shocks in food and fuel prices and their spillovers could provide meaningful insights for monetary policy in anchoring inflation expectations.

Chart II.13: Measures of Underlying Inflation



Sources: CSO and staff calculations.

[4] Bordoloi S. (2016) "Spill-over from Food inflation to Core inflation in India: an empirical analysis," (Mimeo).

Table II.1: Measures of Inflation

(Y-o-y, per cent)

Quarter/ Month	GVA Deflator	GDP Deflator	WPI	CPI	CPI-IW	CPI-AL	CPI-RL
Q1 : 2014-15	7.2	5.9	5.8	7.4	6.9	8.1	8.3
Q2 : 2014-15	2.1	1.8	3.9	6.7	6.8	7.3	7.6
Q3 : 2014-15	2.9	3.5	0.3	4.1	5.0	5.4	5.7
Q4 : 2014-15	1.0	2.3	-1.8	5.3	6.6	5.8	6.0
Q1 : 2015-16	0.0	1.0	-2.3	5.1	5.9	4.4	4.7
Q2 : 2015-16	-2.1	-1.2	-4.6	3.9	4.6	3.1	3.4
Q3 : 2015-16	0.7	1.8	-2.3	5.3	6.5	5.0	5.2
Jan-16			-0.9	5.7	5.9	5.6	5.7
Feb-16			-0.9	5.2	5.5	5.0	5.3

IW: Industrial Workers, AL: Agricultural Labourers and RL: Rural Labourers.

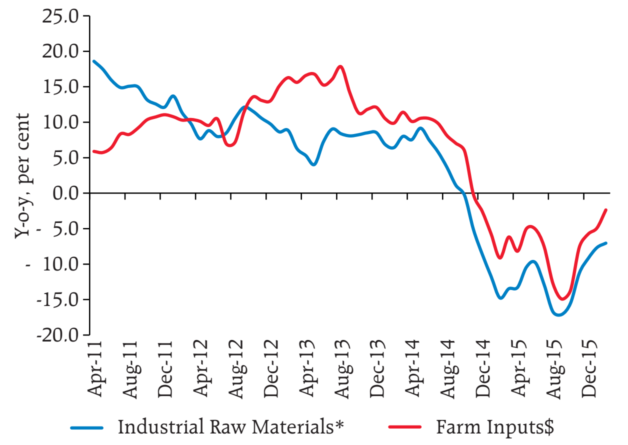
Inflation measured by other consumer price indices moved synchronously with headline CPI inflation. The deflation in WPI appears to have bottomed out in Q2 of 2015-16. GVA and GDP deflators that were in negative terrain in Q2, turned positive in Q3. The gap between CPI and WPI started narrowing in Q4 so far (Table II.1).

II.3 Costs

Since the MPR of September 2015, cost pressures in the economy have abated with the sustained fall in global energy and non-energy prices. Domestic input cost pressures also remained subdued. Both industrial and farm costs remained in contractionary mode, *albeit* with some pick-up in sequential terms in recent months (Chart II.14). In the farm sector, electricity, fertiliser and agricultural machinery prices remained range-bound whereas diesel prices moderated. In case of the non-farm sector, decline in minerals prices and fall in fuel prices provided comfort.

Wholesale input price inflation closely tracks the assessment of manufacturing firms participating in the Reserve Bank's industrial outlook survey. The 73rd round of the survey conducted in January-March 2016 reports moderation in input price growth, with the softness in costs extending into the near-term. This sentiment was driven by companies that are benefiting from the fall in international commodity prices, especially those in the petroleum and metal industries. Declining wholesale price inflation attested to the moderation in the cost of raw materials. Falling input

Chart II.14: Farm and Non-farm Input Cost Inflation



*: Comprises primary non-food articles, metallic & other minerals, coal, aviation turbine fuel, high speed diesel, naphtha, bitumen, furnace oil, lubricants, electricity (industry), cotton yarn and paper pulp from WPI.

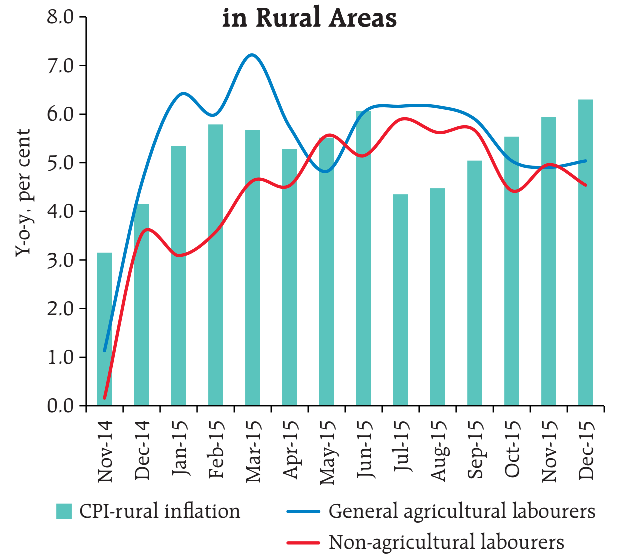
$: Comprises high speed diesel, electricity (agricultural), fertilizers & pesticides, agricultural machinery & implements and tractors from WPI.

Sources: Ministry of Commerce & Industry and staff calculations.

prices and weak demand conditions kept corporate pricing power in check. In case of the services sector, however, increase in input costs was reported across all major sectors such as hotels and restaurants, finance, and transport companies.

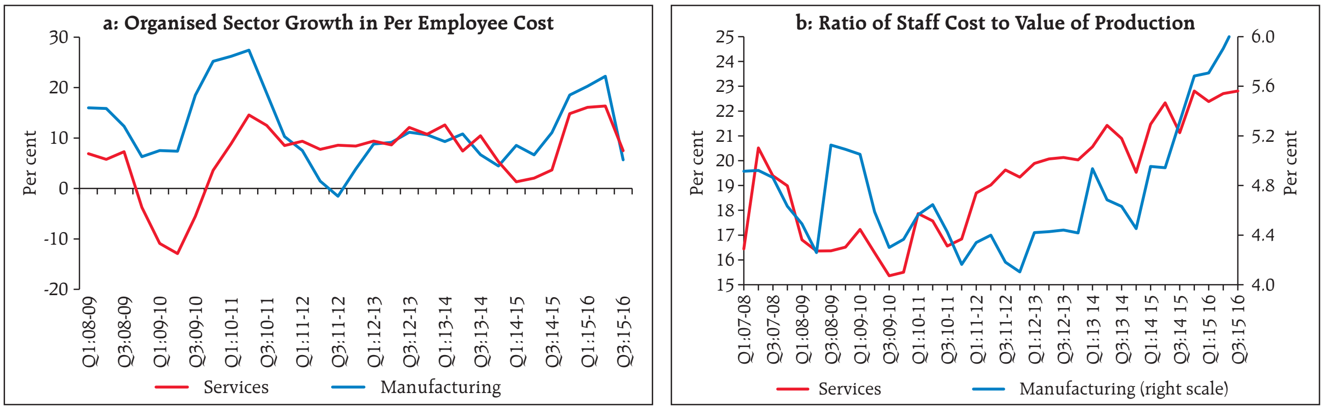
Rural wages, a key determinant of farm costs, recorded moderate growth in nominal terms and remained almost stagnant in real terms (Chart II.15).

Chart II.15: Wage Growth and Inflation in Rural Areas



Sources: Labour Bureau, CSO and staff calculations.

Chart II.16: Labour Cost in Manufacturing and Services



Note: Per employee cost= Total employee cost/total number of employees. Per employee cost from Q1:2015-16 is worked out based on total number of employees as of March 2015.

Sources: Capitaline database and staff calculations.

Part of the moderation in nominal wage growth could be in response to the fall in inflation.

Wage growth in the organised sector, reflected in per employee cost, decelerated in Q3 of 2015-16 for both manufacturing and services, with the manufacturing sector registering a sharper decline. While wage growth in manufacturing sector slowed down, value of production in manufacturing sector decelerated at a much faster pace leading to an increase in unit labour cost (as measured by ratio of staff cost to value of production, Chart II.16).

Understanding price setting behaviour in an economy is important for monetary policy, especially in gauging rigidities in price formation which generate welfare losses (Blinder *et al.* (1998)[5], Loupias (2013)[6], Dias *et al.* (2015)[7]).

A random effects ordered probit model on the panel of companies covered in the Reserve Bank's industrial outlook survey from 2010-2014[8], suggests that raw material costs, labour costs and cost of finance influence price setting behaviour with a decreasing order of impact. Pricing decisions generally vary based on company size, seasonality, past price changes as well as in the way firms adjust to shocks.

Firms respond more often in response to a price shock by adjusting prices upwards than in the other direction. Similarly, strong demand conditions induce higher increase in prices, whereas the likelihood of lowering the price in case demand is weak is lower. This suggests that the response of expansionary and contractionary monetary policies in controlling inflation will also be asymmetric – expansionary policy fuels inflation at a rate faster than contractionary policy can contain it[9].

New forms of transactions such as online exchange and e-commerce are gaining currency in India, especially in the urban areas. The cost of adjustments in prices may be limited in such forms of transactions and, therefore, price rigidities induced by menu costs may turn out to be less relevant. Also, prices could turn out to be extremely flexible with dynamic pricing models and strategies adopted by such firms. These developments complicate the setting of monetary policy as the prices of such items are not currently covered in the official price statistics.

[5] Blinder, A.S. (1991), "Why Are Prices Sticky? Preliminary Results from an Interview Study", American Economic Review 81: 89–96.

[6] Loupias Claire and Patrick Sevestre (2013), "Costs, Demand, and Producer Price Changes", The Review of Economics and Statistics, March, 95(1): 315–327.

[7] Dias Daniel A., Carlos Robalo Marques, Fernando Martins, J.M.C. Santos Silva (2015), "Understanding Price Stickiness: Firm-Level Evidence on Price Adjustment Lags and Their Asymmetries", Oxford Bulletin of Economics and Statistics, 77 (5): 701-718.

[8] Kumari Shweta, and Indrajit Roy, (2016), "Price Setting Behavior of Companies: Evidence from Industrial Outlook Survey" (Mimeo).

[9] These results are found to hold for other countries as well. See Amirault. David, Kwan Carolyn, and Wilkinson Gordon (2006), "Survey of Price-Setting Behaviour of Canadian Companies", Bank of Canada Working Paper 2006-35, September.

III. Demand and Output

Domestic activity slowed in the second half of 2015-16. Aggregate demand was restrained by stalling fixed investment, weak rural consumption and the ongoing fiscal consolidation. Aggregate supply moderated with the impact of deficient monsoons on agriculture. Gross value added in industry benefited from the decline in input costs while services remained in expansion mode.

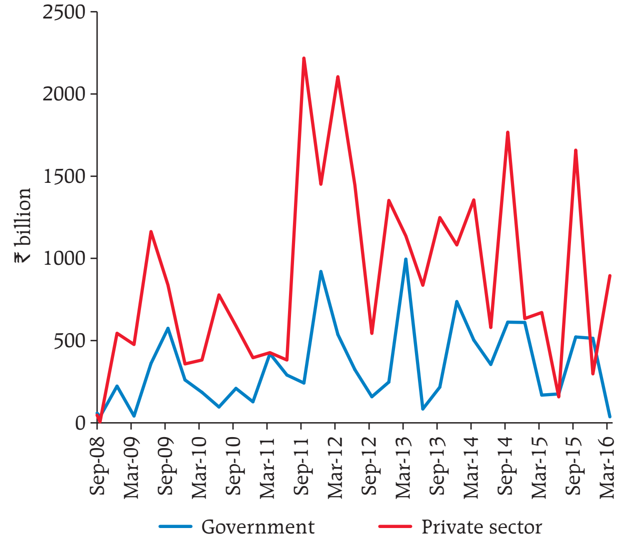
Domestic economic activity lost pace in the second half of 2015-16, slowed down by muted investment and a prolonged contraction in exports. While private consumption has been the mainstay in holding up aggregate demand, it has largely been an urban phenomenon; coincident indicators of rural consumption have generally remained weak or in negative territory. On the supply side though, some silver linings are discernible. Despite consecutive deficient monsoons and unseasonal weather more recently, foodgrains production is on course to post a modest improvement over the levels recorded a year ago. For industry, the deceleration in the volume of production has been more than offset by the decline in input costs. While service sector activity has been affected by the subdued performance of tradables, non-tradables have been expanding at a reasonable pace.

III.1. Aggregate Demand

Aggregate demand in terms of year-on-year (y-o-y) changes in real gross domestic product (GDP) at market prices moderated in the second half of 2015-16, encountering headwinds from stalling fixed investment (Table III.1).

The stock of stranded investment in stalled projects fell, reflecting concerted efforts by the Government towards fast-tracking the revival of projects in electricity generation and chemicals sectors (Chart III.1). New investment remained subdued in

Chart III.1: Stalled Projects



Source: Centre for Monitoring Indian Economy (CMIE).

Table III.1: Real GDP Growth

(Per cent)

Item	Weighted Contribution*		2014-15	2015-16 (AE)	2014-15				2015-16			
	2014-15	2015-16 (AE)			Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4#
I. Private Consumption Expenditure	3.5	4.2	6.2	7.6	8.2	9.2	1.5	6.6	6.4	5.6	6.4	11.7
II. Government Consumption Expenditure	1.3	0.3	12.8	3.3	9.0	15.4	33.2	-3.3	1.0	4.3	4.7	3.0
III. Gross Fixed Capital Formation	1.6	1.7	4.9	5.3	8.3	2.2	3.7	5.4	5.2	7.6	2.8	5.5
IV. Net Exports	0.2	0.1	11.7	6.1	62.8	-72.5	-111.1	-6.6	-7.6	-6.5	30.4	16.6
(i) Exports	0.4	-1.5	1.7	-6.3	11.6	1.1	2.0	-6.3	-5.8	-4.3	-9.4	-5.7
(ii) Imports	0.2	-1.6	0.8	-6.3	-0.6	4.6	5.7	-6.1	-5.0	-3.4	-10.8	-6.0
V. GDP at Market Prices	**7.2**	**7.6**	**7.2**	**7.6**	**7.5**	**8.3**	**6.6**	**6.7**	**7.6**	**7.7**	**7.3**	**7.7**

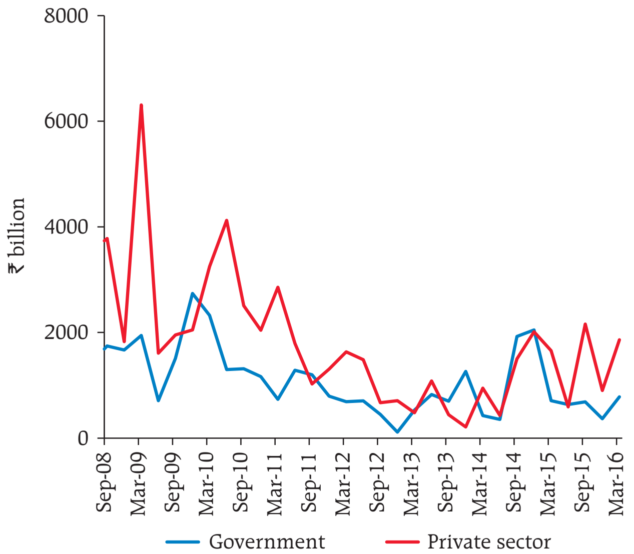
AE: Advance estimates.

*: 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.

#: Implicit growth rate calculated from AE of 2015-16.

Source: Central Statistics Office (CSO).

Chart III.2: New Projects



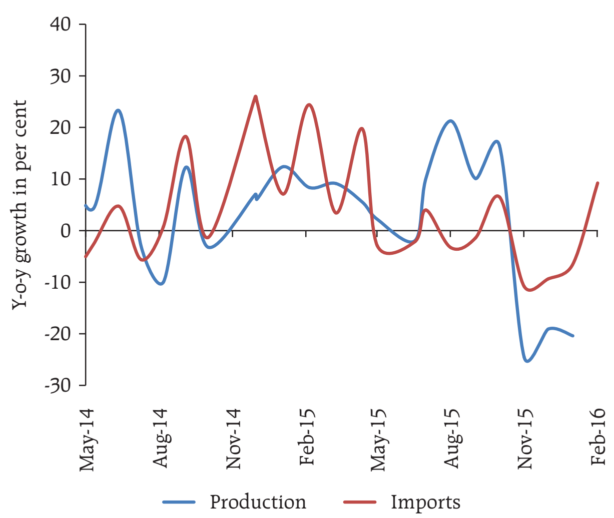
Source: CMIE.

both private and public sectors in response to the prevailing uncertainty in the business environment and muted business confidence (Chart III.2). The production of capital goods fell sharply, co-moving with a deceleration in imports, barring in February (Chart III.3). A durable recovery in the capex cycle continues to remain elusive in the face of considerable slack. Profitability of the non-government non-financial companies has also moderated in Q3, with implications for corporate saving and investment. These coincident indicators suggest that national accounts data for Q4 of 2015-16, especially private final consumption expenditure (PFCE), may be subject to downward revisions from the implicit levels in the advance estimates for the full year.

PFCE expanded in H2, in part benefiting from real income gains from lower average inflation than a year ago. The production of consumer durables rose robustly up to January 2016, also reflecting improvement in credit conditions for consumers as banks rebalanced their lending portfolios in favour of personal loans in which stress is relatively low. Sales of commercial and passenger vehicles, production of gems and jewellery and mixers and grinders accelerated, indicative of the resilience of urban consumption. Purchasing managers' surveys point to some improvement in employment in manufacturing industries.

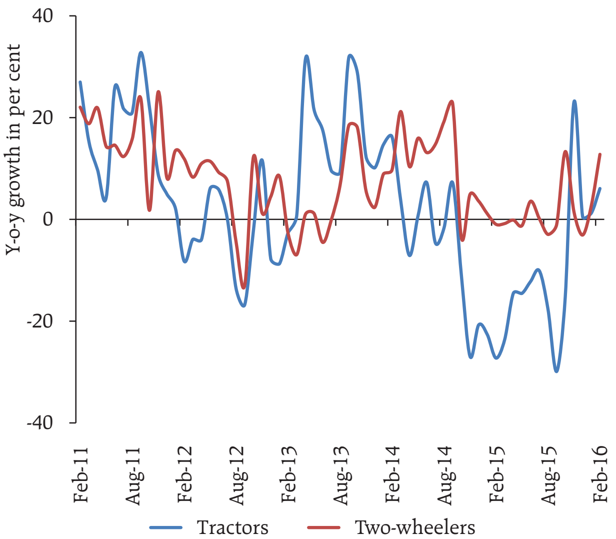
By contrast, rural consumption remained weak in H2; with moderation in wage growth, rural incomes have been depressed by shocks to farm activity from back-to-back deficient monsoons. In Q4, however, there was a pick-up in sales of tractors and two-wheelers which could be indicative of a turning point in the rural economy (Chart III.4). The focus of the Union Budget

Chart III.3: Production and Imports of Capital Goods



Sources: CSO, Directorate General of Commercial Intelligence and Statistics.

Chart III.4: Tractor and Two-wheeler Sales



Source: CMIE.

2016-17 on reviving the rural economy and doubling rural incomes could support rural consumption demand more enduringly going forward. Overall, the prospects for PFCE have been brightened by the proposal to implement the 7th Pay Commission award and one-rank-one-pension for retired defence personnel.

The growth of government final consumption picked up in H2 relative to H1. The Centre's revenue expenditure rose on higher spending on major subsidies, especially petroleum subsidies, and higher interest payments. Plan revenue expenditure related to social and physical infrastructure made a turnaround in H2 from an absolute decline in H1. Capital expenditure of the Centre decelerated in H2 in relation to H1, reflecting lower growth in capital outlay. States, accounting for nearly two-third of general government capital expenditure, received significantly higher resources on account of their enhanced share in taxes as recommended by the Fourteenth Finance Commission. The expenditure multiplier of States tends to be higher than that of the Centre, which could work towards reviving overall investment in the economy.

For the year as a whole, the revised estimates indicate that growth in aggregate expenditure of the Central Government was higher than a year ago with revenue and capital expenditure broadly in line with their respective budgetary targets. Despite a large shortfall *vis-à-vis* projected disinvestment, the buoyancy in indirect tax collections and non-tax revenues helped in meeting the fiscal deficit target (Table III.2). The combined fiscal deficit at 6.5 per cent of GDP in 2015-16 is budgeted to have improved in relation to a year ago at 7 per cent.

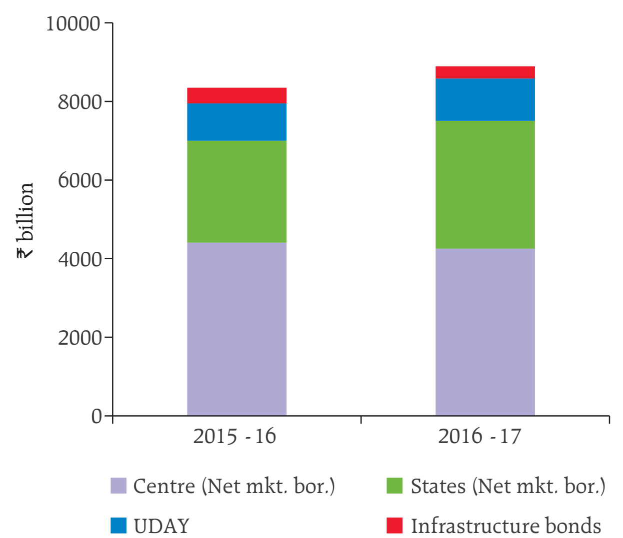
The Union Budget 2016-17 adhered to the path of fiscal consolidation with the Centre's gross fiscal deficit (GFD) projected to decline by 0.4 percentage points. Adherence to fiscal consolidation path is contingent upon efficient revenue mobilisation - broadening the tax base and rationalising exemptions reflect the Government's intent in this direction. The stance of fiscal policy in 2016-17 will face a challenging trade-off sustaining public investment within the straitjacket of shrinking fiscal headroom (Chart III 5).

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

Indicators	As per cent of GDP		
	2015-16 (BE)	2015-16 (RE)	2016-17 (BE)
1. Revenue Receipts	8.1	8.9	9.1
a. Tax Revenue (Net)	6.5	7.0	7.0
b. Non-Tax Revenue	1.6	1.9	2.1
2. Total Non-Debt Receipts	8.7	9.2	9.6
3. Non-Plan Expenditure	9.3	9.6	9.5
a. On Revenue Account	8.5	8.9	8.8
b. On Capital Account	0.8	0.7	0.7
4. Plan Expenditure	3.3	3.5	3.7
a. On Revenue Account	2.3	2.5	2.7
b. On Capital Account	1.0	1.0	1.0
5. Total Expenditure	12.6	13.2	13.1
6. Gross Fiscal Deficit	3.9	3.9	3.5
7. Revenue Deficit	2.8	2.5	2.3
8. Primary Deficit	0.7	0.7	0.3
Memo: Additional resource mobilisation for infrastructure financing (₹ billion)*	…	*400*	*313*

BE: Budget estimates. RE: Revised estimates.
*: Includes bonds allocated to NHAI, IRFC, HUDCO, IREDA, PFC, REC and NTPC for 2015-16 and NHAI, PFC, REC, IREDA, NABARD and Inland Water Authority for 2016-17.
Source: Union Budget 2016-17.

Chart III.5: Mobilisation of Resources



mkt. bor.: Market borrowing.
Source: Staff estimates.

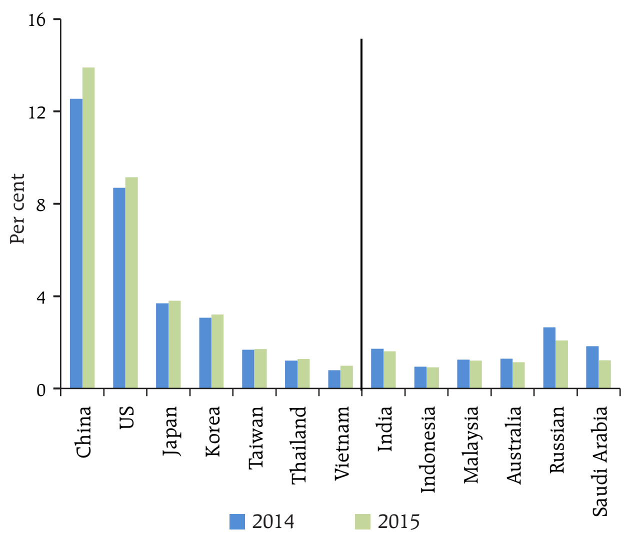
Net exports turned positive in Q3 for the first time in the year and contributed modestly to the increase in aggregate demand in the quarter. The contraction in merchandise exports, which began in December 2014 and peaked in Q3 of 2015-16 was primarily on account of weakening global demand and the persistent fall in international commodity prices. World trade volume was pulled down by a deepening contraction in demand from emerging market economies (EMEs) – which absorb more than half of India's exports. POL (petroleum, oil and lubricants) exports declined by more than 50 per cent, mainly attributable to the decline in international crude prices, although export volumes also shrank. Similarly, non-POL exports also contracted in nominal terms, and the highly adverse international environment drove the volume of these exports into negative territory, as in Q2. Merchandise imports recorded a precipitous decline in Q3, mainly on account of POL and gold. Even excluding these items, imports declined by about 9 per cent. The merchandise trade deficit was lower than in preceding quarters and was mainly responsible for the improvement in net exports in the national accounts, since net exports of services remained broadly stable. India continued to benefit from an improvement in the terms of trade, with import prices falling faster than those of exports.

In Q4, exports remained in contraction mode in January and February 2016 across both POL and non-POL products. Exports have declined in nominal terms for fifteen successive months; however, the contraction eased to a single digit on a y-o-y basis. Powering the turnaround were gems and jewellery, drugs and pharmaceuticals, electronics and chemicals. The decline in imports also slowed. While POL imports fell on account of further softening of crude oil prices, gold imports also declined in anticipation of lower import duties in the Union Budget 2016-17. An important development in Q4 was the resumption of positive growth in non-oil non-gold imports in February after a gap of seven months, largely contributed by imports of machinery, pearls, precious stones, and electronic goods. The trade deficit narrowed sharply in January and February 2016 reflecting these developments.

India's share in world exports has declined from its recent peak of 1.7 per cent in 2014 to 1.6 per cent even as some major advanced economies (AEs) and peer Emerging Market and Developing Economies (EMDEs) gained share (Chart III.6). This suggests that factors such as the rising incidence of protectionism and competitive depreciation might have affected export performance, since depressed global demand is common to all exporting countries.

Financing of net exports in Q3 of 2015-16 mainly took the form of foreign direct investment (FDI) which, at US$ 14 billion was the highest ever quarterly net inflow of FDI to India. Foreign portfolio investment, by contrast, recorded net outflows in H2 as heightened turbulence in global financial markets triggered shifts in investors' risk appetite and flights to safe haven. In March, however, FPIs returned as risk-on sentiments took hold. Other forms of capital inflows, however, remained subdued in Q3. There was an accretion to foreign exchange reserves, taking their level to US$ 355.6 billion as on March 25, 2016, equivalent to about 10 months of imports.

Chart III.6: Country-wise Share in World Exports

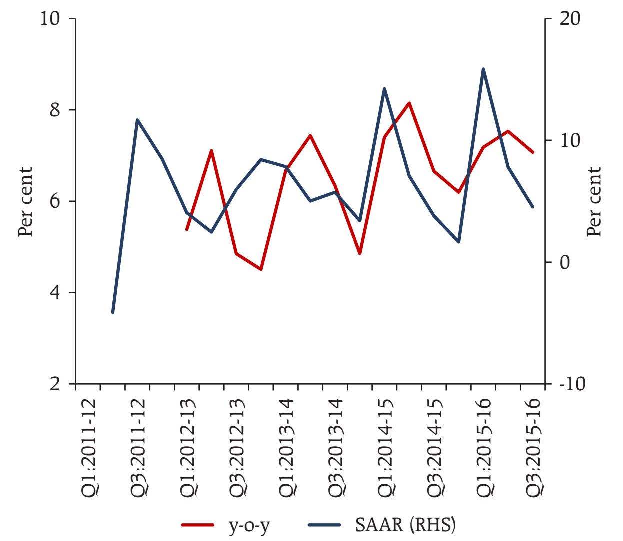


Sources: International Financial Statistics, IMF.

III.2. Aggregate Supply

The rate of growth in output measured by gross value added (GVA) at basic prices moderated in H2 of 2015-16 on a y-o-y basis (Table III.3). In terms of seasonally adjusted quarter-on-quarter (q-o-q) annualised growth, the loss of momentum was even more stark (Chart III.7).

Chart III.7: GVA Growth



SAAR: Seasonally adjusted annualised rate.
Source: CSO.

Actual quarterly outcomes have closely adhered to the projection path given in the September MPR, with small deviations in magnitude around the turning points. In Q2, the upturn in construction turned out to be more moderate than initially anticipated. The magnitude of recovery in corporate earnings was also somewhat muted. Real GVA growth slowed between Q2 and Q3 in line with projections, but it was 10 basis points above the projection, with manufacturing value added surprising on the upside (Chart III.8).

Value added in agriculture and allied activities contracted in Q3 and dragged down overall GVA growth in the quarter. After the south-west monsoon ending the season with a deficit of 14 per cent relative to the long period average (LPA), the north-east monsoon started on a listless note with a highly skewed spatial distribution entailing risks to soil moisture. Sowing of major *rabi* crops except coarse cereals was significantly below normal. An important buffer was the foodgrains stock which remained higher than the new norms through the year. In the first part of November, Tamil Nadu, which receives almost half of its rainfall from these rains, was buffeted by cyclonic weather and excess precipitation. Floods adversely affected coffee

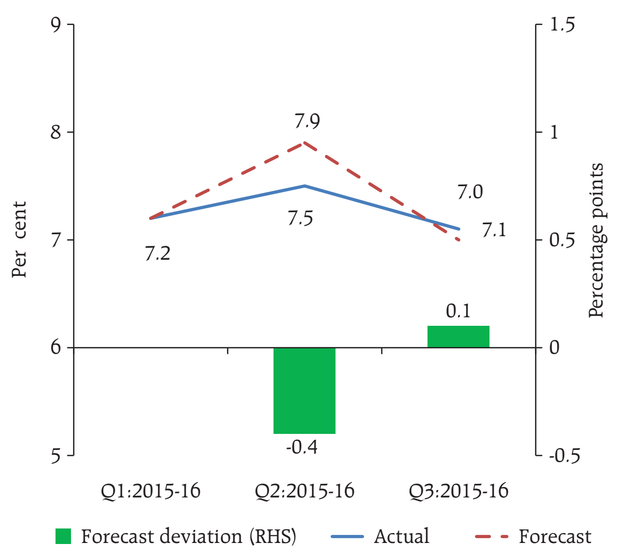
Table III.3 Sector-wise Growth in GVA

(Per cent)

Sector	2014-15	2015-16	2015-16 Q1	Q2	Q3	Q4#
I. Agriculture and Allied Activities	-0.2	1.1	1.6	2.0	-1.0	2.6
II. Industry	6.5	8.8	7.1	8.4	11.0	8.7
Manufacturing	5.5	9.5	7.3	9.0	12.6	9.4
III. Services	9.4	8.4	8.5	8.3	8.6	8.2
Construction	4.4	3.7	6.0	1.2	4.0	3.5
Trade, Hotels, Transport, Communication	9.8	9.5	10.5	8.1	10.1	9.3
Financial, Real Estate & Professional Services	10.6	10.3	9.3	11.6	9.9	10.1
GVA at Basic Prices	**7.1**	**7.3**	**7.2**	**7.5**	**7.1**	**7.4**

#: Implicit growth rate calculated from AE of 2015-16.
Source: CSO.

Chart III.8: GVA Growth: Actual *versus* Projected



Source: Staff estimates.

plantations and paddy sowing. The shortfall in the production of pulses - *arhar* and *urad* - became binding in the context of the spike in prices of pulses. The north-east monsoon ended in December with a deficiency of 23 per cent of the LPA, particularly acute in central, western and parts of eastern India. In Q4, *rabi* sowing improved in January mainly on account of return of rain and chill in the north and north-eastern parts of the country.

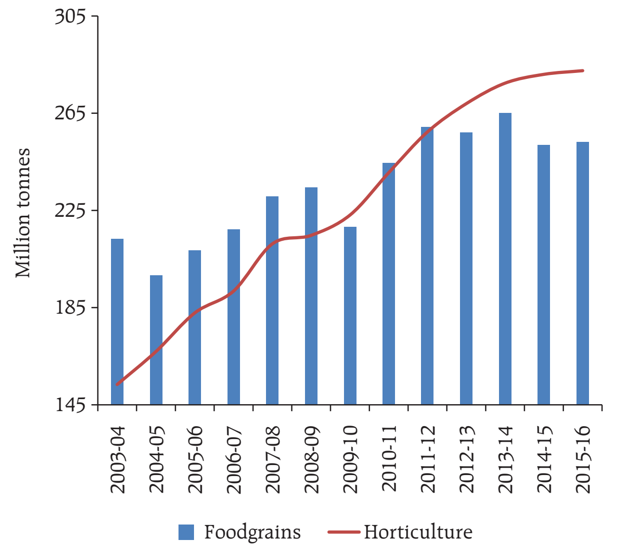
In the context of crop losses in 2015-16 due to vagaries of weather, the *Fasal Bima Yojana* announced on January 13, 2016 assumes importance. It envisages a uniform premium of 2 per cent to be paid by farmers for all *kharif* crops and 1.5 per cent for all *rabi* crops. In case of annual commercial and horticultural crops, the premium to be paid by farmers will be 5 per cent. The balance premium will be paid by the Government to provide full insurance to farmers against crop loss on account of natural calamities. Remote sensing and smart phones technologies will be used to fast track the payment of claims.

In February, the second advance estimates placed foodgrains output at 0.5 per cent higher in 2015-16 than the previous year. This positive outcome reflects the impact of greater weather proofing of Indian agriculture and timely intervention by the government over a wide area, including pre-emptive advisories, contingency plans and promotion of better variety seeds.

In recent years, the horticulture sector has been imparting resilience to overall agriculture performance. Growth in production of horticulture crops (5.3 per cent) outstripped the production of foodgrains (1.6 per cent) in terms of the 12-year average (Chart III.9).

Although forecasts for the south-west monsoon 2016 are not yet available from the IMD, the chance of *El Niño* gradually decreases into the spring and turns neutral by May-June-July 2016, according to the US National Oceanic Atmospheric Administration. The chance of *La Niña* increases to 50 per cent in September-October-November 2016. In the Indian context, some

Chart III.9: Foodgrains and Horticulture Production



Sources: National Horticulture Board; Ministry of Agriculture.

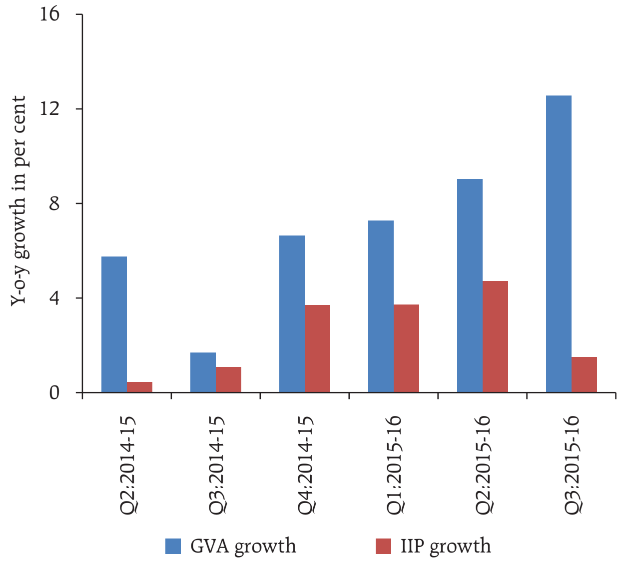
of the strongest *El Niño* years have been followed by *La Niña* episodes, resulting in bumper harvests[1].

Value added in the industrial sector accelerated in H2 of 2015-16, led by manufacturing. By contrast, industrial output measured by the Index of Industrial Production (IIP) could not sustain the base-effect surge in October and fell into contraction through January 2016. Soft commodity prices brought down input costs sharply as well as the implicit GVA deflator for industry, which together explains the wedge between value added and IIP (Chart III.10). In terms of use-based activity, all segments suffered output losses, except festival related demand for consumer durables and intermediate goods in H2. The contraction in industrial output was not, however, broad-based - excluding 2 per cent on either side on account of volatile items, the IIP rose by 0.9 per cent; excluding capital goods, the rest of IIP expanded by 1.4 per cent in December 2015.

In Q4, the IIP continued to contract for the third successive month during January 2016, again mainly led by decline in manufacturing. Electricity generation remained resilient and is expected to sustain its

[1] Economic Survey: 2015-16.

Chart III.10: GVA and IIP Manufacturing Growth



Source: CSO.

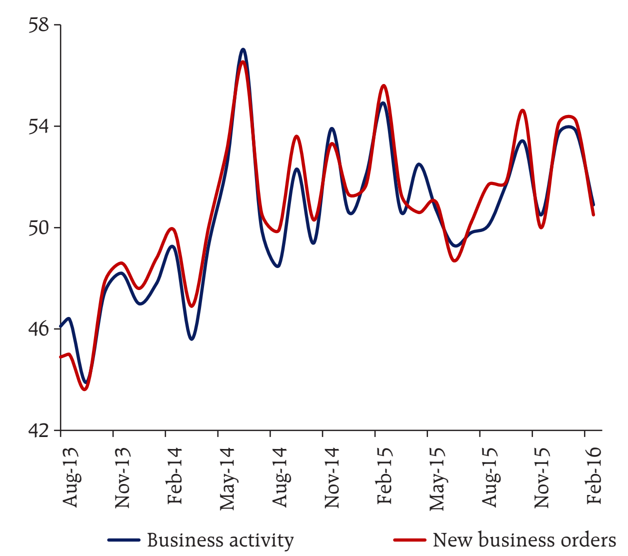
performance backed by thermal supplies, while consumer durables continued to gain from favourable base effects. The sharp contraction in capital goods was primarily due to the decline in production of cables and insulated rubber; excluding this lumpy item the IIP would have shown a modest increase of 1.7 per cent. Consumer non-durables continued to shrink in the absence of support from demand. Consequently, the overall consumer goods sector stayed flat, while basic goods decelerated.

The manufacturing PMI for March 2016 expanded on the basis of growth of output, new orders, including exports. The Make in India drive, together with new measures announced in the Union Budget to widen the space for FDI, and custom and excise concessions, are expected to help lift industrial performance. In this context, the start-up India initiative assumes importance as a potential game changer in lifting business sentiment. The objective is to create an ecosystem that is conducive for entrepreneurship, employment generation and wealth creation.

Gross value added in the services sector maintained a stable pace of expansion in H2, as it had in the first half of 2015-16. All constituents shared in this growth, although financial services, real estate and professional services experienced some moderation.

In Q3, the services PMI was in expansionary territory in October on new business orders, but it fell to a five-month low in November as new business orders slowed down (Chart III.11). In December, the index surged back but polled firms indicated a reluctance to hire. Other lead and coincident indicators of service sector activity were mixed and reflected sector-specific dynamics. By October through the quarter, passenger and commercial vehicles sales registered healthy growth on festival related demand and one-time replacement requirements to comply with fuel emission norms. On the other hand, the two wheelers segment remained subdued compared to other segments as rural demand remained moribund. Steel consumption and cement production – compositely, a lead indicator of construction activity – anticipated a slowdown in an environment of legacy issues especially delays in clearances and land acquisition, weak demand and unsold inventory. The revival in roads and highways construction and commercial real estate activity cushioned the downturn. In the trade sector, port traffic decelerated.

Chart III.11: Services PMI



Source: Nikkei India.

In Q4, the services PMI remained in expansion zone but dipped sequentially, unable to sustain the smart improvement in January 2016. The moderation occurred on account of softer growth in new business. Other indicators moved diversely. Sales of commercial vehicles showed an uptick in January, while passenger vehicles sales decelerated to lowest in seven months possibly because of correction in inventory management and ban in the national capital region (NCR) on registration of diesel vehicles with higher engine capacity. Sales of passenger vehicles continued to remain subdued in February 2016 exacerbated by strikes in Haryana affecting supplies while commercial vehicles sales continue to accelerate. Overall freight traffic and particularly in respect of coal, the largest commodity carried by railways, contracted during February 2016. Port cargo was, however, boosted by higher tonnage of POL and containerised cargo.

III.3. Potential Output Revisited

Potential output generally refers to the level of output that is consistent with low and stable inflation. Divergence between the levels of actual output and potential output and expressed as a proportion of potential output, *i.e.* the output gap, indicates excess demand when it is positive, leading to inflationary pressures. There is now a wide consensus that potential output across the world has been lastingly impaired since or even before the global financial crisis[2]. By how much should current estimates of potential output be lowered is, however, unclear since these estimates tend to be highly sensitive to the choice of data/sample period and methodology. Nonetheless, misperceptions of the current output gap could lead to notably higher inflation in the near term, and sharply lower growth and increasing external imbalances in the case of delay in recognising the error (IMF, 2011)[3]. The output gap in India was positive during Q1 of 2005-06 through Q1 of 2012-13 except in Q4 of 2008-09, and turned negative since Q2 of 2012-13 with the downturn in the business cycle; it was (-)0.6 per cent in Q3 of 2015-16. The derived rate of growth of potential output was around 5 per cent during 1981-1991, increasing to around 6 per cent during 1992-2002 and to 8 per cent during 2003-2008. It has, however, fallen in the post global crisis period to around 7 per cent during 2009-2015 (Box III.1).

Box III.1: Alternative Approaches to Estimating Potential Output

Methods for estimating potential output can be broadly categorised into three groups: (i) purely statistical methods (*e.g.* time trend estimation; statistical filters), (ii) methods that combine structural relationships with statistical methods (*e.g.*, the Kalman filter) and (iii) structural methods which are based on economic theory (*e.g.*, the production function approach). Each methodology has limitations which influence the estimate of potential output and appropriate caveats are warranted in the interpretation of results[4]. Against this backdrop, a pragmatic approach is to estimate potential output employing a battery of statistical and structural methods on quarterly GVA data (Q2:1980 – Q4:2015)[5] and then to combine these results using principal component analysis to produce composite estimates of the output gap. This estimate closely co-moves with inflation excluding food and fuel and capacity utilisation – two indicators of aggregate

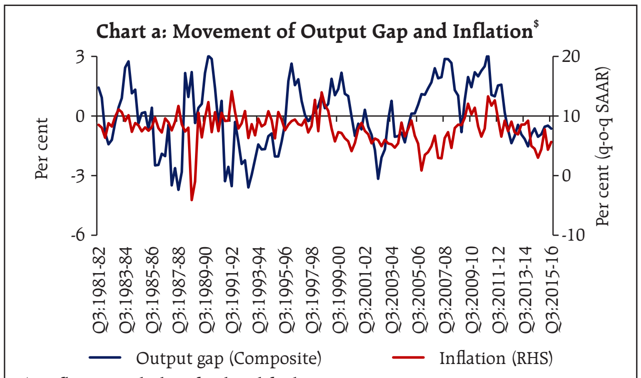
(Contd...)

[2] Anand, R., K.C. Cheng, S. Rehman, and L. Zhang. 2014. "Potential Growth in Emerging Asia." IMF Working Paper, No. WP/14/2, January.

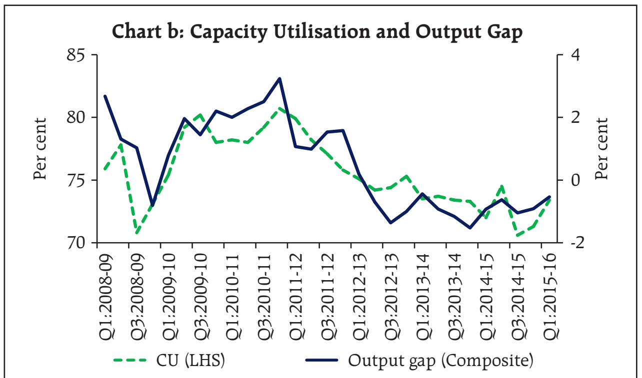
[3] IMF, 2011, *World Economic Outlook*, April.

[4] While the production function approach is regarded as superior as it provides economic explanations for the movement of potential output, univariate statistical filters like Hodrick-Prescott (HP), Rotemberg and Band-Pass (BP) are subject to endpoint problems due to the one-sidedness at both ends of the time series. See Bhoi and Behera (2016) for a comprehensive review.

[5] The unavailability of back series of national account statistics is a major constraint to estimate potential output, which has been handled with splicing the series. Therefore, the estimated potential output from these data is required to be used with caveats.



$: Inflation excluding food and fuel.
Source: Staff estimates.



Source: Staff estimates.

demand conditions – attesting to the robustness of the estimation (Chart a & b).

Reference:

Bhoi, B.K. and H.K. Behera (2016), "India's Potential Output Revisited'', RBI Working Papers (forthcoming).

The recent deceleration in India's potential growth is attributed largely to slowdown in investment and a modest decline in total factor productivity. Hence, key to acceleration of India's growth lies in augmentation of capital formation and raising the productivity of labour and capital so as to be able to operate the economy at the technology possibility frontier.

IV. Financial Markets and Liquidity Conditions

Money, bond and credit markets have been largely insulated from global spillovers, while foreign exchange and equity markets have experienced bouts of volatility. Liquidity conditions generally tightened in the second half of the year and proactive liquidity management alleviated pressure on money market rates. Long-term yields exhibited a tightening bias till February and risk spreads reflected both corporate sector stress and asset quality concerns in banks. Total flow of resources to the corporate sector remained buoyant, with industry receiving a rising proportion of increase in non-food credit.

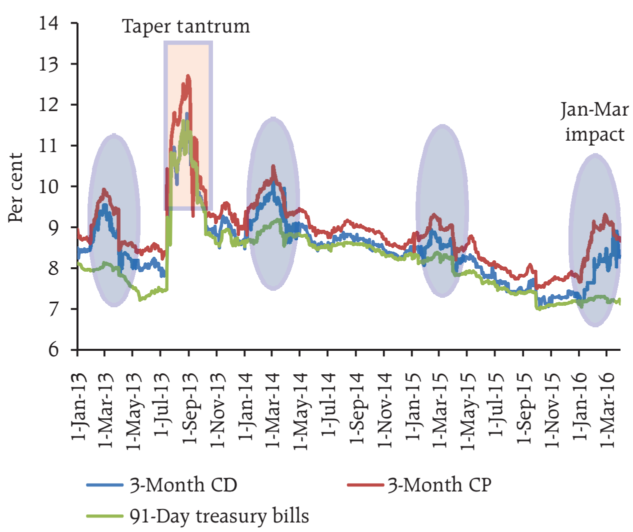
With the turn of the year, global financial markets were seized with renewed fears of a weakening global economy. Volatility surged, dispelling the calm in the preceding quarter that had enabled a priced-in response to the start of normalisation of the US monetary policy in December. As the final section of this chapter shows, financial markets in India exhibited differentiated responses to these developments. Money, bond and credit markets have been largely insulated from global developments. By contrast, foreign exchange and equity markets experienced bouts of volatility and were vulnerable to rapid shifts in risk assessments.

IV.1 Financial Markets

Money markets experienced distinct two-way movements through Q3 of 2015-16. Overnight rates traded with a softening bias in the first half of October, having fully transmitted the end-September policy rate reduction of 50 basis points (bps) amidst easing liquidity conditions. Other short-term rates moved synchronously, with interest rates on both commercial papers (CPs) and 91-day treasury bills (TBs) declining by about 38 bps in response to the repo rate cut. From the second half of October, however, redemption pressures in the equity market due to selling by foreign portfolio investors (FPIs) constrained lending by mutual funds in the collateralised borrowing and lending obligation (CBLO) market and liquidity pressures spread to other segments of the overnight spectrum. The slowing pace of Government expenditure and the onset of festival-related currency demand also contributed to tighter liquidity conditions. Barring brief respites in the early part of each month due to salaries/pension spending by the Government and some return of currency to the banking system after the festivals in late November, the weighted average call rate (WACR) generally remained a little above the repo rate through the quarter - especially around the outflow of advance tax payments in mid-December.

Money market rates hardened in Q4 as the spending restraint by the Government became pronounced by mid-January and cash balances began to build-up well ahead of the Union Budget. Term premia rose as secondary market three month CP and certificate of deposit (CD) rates inched up (Chart IV.1). Another factor squeezing liquidity through the quarter was the firming up of non-food credit offtake that started in December. Liquidity tightness was exacerbated from the second week of February, imparting an upside to the WACR. On March 31, the WACR spiked with the Government's cash balances rising to ₹1.9 trillion and

Chart IV.1: Short-term Rates



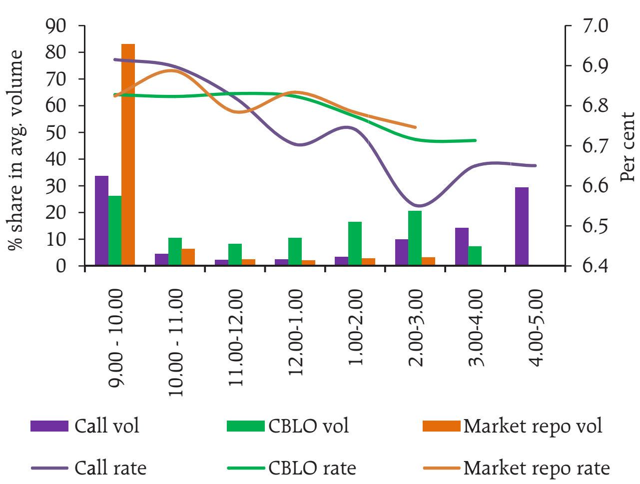
Source: Bloomberg.

banks building excess reserves of 23 per cent above the requirement.

Two factors are notable in recent money market activity. First, asymmetry in the intra-day evolution of the WACR reflects the market microstructure. Money market rates are generally higher during the first hour of trading, reflecting reversal of the previous day's borrowings as also funding requirements for the day ahead (Chart IV.2). Market activity again picks up during the last hour of trading on reassessment of liquidity positions by banks to meet reserve requirements and other cash flows. The first and last hour of trading covers about 70-75 per cent of daily call market volumes. Secondly, the heightening of liquidity pressures towards the close of Q4 is a recurring phenomenon every year as market participants rush for liquidity for balance sheet adjustments and to meet year-end targets. Cash balances with the Reserve Bank become a preferred asset at this time of the year. With the unwinding of these cash balances, liquidity conditions ease significantly in early April, again a recurring phenomenon year after year.

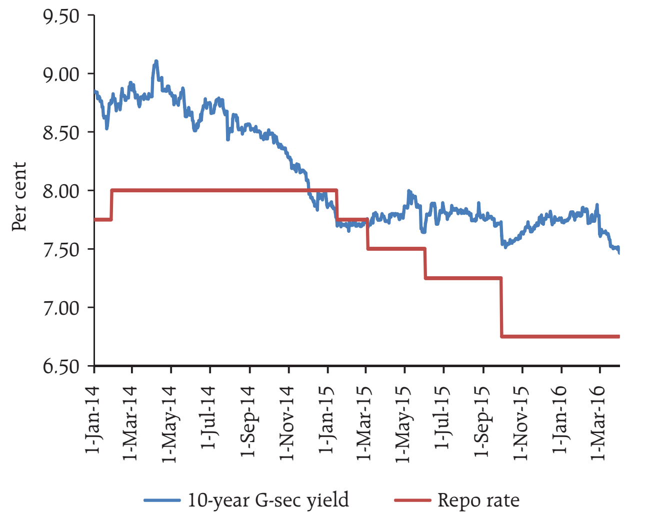
In the bond market, yields on government securities (G-secs) – which had started to ease ahead of the monetary policy easing cycle – got increasingly disconnected and firmed up through the second half of 2015-16. After the announcement of the Union Budget, however, yields steadily eased (Chart IV.3).

Chart IV.2: Intra-day Money Market Activity: Average Volume and WAR (Oct 15 - Feb 16)



Source: CCIL.

Chart IV.3: 10-year G-sec Yield and Repo Rate



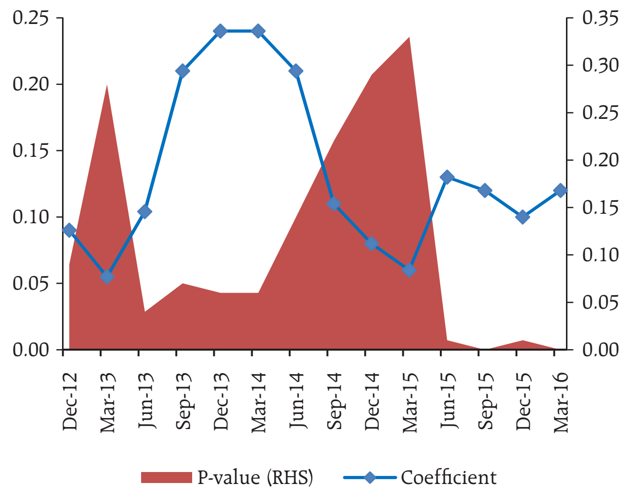
Sources: RBI and Bloomberg.

From the second week of October, the benchmark yield traded with a hardening bias, mainly due to higher primary treasury issuances in October, an uptick in inflation and the depreciation of the rupee brought on by portfolio investment sales. Barring high intensity global events that prompted sell-offs globally, domestic factors have played a predominant role in driving up yields. A rolling regression of India's 10-year G-sec yield on the US 10-year treasury yield suggests that the sensitivity of domestic yields to global yields has subsided significantly in the recent period[1] (Chart IV.4).

In Q4 of 2015-16, G-sec yields traded with an upward bias. Successive increases in monthly inflation readings, uncertainty on the likely fiscal stance in the Union Budget and concerns about compliance with the liquidity coverage ratio (LCR) norm weighed on yield movements. The introduction of the new 10-year

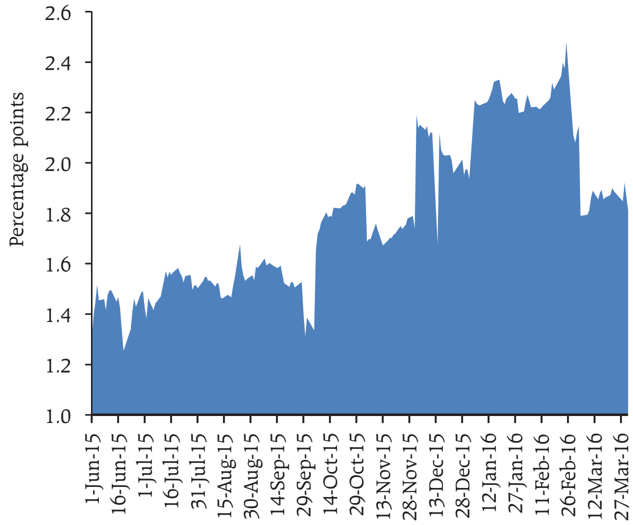
[1] Daily data have been used from January 2012 to March 2016. Since the variables used are non-stationary, they have been used in first difference form in the quarterly rolling regression. The window size for regression analysis is one year.

Chart IV.4: Sensitivity of India's Yield to US Yield



Source: Bloomberg.

Chart IV.5: Corporate Bond Spread between A and AAA rated 5-year Yield



Source: Bloomberg.

benchmark security on January 11, an OMO purchase auction of ₹100 billion on January 20 and the increase in the investment limit for FPIs in the debt segment improved sentiment in the bond market, but it was transient and yields started hardening by the third week of January 2016 right up to the last week of February, due to likely over-supply of papers relative to demand – State Development Loans (SDLs), tax free bonds and Ujwal DISCOM Assurance Yojana (UDAY) bonds.

Positive sentiment generated by the Union Budget softened yields, with 10-year generic yield declining by about 16 bps on February 29. G-sec yields edged up in the first half of March on profit-booking by market participants, but traded with a softening bias in the second half on the lower inflation reading for February and dovish guidance by the Fed.

High rated corporate bond yields had eased in the early part of Q3, fully pricing in the September policy rate cut. In Q4, however, a hardening bias set in, but eased during the second half of March. Lower rated corporate bond yields rose on concerns related to balance sheets and rising incidence of restructuring of corporate debt by Indian banks (Chart IV.5). The overall corporate stress ratio – the number of rating upgrades divided by the number of downgrades – declined sharply, indicating deterioration of credit quality of Indian firms. Overall, corporate bond spreads widened though the issuance of corporate bonds (public issues and private placements) increased significantly during the year.

Equity markets began Q3 on a buoyant note, lifted by the policy rate cut on September 29 which boosted rate-sensitive sectors. With positive global cues, including signals of additional accommodation by the ECB and the Fed holding rates steady, the sensex was supported by the resumption of portfolio flows while domestic institutional investors, including mutual funds, engaged in profit-booking. Towards the end of October, however, indications of monetary policy normalisation in the FOMC's December meeting, weak quarterly earnings of some domestic blue chip companies and caution ahead of Bihar elections triggered a fresh slide on the domestic bourses. Bearish sentiment persisted through December, with pessimism building on the slow pace of structural reforms, higher CPI inflation readings, slowdown in industrial production, disappointing Chinese economic data and terror attacks in Europe.

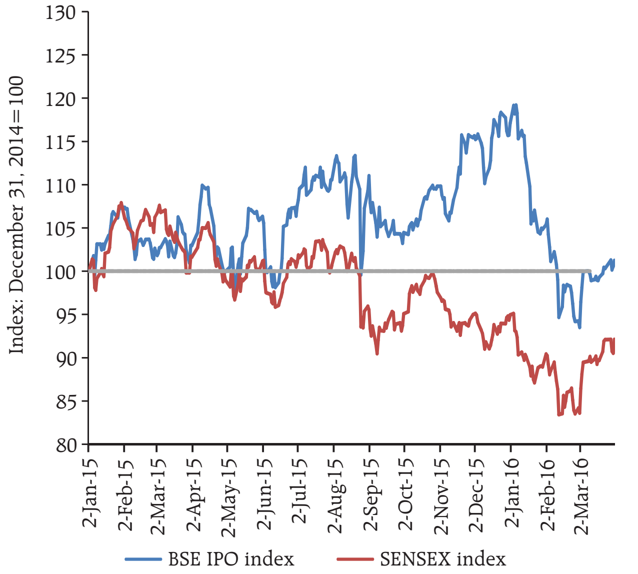
At the start of Q4, global spillovers pulled down the sensex. A slump in oil prices to below US$ 30 per barrel – a 12-year low – and dismal Chinese data coupled with another devaluation of the renminbi triggered a massive retrenchment of portfolio investment across EMEs. Equity markets in India were also affected by weaker than expected corporate earnings forecasts and the depreciation of the rupee. In February, there was a resurgence of stress in global financial markets, triggered by a meltdown in stock markets in China. As spillovers spread, investors questioned the ability of highly leveraged European banks to service their contingent convertible bonds. In India, global risk aversion was amplified by public sector banks declaring steep fall/increase in their net profits/losses in Q3 due to higher provisioning for non-performing assets (NPA) and as a result, banking stocks witnessed a sharp fall in market valuation. The sensex dropped by 22 per cent from its January 2015 highs to a 21-month low and erasing all gains since May 2014.

The sensex surged a day after the Union Budget with a return of portfolio flows, improvement in business sentiment and recovery in the rupee amidst strong cues from Asian and European equity markets after China's central bank cut the reserve requirement ratio. The sensex continued gaining in the following days with heavy buying by foreign investors, surge in banking stocks after core capital requirement rules were eased, appreciation of the rupee and rallies in Asian equity markets on expectations of further stimulus from the ECB.

Compared with the secondary market, the initial public offering (IPO) market remained upbeat, recording a four year high mobilisation in 2015 with 64 IPOs aggregating to about US$ 2.2 billion (about ₹139 billion). While the IPO index generated return of 19 per cent in 2015, the benchmark sensex yielded a negative return of 5.0 per cent in 2015 (Chart IV.6).

The rupee traded with an appreciating bias against the US dollar in the first half of October, buoyed by the weakness in the US dollar on deferment of monetary policy normalisation in the FOMC's September 17-18 policy meeting (Chart IV.7a). From mid-October, however, the rupee started to depreciate with the strengthening of the US dollar on increasing market expectations of an increase in the Federal Funds rate in December. Bunching of importers' demand for foreign currency and risk-averse FPI outflows also imparted downward pressures to the rupee (Chart IV.7b). Barring intermittent gains on profit-taking and positive domestic cues, including better than expected GDP data for Q2, narrowing of the merchandise trade deficit and expansion of the space for FDI, the rupee continued to depreciate through November and December. The December lift-off of the Federal Funds rate turned out to be fully factored in by markets. Dovish Fed guidance brought back stability in foreign exchange markets across EMEs, and the rupee appreciated towards the close of the quarter.

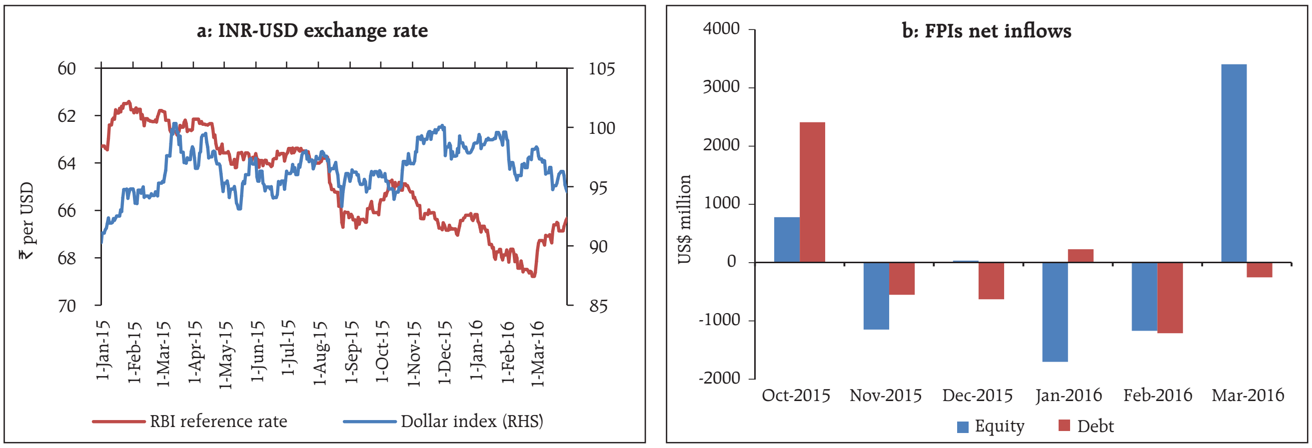
Chart IV.6: IPOs Outperformed Sensex



Source: Bloomberg.

The onset of Q4 brought with it a dramatic shift in the foreign exchange market. Global spillovers produced a renewed bout of downward pressure from the beginning of 2016 as risk aversion and flight to safety intensified on pervasive bearish sentiment. Domestic developments such as rise in inflation,

Chart IV.7: Exchange Rate and FPI Flows



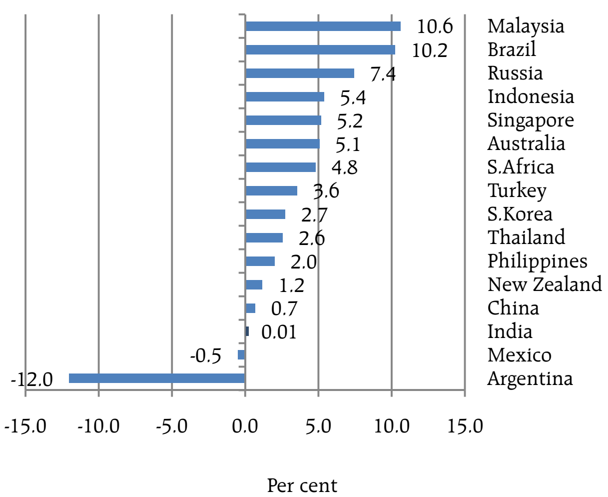
Sources: RBI, Bloomberg and NSDL.

weaker industrial production and continued portfolio outflows also imparted downside to the rupee. The decision of the Bank of Japan to push interest rate into negative territory accentuated the risk-on sentiment towards EMEs in general, resulting in a modest appreciation of the rupee relative to the extent of firming up of several EME currencies (Chart IV.8).

Following the announcement of the Union Budget, the rupee appreciated. Since mid-March, the return of portfolio flows to equity market has sustained the upside in the foreign exchange market. In terms of both nominal effective exchange rate (NEER) and real effective exchange rate (REER), the rupee depreciated during 2015-16 by 4.1 per cent and 1.4 per cent, respectively, partly offsetting the appreciation in 2014-15 (Table IV.1).

Credit market activity was weighed down by weak demand due to sluggish industrial and corporate activity and the presence of considerable slack. In addition, risk aversion among banks emanating from asset quality concerns restrained credit flows. Non-food bank credit, which had slipped into an extended single-digit growth trough in the first half of 2015-16, picked up in the second half of the year and recorded y-o-y growth rates of 10.7 per cent and 11.3 per cent,

Chart IV.8: Currency Appreciation/Depreciation March 31, 2016 over Dec 31, 2015



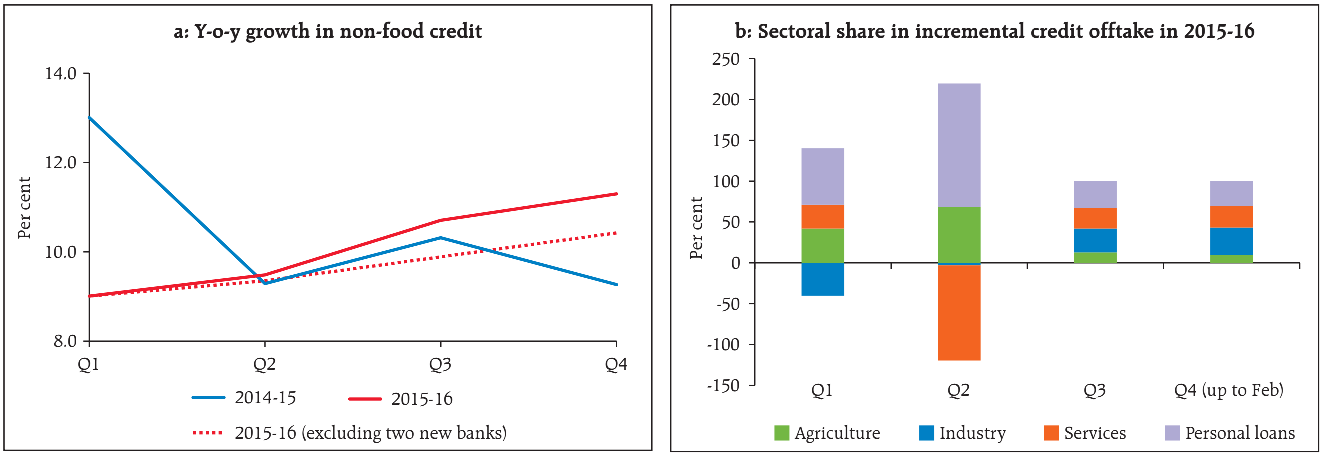
Source: Bloomberg.

Table IV.1 : Nominal and Real Effective Exchange Rates: Trade-Based (Base: 2004-05=100)

Item	Index March 25, 2016 (P)	Appreciation (+) / Depreciation (-) (per cent)	
		Mar 2016 over Mar 2015	Mar 2015 over Mar 2014
36-currency REER	111.62	-1.4	9.0
36-currency NEER	73.67	-4.1	6.8
6-currency REER	122.13	-3.0	11.7
6-currency NEER	66.43	-6.7	7.1
₹/ US$ (As on Mar 31, 2016)	66.33	-5.6	-4.0

P: Provisional.
Note: REER figures are based on Consumer Price Index (Combined).
Source: Reserve Bank of India.

Chart IV.9: Non-food Credit



Source: RBI.

respectively, in Q3 and Q4. The upturn is discernible even after adjusting for the operations of Bandhan and IDFC Bank – two new private banks that commenced activity during the year (Chart IV.9a). Noteworthy in this pick-up was that the flow of credit to industry, which had declined in the first half, turned around and accounted for 29 per cent of the total increase in non-food credit in Q3, followed by a share of 34 per cent in Q4 (Chart IV.9b). By and large, the improvement in bank credit flows has been led by the personal loans category, especially housing, in which delinquency and collateral constraints are comparatively less binding. The flow of resources from banks and non-banks to the commercial sector increased by 25 per cent in 2015-16. Flows from non-banks, which include CPs, public issues, financing from all India financial institutions, housing finance companies as well as foreign sources, increased by 12 per cent.

In response to the cumulative reduction in the policy repo rate by 125 bps, the weighted average lending rate (WALR) on fresh rupee loans declined by 90 bps (up to February 2016) and even the WALR on outstanding rupee loans softened by 53 bps (Table IV.2). The median base rate of banks, however, declined by 60 bps as against a higher decline of 80 bps in their median term deposit rates during the same period, reflecting the preference of banks to protect profitability in the wake of deteriorating asset quality and higher provisioning.

Table IV.2: Transmission of Policy Rate to Deposit and Lending Rates of Banks

(Per cent)

Month	Repo Rate	Term Deposit Rates		Lending Rates		
		Median Term Deposit Rate	WADTDR	Median Base Rate	WALR - Outstanding Rupee Loans	WALR - Fresh Rupee Loans
Dec-14	**8.00**	**7.55**	**8.64**	**10.25**	**11.96**	**11.52**
Mar-15	7.50	7.50	8.57	10.20	11.88	11.15
Jun-15	7.25	7.22	8.43	9.95	11.74	11.08
Sep-15	6.75	7.02	8.02	9.90	11.66	10.86
Dec-15	6.75	6.77	7.83	9.65	11.46	10.68
Mar-16	6.75	6.75	7.75*	9.65	11.43*	10.62*
Variation (Percentage Points) Mar-16 over Dec-14	**-1.25**	**-0.80**	**-0.89**	**-0.60**	**-0.53**	**-0.90**

WADTDR: Weighted Average Domestic Term Deposit Rate. WALR: Weighted Average Lending Rate.
*: Data are provisional and relate to February 2016.
Source: Reserve Bank of India (based on SMR VI AB submitted by banks).

The Marginal Cost of Funds Based Lending Rate (MCLR) system, effective April 1, 2016, is expected to impart greater transparency in the pricing of credit and improve the transmission of policy rate into the lending rates. As on April 4, the median overnight MCLR of 26 banks, accounting for about 83 per cent of total bank credit, was 50 bps lower than the median base rate, while the median MCLR across all tenors was lower by 25 bps.The Government's decision to remove the spread of 25 bps on select small savings schemes *vis-a-vis* G-sec yields of comparable maturities, and introduce a more frequent (quarterly, instead of annual) resetting of the administered interest rates on all small savings schemes effective Q1 of 2016-17 should align small savings rates with market rates and contribute to strengthening transmission. Administered interest rates on small savings schemes have been marked down by 40-130 bps for Q1 of 2016-17 as compared with those for 2015-16.

In Q3 of 2015-16, the Reserve Bank started the Asset Quality Review (AQR) to ensure that banks were taking proactive steps to correctly classify their loan portfolios, with the deadline of March 2017 to clean up by making full provision. Fifteen public sector banks reported losses on their domestic operations in Q3 of 2015-16 as a result of increased provisions for doubtful/ loss assets and write-offs of bad loans.

IV.2 Liquidity Conditions

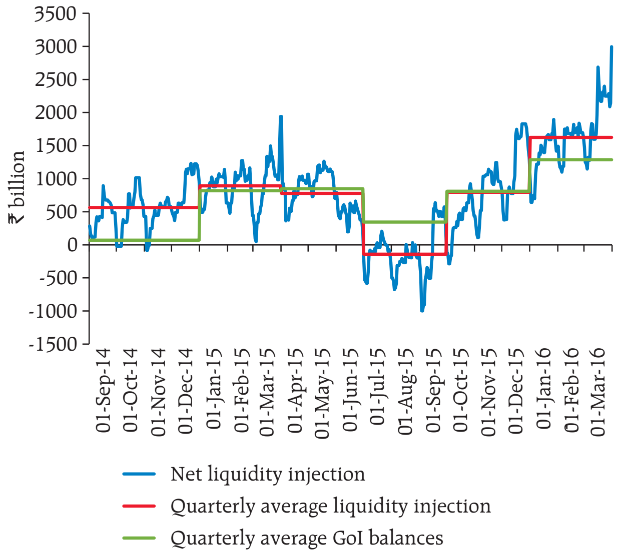
Barring transient periods of surpluses on account of Government spending on salaries/pensions/subsidies – usually in the first week of every month – liquidity conditions generally tightened in the second half of the year beginning from mid-October as the pace of Government expenditure slowed and the seasonal increase in currency demand for the festival season took hold. In anticipation of the mid-December outflow of advance tax payments, the Reserve Bank conducted fine-tuning operations, including a 28-day variable rate term repo auction (₹210 billion) and an open market purchase operation (₹100 billion) as well as term repos of tenors varying from overnight to 13-day, completely offsetting the build-up of Government balances. Liquidity injected by the Reserve Bank rose from ₹436 billion at the end of October to ₹1,322 billion at the end of December 2015.

In January 2016, as cash balances of the Government jumped from ₹762 billion on January 6 to ₹1.5 trillion by January 22, the Reserve Bank expanded its scale of operations, introducing a 56-day variable rate term repo, and also provided permanent liquidity through an open market purchase operation (₹100 billion) on January 20, followed up by another auction of equivalent amount on February 8. Durable liquidity was also injected through buyback operations (₹375 billion) on behalf of the Government. Three open market purchases aggregating to ₹414 billion were also conducted in March, besides additional term repos of tenors ranging from 2-day to 28-day involving a cumulative amount of ₹1.75 trillion to ensure adequate liquidity in the system. The pre-emptive approach of the Reserve Bank can be gauged from the fact that on March 15-16, term repos to the tune of ₹1 trillion were conducted to manage the extreme tightness induced by advance tax outflows. By March 16, the liquidity injection by the Reserve Bank from all sources rose to ₹2.7 trillion, including its regular facilities.

As pointed out earlier in this chapter, liquidity tightness in Q4 is a recurring phenomenon, especially in March. Among the major frictional drivers of liquidity, larger than usual swings in Government balances necessitated stepping up offsetting net LAF injection/absorption operations this year (Chart IV.10). Additional headroom was also provided within the prescribed SLR for accommodating the maintenance of higher LCR, which alleviated liquidity concerns by freeing up excess SLR to be used for collateralised money market/LAF transactions[2].

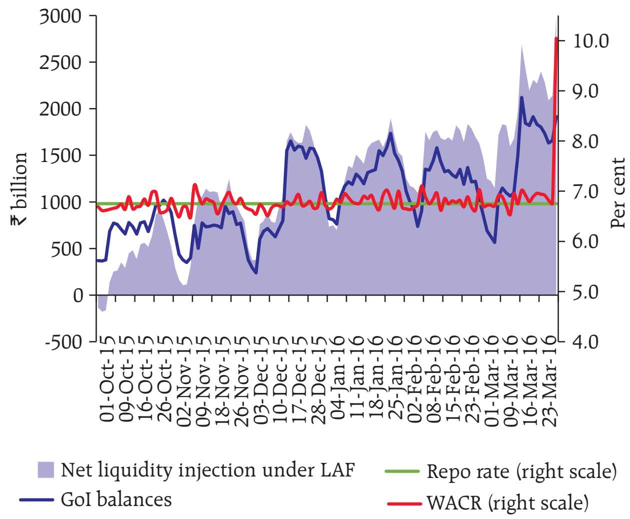
[2] The assets allowed as Level 1 High Quality Liquid Assets (HQLAs) for the purpose of computing the LCR of banks, *inter alia*, used to include Government securities in excess of the minimum SLR requirement, and within the mandatory SLR requirement up to 7 per cent of NDTL. Banks were permitted to reckon government securities held by them up to another 3 per cent of NDTL under the mandatory SLR, thereby raising the total carve-out from SLR to 10 per cent of NDTL.

Chart IV.10: Liquidity Injection and GoI Balances



Source: RBI.

Chart IV.11: Liquidity Management and WACR



Source: RBI.

These operations were reflected in the growth of reserve money at 14.5 per cent*, significantly higher than the growth in nominal GDP at 8.6 per cent in 2015-16. Moreover, there was a large overhang of permanent liquidity injected in 2014-15, when net foreign currency asset purchases (adjusted for OMO sales) were as high as 190 per cent of the increase in currency. Broad money (M_3) growth trailed the growth in reserve money in the second half of the year, mirroring modest deceleration in growth of deposits and the impact of relatively higher growth in currency on the money multiplier.

With proactive liquidity management, the effective policy corridor in the second half of the year was +36/-27 bps** pointing to the marksmanship achieved in terms of the Reserve Bank's operating target, notwithstanding perceptions about persisting deficit liquidity (Chart IV.11). The WACR spread over the repo rate, in fact, remained within +/-10 bps on 50 per cent of the total number of trading days, and within +/- 20 bps on 85 per cent of the total number of trading days. In this context, the issue of the appropriate width of the liquidity management corridor assumes significance (Box IV.1).

Box IV.1: Tactical Marksmanship in Liquidity Management

Corridor systems widely adopted by central banks in their monetary policy operations encounter both consensus and dilemmas or trade-offs. There is consensus that: (a) the operating target should be an interest rate over which the central bank has the most control – the overwhelming preference in country practices is for the overnight money market rate; (b) a sound and active liquidity management framework is essential to steer the target rate close to the policy rate; (c) there is a commitment to smoothing volatility in the target rate; and (d) reasonably accurate liquidity forecasts drive the active liquidity operations. The dilemmas include: (i) which instrument to use for modulating liquidity conditions; (ii) which interest rate to target – collateralised or uncollateralised, and overnight or short-term; and (iii) width of the corridor

(contd.)

* As on March 25, 2016; ** Excluding March 31, 2016.

– too wide a corridor allows volatility in the operating target while too narrow a corridor disincentivises market development.

International experience suggests that a preference for narrowing the policy rate corridor has generally been driven by the emphasis on minimising volatility in the overnight rate, as too wide a corridor appears to distort policy signals (Maehle, 2014) and encourages liquidity hoarding (Gray, 2013). Trading risks associated with high volatility may, in fact, dent market development, and market feedback in a volatile market for fine tuning liquidity operations may also become noisier. Countries with narrow symmetrical corridors (+/- 25 bps in the case of Australia and Canada) seem to 'middle' their operating targets better since market participants are encouraged to borrow and lend among themselves rather than use the central bank's facilities (Table 1). The Bank of Thailand established a corridor of +/-50 bps in 2006, and did not have to change it thereafter as it helped in achieving the target in both normal and crisis times. The Bank of England switched to a symmetrical +/-25 bps corridor in 2006, after experimenting with the asymmetrical +150/-100 bps corridor earlier. Volatility dropped significantly after the switchover. The Riksbank in 2000 started with a corridor of +/-75 bps but after the global crisis, the corridor was narrowed to +/-50 bps in 2009.

In India, the stylised evidence shows that volatility in the operating target has reduced markedly over the years. Rolling period standard deviations of the call rate for 7 days to 90 days have declined to a tenth from 4.5 per cent in 2006-07 to around 0.4 per cent in 2014-15 and further to 0.2 per cent in 2015-16. The efficacy of the revised liquidity management framework in reducing volatility in the overnight money markets is also validated by conditional volatility estimated by an I-GARCH (1, 1) model: spikes now occur with a reduced frequency. Fleetness in anticipating and responding to market aberrations has played an important role in these recent outcomes. Even intra-period reserve maintenance flux is getting evened out and final maintenance day effects are statistically insignificant.

Table 1: Spread of Mean of Interbank Rate *versus* Target Rate: Select Countries[1]

(Percentage points)

Country	During Crisis	Post Crisis			
	Aug 9, 2007-Dec 2010	Jan, 2011-Dec, 2012	2013	2014	2015
Australia	0.00	0.00	0.00	0.00	0.00
Canada	0.10	0.00	0.00	0.00	0.00
Sweden	-0.06	0.17	0.05	0.05	0.01
UK	0.07	0.05	-0.02	-0.03	-0.02
Euro Area	-0.40	-0.50	-0.50	-0.10	-0.10
Czech Rep	0.07	0.09	0.13	0.10	0.10
Poland	-0.54	-0.25	-0.14	-0.06	-0.07
Hungary	-1.15	-1.62	-1.25	-1.52	-1.23
US	-0.13	0.00			
Switzerland	-1.11	-0.51	-0.52	-0.51	-1.19
Norway	0.14	0.00	0.00	-0.01	-0.01
New Zealand	-0.11	-0.07	-0.03	-0.04	-0.09

References:

[1] Patra, M.D., Kapur M, Kavediya R, and Lokare S.M. (2015) "Liquidity Management and Monetary Policy: From Corridor Play to Marksmanship" in 'Monetary Policy in India: A Modern Macroeconomic Perspective', Springer Verlag, 2016 forthcoming.

Gray, S. *et al.,* (2013), "Monetary Issues in the Middle East and North Africa", Departmental Paper, IMF.

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IV.3 Global Spillovers and Domestic Financial Markets

Various segments of the domestic financial market spectrum have been impacted by bouts of turmoil in global financial markets and heightened volatility. In view of the disruptions in normal functioning of these markets and the implications for monetary policy transmission, identifying, measuring and managing spillovers has become a major challenge for domestic macroeconomic policies. In India, both domestic factors and global spillovers have conditioned movements in financial markets, though increasingly domestic factors appear to have played a more prominent role. Money, bond and credit markets are largely insulated in terms of persistence of the impact on average price levels, unlike the foreign exchange and stock markets. However, global spillovers tend to influence volatility in all segments[3]. Among domestic factors, liquidity conditions, market microstructure, inflation and fiscal outlook, and market concerns relating to asset quality of banks and corporate balance sheets have a prominent influence on market activity. Proactive liquidity management is critical to transmission, but by itself cannot prevent disruptions arising from overwhelming global developments.

[3] Patra, M.D.; Pattanaik, S; John, J. and Behera, H.K .(2016) "Global Spillovers and Monetary Policy Transmission in India", RBI Working Paper Series, WPS(DEPR):03/2016.

V. External Environment

Global economic activity has slackened further and international trade remains subdued, while downside risks have increased. Weak demand and soft commodity prices have rekindled fears of deflation in some key AEs, prompting renewed divergence in monetary policy stances. With fragile domestic economic fundamentals, EMEs remain vulnerable to swings in market sentiments and capital outflows.

Since the MPR of September 2015, the global economy has weakened, with rising downside risks prompting downward revisions to forecasts by several international agencies. Still subdued commodity prices and trade flows coupled with rising volatility in capital flows, exchange rates and financial markets have amplified the downside risks more recently. Stagnant investment across economies remains the main drag on growth. Clouding the outlook is the continuing loss of momentum in EMEs, overlaid by the anticipated slowdown in China and tightening financial conditions.

Global financial markets remained relatively calm in Q4 of 2015, factoring in the US monetary policy shift to normalisation. Sentiment was boosted by monetary policy easing in China and indication of further monetary stimulus in the Euro area and Japan. In January, however, financial markets were in turmoil, with an upsurge in volatility. Fears of further weakening of the Chinese economy and the depreciation of the Renminbi (RMB) set off capital outflows from China and triggered sell-offs in equity and debt markets across AEs and EMEs. Worries about profitability of banks churned global financial markets again in February before they began recuperating in March.

V.1 Global Economic Conditions

The US economy slowed in the second half of 2015 as the private sector cut back capital investment in the face of an inventory glut, while a strong dollar and tepid global demand weighed on exports. Industrial production remained in contraction mode in Q1 of 2016. Consumer sentiment remained upbeat, however, despite mixed sentiment in labour market conditions and retail sales. In the Euro area, growth decelerated in Q4 of 2015 due to sagging exports, though private consumption was boosted by low oil prices and favourable financing conditions. Consumer confidence and economic sentiment have fallen significantly in Q1 of 2016. Growth in the Japanese economy suffered a setback in Q4 of 2015 as the fall in private consumption overshadowed the expansion in exports. Continuing decline in factory output amplifies the fear of contraction in GDP in Q1 of 2016. The UK economy picked up in Q4 of 2015, driven by its services sector. Business confidence, however, remains subdued in Q1 of 2016 (Table V.1).

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

(Per cent)

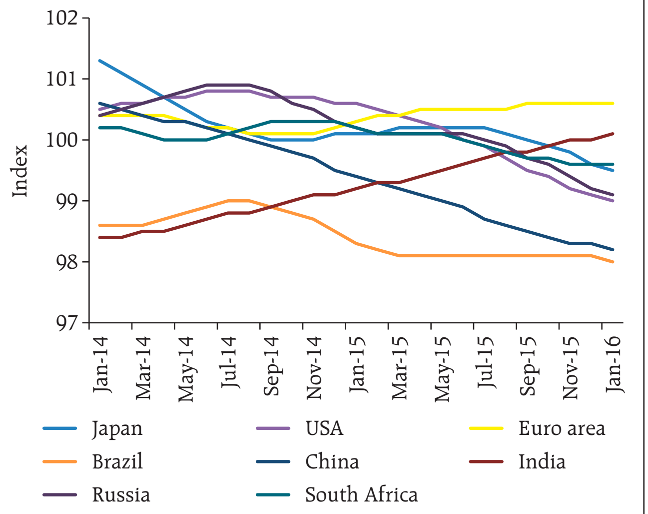
Period	Q1-2015	Q2-2015	Q3-2015	Q4-2015	2016 (P)
Advanced Economies					
US	0.6	3.9	2.0	1.4	2.6
Euro area	2.0	1.6	1.2	1.2	1.7
Japan	4.6	-1.4	1.4	-1.1	1.0
UK	1.6	2.4	1.6	2.4	2.2
Canada	-0.8	-0.4	2.4	0.8	1.7
Korea	3.2	1.6	5.2	2.8	3.2
Emerging Market and Developing Economies					
China	5.2	7.6	7.2	6.4	6.3
Brazil	-3.3	-8.2	-6.8	-5.8	-3.5
Russia	-4.6	-5.2	-2.3		-1.0
South Africa	1.4	-1.3	0.7	0.6	0.7
Thailand	2.0	1.6	4.0	3.2	3.2
Malaysia	4.8	4.4	2.8	6.0	4.5
Mexico	2.1	2.6	3.3	2.2	2.6
Saudi Arabia*	-2.4	0.3	1.8		1.2
Memo Items:	**2013**	**2014**	**2015 E**	**2016 P**	**2017 P**
World Output	3.3	3.4	3.1	3.4	3.6
Advanced Economies	1.1	1.8	1.9	2.1	2.1
Emerging Market and Developing Economies	5.0	4.6	4.0	4.3	4.7
World Trade Volume	3.3	3.4	2.6	3.4	4.1

E: Estimate P: Projection *: Seasonally unadjusted
Sources: Bloomberg and IMF.

In EMEs, the overall macroeconomic environment remains challenging, with growth having weakened further in recent quarters. Their relative contribution to world output growth shrank in 2015 (Chart V.1). The Chinese economy recorded the lowest quarterly expansion in Q4 of 2015 since 2009, with downside risks looming large in terms of weak external demand, factory overcapacity, slowing investment, a soft property market and high debt levels. Recessionary conditions persisted in Brazil in the closing quarter of 2015, as worsening labour market conditions and falling fuel and electricity subsidies continue to adversely impact private consumption. Investment was hamstrung by a combination of low domestic demand, high borrowing costs and weak business confidence. In Russia, economic activity remained in contraction. South Africa continued to face severe droughts, coupled with a plunging currency and political turmoil. By contrast, Turkey, Indonesia, Thailand and the Philippines recorded improved growth. Going forward, the OECD's latest composite leading indicators suggest tentative signs of stabilisation in China and a loss of momentum in Brazil and Russia (Chart V.2).

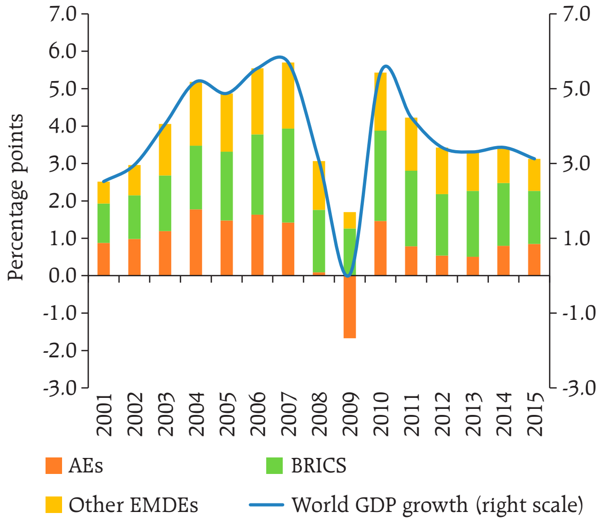
Global cross-border trade flows remained weak in 2015 and in January 2016 as well, propagated largely through manufacturing and investment linkages. Reduced demand for imports from China, sluggish import-intensive investment in other EMEs, particularly in extractive industries, and increasingly unremunerative terms of trade have played important roles. Nevertheless, trade volume has shown some resilience (Chart V.3). Looking ahead, a modest improvement in world trade flows is projected by the International Monetary Fund (IMF) and World Bank in 2016.

Chart V.2: Composite Leading Indicators for Major Economies



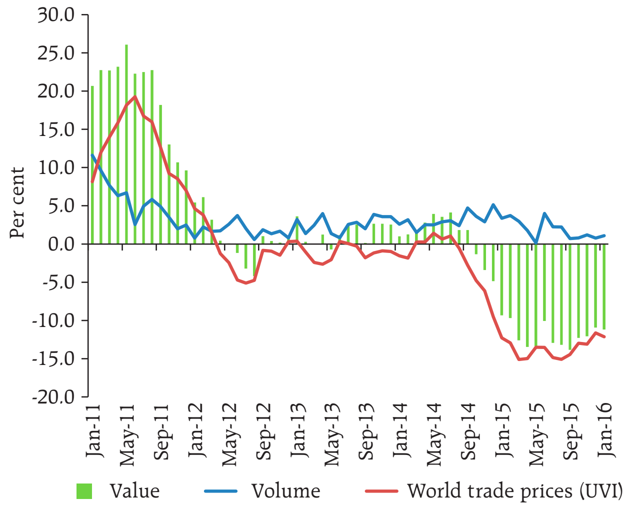
Source: OECD.

Chart V.1: Relative Contribution to World GDP Growth



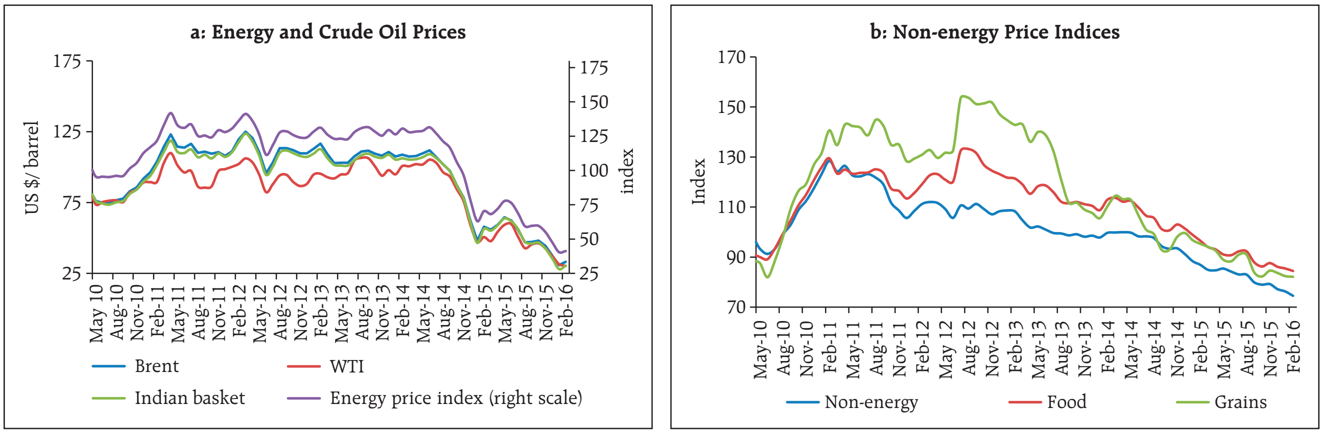
Source: WEO, IMF.

Chart V.3: World Trade Growth



Source: CPB Netherlands Bureau for Economic Policy Analysis.

Chart V.4: Global Commodity Prices



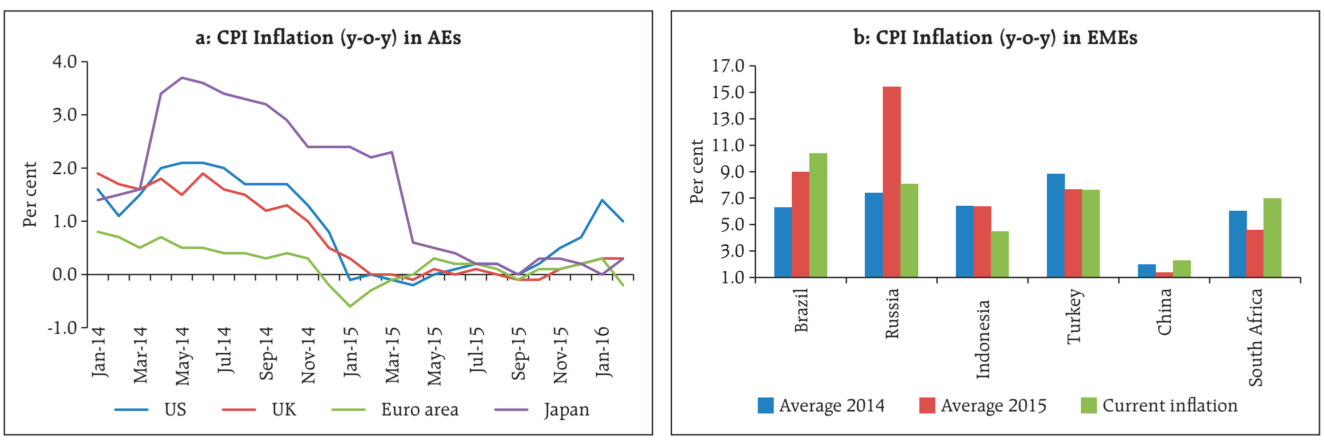
Sources: World Bank and Petroleum Planning and Analysis Cell.

V.2 Commodity Prices and Global Inflation

Global commodity prices softened further through Q4 of 2015. A recent uptick starting in mid-February 2016 is shadowed by excess supply, faltering demand from EMEs and strengthening of the US dollar. Crude oil prices dipped to a 12-year low of below US$ 30 per barrel in January 2016 under the weight of supply glut, combined with weaker than expected demand due to a milder winter in the northern hemisphere. The weakening US dollar and anticipation of OPEC freezing output in its scheduled April meeting, however, has boosted crude oil prices lately. Metal prices fell for four consecutive months till January; however, prices of gold gained by around 16 per cent during Q1of 2016 as demand for safe haven assets increased. Agricultural prices, which declined in Q4 of 2015, rose marginally for two consecutive months up to February due to supply concerns arising from still intense *El Nino* conditions (Chart V.4a and b).

Globally, inflation pressures were contained by weak global growth and the continuing softness in commodity prices. In the US, inflation inched up since the beginning of Q4 of 2015 through January, but it eased in February and is expected to remain well below 2.0 per cent in the near- term. The Euro area slipped back into deflation in February, after experiencing a

Chart V.5: Global Inflation



Source: Bloomberg.

creeping up of inflation in the three months up to January. Similarly, in Japan, inflation remains near zero since Q4 of 2015, and downside risks persist. By contrast, a number of EMEs continue to reel under high inflation due to currency depreciation – in Brazil, Russia and other Latin American countries – and domestic structural rigidities - in South Africa and Turkey (Chart V.5a and b). Thailand and Korea have benefited from low commodity prices, and inflation has eased below target since late 2012 and early 2013, respectively.

V.3 Monetary Policy Stance

Monetary policy stances have been diverging across both AEs and EMEs. In December 2015, the Fed raised its policy rate after almost a decade – to a target range for the fed funds rate of 0.25-0.5 per cent. However, the future policy rate path of Fed remains uncertain with the rate being kept on hold in January and March alongside dovish guidance. On the other hand, as fears of growth slowdown and deflation resurfaced, Japan and the Euro area have further eased unconventional accommodation. The European Central Bank (ECB) expanded its QE programme in March, reduced the deposit rate further into negative territory (-0.4 per cent) and cut its policy rate to zero. The Bank of Japan (BoJ), while maintaining its quantitative and qualitative easing programme, introduced a negative deposit rate since January. While the aim of countries pursuing negative interest rates has been to improve domestic growth and inflation outlook, it has given rise to global concerns about financial stability (Box V.1).

Box V.1: Negative Interest Rate-Crossing the Last Frontier

Post the Great Financial Crisis, Sveriges Riksbank, Danmarks Nationalbank, the ECB, the Swiss National Bank and, most recently, the BoJ have introduced negative interest rates on deposits at the central bank, and lowered the target for the overnight rate to below zero in some of them. Although the overall objective has been to raise economic growth and counter deflationary conditions by deterring saving, and encouraging borrowing and risk taking, scepticism has developed about the efficacy of the policy in achieving anything beyond inflating asset prices and depreciating currencies competitively. First, banks may choose to borrow less from the central bank in order to lower excess reserves and avoid the negative deposit rate. This would put upward pressure on rates in the interbank and bond market, offsetting the stimulative impact of the negative policy rate. Second, even if negative interest rates are transmitted to money markets, retail deposits may remain insulated due to banks' reluctance to pass it on to depositors for fear of losing deposits. Third, there could be offsetting adjustment in lending rates among sectors such as in Switzerland where negative rates have led to a rise in mortgage rates to protect margins. Fourth, unless there is transmission of the negative interest rate into lending and deposit rate, it would lose its rationale of boosting domestic demand. Lastly, if persisted for long, negative interest rates may encourage financial excesses, including instruments that emulate currency, allow tax avoidance and undermine the policy itself.

As for actual outcomes, negative interest rates could be impacting profit margins of banks already - concerns about profitability of banks in early February 2016 led to a sharp fall in bank equities in the Euro area which spread across AEs and EMEs. Over time, this could get entangled with volatility in financial markets due to persistent mispricing and financial imbalances, setting them up for the shocks from inevitable corrections. It is also observed that under negative interest rates, a tendency for resorting to currency depreciation to attract foreign demand gets heightened (Lipton, 2016).

A simple event-study analysis corresponding to day/month/quarter of introduction of the policy shows uncertain impacts on both GDP and inflation as well as perverse outcomes - decline in GDP growth and deeper deflation in Switzerland (Chart a and b). However, the counterfactual remains that the situation could have been worse without the policy.

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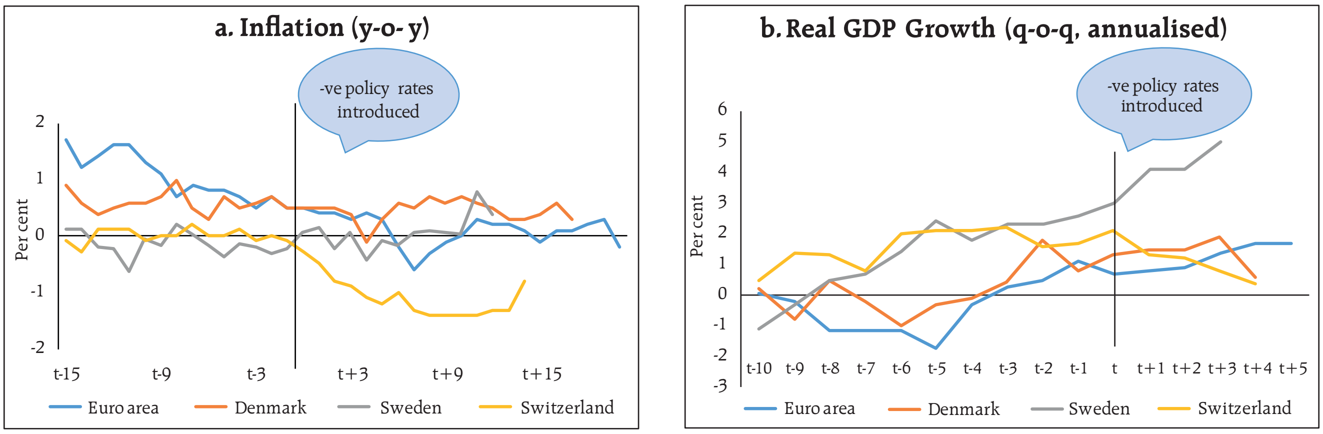

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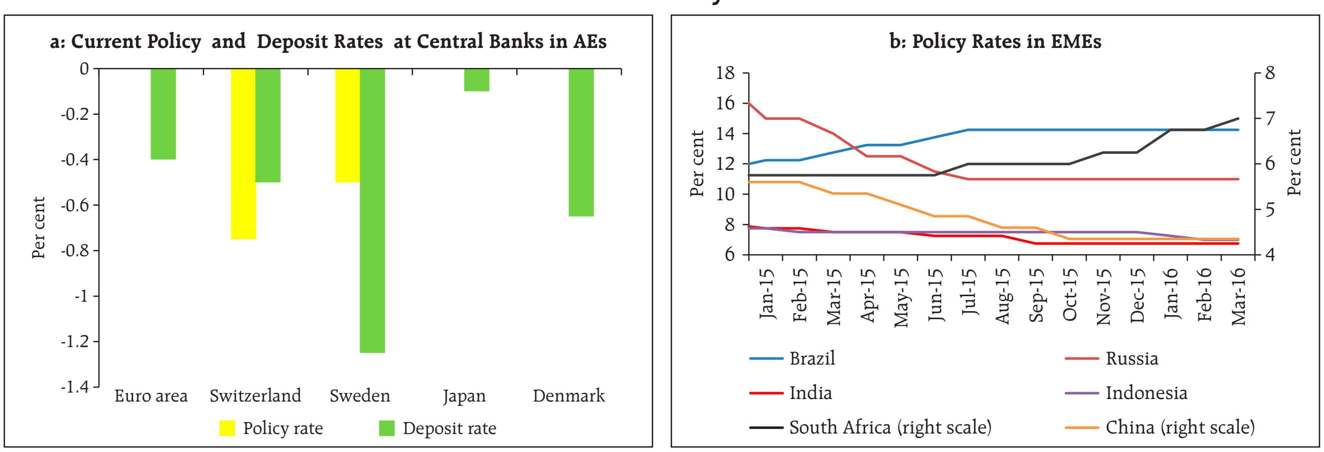
Lipton David (2016), "Policy Imperatives for Boosting Global growth and Prosperity", Speech delivered at National Association for Business Economics, Washington, D.C.

Monetary policy in EMEs has also been diversely stanced, reflective of varied macroeconomic conditions. China has aggressively cut deposit and lending rates and relaxed required reserves, including in March, to modulate the pace of economic slowdown. Indonesia, which lowered reserve requirements to boost bank financing capacity in November, reduced the policy rate in January and February on growth concerns. By contrast, South Africa raised its policy rate in November 2015 and January 2016 to curb inflationary pressures. Brazil and Russia continue to maintain high policy rates despite recession, as inflationary pressures remain elevated by large currency depreciation. Some Latin American countries such as Mexico, Chile and Colombia have been raising policy rates in response to currency depreciation, tracking in some measure the depreciation of the RMB (Chart V.6a and b).

Chart V.6: Policy Rates



Source: Bloomberg.

V.4 Global Financial Markets

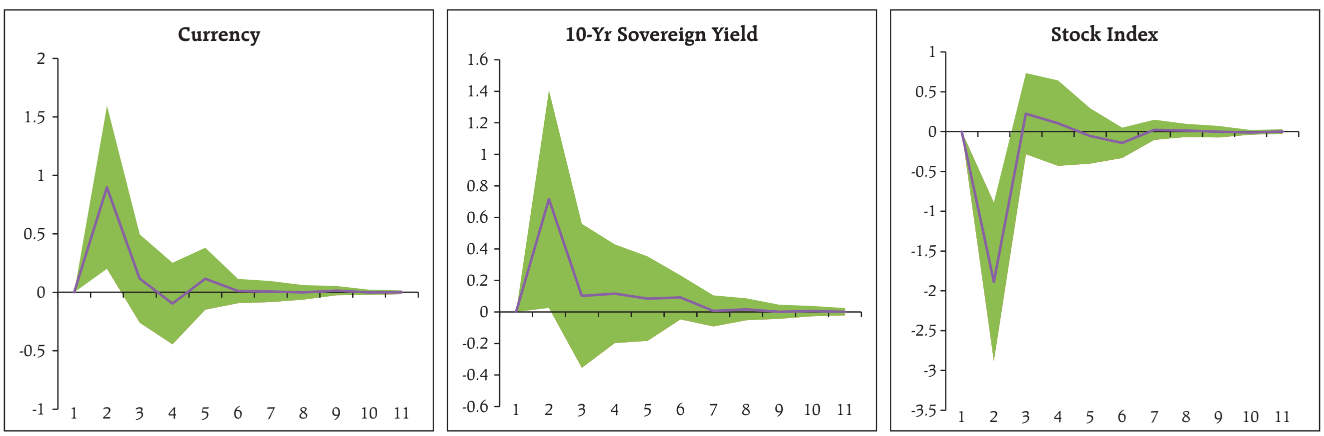
Global financial markets began Q4 of 2015 on a positive note, with market sentiment boosted by the Fed refraining from raising policy rate in its September meeting. As concerns about China seemed to recede, markets rallied in October – globally, equity markets recorded modest gains, yields softened in debt markets, major currencies regained some ground against the US dollar and crude oil traded briefly above US$ 50 per barrel for the first time since July. Policy interventions in major EMEs and AEs, either through stepping up of monetary accommodation or intervention in foreign currency markets, also supported the markets. With a hawkish tone discernible in Fed's October meeting, both money and bond markets in the US reacted to heightened rate expectations that gained ground from November 2015. In the Euro area, however, market sentiment remained calm until December.

Since the beginning of 2016, fears about weakening global growth have re-emerged, especially about China. Combined with worries about financial viability of European banks and falling commodity prices, it triggered surges of volatility in financial markets and overshoots, with contagion spreading to financial markets across AEs and EMEs. A panel VAR using daily data of select EMEs for the period July 1, 2015 to February 25, 2016 - covering the two episodes of large devaluation in RMB in August 2015 and January 2016 - shows that devaluation of the RMB induces marked movement in the currency, bond and equity markets in the panel countries over the next two weeks.[1] A one per cent depreciation in the RMB leads to a similar depreciation in the currencies of these countries, while the 10-year G-sec yield hardens and equity prices fall significantly (Chart V.7).

Global equity markets dipped into 'bear' territory during January-February 2016, with equity prices retreating across all major markets. Bank equities, in particular, were hit hard in AEs and have fallen significantly since the beginning of the year - 21 per cent in the Euro area; 30 per cent in Japan; 19 per cent in the UK; and 12 per cent in the US. Equity markets also fell across EMEs in Q1 of 2016, but the declines were relatively modest (Chart V.8a).

In AE bond markets, yields rose in the last quarter of 2015 on the anticipated rate hike by the Fed and easing concerns about China. Net foreign portfolio flows to EME bond markets were mostly negative in Q4 which kept yield rates high. In Q1 of 2016, financial market

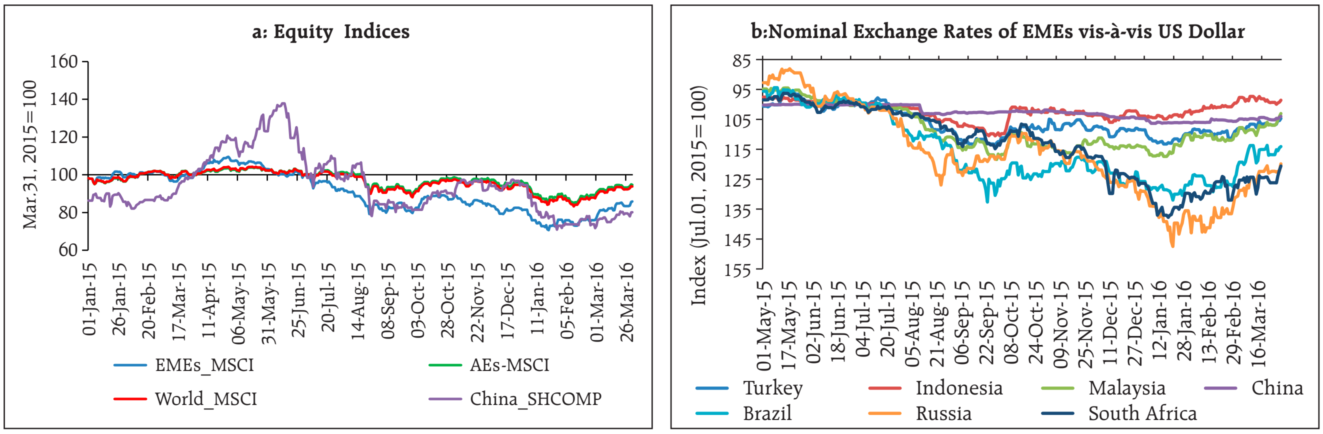
Chart V.7: Impulse Response to a One Per cent Devaluation in RMB



Source: Staff estimates.

[1] PVAR Stata Package developed by Abrogo *et al*, (2015) was used with the number of lags set to three with standard Choleskey decomposition. The selected EMEs are Brazil, China, India, Indonesia, Malaysia, Russia, South Africa and Thailand.

Chart V.8: Financial Markets



Source: Bloomberg.

turbulence and a further sharp fall in oil prices aggravated worries about global growth, and government bond yields fell into negative territory in some AEs. The introduction of a negative deposit rate by Japan pushed its 10-year bond yield into negative zone, which spurred demand for other positive yielding treasuries and depressed their yields.

Global foreign exchange markets broadly tracked the equity markets, policy measures of central banks in systemically important economies and shifts in investors' risk assessments. The US dollar has generally strengthened, barring intermittent loss of ground on incoming data. Currency markets have reacted perversely to more recent unconventional monetary policy actions by the ECB and the BoJ, with appreciation in the euro and yen occurring immediately after policy announcements. Among EME currencies, a few currencies such as the Korean won, the Malaysian ringgit, the Thai Baht and the Indonesian rupiah appreciated in Q4 of 2015. By contrast, currencies such as the Brazilian real, the Russian ruble and the South African rand weakened due to lower commodity prices. Most EME currencies have steadied after losing ground in early part of Q1 of 2016 (Chart V.8b).

In sum, downside risks to global economic activity have increased. With global commodity prices and inflation expected to remain soft, monetary policy stances continue to be highly accommodative, but divergent. Financial markets remain vulnerable to volatility and flux in capital flows and investor sentiment.

SPEECHES

*Towards Rules of the Monetary Game**

Raghuram G. Rajan

There are few areas of robust growth around the world, with the IMF repeatedly reducing its growth forecasts in recent quarters. This period of slow growth is particularly dangerous because both industrial countries and a number of emerging markets need high growth to quell rising domestic political tensions. Policies that attempt to divert growth from others rather than create new growth, or that create growth while fostering instability elsewhere, are more likely under these circumstances. Even as we create conditions for sustainable growth, we need new rules of the game, enforced impartially by multilateral organisations, to ensure countries adhere to international responsibilities. I propose to sketch how we could do this in this talk.

Why is growth weak?

Why is the world finding it so hard to restore pre-Great Recession growth rates? The immediate answer is that the financial boom preceding the Great Recession left industrial countries with an overhang of debt, and debt, whether on governments, households, or banks, is holding back growth.[1] While the remedy may be to write down debt so as to revive demand from the indebted, it is debatable whether additional debt fueled demand is sustainable. At any rate, large-scale debt write-offs seem politically difficult even if they are economically warranted.

But perhaps the debt overhang points to a deeper cause; the debt-fueled demand before the Great Recession, which has led to the debt overhang now, hid a structural slowdown in global potential growth, perhaps because of the difficult-to-understand consequences of population ageing across the industrial world, and the slowdown in productivity growth.

Structural reforms, typically ones that increase competition, foster innovation, and drive institutional change, are the way to raise potential growth. But these hurt protected constituencies that have become accustomed to the rents they get from the status quo. Moreover, the gains to constituencies that are benefited are typically later and uncertain. No wonder Jean-Claude Juncker, then Luxembourg's prime minister, said at the height of the Euro crisis, 'We all know what to do, we just don't know how to get re-elected after we've done it!'

The Growth Imperative

If indeed fundamentals are such that the industrial world has, and will, grow slowly for a while before new technologies and new markets come to the rescue, would it be politically easy to settle for slower growth? After all, per capita income is high in industrial countries, and a few years of slow growth would not be devastating at the aggregate level. Why is there so much of a political need for growth in industrial countries?

One reason is the need to fulfil government commitments such as debt and social security entitlements. Another reason is that growth is necessary for inter-generational equity, especially because the young, who are most benefited from job creation, are the generations that will be working to pay off commitments to older generations. Given the young are also the cohorts that can take to the streets, growth is essential for social harmony. A third reason is that, within country, long periods of below par growth can lead the unemployed to become unemployable.

* Talk by Dr. Raghuram G. Rajan, Governor of the Reserve Bank of India, at the IMF/Government of India Conference on Advancing Asia: Investing for the Future. This talk draws extensively on a paper entitled 'Rules of the Monetary Game' with Dr. Prachi Mishra at the RBI.

[1] See the interesting evidence in Atif Mian and Amir Sufi, House of Debt (Princeton University Press, New Jersey, 2014) and the cross-country evidence in Carmen Reinhart and Kenneth Rogoff, This Time is Different (Princeton University Press, New Jersey, 2008). For an illuminating overall view of the global financial crisis and the policy remedies, see Martin Wolf, The Shifts and the Shocks: What We've Learned and Have Still to Learn from the Financial Crisis (Penguin USA 2015).

Growth is also extremely important for emerging markets and developing countries, where populations are typically younger, poorer, and social safety nets thinner. With everyone looking for growth, but limited political room for structural reforms and substantial time lags before they pay off, every country is looking for alternatives.

The Monetary Dilemma

Industrial country central bankers know that monetary policy cannot substitute for structural reforms and elevate growth potential. They have a different problem from the country's political authorities, though its roots may be common. Inflation is flirting with the lower limit of their inflation mandate and threatens to stay lower for long. With interest rates already very low, and with pundits constantly reminding them that 'inflation is always and everywhere a monetary phenomenon' they have to go beyond ordinary monetary policy, or lose credibility and risk violating their domestic mandate.

No central banker can claim they are out of tools. For after all, if all else fails, there is the 'helicopter drop', where the central bank prints money and literally sprays it on the streets to create inflation (more prosaically, it sends a check to every citizen, perhaps more to the poor who are more likely to spend). But before it reaches this pass of monetary financing of the fiscal deficit, there are a whole range of unconventional tools ranging from various forms of asset purchases termed 'quantitative easing' to negative interest rates.

But as central bankers flirt with ever more unconventional policies, it is worth asking if these policies really move the economy towards the desired objective. Monetary policy works through the public's expectations. If ever more aggressive policy convinces the public that calamity is around the corner, it may tempt large segments to save rather than spend. The effect is magnified if there is a sense that the consequences of today's policies (distorted asset prices, high government debt, high private debt *etc.*) will have to be reversed in the future at great cost to the system.

Perhaps worse is if the public believes that policies will never change, and takes on leverage and positions in assets commensurate with that. While this may help the central bank achieve its objectives in the short run, the shifts in asset price when policy does inevitably change, with effects exacerbated by enhanced leverage, could create enormous dislocation.

While the jury is still out on the effects of unconventional monetary policy on the domestic economy, it seems fair to say that the benefits seem to be diminishing after years of effort, and the costs increasing. Also, if structural impediments are the primary cause of slow growth, one could ask if unconventional monetary policy, by giving the public the impression that something is being done, actually takes the pressure off politicians to undertake the required policy actions – by stating monetary policy is the only game in town, central bankers make it the only game in town. Unfortunately, given their domestic inflation mandate, central bankers cannot but try anything that could work. And this leads to an important consequence of their policies that is neglected, the external spillovers effects.

Spillovers from Monetary Policy

All monetary policies have external spillover effects. If a country reduces domestic interest rates, its exchange rate also typically depreciates, helping exports. The key, however, is that under normal circumstances, the 'demand creating' effects of lower interest rates on domestic consumption and investment tend to be substantial, and the 'demand switching' effects of the lower exchange rate in enhancing external demand for the country's goods are likely to be relatively small. Indeed, one could argue that the spillovers to the rest of the world could be positive on net, as the enhanced domestic demand draws in substantial imports, offsetting the higher exports.

Matters are less clear in the circumstances we find ourselves in today, and with the unconventional policies countries are adopting. For instance, if the interest rate sensitive segments of the economy are constrained by existing debt, lower rates may have little effect on enhancing domestic demand, but continue to have demand switching effects through the exchange rate.

Similarly, the unconventional 'quantitative easing' policy of buying assets such as long term bonds from domestic players may certainly lower long rates but may not have an effect on domestic investment if aggregate capacity utilisation is low. Indeed, as argued earlier, savers may respond to the increased distortion in asset prices by saving more. And if certain domestic institutional investors such as pension funds and insurance companies need long term bonds to meet their future claims, they may respond by buying such bonds in less distorted markets abroad. Such a search for yield will depreciate the exchange rate. The primary effect of this policy on domestic demand may be through the 'demand switching' effects of a lower exchange rate rather than through a demand creating channel.

Of course, if all countries engage in demand switching policies, we could have a race to the bottom, with no one any better off. Nevertheless, countries may find it hard to get out of such policies because the immediate effect for the country that exits might be a serious appreciation of the exchange rate and a fall in domestic activity.

The bottom line is that simply because a policy is called monetary, unconventional or otherwise, it may not be beneficial on net for the world. That all monetary policies have external spillovers does not mean that they are all justified. What matters is the net spillovers. One source of spillovers is through the trade channel, the relative magnitude of demand creating versus demand switching effects. Another source of spillovers is through cross border capital flows, and their effect on financial stability elsewhere.

Of course, a country's international responsibilities in this regard are murky, while the central bank's domestic mandate is explicit. This leads to a possibly serious asymmetry in responsibility. If the central bank is in danger of falling below the lower bound of its inflation mandate, for example, it is required to adopt all possible policies to get inflation back on target, no matter what their external effect. Indeed, it can even intervene directly in the exchange rate in a sustained and unidirectional way, though internationally this could be seen as an abdication of international responsibility according to the old standards. In the current state of affairs, industrial country central banks find all sorts of ways to justify their policies in international fora, without acknowledging the unmentionable – that the exchange rate may be the primary channel of transmission, and that adverse capital flow spillovers may be sizeable. Of course, central banks consider 'spillbacks' to their policies from abroad, but these may be a small fraction of overall spillovers. In what follows, I will examine sensible rules of monetary behavior assuming the domestic mandate does not trump international responsibility.

Rules of the Game

What would be the basis for the new rules? As described elsewhere, the state of theoretical models and empirical work do not allow for clear cut identification of spillovers and their consequences.[2] Rather than wait for clear identification, which may be a long while coming, perhaps as a start policies could be broadly rated based on analytical inputs and discussion. To use a driving analogy, polices that are generally seen to have few adverse spillovers, and are even to be encouraged by the global community should be rated Green, policies that should be used temporarily and with care could be rated Orange, and policies that should be avoided at all times could be rated Red. To establish such ratings, the effects of any policy have to be seen over time, rather than at a point in time.

In general, policies that are likely to have net adverse outside spillovers over time could be rated red and should be avoided. Such policies obviously include those that have small positive effects in the home

[2] See Prachi Mishra and Raghuram Rajan, 'Rules of the Monetary Game', 2016, mimeo.

country (where the policy action originates) combined with large negative effects in the foreign country (where the spillovers occur). For example, if unconventional monetary policy actions lead to small positive effects on exports to emerging economies (EMs) and a feeble recovery in the source country but large capital outflows and asset price bubbles in the EMs, these policies could be rated Red. Global welfare would decrease with this policy.

If a policy has positive effects on both home and foreign countries, and therefore on global welfare, it would definitely be rated Green. Conventional monetary policy would typically fall in this category, as it would raise output in the home economy, and create demand for exports from the foreign economy. A Green rating for such policies would, however, assume that the stage of the financial and credit cycle in the home and foreign economies is such that financial stability risks from low interest rates are likely to be limited.

A policy could also be rated Green if it acts as a booster shot and can jump-start a large home economy, but creates temporary negative spillovers for the foreign economy. Even if there are temporary adverse spillovers on foreign countries, the policy, through its effect on home economy growth and demand for foreign goods, can eventually provide offsetting large positive spillovers to the rest of the world. Of course, it is important that the home economy, after receiving the booster shot and picking up growth, not follow policies (such as holding down its exchange rate) that minimise positive spillovers to other countries. A policy rated Red on a static basis could thus be deemed Green based on implicit commitments over time.

It is possible to visualise other policies that have large positive effects for the originating country (because of the value of the policy or because of the country's relative size) and sustained small negative effects for the rest of the world. Global welfare, crudely speaking, may go up with the policy, even though welfare outside the originating country goes down. While it is hard to rate such policies without going into specifics, these may correctly belong in the Orange category – permissible for some time but not on a sustained basis. Even conventional monetary policies to raise growth in the home economy could fall in the Orange category if countries are at a stage of financial cycle where low interest rates lead to significant financial stability risks in the home and foreign economies.

Clearly, foreign countries may have policy room to respond, and that should be taken into account. Perhaps the right way to measure spillovers to the foreign country is to measure their welfare without the policy under question` and their welfare after the policy is implemented and response initiated. So, for instance, a home country A at the zero lower bound may initiate Quantitative Easing (QE), and a foreign country B may respond by cutting interest rates to avoid capital inflows and exchange rate appreciation. The spillover effects of QE would be based on B's welfare if QE was not undertaken versus B's welfare after QE is initiated and it responds.

Overall, whether policies are rated Red, Green, or Orange would depend on a number of factors such as the time dimension; stage of the financial and business cycle in the home and foreign countries; whether the policy action constitutes a booster shot to jump start the economy or gives only a mild boost and has to be employed for a sustained period; whether standard transmission channels are clogged to warrant the use of unconventional policies; whether the foreign country has room to adopt buffering policies; whether the spillovers impact poor countries which have weak institutions and less room to respond, *etc.*

Moving Forward

The next crucial question is: who should measure and analyse spillovers, what would be an appropriate forum to discuss spillover effects from specific policies, and the ratings of these policies? How should we proceed?

International Discussion

Given the constraints and political difficulties under which international organisations operate, it may be appropriate to start with a group of eminent academics with reasonable representation across the globe, and have them measure and analyse the spillovers, and grade policies.

Perhaps the next step would be an agreement to discuss policies and their international spillover effects at meetings such as those of the IMF Board, the IMFC, the BIS and the G-20. The discussion would be based on background papers, which would be commissioned from both traditional sources like the IMF, as well as non-traditional sources like the group of academics and EM central banks.

These papers would attempt to isolate the nature of spillovers as well as their magnitude, and attempt a preliminary classification of policy actions. Almost surely, there will be a lot of fuzziness about which color to attribute to a wide range of recent policies. But discussion can help participants understand both how the policies could be classified if we had better models and data, as well as how the models and data gathering can be improved.

Country Responsibilities before Formal Rules

When policies are being discussed so as to get better understanding, no policies that affect the international monetary system should be off the table. Importantly, simply denoting a policy with the label 'monetary' should not give it an automatic free pass because it falls under the central bank's domestic mandate. What will be important is neither the policymaker's mandate, professed intent, or instruments, but actual channels of transmission and outcomes, including spillovers.

Policymakers will respond to the background papers by stating and explaining their policy actions, attempting to persuade the international community they fall in the Green and Orange zones.

International Conference

Perhaps free and frank discussion may be enough to get countries to adopt responsible policies. If not, as the international community builds understanding on what constitutes sensible rules of the game, and how to label policies in that context, perhaps an international conference may be warranted to see how the community's understanding of beneficial rules can be implemented. At that time, a discussion of how a central bank's international responsibilities fit in with its domestic mandate may be warranted. While recognising the political difficulty of altering any central bank's mandate, the conference will have to deliberate on how international responsibilities can be woven into existing mandates. It will also have to decide whether a new international agreement along the lines of Bretton Woods is needed, or whether much can be accomplished by small changes in the International Monetary Fund's Articles of Agreement.

Role of the Fund

What role would the Fund play? The obligations of members and the authority of the Fund are derived from the Articles of Agreement. Section 1 of Article IV makes clear that IMF members are under general obligation 'to collaborate with other members of the Fund to assure orderly exchange arrangements and to promote a stable system of exchange rates'. The meaning of 'general obligation' is unclear in the Articles but could be 'relied upon as a basis for the Fund to call on its members to take specific actions or to refrain from taking specific actions' (IMF, 2006). Article IV further states that 'In particular, each member shall … (iii) avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain unfair competitive advantage over other members …..'. Further, The Principles for the Guidance of Members' Exchange Rate Policies (originally 1977, amended in 2007) notes that ' … C. Members should take into account in their intervention policies the interests of other members, including those in whose currency they intervene'.

Although the Articles of Agreement or The Principles do not define 'manipulation' in any detail, IMF (2007) narrows the scope of manipulation by noting that 'manipulation of the exchange rate is only carried through policies that are targeted at – and actually affect – the level of exchange rate. Moreover, manipulation may cause the exchange rate to move or may prevent such movement.'

In practice, it may be difficult to determine if a policy is targeted at attaining a level of exchange rate. Direct policy actions such as intervention in the foreign exchange market, or indirect policies such as monetary, fiscal, and trade policies or regulations of capital movements, regardless of the intent or purpose, can affect the level of the exchange rate, and can be interpreted as 'manipulation'. The interpretation of the Articles of Agreement could perhaps be broadened in scope to include a wider range of policies, which can primarily have effects on the exchange rates, and therefore beggar-thy-neighbor consequences.

While the Articles of Agreement include members' obligations in relation to exchange rate policies, global financial stability implications of country specific policies are not touched upon anywhere in the Articles. Members' obligations are considered only in relation to domestic growth objectives. For example, based on the Articles, a country with a weak economy can pursue loose monetary policies to stimulate output and employment. Despite the implications of such policies for financial stability in other countries, the country would argue that its policies are in line with Article IV, Section 1(i) which allows each member to '(i) … direct its economic and financial policies toward the objective of fostering orderly economic growth with reasonable price stability …'. More generally, the Fund's Articles may need altering based on the discussion of the rules of the game.

Moreover, although broader surveillance by the Fund of its members' exchange rate policies, and other policies with significant financial sector spillovers, and perhaps public statements about such policies can have signaling effects, countries are not obligated to follow Fund advice unless in a program. The more pertinent question, therefore, might be what can the Fund really do once its Executive Board determines that a particular country is in violation of its obligations under the new rules of the game? Hopefully, the clear focus on the downsides of the particular country's actions for the rest of the world will lead to political and economic pressures from around the world that make the country cease and desist. The clearer the eventual rules of the game, the more likely this outcome.

Conclusion

Given the importance of spillovers from monetary policies, especially in the face of globally low inflation, it is important we start building a global consensus on how to get better outcomes for the world. Nevertheless, with economic analysis of these issues at an early stage, it is unlikely we will get strong policy prescriptions soon, let alone international agreement on them, especially given that a number of country authorities like central banks have explicit domestic mandates.

This paper therefore suggests a period of focused discussion, first outside international meetings, then within international meetings. Such a discussion need not take place in an environment of finger pointing and defensiveness, but as an attempt to understand what can be reasonable, and not overly intrusive, rules of conduct.

As consensus builds on the rules of conduct, we can contemplate the next step of whether to codify them through international agreement, see how the Articles of multilateral watchdogs like the IMF will have to be altered, and how country authorities will interpret or alter domestic mandates to incorporate international responsibilities.

The international community has a choice. We can pretend all is well with the global financial non-system and hope that nothing goes spectacularly wrong. Or we can start building a system for the integrated world of the twenty first century. I do hope we can consider some initial steps. Thank you.

*India in the Global Economy**

Raghuram G. Rajan

Thank you for inviting me to deliver the first Ramnath Goenka lecture. As you know, Shri Goenka was a freedom fighter, who built the Indian Express into a national newspaper. In his time, it was arguably the best investigative newspaper in the country. He was instrumental in highlighting the excesses of the Emergency, which probably contributed to Indira Gandhi's defeat when she lifted it. He continued to be a tireless scourge of corruption and government high-handedness, and was responsible for unsettling many a minister and business tycoon. It would be fitting in a lecture in his memory to speak about the efforts we are making in India today on increasing transparency and curbing corruption. However, I have said what I needed to on that elsewhere. Instead, I will speak today on India's engagement with the global economy, and how best to manage it in these turbulent times.

The global economy is finding it hard to restore pre-Great Recession growth rates – every report of the IMF seemingly downgrades its previous growth forecasts. Why has the recovery been so slow? The immediate answer is that the financial boom preceding the Great Recession left industrial countries with an overhang of debt, and debt, whether on governments, households, or banks, is holding back growth. While the remedy may be to write down debt so as to revive demand from the indebted, it is debatable whether additional debt fueled demand is sustainable. At any rate, large-scale debt write-offs seem politically difficult even if they are economically warranted.

But perhaps the debt overhang points to a deeper cause; the debt-fueled demand before the Great Recession, which has led to the debt overhang now, hid a fall in global potential growth, perhaps because of the difficult-to-understand consequences of population ageing across the industrial world, and the slowdown in productivity growth.

Structural reforms, typically ones that increase competition, foster innovation, and drive institutional change, are the way to raise potential growth. But these hurt protected constituencies that have become accustomed to the rents they get from the status quo. Moreover, the gains to constituencies that are benefited are typically later and uncertain. No wonder Jean-Claude Juncker, the former Luxembourg Prime Minister, said at the height of the Euro crisis, 'We all know what to do, we just don't know how to get re-elected after we've done it!'

Instead, industrial countries are engaged in ever more aggressive monetary policy moves. This imposes tremendous risks on emerging markets like ours, as we are faced with surges of capital inflows one day when investors go into 'risk-on' mode only to see outflows the next as they switch risk off. At the same time, overcapacity in competitor countries threatens some of our key industries.

What Should India Do?

What should India do in this environment where the international investor is manic depressive in his behavior and all countries are striving for extra growth? Importantly, when global growth is uncertain, we should make sure that our domestic environment promotes strong, sustainable, and stable growth. This requires a firm platform of macroeconomic stability. Let me elaborate.

The recent central budget emphasised fiscal prudence and adhered to past commitments, even while allocating resources towards capital spending and focusing on structural reforms, especially in agriculture. The subsequent fall in government bond yields suggests that market investors were calmed by the Government's overall message. Fiscal consolidation, combined with lower commodity prices, has also led to a lower current account deficit.

* First Ramnath Goenka Memorial Lecture by Dr. Raghuram G. Rajan, Governor, Reserve Bank of India, delivered on March 12, 2016. I thank Dr. Prachi Mishra and her team for assistance.

Inflation is also clearly down since the days of double-digit CPI inflation not so long ago. The RBI's inflation-focused monetary framework will be strengthened by the constitution of the monetary policy committee mooted in the Finance Bill. While the RBI Governor will no longer be able to set monetary policy unilaterally, I believe shifting the decision to a committee is in the economy's interest. Not only will a committee aggregate multiple views better than an individual can, it will offer more continuity, and be less subject to undue pressure. I believe the monetary reforms of this Government will stand out as one of its signal achievements.

The last leg of the stabilisation agenda is to clean up the stressed assets in the banking sector so that banks have the room to lend again. The problem in the past was that banks simply did not have enough powers to force promoters to pay, or to put stressed assets back on track. Unlike more developed countries, we do not have a functioning bankruptcy system, though a bill is currently before Parliament. Therefore, we first had to create an effective out-of-court resolution system. Having done that, we are now working with banks to recognise and resolve stressed assets, even while getting them to raise capital where necessary. Our intent is to have clean and fully provisioned bank balance sheets by March 2017.

Perhaps the hardest aspect of this stabilisation agenda has been to persuade the economics commentariat of the need for macroeconomic stability when growth is below expectations. The constant call of the economic sirens, seeking to lure the economy onto the shoals of economic distress, is 'Lord, give us stability, but not just yet!' Growth is always more important, no matter how the risks build up. Usually, the sirens call on you to not be doctrinaire (after all, only academic economists care about fiscal deficits), to be practical (does it really matter if an NPA is recognised a quarter or three later) and to appreciate Indian realities (everyone may say they hate inflation but no one really wants to bear the pain of the disinflationary process).

I believe we are in the process of proving the sirens wrong. Given the inhospitable world economy and two successive droughts in India, either of which would have thrown the economy into a tail spin in the past, our focus on macroeconomic stabilisation must be part of the explanation why we have over 7 per cent growth, low inflation and a low current account deficit unlike some of our emerging market counterparts. Now, we have to build on this sound base. What will be particularly important is how we engage with the world economy. I want to talk specifically about trade, the exchange rate, capital flows, and ideas.

International Trade

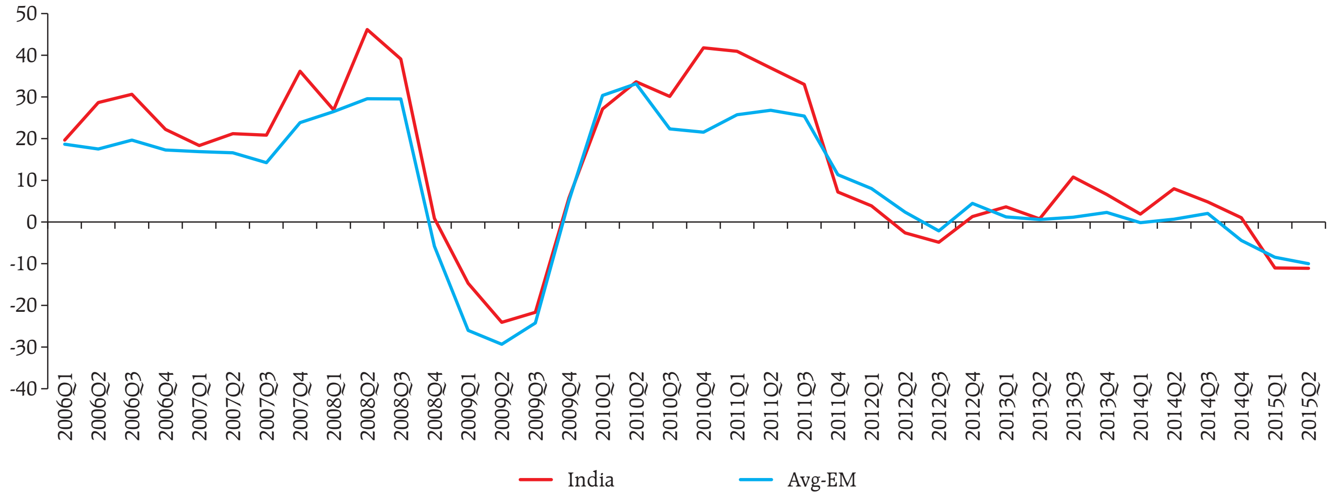
For the first time in decades, global trade has consistently grown more slowly than global output. There are a number of possible explanations; as countries get richer, non-traded services constitute a greater fraction of GDP, causing GDP to grow faster than trade. Also, with trade-intensive capital goods' investment muted because of global overcapacity, trade grows more slowly than GDP. Finally, as industrial countries become more competitive, and as China moves up the value chain, more of the inputs going into final products are being sourced from inside a country rather than from outside the country. Some global supply chains are therefore contracting. For all these reasons, the heady days when Indian trade in goods and services were expanding at a double digit pace will probably only be a memory for some time.

It is useful to examine recent trade data to see how India compares with rest of the world. Figure 1 suggests the growth of Indian exports of goods and services broadly mirrors that of emerging markets.

Most recently, of course, emerging market commodity exporters have been hit by lower prices. Nevertheless, Indian goods exports seem to be doing worse recently than goods exports from emerging markets (see figure 2).

At the same time, the growth of Indian service exports seems to be doing somewhat better, perhaps because countries like the United States that we export

Figure 1: Exports of goods and services (BoP, current US$)
(quarterly, yoy, % change)



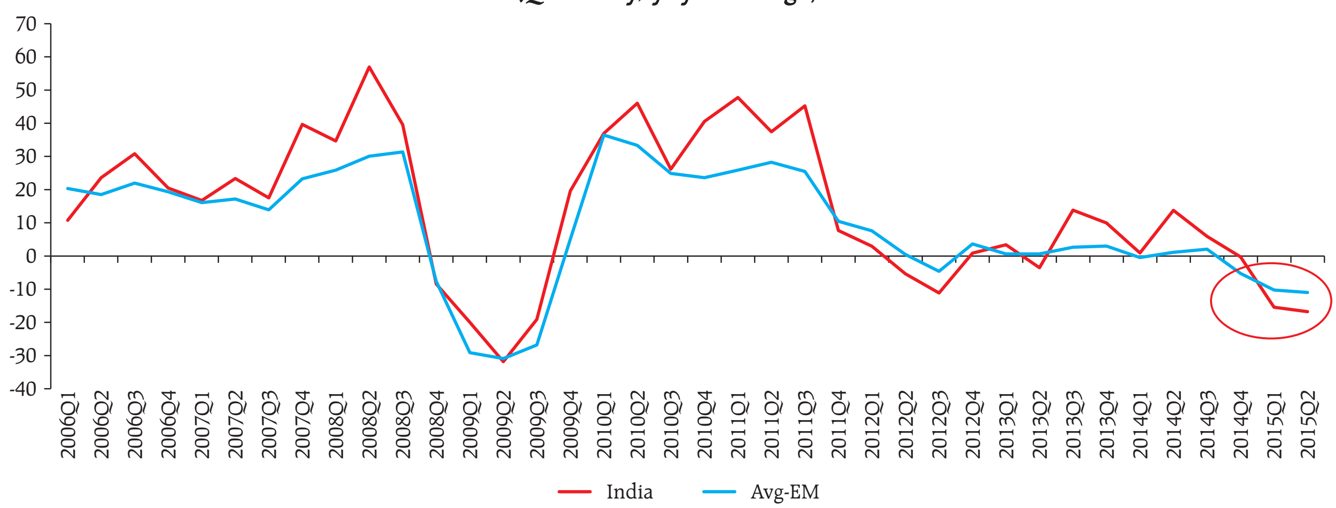
Source: IMF Balance of Payment Statistics. Emerging markets (EMs) include Brazil, China, Indonesia, Mexico, Russia, South Africa, Thailand, Turkey, and India. The black line shows a simple average of growth rates across these EMs.

services to are recovering more strongly. Of course, these differences are over very short periods, so it is probably unwise to draw strong conclusions from them. What one can probably take away is that India is not alone in suffering a fall-off in trade.

However, as Indian trade slows, industry bodies are urging authorities to do something. Of course, if all countries are experiencing slower trade, the remedies may be beyond the control of Indian authorities. While we can examine possible dumping in certain industries, we have to be careful that any remedies that increase prices in the protected industry do not render other domestic industries uncompetitive.

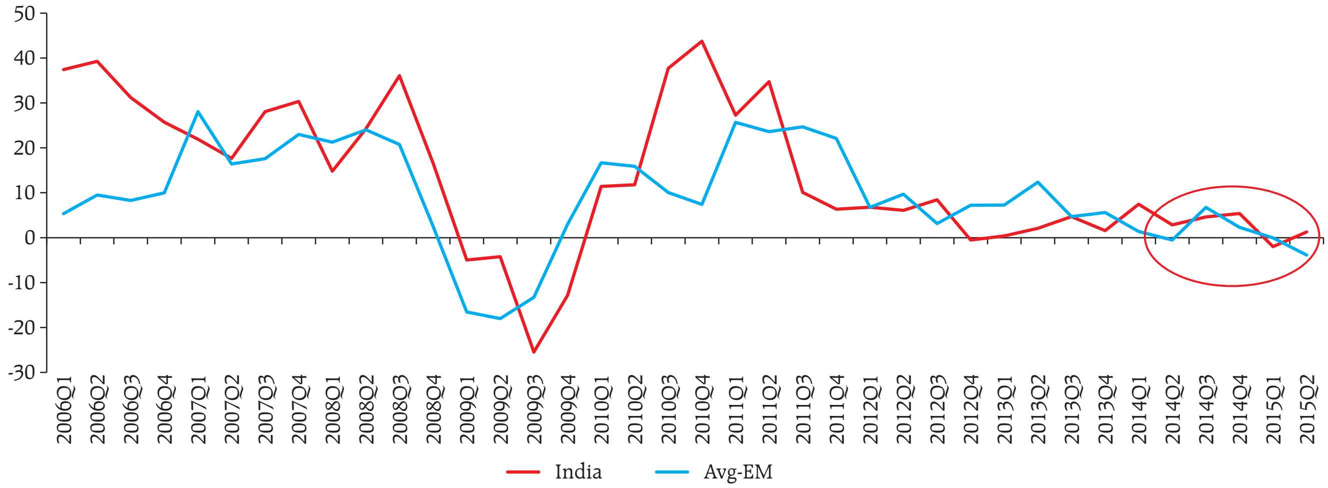
It is at these times of slowing trade that our pundits look at the exchange rate and argue it is overvalued. Of course, I have just argued that we are

Figure 2: Goods exports (BoP, current US$)
(Quarterly, yoy % change)



Source: IMF Balance of Payment Statistics. Emerging markets (EMs) include Brazil, China, Indonesia, Mexico, Russia, South Africa, Thailand, Turkey, and India. The black line shows a simple average of growth rates across these EMs.

Figure 3: Service exports (BoP, current US$) (Quarterly, yoy % change)



Source: IMF Balance of Payment Statistics. Emerging markets (EMs) include Brazil, China, Indonesia, Mexico, Russia, South Africa, Thailand, Turkey, and India. The black line shows a simple average of growth rates across these EMs.

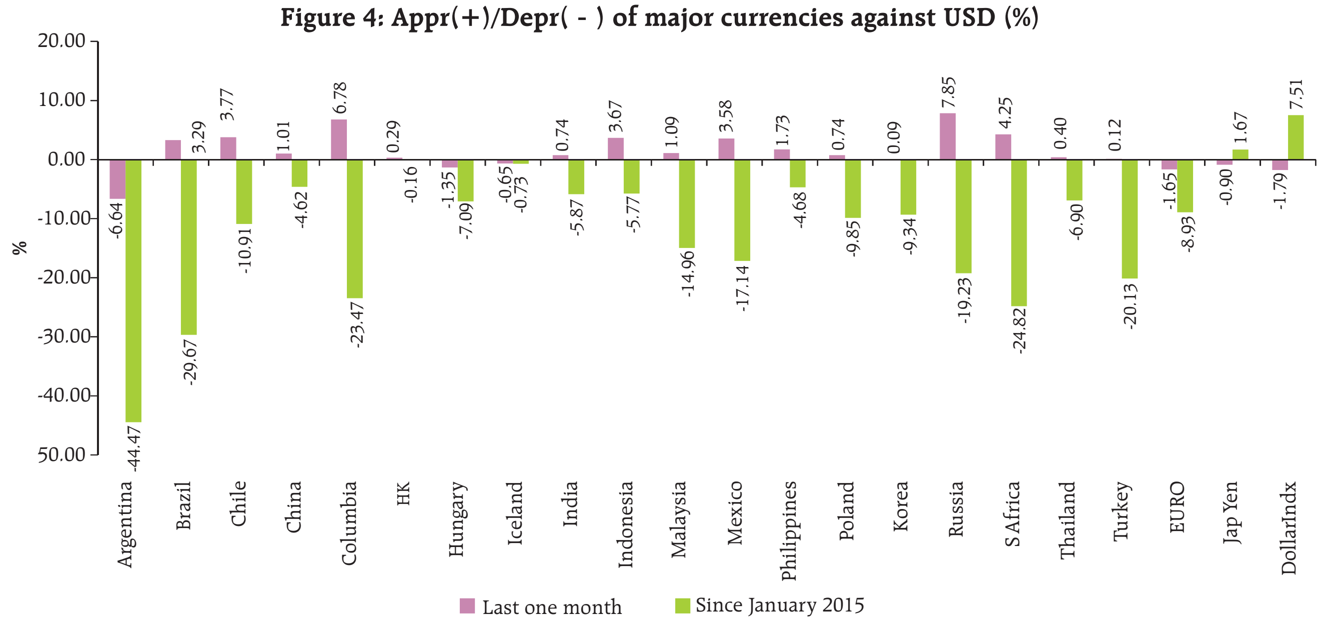
not alone in experiencing a fall in trade, but let us examine the exchange rate.

The Exchange Rate

When most people think about the exchange rate, they think of the rupee's value against the dollar. As Figure 4 indicates, the rupee seems to have weakened by about 6 per cent against the dollar since the beginning of 2015, approximately the time our relative underperformance on goods exports started. This depreciation should have helped our exports, though the effects of depreciation show up only after a lag.

But we should note that other currencies have depreciated against the dollar also. So while we have gained an advantage versus US producers, other foreign producers may have become even more competitive because their exchange rate has depreciated more.

Figure 4: Appr(+)/Depr(-) of major currencies against USD (%)



Economists therefore advise looking at an index of the nominal effective exchange rate, which compares the rupee's value versus other exchange rates, weighing each by their share in trade.

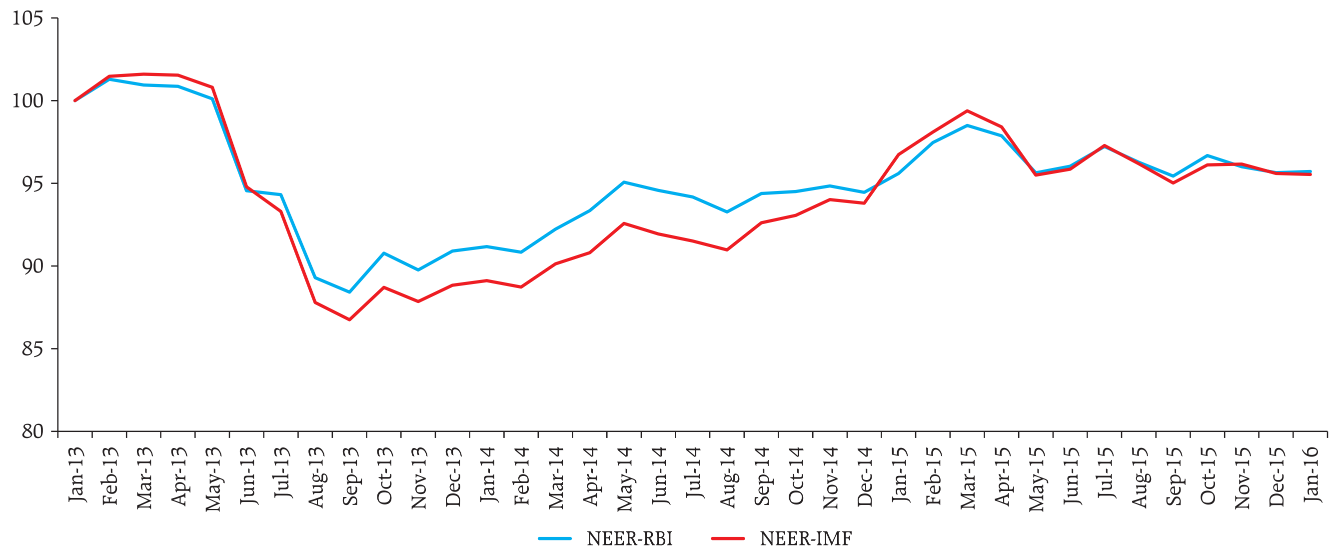
By this metric in Figure 5, the rupee has remained relatively flat since early 2015. What we have given up against the dollar, we have gained against the Euro or the Real, so overall, in trade-weighted terms, the rupee has been flat.

But wait a minute, our economist friends will say. Inflation in India is higher than inflation in most other countries. This affects competitiveness. If a widget cost a dollar to make a year ago in the United States, and ₹63 in India then, the Indian producer would have been competitive with the United States because the dollar was worth ₹63. But if inflation in India is 5 per cent and zero in the United States, it would cost the Indian manufacturer ₹66.2 to make it today. If the rupee stayed at ₹63 to the dollar, the Indian manufacturer would have become uncompetitive today – the US producer would be able to manufacture the widget at a cost equivalent of ₹63 only. In other words, to retain competitiveness, the rupee has to depreciate by the inflation differential *vis a vis* a trading partner. An index of how competitive we are is called the 'real effective exchange rate'. Think of that as the nominal effective exchange rate adjusted for inflation. The higher it is, the less the exchange rate has depreciated to offset inflation, and the more uncompetitive we are.

Figure 6, where I plot the real effective exchange rate, shows the age old truth that interpretation is in the eyes of the beholder. If a columnist wants to blame the exchange rate for our export slowdown, she can look at the index from the low point of September 2013 and argue it has appreciated 20 per cent (based on the IMF measure). Of course, it would be hard to argue that the low point our exchange rate reached in September 2013 represented an equilibrium rate. Moreover, our exports were doing quite well relative to emerging markets for much of that period (see Figure 1).[1] Indeed, over the last year when goods exports have slowed, the real effective exchange rate has been rather flat. So someone who wants to absolve the exchange rate of blame will point to the recent period.

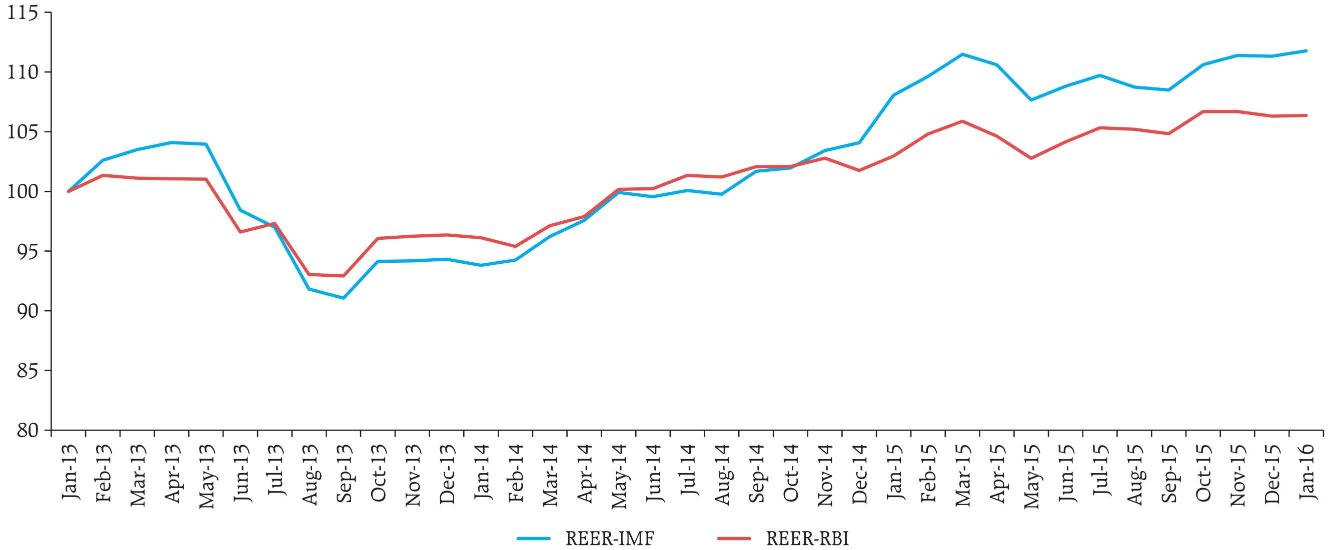
But there is another reason to absolve the exchange rate of accusations of overvaluation. The real exchange

Figure 5: Nominal Effective Exchange Rates (NEER): India



Source: RBI and IMF. The indices are normalised to January 2013=100. An increase denotes an appreciation.

Figure 6: Real Effective Exchange Rates: India



Source: RBI and IMF. The indices are normalised to January 2013=100. An increase denotes an appreciation.

rate is only one measure of competitiveness. Productivity also matters. In a rich country, firms are already at the productivity frontier, so they typically can improve productivity only through innovation. In a poor country, productivity can be improved simply by reducing existing bottlenecks or by moving a little closer to the productivity frontier through the adoption of already-known best practices. Productivity in India, for example, can improve simply if a better road is built from a factory to the rail head, or if the firm manages its inventories better. One reason Indian manufacturing GDP has been growing so fast when firms have been experiencing little increase in final sales is that firms have been focusing on improving productivity. So offsetting any rise in the real exchange rate is any productivity differential we enjoy with respect to the rest of the world. Assuming conservatively that this is about 2 per cent a year, much of the real appreciation that economists complain about is offset by productivity differentials.

The bottom line is that even though Indian trade has been slowing, the slowdown is similar to what has been happening elsewhere, with a significant portion due to a fall in commodity prices, and a smaller share due to a fall in trade volumes. While goods exports may have suffered a little more over the last year, it is too early to discern a clear pattern, and certainly hard to pin the slow down on the exchange rate.[2]

The Goldilocks Rate

It is worthwhile to push this discussion a little further though. If the RBI could press a button and get the exchange rate it desired (as some economists imagine is possible) should it aim for a strong rupee or a weak rupee? Non-economists typically advocate a strong rupee – not only does it convey national strength, but you can buy more stuff with your rupee when you go abroad, and imports are cheaper. The non-economist is consumer focused.

Of course, it is precisely because domestic tourism and domestic production are disadvantaged relative to tourism abroad and foreign production that many economists prefer a weak rupee. Yet these modern day, producer-focused, mercantilists do not acknowledge that undervaluation is a subsidy to domestic producers paid for by domestic consumers and savers. The domestic consumer pays too high a price for foreign

[2] In fact, if we focus on manufacturing exports which are perhaps less susceptible to high frequency price movements, based on limited data for recent years we find that the magnitude of the slowdown in India over the last few years is comparable or even less than many emerging markets.

goods, and interest rates have to be kept artificially low so as to reduce the cost of holding the enormous foreign exchange reserves built up through intervention. There are costs over the long run also. A sizeable portion of the investment made in the country based on an artificially low exchange rate will turn out to be uncompetitive when the exchange rate normalises. One might argue that this reflects the experience of Japan in the 1990s and possibly the experience of parts of Chinese industry today.

An undervalued exchange rate might have made sense in the past for countries that had weak firms and small domestic markets. India is in a very different position today from the export-led East Asian tigers when they embarked on their growth path. The ideal exchange rate for us is neither strong nor weak, it is just right. Typically, market forces get you to this Goldilocks rate. Yet there are circumstances where rapid capital inflows or outflows can move the rate to a level that is unlikely to be supported by fundamentals. While the RBI would not claim to know precisely what the equilibrium level of the exchange rate is at any given point in time, we intervene to moderate adjustment whenever we believe the movement is extreme, driven by sentiment, and likely to be reversed. Our intent is to prevent overshooting and undue volatility, rather than to stand in the way of the needed adjustment.

Of course, temporary irrationality in the market can overwhelm a central bank. Much like a bank run, a falling currency can prompt further fall as foreign investors attempt to get out before they lose everything. To maintain orderly movement of the rupee versus other currencies, we believe we need three ingredients. First, good policies that ensure macroeconomic stability and convinces investors their money is safe over the medium term. I have already discussed this earlier.

Second, we should focus on attracting stable capital flows that will stay for the long run. This means resisting the temptation to open up too much to short-term as well as foreign currency denominated debt flows in good times, no matter how low an interest rate they charge. In the last few years, we have limited foreign portfolio debt investment in short term rupee debt instruments. It is not that these investors cannot sell long term bonds and leave at a moment's notice, it is that investors in longer maturity bonds are likely to be a little more stable than investors who want overnight exposure only. At the same time, we have steadily expanded investment limits for foreign investors in government bonds and will continue doing so.

Our new External Commercial Borrowing rules encourage infrastructure projects and other projects that have limited foreign earnings to either issue rupee Masala loans, or to borrow really long term tenors. This limits the risk that they will be required to repay when the exchange rate has moved adversely against them.

Finally, the Government has been encouraging foreign investors to 'Make in India'. One offshoot of this campaign has been a sizeable rise in foreign direct investment, the most stable sort of investment. With two months left in the year to go, net FDI is already at the second highest level ever and comfortable higher than the current account deficit.

The bottom line is that our policy towards foreign capital flows is one of steady liberalisation, where we try and not be tempted by cheap finance, but draw in the risk-bearing capital we need to finance our growth. We intend foreign investors to get decent returns and we do intend to continuously ease both entry into and exit from the country.

Finally, our third line of defence is our foreign exchange reserves. We intervene in the exchange markets to smooth volatility and typically find ourselves buying dollars at certain times and selling dollars at others in any given year.

How to increase exports

So if the exchange rate is unlikely to be a helpful tool in our quest to increase what we make in India, how should we export more? The answer is simple – improve productivity by building out infrastructure; improve human capital with better schools, colleges, vocational and on-the-job training; simplify business regulation and taxation; and improve access to finance. Fortunately, all this is what the government is focused on.

Figure 7: Net FDI Flows to India*

* Net of disinvestment/ repatriation

I am often asked, 'What industries should we focus on, what should we encourage?' Learning from our past, I would say let us not encourage anything; that might be the surest way of killing it. Instead, let us make sure we create a good business environment that can support any kind of activity, and then let our myriad entrepreneurs figure out what new and interesting businesses they will create. In the 1990s, the IITs that Pandit Jawaharlal Nehru created to supply engineers to the commanding public sector heights of the economy instead supplied managers and programmers to body shops focused on dealing with the Y2K bug. These in turn evolved into our world-beating software giants. While the government did not create the software industry, it was not inconsequential by any means to its emergence and development. Similarly, let us enable business activity but not try and impose too much design on it.

Ideas and Analysis

Before concluding, let me emphasise one additional area of engagement with the world, ideas and analysis. Today, we have a seat at most international tables, many countries want to draw us into bilateral and multilateral treaties. When we were unimportant, we used to rail against the proposals that were inimical to us, knowing it would not make an iota of difference. As we get more power, we need to develop the capability of using it effectively.

Today, it is an unfortunate reality that international meets are still dominated by the old powers. But it is less through brute power politics and more through the power of ideas, agenda setting and organisation that they dominate. Agendas in the G-20 are still largely set by elements of the old G-7 and often we find that they have already agreed on their preferred approach. It is only when the big powers disagree that the rest of us have some hope of influencing outcomes.

The fault is not in the power structure, it is in us. Unless we amongst the emerging world put forward our agenda, build the intellectual and analytical basis for pushing it and create coalitions to support it, we will have no chance of moving forward. Encouragingly, the BRICS do discuss policy issues and try and develop common approaches, but we need to do more. We also need to build coalitions with sympathetic industrial countries. In India, we need to build capacity in our think tanks and universities to inform our policy makers on how to approach and shape the international policy agenda. We need to be well prepared when we negotiate bilateral and multilateral treaties, so that we do not wake up too late to the fact that we have given away the house with little in return. With careful analysis, engagement and coalition building we will be able to influence the global agenda and will stop being seen as an obstructionist but ultimately powerless country that we may have been in the past.

Conclusion

Let me conclude. Shri Ramnath Goenka focused on unearthing facts that would help move the public debate forward. All too often, our public debates generate more noise than illumination and we should learn from the example he set. As we cope with the global slowdown and as we frame our policies going forward, we need to debate what our policy path will be, based on facts, empirical analysis and sound arguments. I have laid out a view. I look forward to alternative viewpoints. Thank you for listening to me.

*Global Economic Turmoil: Impact on Indian Economy and the Way Forward**

Harun R. Khan

It is a pleasure to be here amongst the captains of Indian Industries who drive India's growth amidst global uncertainty and economic slowdown. I thank the organisers for allowing me to share my thoughts on a topic which is quite relevant in the current context.

2. While preparing myself for today's discussion, I was not very sure whether the current global economic situation warrants the characterisation as 'turmoil'. Turmoil is defined as 'a state of great disturbance, confusion, or uncertainty.' While there is a high degree of disturbance, confusion and uncertainty and some would like to characterise the current situation as a newer version of VUCA (volatility, uncertainty, complexity and ambiguity), I would still be hesitant to use the word 'turmoil' to describe the prevailing market conditions. I intend to highlight some features of the evolving global economic scenario. I would then touch upon its impact on the Indian economy and what could be the way forward.

Global scenario

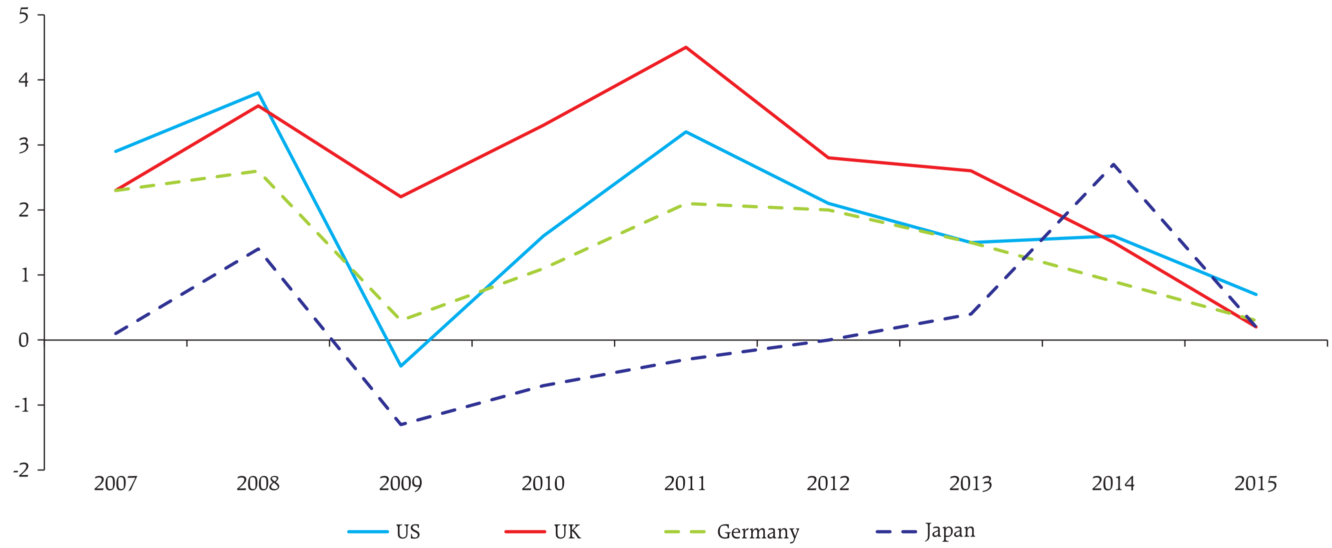
3. More than eight years have passed since the onset of the Global Financial Crisis (GFC) in 2007. Yet the world economy is not out of the woods yet. Central banks of Europe, UK and Japan continue to remain in an accommodative mode, a clear indication that growth and inflation have not recovered to a sustainable level (Charts 1 & 2). The US economy has been doing well enough in growth terms for the Federal Reserve to begin, in December 2015, the process of normalising policy rates that had been hugging the zero lower bound since late 2008. The fragility of their economic outlook was, however, clearly revealed in the reversal of the impact of lift-off in less than a month as China started showing signs of weakening. Inflation outlook in all these countries continue to be soft which has been

Chart 1: Trends in growth of US, UK, German and Japanese economy

Source: World Bank, Bloomberg.

* Address of Shri Harun R. Khan, Deputy Governor, Reserve Bank of India at the Programme on Global Economic Turmoil, Impact on Indian Economy organised by PHD Chamber of Commerce on March 12, 2016 in New Delhi. The speaker acknowledges the contribution of Shri T. Rabi Sankar, Shri Rakesh Tripathy and Shri D. K. Loharia of the Reserve Bank of India.

Chart 2: Inflation trends in the US, UK, Germany & Japan



Source: World Bank, Bloomberg.

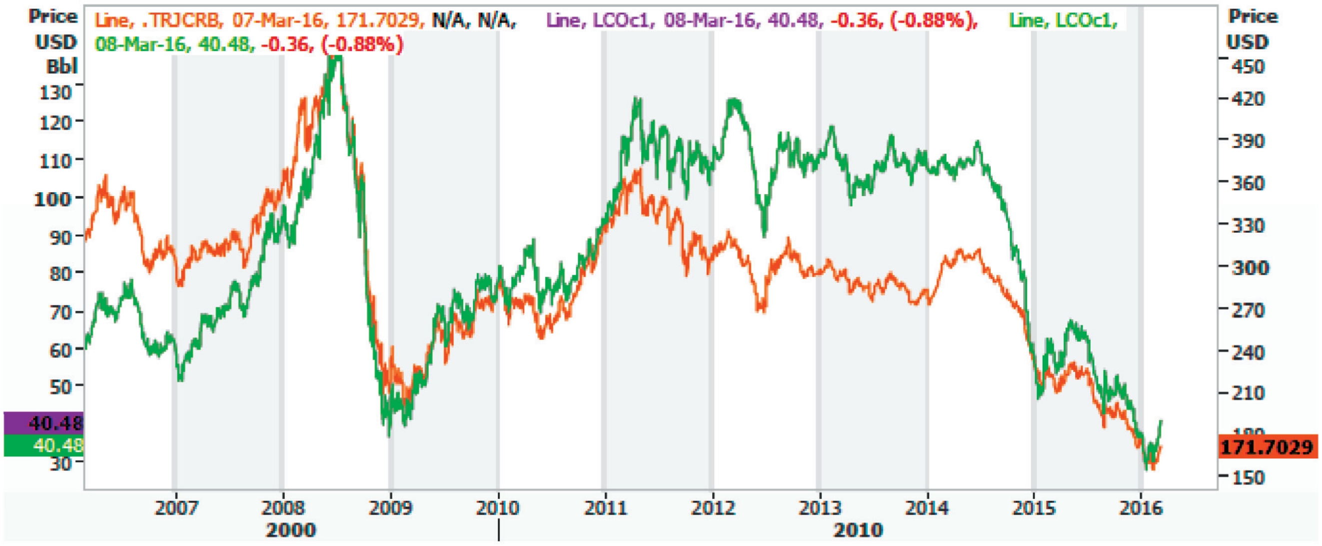
dampening hopes of a sustained recovery. In the US in particular, the softness in wages despite the unemployment rate edging below five per cent does not auger well for the inflation outlook. This together with fragility of the global economic conditions and the strengthening of the US dollar are the reasons the market seems to be sceptical of pace of rate hikes by the Federal Reserve in the near future.

4. Fears of further weakening of the Chinese economy, its falling equity market and the depreciation of its currency loom large over global economic prospects. In January, capital outflows from China triggered sell-offs across both Advanced Economies (AEs) and Emerging Market & Developing Economies (EMDEs), exacerbating currency declines and heightening volatilities. Crude oil prices fell to multi-year lows to below US$ 30 per barrel. The risk-off sentiment was reflected in the sharp surge in the prices of gold and the US treasuries and in the unwinding of carry trades undertaken with Euro and Japanese Yen as funding currencies, leading to their unexpected strengthening. Markets have somewhat settled down since then but the threat of renewed volatility is ever present.

5. Apart from uncertain recovery prospects in the AEs, the major reason behind such turbulence is the real prospect of a China slowdown. Global economic performance post GFC has been largely supported by Chinese growth and demand, particularly for commodities (oil, industrial metals, *etc.*), needed to support the huge infrastructure build-up. During the period 2005-2014, China's share in world GDP has increased from two per cent to around 12 per cent. The massive liquidity pumped into the global system as the consequence of the easy monetary policies pursued by the AEs (*viz.* US, Europe, Japan, UK), managed to find assets in which it could be invested, be it emerging market assets or commodities. In fact, commodity prices managed to stay well supported after their post-2008 crash, until they started to unwind from mid-2014. (Chart 3)

6. There are now indications that China's efforts at rebalancing its economy are facing serious challenges, at least in the near term. Prolonged slowdown in developed economies is increasingly making it improbable that even a big economy like China will be able to create the level of demand lost by the advanced economies for much longer. China generated demand

Chart 3: Movement of oil and commodity prices



Source: Reuters

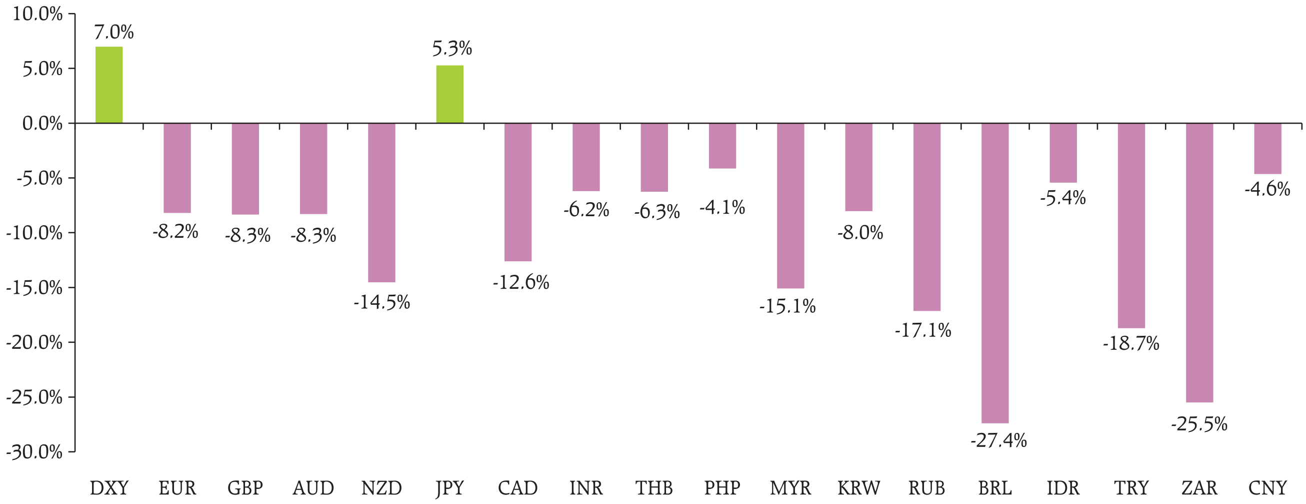
as it went on a colossal spree to build infrastructure. In the process, the economy might have created large overcapacity not just in infrastructure but also in the manufacturing sector. In fact, China is said to be now taking steps to cut down excess capacities in sectors like steel and coal mining over the next few years. The scope for further activity in this sector, therefore, looks diminished at this juncture. Simultaneously, the financial health of banks and local bodies, which had funded this huge expenditure, is being called into question.

7. These factors have led to an outflow of capital from China, particularly in the last one year. China's forex reserves have come down from US$ 3.9 trillion to US$ 3.2 trillion. The Chinese currency has been under increasing pressure. The stock markets have sold off and lost nearly 50 per cent of their value since mid-2015. The prospect of effectively containing the pressures of a more open capital account also looks uncertain. The slowdown in China has also led to a sharp correction in commodity prices, which, in turn, had major consequences as under:

a. Economic performance of commodity exporting economies (Australia, Canada, Brazil, Russia, *etc.*) has taken a beating and this has added to the weakening global growth outlook;

b. Money has started to move out of risky assets (equity, commodity, *etc.*) to safe haven assets (*e.g.*, Government bonds in US, UK, Euro-core and Japan) and safe haven currencies (*e.g.*, US dollar, Euro and Japanese Yen). The high risk segment of the financial sector (*viz.* hedge funds, private equity, *etc.*) has already been suffering over 2015. But lately, the health of banks, especially the ones who have had large exposure to commodities including energy sector, has also been called into question. Top banks in Europe have seen their stock prices falling sharply and their CDS premia go to near crisis-levels. Banks in UK, US, Australia, Japan are all, to a lesser extent, similarly affected. The financial sector is thus again under pressure. The emerging market currencies (Chart 4) and equities have come under pressure. Some of the EMDE commodity exporting countries have, however, seen their currencies recouping a part of the losses during last few days on the back of recovery in international crude and commodity prices.

Chart 4: Movement in currencies
(percentage change since end-2014 till March 11, 2016)



Source: Reuters

8. To sum up, global economic growth has slowed down but has not really reversed the direction. The International Monetary Fund (IMF), in its January 2016 World Economic outlook, has projected global growth at 3.4 per cent in 2016, marginally going up to 3.6 per cent in 2017, helped largely by EMDEs, projected to grow at 4.3 per cent and 4.7 per cent respectively. Fears of a 2008 like crisis may still be a long way off unless things get a lot worse in China. Being an optimist, I would, be hesitant in using the word 'turmoil' to describe the current global economic situation. There are certain concerns though. The risk of a deflationary spiral looks more immediate and has the potential to cause damage. With some sovereign and corporate balance sheets sitting highly leveraged, a deflationary period and the increase in the real value of debt could weaken the debt repayment capacity of many economies and corporations. Persistent low interest rates, which cast a shadow on the capabilities of central banks to stimulate growth and stability, make the outlook on global financial markets highly uncertain. Critical issues relating to global geo-political developments and idiosyncratic socio-political challenges being faced by many advanced economies would have a spill-over impact on the economic outlook and have to be kept in view. Of course, this would require separate discussions.

Impact on India

9. Let me now briefly discuss about India's positioning *vis-à-vis* its peers in the EMDE space at the current juncture. While I share with you some facts and figures which are quite impressive, I would also flag certain issues which, if not addressed properly, could be a drag on the economy. India has been variously hailed as 'beacon of stability', 'haven of stability' and 'bright spot' amidst a slowing global economy'. This flows from the fact that India is the best performing large economy (GDP close to US$ two trillion) with a 7.6 per cent estimated growth rate for FY16. Both IMF and the World Bank in their January 2016 outlook project India to grow at the highest rate among major economies in 2016 and 2017. Notwithstanding the volatility seen in some of the vital data points (*e.g.*, falling exports, low IIP numbers, *etc.*) the growth trajectory remains on track. Importantly, such growth has been accompanied by macro-economic stability. Inflation has been under control and the balance of payment position looks healthy. Current Account Deficit (CAD) has narrowed to 1.4 per cent of GDP (Q2,

Table 1: Major Sources of Capital Flows

(amount in US$ billion)

Source	2012-13	2013-14	2014-15	2015-16
Net FDI	19.8	21.6	31.3	31.7 (Apr-Jan)
Net FPI	26.9	4.8	40.9	(-) 15.3 (Apr-Mar 4)
Net NRI Deposits	14.8	38.4	14.0	12.7 (Apr-Jan)

Source: Reserve Bank of India

FY16) from the high of 4.8 per cent in FY13. Capital flows have remained strong during the last few years as can be seen from the data given in table 1:

India's foreign exchange reserves stand at a robust level of about US$ 350 billion. The ratio of short-term debt to foreign exchange reserves remains around 25.0 per cent. As illustrated in the Economic Survey 2016[1], India has made significant progress in reducing its macro-vulnerability, as gauged by an overall index of macro-economic vulnerability based on fiscal deficit, current account deficit and inflation. According to the Survey, India, which was most vulnerable among the major EMDEs in 2012, has sharply reduced its vulnerabilities. Since 2013, India's index has gone up to 5.3 per cent compared to say, that of 0.7 per cent of China and 0.4 per cent for many other EMDEs which are in the 'BBB' category of rating. In Global Competitiveness Index, India has also moved up 16 places from 71 to 55 in 2015. This index is based on 12 pillars, such as, macroeconomic environment, institutions, infrastructure, innovations, market size, health, education, *etc.* The Survey also suggests that India compares favourably to its peers in its credit rating universe when it comes to India's attractiveness to investors based on macro-economic stability and growth rate. This is captured in the Rational Investor Rating Index (RIRI).

10. On the flip side, like most other EM currencies, Rupee did come under pressure, and so was the stock market. Over a longer time horizon, say the last five quarters, Rupee has, however, shown more resilience as compared to its peers reflecting the improving macro-economic fundamentals of the country.

11. Another area that has been affected by global weakness is the exports sector. India's exports have been in contraction mode for fourteen successive months although there are indications of a sequential bottoming out. While the CAD has improved, the external sector has been contracting. Though India's foreign exchange reserves are at almost record high levels, the external sector vulnerabilities have not completely disappeared. India's external debt has increased from US$ 446.0 billion as at end-March 2014 to US$ 483.2 billion as at September-end 2015. Foreign exchange reserves provide 72.5 per cent cover to external debt though *vis-à-vis* some of its EM peers, India is better placed as can be seen in Table 2 below:

Way Forward

12. The inter-linkage of Indian economy with the rest of the world has been growing at a rapid pace, and therefore, global developments influence the domestic economy in a much bigger way than before. Though the spill over effect can take place through multiple channels, it mostly gets transmitted through the commerce or trade channel, through the capital flows channel and through the confidence channel.

13. As stated earlier, the falling exports for a prolonged period is an issue that needs serious attention. What

Table 2: Total Reserves as a percentage of Total External Debt

Country	2011	2012	2013	2014
Brazil	87.1	84.7	74.2	65.3
Indonesia	50.1	44.7	37.3	38.1
India	88.7	76	69.4	70.2
China	458.3	451.2	445.6	406.5
South Africa	41.7	35	35.7	34.1
Turkey	28.8	35.4	33.7	31.2

Source: World Bank

[1] Economic Survey 2016 -p 9-10, chapter 1: http://indiabudget.nic.in/es2015-16/echapvol1-01.pdf

is worrying is the fact that our market shares have fallen from 1.7 in 2011 per cent to 1.6 per cent in 2015. The falling crude prices may have helped the country to bring down the current account deficit but once oil prices start recovering, the challenge before the country would be to increase exports if the CAD has to be contained on a sustainable basis. A recent IMF working paper[2] on Price and Income Elasticity of Indian Exports has concluded that Indian goods exports are sensitive to external demand and to international relative price-competitiveness. Manufacturing sector exports are estimated to be more price elastic and sensitive to global demand developments in the short-term. Services exports are also not exhibiting buoyant trends with the market share falling from 3.2 per cent in 2011-12 to 3.1 per cent in 2013-14. The prospects of a sluggish global economic recovery may pose challenges for India to achieve significant export growth acceleration in the coming years whereas supply-side constraints could dampen the price responsiveness in the short-term. In the backdrop of uncertain global demand, the challenge for the country would be to search for new markets and new products for existing markets besides addressing the issues relating to competitiveness of Indian exports.

14. As we have seen in the past, capital flows are usually susceptible to periodic phases of sudden stops and/or reversals which can put downward pressure on Rupee. Despite India's relatively stronger fundamentals, the confidence or contagion effect of a global safe haven move could have its impact on the Rupee. Here the importance of attracting stable flows like FDI needs to be highlighted. As shown in Table 1, the policy adjustments and improved macro-economic environment have helped us to attract more FDI flows this year than the last year. As hitherto, Government and Reserve Bank would, of course, continue to be on constant vigil and be ready to take proactive measures in respect of the evolving situation in the external sector.

15. Macroeconomic stability is important to contain contagion effects arising out of the confidence channel. Government has shown its firm commitment for fiscal consolidation. The Economic Survey 2016 has brought out that India taxes and spends less than OECD countries and even its emerging market peers. After adjusting for the level of economic development and democracy, India's tax/GDP ratio is 5.4 per cent less than that of comparable countries, while its expenditure/GDP ratio lags by 6.4 per cent. Nearly 85 per cent of the economy is outside the tax net. While these developments may be explained by historical differences, the need to catch up with EM peers and the OECD countries in the next few decades would be important in determining the extent and pace of India's infrastructure development and, by extension, future economic development. Therefore, even as fiscal consolidation is on track in terms of GFD/GDP target ratios, there may well be a need to broaden the reach of fiscal reform by setting a targeted path to increase both tax revenue and fiscal expenditure.

16. Retail inflation in India as measured by CPI rose for the sixth straight month in January 2016. The CPI for January at 5.69 per cent was the highest figure recorded since August of 2014. Similarly, food inflation at 6.85 per cent in January was also the highest in 17 months. Despite these numbers, we are on track as far as meeting the inflation targets is concerned in near term[3]. There are, however, risks to meeting our projections. Besides structural factors like persistent high level of food prices due to rising income level not being matched by increase in productivity, production and distribution of food items, in particular protein/pulses food, the implementation of the seventh Central Pay Commission award, monsoon and the path of commodity prices including crude prices have to be factored in the near term inflation outlook.

[2] https://www.imf.org/external/pubs/ft/wp/2015/wp15161.pdf

[3] Consumer prices in India decreased to 5.18 percent year-on-year in February 2016, lower than 5.69 percent in January. Consumer inflation eased for the first time in seven months, reaching the lowest since October. Inflation averaged 7.85 percent from 2012 until 2016, reaching an all time high of 11.16 percent in November of 2013 and a record low of 3.69 percent in July of 2015.

17. There have been discussions in recent times about the stress in banking and corporate balance sheets. In respect of health of Indian banks, the Reserve Bank has taken various steps to address the issue of stressed assets of the banks. After a comprehensive asset quality review, banks have initiated the process of cleaning up balance sheets by March 2017. While this may lead to a short-term impact on profitability of some of the PSU banks, it would enable a healthy flow of credit to the system in the long run. Further, efforts at improving the capital buffers of banks will be helpful as they prepare to lend more now, after cleaning up their balance sheets. Also, the steps being taken to improve governance in banks, such as the setting up of a Banks' Board Bureau (BBB), would complement these efforts to develop and strengthen the banking sector. In respect of corporate sector stress, as evident from profitability and lower interest coverage ratio, the efforts at deleveraging, including by way of exit from non-core business, enhanced productivity and additional equity infusion and better governance practices supported by policies aimed at containing the global headwinds have to be fast-tracked.

18. A deep, vibrant and well-developed financial market is needed to facilitate efficient resource allocation, risk dispersion and credit intermediation. Government, Reserve Bank, and other regulators have been constantly engaged in taking measures that would help in developing markets. During the last few years, Reserve Bank has taken various measures including introduction of currency futures and options, interest rate futures which would add to the menu of already existing over the counter instruments for managing the currency and interest rate risks. Further, in order to give a fillip to the development of term repo market, Reserve Bank allowed re-repoing of securities acquired under market repo. These products, if used judiciously would facilitate corporates to manage their risk exposure efficiently.

19. Underscoring the importance of a vibrant corporate bond market that could help the country in meeting the large scale infrastructure financing, Reserve Bank has allowed repo in corporate bonds as well as selling and buying of single name Credit Default Swaps. There is also a proposal to introduce electronic trading platform for corporate bonds in India. I would, however, like to add here that we have not seen a wide range of players participating in recently launched products-be it in the area of currency derivatives or interest rate derivatives. Government is initiating the process of legislation for lender protection that would incentivise flow of debt funds to corporates. The Government has announced a slew of proposals in the Union Budget for 2016-17 that would give a fillip to the corporate bond market in India. These include expanding the investment basket for foreign portfolio investors to include unlisted debt securities and pass through securities issued by securitisation and introduction of electronic auction platform for primary debt. Early passage of the Bankruptcy Code will greatly facilitate the development of corporate debt market. Reserve Bank in collaboration with the Government and other regulators will continue with its efforts in bringing about reforms in the financial sector.

20. While domestic policies that reinforce the macro-economic fundamentals help us to cope with external vulnerabilities, given our increasing level of international linkages we cannot be immune to spill-back effects of action or inaction of other countries, particularly arising from surges in inflows or sudden & substantial outflows. This calls for regional and global safety nets in terms of multilateral institutional mechanisms for funding support. It is also imperative that institutional mechanisms (*e.g.*, the International Monetary Fund) should exist at the global level to assess the policies of large economies from the point of their contagion impact on other countries, particularly EMDEs and advise them to factor such consequences in their policy framework. India will have to work vigorously to build-up global consensus in this area.

In Conclusion

21. As I said in the beginning, I do not take a very pessimistic view of the current global situation and would prefer not to call it 'turmoil'. I would rather consider the current situation as a great opportunity for India to position itself as a leader who would shape the world economic order in years to come. There would be challenges, nevertheless. The real challenge would be to sustain the improved fundamentals over a longer period and contain the spill over effect from other parts of the world. While other countries may take measures best suited to them, our focus should continue to remain on improving domestic macroeconomic fundamentals, including addressing the infrastructure bottlenecks, ensuring price stability, narrowing current account deficit, continuing fiscal reforms, increasing the competitiveness of our products and services for the global market and improved governance. I have no doubt that the steps taken by the Government, including those aimed at ease of doing business in India and regulatory measures initiated by the Reserve Bank and other regulators, would give enormous confidence to local & foreign investors, our trade partners, rating agencies and the large community of non-resident Indians. Simultaneously, we have to work to build international consensus on policy coordination among advanced and emerging economies for minimising the spill-over and spill-back impacts of the policies of the former on the latter.

22. Thank you all for your attention.

PRESS RELEASE OF WORKING PAPERS

Challenges of Effective Monetary Policy in Emerging Economies
Amartya Lahiri and Urjit R. Patel

Implications of MGNREGS on Labour Market, Wages
and Consumption Expenditure in Kerala
V. Dhanya

Global Spillovers and Monetary Policy Transmission in India
Michael Debabrata Patra, Sitikantha Pattanaik,
Joice John and Harendra Kumar Behera

Rules of the Monetary Game
Prachi Mishra and Raghuram G. Rajan

Challenges of Effective Monetary Policy in Emerging Economies

Amartya Lahiri and
Urjit R. Patel

The Working Paper titled *"Challenges of Effective Monetary Policy in Emerging Economies"* was published under the Reserve Bank of India Working Paper Series on February 12, 2016. This paper is co-authored by Amartya Lahiri and Urjit R. Patel.[1]

Monetary policymaking in emerging economies have their own particular challenges. The compulsions of unique institutional details as well as the thinness of financial markets in the backdrop of increasing global integration often tends to render the monetary transmission mechanism unstable. This paper firstfleshes out a number of these confounding institutional and legacy issues in the context of India. We then illustrate the consequences of these frictions for the monetary transmission mechanism with two features of the policy environment in India: statutory liquidity ratio requirements imposed on banks and chronic fiscal deficits. We show that these frictions can completely invert the monetary transmission mechanism: when the constraint binds, under some stylized conditions, a reduction in the policy rate can end up raising lending spreads and thereby cause a contraction instead of an expansion in the economy.

[1] Amartya Lahiri is Professor, University of British Columbia and Urjit R. Patel is Deputy Governor, Reserve Bank of India. The views expressed in the paper are those of the authors and not of the institution to which they belong.

Implications of MGNREGS on Labour Market, Wages and Consumption Expenditure in Kerala

V. Dhanya

The Working Paper titled "*Implications of MGNREGS on Labour Market, Wages and Consumption Expenditure in Kerala*" was published under the Reserve Bank of India Working Paper Series on February 17, 2016. This paper is authored by V. Dhanya.[1]

This paper evaluates the implications of Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) in the labour short economy of Kerala by using NSSO unit level data and primary survey data. The analysis of NSSO data reflects the inter-state differences in implementation of the scheme with North-Eastern and Southern states performing better than its counterparts. The study found partial impact of MGNREGS on Kerala's labour market as nearly half of the workers were new entrants and the impact was largely limited to increase in consumption expenditure. Nevertheless, it resulted in an increase in wages among certain rural works carried out by female labour force. The study observes that for the existing workers, MGNREGS acted as a fall back option thereby smoothening consumption during the lean period. It also enhanced their capacity to borrow as lenders are assured of their repaying capacity. The paper also finds that an indirect benefit of MGNREGS was improvement in financial inclusiveness and health standards of the workers. The empirical evidence of the study shows that MGNREGS leads to an increase in consumption expenditure, particularly in case of food items.

[1] V. Dhanya is AssistantAdviser, Department of Economic and Policy Research, Reserve Bank of India, Kochi. The views expressed in the paper are those of the author and not of the institution to which she belongs.

Global Spillovers and Monetary Policy Transmission in India

Michael Debabrata Patra, Sitikantha Pattanaik, Joice John and Harendra Kumar Behera

The Working Paper titled "*Global Spillovers and Monetary Policy Transmission in India*" was published under the Reserve Bank of India Working Paper Series on February 26, 2016. The Paper is co-authored by Michael Debabrata Patra, Sitikantha Pattanaik, Joice John and Harendra Kumar Behera[1].

With the world's largest economies setting divergent courses for monetary policy, India faces significant risk of spillovers. This paper examines the impact of global spillovers on transmission channels of monetary policy through domestic financial markets in India. Drawing on stylised facts and using a dynamic factor model to develop an indicator of global spillovers (IGS), a time varying parameter vector auto-regression (TVP-VAR) model is estimated.

The results indicate that there is no strong evidence of domestic monetary policy losing traction because of global spillovers although there are effects on some segments of the market spectrum. Monetary policy responds to volatility-driven stress in domestic financial market conditions as a policy choice in the context of meeting domestic goals, rather than a loss of independence.

[1] Michael Debabrata Patra isExecutive Director,Reserve Bank of India and Sitikantha Pattanaik, Joice John and Harendra Kumar Behera areDirector, Assistant Adviser and Assistant Adviser in Monetary Policy Department, Reserve Bank of India, respectively.The views expressed in the paper are those of the authors and not of the institution to which they belong.

Rules of the Monetary Game

Prachi Mishra and Raghuram G. Rajan

The Working Paper titled "*Rules of the Monetary Game*" was published under the Reserve Bank of India Working Paper Series on March 28, 2016. The Paper is co-authored by Dr. Prachi Mishra and Dr. Raghuram Rajan[1].

Aggressive monetary policy actions by one country can lead to significant adverse cross-border spillovers on others, especially as countries contend with the zero lower bound. If countries do not internalize these spillovers, they may undertake policies that are collectively suboptimal. Instead, countries could agree to guidelines for responsible behaviour that would improve collective outcomes. This paper puts forward some of the practical issues that need to be considered in framing possible rules of the monetary game. Policies could be broadly characterized and rated based on analytical inputs and discussion. Policies that generally have positive or domestic effects could be rated Green, policies that should be used temporarily and with care could be rated Orange, and policies that should be avoided at all times could be rated Red.

The paper provides a brief review of the some of the frameworks that have been used in the literature to assess spillovers, and makes the case that models may reflect the policy biases of those devising them, and may be at too early a stage to be able to draw strong conclusions from them. Therefore, while more empirical analysis should be undertaken, it should be seen as an input to a dialogue rather than definitive, with the analysis being refined as outcomes are better understood.

With economic analysis on the international spillovers from domestic policies still at an early stage, it is unlikely we will get strong policy prescriptions soon, let alone international agreement on them, especially given that a number of country authorities like central banks have explicit domestic mandates. The paper, therefore, suggests a period of focused discussion, first outside international meetings, then within international meetings. Such a discussion need not take place in an environment of finger pointing and defensiveness, but as an attempt to understand what can be reasonable, and not overly intrusive, rules of conduct. As consensus builds on the rules of conduct, we can contemplate the next step of whether to codify them through international agreement, see how the Articles of multilateral institutions like the IMF will have to be altered, and how country authorities will interpret or alter domestic mandates to incorporate international responsibilities.

[1] Dr. Prachi Mishra is Specialist Adviser, Strategic Research Unit, Reserve Bank of India and Dr. Raghuram Rajan is Governor, Reserve Bank of India. The views expressed in the paper are those of the authors and not of the institution to which they belong.

CURRENT STATISTICS

Contents

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

No. 1: Select Economic Indicators

Item	2014-15	2014-15		2015-16	
		Q1	Q2	Q1	Q2
	1	2	3	4	5
1 Real Sector (% Change)					
1.1 GVA at Basic Prices	7.2	7.4	8.4	7.1	7.4
1.1.1 Agriculture	0.2	2.6	2.1	1.9	2.2
1.1.2 Industry	6.6	8.1	7.2	6.4	8.3
1.1.3 Services	9.4	8.4	10.2	8.6	8.0
1.1a Final Consumption Expenditure	6.4	5.3	7.4	6.3	6.5
1.1b Gross Fixed Capital Formation	4.6	8.7	3.8	4.9	6.8
	2014-15	**2015**		**2016**	
		Jan.	**Feb.**	**Jan.**	**Feb.**
	1	2	3	4	5
1.2 Index of Industrial Production	4.4	2.8	4.9	-1.5	..
2 Money and Banking (% Change)					
2.1 Scheduled Commercial Banks					
2.1.1 Deposits	10.7	10.9	11.0	11.1	10.3
2.1.2 Credit	9.0	9.3	8.9	11.5	11.5
2.1.2.1 Non-food Credit	9.3	9.6	9.2	11.7	11.5
2.1.3 Investment in Govt. Securities	12.6	12.9	13.2	8.9	6.8
2.2 Money Stock Measures					
2.2.1 Reserve Money (M0)	11.2	10.2	11.2	12.0	14.2
2.2.2 Broad Money (M3)	10.5	10.8	11.2	11.1	11.3
3 Ratios (%)					
3.1 Cash Reserve Ratio	4.00	4.00	4.00	4.00	4.00
3.2 Statutory Liquidity Ratio	21.50	22.00	21.50	21.50	21.50
3.3 Cash-Deposit Ratio	4.8	4.7	4.9	4.7	4.8
3.4 Credit-Deposit Ratio	74.4	76.0	76.0	76.3	76.8
3.5 Incremental Credit-Deposit Ratio	44.1	56.0	58.7	72.6	79.2
3.6 Investment-Deposit Ratio	29.3	29.9	29.8	29.3	28.8
3.7 Incremental Investment-Deposit Ratio	31.1	43.4	40.2	31.1	25.2
4 Interest Rates (%)					
4.1 Policy Repo Rate	6.75	7.75	7.75	6.75	6.75
4.2 Reverse Repo Rate	5.75	6.75	6.75	5.75	5.75
4.3 Marginal Standing Facility (MSF) Rate	7.75	8.75	8.75	7.75	7.75
4.4 Bank Rate	7.75	8.75	8.75	7.75	7.75
4.5 Base Rate	10.00/10.25	10.00/10.25	10.00/10.25	9.30/9.70	9.30/9.70
4.6 Term Deposit Rate >1 Year	7.00/8.75	8.00/8.75	8.00/8.75	7.00/7.90	7.00/7.90
4.7 Savings Deposit Rate	4.00	4.00	4.00	4.00	4.00
4.8 Call Money Rate (Weighted Average)	7.36	7.79	7.65	6.89	6.73
4.9 91-Day Treasury Bill (Primary) Yield	8.27	8.23	8.39	7.31	0.00
4.10 182-Day Treasury Bill (Primary) Yield	8.14	8.14	8.33	7.23	0.00
4.11 364-Day Treasury Bill (Primary) Yield	7.98	7.91	8.04	7.21	7.28
4.12 10-Year Government Securities Yield	7.80	7.72	7.77	7.64	7.61
5 RBI Reference Rate and Forward Premia					
5.1 INR-US$ Spot Rate (₹ Per Foreign Currency)	62.59	61.76	61.79	67.88	68.78
5.2 INR-Euro Spot Rate (₹ Per Foreign Currency)	67.51	70.03	69.29	74.07	76.04
5.3 Forward Premia of US$ 1-month (%)	9.78	7.09	9.32	6.01	8.29
3-month (%)	8.50	7.84	8.29	6.36	7.36
6-month (%)	8.11	7.35	7.99	6.22	6.86
6 Inflation (%)					
6.1 All India Consumer Price Index	5.9	5.2	5.4	5.7	5.2
6.2 Consumer Price Index for Industrial Workers	6.3	7.2	6.3	5.9	5.5
6.3 Wholesale Price Index	2.0	-1.0	-2.2	-0.9	-0.9
6.3.1 Primary Articles	3.0	1.4	1.0	4.6	1.6
6.3.2 Fuel and Power	-0.9	-11.0	-14.8	-9.2	-6.4
6.3.3 Manufactured Products	2.4	1.1	0.3	-1.2	-0.6
7 Foreign Trade (% Change)					
7.1 Imports	-0.6	-11.7	-16.0	-11.2	-5.0
7.2 Exports	-1.2	-9.4	-13.8	-14.1	-5.7

Reserve Bank of India

No. 2: RBI - Liabilities and Assets

(₹ Billion)

Item	As on the Last Friday/ Friday						
	2015-16	2015	2016				
		Mar.	Feb. 26	Mar. 4	Mar. 11	Mar. 18	Mar. 25
	1	2	3	4	5	6	7
1 Issue Department							
1.1 Liabilities							
1.1.1 Notes in Circulation	16,512.44	14,264.95	15,992.62	16,135.30	16,331.02	16,379.37	16,512.44
1.1.2 Notes held in Banking Department	0.16	0.12	0.15	0.13	0.14	0.15	0.16
1.1/1.2 Total Liabilities (Total Notes Issued) or Assets	**16,512.60**	**14,265.06**	**15,992.76**	**16,135.44**	**16,331.16**	**16,379.52**	**16,512.60**
1.2 Assets							
1.2.1 Gold Coin and Bullion	694.86	642.29	629.43	694.82	694.82	694.86	694.86
1.2.2 Foreign Securities	15,804.14	13,609.92	15,351.82	15,427.57	15,623.82	15,672.64	15,804.14
1.2.3 Rupee Coin	3.14	2.38	1.05	2.58	2.05	1.56	3.14
1.2.4 Government of India Rupee Securities	10.46	10.46	10.46	10.46	10.46	10.46	10.46
2 Banking Department							
2.1 Liabilities							
2.1.1 Deposits	6,481.57	5,953.69	5,619.79	5,079.95	5,423.62	6,294.82	6,481.57
2.1.1.1 Central Government	1.01	1.01	1.00	1.01	1.01	1.00	1.01
2.1.1.2 Market Stabilisation Scheme	–	–	–	–	–	–	–
2.1.1.3 State Governments	1.99	21.40	0.42	0.43	0.42	0.42	1.99
2.1.1.4 Scheduled Commercial Banks	3,906.19	3,573.56	3,862.50	3,905.34	3,852.70	3,874.42	3,906.19
2.1.1.5 Scheduled State Co-operative Banks	37.97	35.10	33.76	34.80	33.90	35.03	37.97
2.1.1.6 Non-Scheduled State Co-operative Banks	14.07	11.24	12.79	13.69	13.35	13.13	14.07
2.1.1.7 Other Banks	211.08	189.63	204.13	204.90	203.62	206.03	211.08
2.1.1.8 Others	2,309.26	2,121.76	1,505.18	919.79	1,318.63	2,164.78	2,309.26
2.1.2 Other Liabilities	9,627.82	8,002.15	9,836.11	9,687.55	9,735.00	9,661.61	9,627.82
2.1/2.2 Total Liabilities or Assets	**16,109.39**	**13,955.84**	**14,466.42**	**14,767.50**	**15,158.62**	**15,956.44**	**16,109.39**
2.2 Assets							
2.2.1 Notes and Coins	0.16	0.12	0.15	0.13	0.14	0.15	0.16
2.2.2 Balances held Abroad	6,553.25	6,408.77	7,156.95	6,788.41	6,658.51	6,630.16	6,553.25
2.2.3 Loans and Advances							
2.2.3.1 Central Government	–	–	–	–	–	–	–
2.2.3.2 State Governments	11.92	57.60	15.39	0.61	3.75	9.09	11.92
2.2.3.3 Scheduled Commercial Banks	2,465.69	1,403.93	1,774.63	1,299.54	1,659.32	2,324.67	2,465.69
2.2.3.4 Scheduled State Co-op.Banks	–	–	0.35	0.35	–	–	–
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	145.93	107.73	57.67	55.48	60.28	63.93	145.93
2.2.4 Bills Purchased and Discounted							
2.2.4.1 Internal	–	–	–	–	–	–	–
2.2.4.2 Government Treasury Bills	–	–	–	–	–	–	–
2.2.5 Investments	6,122.94	5,260.32	5,706.93	5,820.65	5,973.72	6,122.23	6,122.94
2.2.6 Other Assets	809.50	717.38	743.84	802.33	802.89	806.19	809.50
2.2.6.1 Gold	631.16	583.45	571.76	631.16	631.16	631.16	631.16

No. 3: Liquidity Operations by RBI

(₹ Billion)

Date	Liquidity Adjustment Facility				MSF	Standing Liquidity Facilities	OMO (Outright)		Net Injection (+)/ Absorption (-) (1+3+5+6+8-2-4-7)
	Repo	Reverse Repo	Variable Rate Repo	Variable Rate Reverse Repo			Sale	Purchase	
	1	2	3	4	5	6	7	8	9
Feb. 1, 2016	67.77	41.04	150.03	–	3.10	–	–	–	179.86
Feb. 2, 2016	75.09	50.65	150.04	–	0.70	–	–	–	175.18
Feb. 3, 2016	32.18	36.96	–	50.79	0.40	–1.80	–	–	–56.97
Feb. 4, 2016	62.33	19.77	–	67.95	1.71	–	–	–	–23.68
Feb. 5, 2016	68.00	20.98	265.02	27.70	26.00	3.80	–	–	314.14
Feb. 6, 2016	93.34	11.47	–	–	8.90	–	–	–	90.77
Feb. 8, 2016	252.63	42.93	450.07	–	38.75	–	–	–	698.52
Feb. 9, 2016	211.44	31.23	355.13	–	10.00	–3.50	–	100.00	641.84
Feb. 10, 2016	218.81	21.18	212.55	–	7.07	3.50	–	–	420.75
Feb. 11, 2016	212.41	10.11	227.70	–	8.40	–	–	–	438.40
Feb. 12, 2016	174.36	82.42	603.70	–	2.00	–	–	–	697.64
Feb. 15, 2016	184.39	39.09	323.62	–	5.62	–	–	–	474.54
Feb. 16, 2016	88.92	39.79	350.08	–	2.20	–2.10	–	–	399.31
Feb. 17, 2016	39.76	30.62	98.75	95.14	5.30	2.10	–	–	20.15
Feb. 18, 2016	113.84	33.71	263.89	–	2.00	–1.40	–	0.10	344.72
Feb. 19, 2016	–	146.46	–	–	19.45	–	–	–	–127.01
Feb. 20, 2016	34.80	23.03	–	–	1.00	–	–	–	12.77
Feb. 22, 2016	151.31	31.40	63.45	–	0.48	–4.50	–	–	179.34
Feb. 23, 2016	104.87	49.88	155.00	–	0.35	5.00	–	–	215.34
Feb. 24, 2016	208.31	27.13	68.00	–	1.03	–0.60	–	–	249.61
Feb. 25, 2016	159.02	63.33	100.01	–	3.00	1.50	–	–	200.20
Feb. 26, 2016	236.07	112.23	455.07	–	–	–0.90	–	5.00	583.01
Feb. 29, 2016	187.69	70.54	390.63	–	47.25	0.90	–	5.95	561.88

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

i) Operations in OTC segment

Item	2014-15	2015	2016	
		Feb.	Jan.	Feb.
	1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US $ Million) (1.1–1.2)	54,837.00	7,874.00	–30.00	–3,341.00
1.1 Purchase (+)	124,414.00	9,630.00	3,240.00	3,462.00
1.2 Sale (–)	69,577.00	1,756.00	3,270.00	6,803.00
2 ₹ equivalent at contract rate (₹ Billion)	3,308.59	494.14	–4.97	–233.71
3 Cumulative (over end-March) (US $ Million)	56,882.00	49,211.00	8,864.00	5,523.00
(₹ Billion)	3,430.69	2,949.41	555.08	321.38
4 Outstanding Net Forward Sales (–)/ Purchase (+) at the end of month (US $ Million)	8,322.00	5,832.00	–318.00	–2,410.00

ii) Operations in currency futures segment

Item	2014-15	2015	2016	2016
		Feb.	Jan.	Feb.
	1	2	3	4
1 Net Purchase/ Sale of Foreign Currency (US $ Million) (1.1–1.2)	0.00	0.00	0.00	–970.00
1.1 Purchase (+)	0.00	0.00	2,765.00	1,780.00
1.2 Sale (–)	0.00	0.00	2,765.00	2,750.00
2 Outstanding Net Currency Futures Sales (–)/ Purchase (+) at the end of month (US $ Million)	0.00	0.00	0.00	–970.00

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

Item	As on February 29, 2016		
	Long (+)	Short (-)	Net (1-2)
	1	2	3
1. Upto 1 month	3,088	645	2,443
2. More than 1 month and upto 3 months	3,150	380	2,770
3. More than 3 months and upto 1 year	19,802	25,208	-5,406
4. More than 1 year	0	2,217	-2,217
Total (1+2+3+4)	**26,040**	**28,450**	**-2,410**

No. 5: RBI's Standing Facilities

(₹ Billion)

Item		As on the Last Reporting Friday						
	2014-15	2015				2016		
		Feb. 20	Oct. 30	Nov. 27	Dec. 25	Jan. 22	Feb. 19	Mar. 18
	1	2	3	4	5	6	7	8
1 MSF	41.9	0.9	25.2	57.5	0.8	26.2	21.5	0.1
2 Export Credit Refinance for Scheduled Banks								
2.1 Limit	128.2	131.0	–	–	–	–	–	–
2.2 Outstanding	51.8	56.8	–	–	–	–	–	–
3 Liquidity Facility for PDs								
3.1 Limit	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
3.2 Outstanding	17.0	19.8	20.7	22.2	22.1	22.3	22.9	27.7
4 Others								
4.1 Limit	–	–	–	–	–	–	–	–
4.2 Outstanding	–	–	–	–	–	–	–	–
5 Total Outstanding (1+2.2+3.2+4.2)	110.7	77.5	45.9	79.7	22.9	48.5	44.4	27.8

Money and Banking

No. 6: Money Stock Measures

(₹ Billion)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2014-15	2015	2016		
		Feb. 20	Jan. 22	Feb. 5	Feb. 19
	1	2	3	4	5
1 Currency with the Public (1.1 + 1.2 + 1.3 – 1.4)	13,863.5	13,741.8	15,177.9	15,372.2	15,583.5
1.1 Notes in Circulation	14,288.8	14,140.5	15,656.2	15,806.1	16,023.9
1.2 Circulation of Rupee Coin	186.9	185.1	205.6	205.6	205.6
1.3 Circulation of Small Coins	7.4	7.4	7.4	7.4	7.4
1.4 Cash on Hand with Banks	619.6	591.3	691.4	647.0	653.5
2 Deposit Money of the Public	9,053.4	8,607.2	9,322.8	9,614.2	9,755.7
2.1 Demand Deposits with Banks	8,907.5	8,526.8	9,196.2	9,487.7	9,484.4
2.2 'Other' Deposits with Reserve Bank	145.9	80.4	126.6	126.5	271.3
3 M_1 (1 + 2)	**22,916.8**	**22,349.0**	**24,500.7**	**24,986.4**	**25,339.2**
4 Post Office Saving Bank Deposits	474.3	464.3	586.8	586.8	586.8
5 M_2 (3 + 4)	**23,391.1**	**22,813.2**	**25,087.5**	**25,573.1**	**25,925.9**
6 Time Deposits with Banks	82,538.7	81,739.7	89,931.8	90,555.8	90,468.5
7 M_3 (3 + 6)	**105,455.5**	**104,088.7**	**114,432.5**	**115,542.2**	**115,807.7**
8 Total Post Office Deposits	1,737.3	1,716.1	2,006.9	2,006.9	2,006.9
9 M_4 (7 + 8)	**107,192.8**	**105,804.8**	**116,439.4**	**117,549.1**	**117,814.5**

No. 7: Sources of Money Stock (M_3)

(₹ Billion)

Sources	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2014-15	2015	2016		
		Feb. 20	Jan. 22	Feb. 5	Feb. 19
	1	2	3	4	5
1 Net Bank Credit to Government	**30,061.6**	**31,331.8**	**32,814.4**	**34,112.8**	**33,248.8**
1.1 RBI's net credit to Government (1.1.1–1.1.2)	3,645.2	4,632.6	4,086.7	4,857.5	4,444.8
1.1.1 Claims on Government	5,293.6	5,274.0	5,585.1	5,594.9	5,721.1
1.1.1.1 Central Government	5,258.3	5,259.8	5,580.3	5,586.3	5,689.9
1.1.1.2 State Governments	35.3	14.2	4.9	8.6	31.2
1.1.2 Government deposits with RBI	1,648.4	641.4	1,498.5	737.4	1,276.3
1.1.2.1 Central Government	1,647.9	641.0	1,498.1	737.0	1,269.6
1.1.2.2 State Governments	0.4	0.4	0.4	0.4	6.7
1.2 Other Banks' Credit to Government	26,416.3	26,699.2	28,727.8	29,255.4	28,804.1
2 Bank Credit to Commercial Sector	**70,395.8**	**69,199.7**	**76,114.4**	**76,732.3**	**76,941.9**
2.1 RBI's credit to commercial sector	148.5	60.5	69.6	64.7	80.2
2.2 Other banks' credit to commercial sector	70,247.4	69,139.1	76,044.8	76,667.5	76,861.7
2.2.1 Bank credit by commercial banks	65,364.2	64,257.9	70,903.3	71,534.1	71,727.4
2.2.2 Bank credit by co-operative banks	4,825.1	4,825.3	5,066.7	5,077.9	5,083.5
2.2.3 Investments by commercial and co-operative banks in other securities	58.0	55.9	74.8	55.5	50.8
3 Net Foreign Exchange Assets of Banking Sector (3.1 + 3.2)	**22,506.5**	**21,383.8**	**24,584.2**	**24,838.9**	**25,106.5**
3.1 RBI's net foreign exchange assets (3.1.1–3.1.2)	21,272.8	20,635.5	23,343.6	23,598.3	23,865.9
3.1.1 Gross foreign assets	21,273.0	20,636.0	23,343.9	23,598.6	23,868.0
3.1.2 Foreign liabilities	0.2	0.5	0.3	0.3	2.1
3.2 Other banks' net foreign exchange assets	1,233.7	748.3	1,240.6	1,240.6	1,240.6
4 Government's Currency Liabilities to the Public	**194.3**	**192.6**	**213.1**	**213.1**	**213.1**
5 Banking Sector's Net Non-monetary Liabilities	**17,702.7**	**18,019.2**	**19,293.6**	**20,354.9**	**19,702.7**
5.1 Net non-monetary liabilities of RBI	7,852.7	8,141.2	9,217.6	9,512.0	9,776.9
5.2 Net non-monetary liabilities of other banks (residual)	9,849.9	9,878.0	10,076.0	10,842.9	9,925.8
M_3 (1+2+3+4–5)	**105,455.5**	**104,088.7**	**114,432.5**	**115,542.2**	**115,807.7**

No. 8: Monetary Survey

(₹ Billion)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2014-15	2015	2016		
		Feb. 20	Jan. 22	Feb. 5	Feb. 19
	1	2	3	4	5
Monetary Aggregates					
NM_1 (1.1 + 1.2.1+1.3)	22,916.8	22,349.0	24,500.7	24,986.4	25,339.2
NM_2 (NM_1+ 1.2.2.1)	58,851.5	57,932.9	63,592.6	64,364.7	64,656.9
NM_3 (NM_2 + 1.2.2.2 + 1.4 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	105,030.3	103,675.1	114,364.4	115,443.0	115,752.9
1 Components					
1.1 Currency with the Public	13,863.5	13,741.8	15,177.9	15,372.2	15,583.5
1.2 Aggregate Deposits of Residents	88,762.2	87,602.3	96,067.1	96,995.2	96,857.1
1.2.1 Demand Deposits	8,907.5	8,526.8	9,196.2	9,487.7	9,484.4
1.2.2 Time Deposits of Residents	79,854.7	79,075.5	86,870.9	87,507.5	87,372.7
1.2.2.1 Short-term Time Deposits	35,934.6	35,584.0	39,091.9	39,378.4	39,317.7
1.2.2.1.1 Certificates of Deposit (CDs)	2,974.5	2,708.9	2,235.3	2,130.0	2,182.1
1.2.2.2 Long-term Time Deposits	43,920.1	43,491.5	47,779.0	48,129.1	48,055.0
1.3 ‘Other’ Deposits with RBI	145.9	80.4	126.6	126.5	271.3
1.4 Call/Term Funding from Financial Institutions	2,258.7	2,250.6	2,992.8	2,949.1	3,041.0
2 Sources					
2.1 Domestic Credit	105,143.8	105,150.8	114,359.3	116,277.9	115,610.2
2.1.1 Net Bank Credit to the Government	30,061.6	31,331.8	32,814.4	34,112.8	33,248.8
2.1.1.1 Net RBI credit to the Government	3,645.2	4,632.6	4,086.7	4,857.5	4,444.8
2.1.1.2 Credit to the Government by the Banking System	26,416.3	26,699.2	28,727.8	29,255.4	28,804.1
2.1.2 Bank Credit to the Commercial Sector	75,082.2	73,819.0	81,544.9	82,165.0	82,361.3
2.1.2.1 RBI Credit to the Commercial Sector	148.5	60.5	69.6	64.7	80.2
2.1.2.2 Credit to the Commercial Sector by the Banking System	74,933.8	73,758.5	81,475.2	82,100.3	82,281.1
2.1.2.2.1 Other Investments (Non-SLR Securities)	4,653.3	4,577.4	5,372.9	5,371.1	5,364.3
2.2 Government’s Currency Liabilities to the Public	194.3	192.6	213.1	213.1	213.1
2.3 Net Foreign Exchange Assets of the Banking Sector	19,441.0	18,756.9	20,495.4	20,901.5	21,191.6
2.3.1 Net Foreign Exchange Assets of the RBI	21,272.8	20,635.5	23,343.6	23,598.3	23,865.9
2.3.2 Net Foreign Currency Assets of the Banking System	–1,831.8	–1,878.6	–2,848.2	–2,696.8	–2,674.3
2.4 Capital Account	16,773.5	16,771.3	18,260.3	18,425.3	18,684.6
2.5 Other items (net)	2,975.3	3,653.9	2,443.1	3,524.1	2,577.3

No. 9: Liquidity Aggregates

(₹ Billion)

Aggregates	2014-15	2015		2016	
		Feb.	Dec.	Jan.	Feb.
	1	2	3	4	5
1 NM_3	**105,030.3**	**103,675.1**	**113,432.4**	**114,364.4**	**115,752.9**
2 Postal Deposits	1,737.3	1,716.1	1,978.7	2,006.9	2,006.9
3 L_1 (1 + 2)	**106,767.5**	**105,391.2**	**115,411.1**	**116,371.3**	**117,759.7**
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 L_2 (3 + 4)	**106,796.9**	**105,420.5**	**115,440.5**	**116,400.6**	**117,789.1**
6 Public Deposits with Non-Banking Financial Companies	321.2	..	344.2	..	..
7 L_3 (5 + 6)	**107,118.1**	..	**115,784.7**	..	..

No. 10: Reserve Bank of India Survey

(₹ Billion)

Item	Outstanding as on March 31/last reporting Fridays of the month/reporting Fridays				
	2014-15	2015	2016		
		Feb. 20	Jan. 22	Feb. 5	Feb. 19
	1	2	3	4	5
1 Components					
1.1 Currency in Circulation	14,483.1	14,333.0	15,869.3	16,019.2	16,237.0
1.2 Bankers' Deposits with the RBI	4,655.6	3,656.9	4,055.6	4,146.8	4,124.9
1.2.1 Scheduled Commercial Banks	4,396.7	3,433.1	3,807.9	3,897.6	3,871.1
1.3 'Other' Deposits with the RBI	145.9	80.4	126.6	126.5	271.3
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 – 2.4 – 2.5)	19,284.6	18,070.3	20,051.4	20,292.5	20,633.2
2 Sources					
2.1 RBI's Domestic Credit	5,670.3	5,383.5	5,712.4	5,993.2	6,331.1
2.1.1 Net RBI credit to the Government	3,645.2	4,632.6	4,086.7	4,857.5	4,444.8
2.1.1.1 Net RBI credit to the Central Government (2.1.1.1.1 + 2.1.1.1.2 + 2.1.1.1.3 + 2.1.1.1.4 – 2.1.1.1.5)	3,610.4	4,618.8	4,082.2	4,849.3	4,420.3
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	5,256.2	5,257.3	5,578.8	5,583.7	5,688.3
2.1.1.1.3.1 Central Government Securities	5,245.7	5,246.8	5,568.4	5,573.2	5,677.8
2.1.1.1.4 Rupee Coins	2.2	2.6	1.5	2.6	1.6
2.1.1.1.5 Deposits of the Central Government	1,647.9	641.0	1,498.1	737.0	1,269.6
2.1.1.2 Net RBI credit to State Governments	34.9	13.8	4.4	8.2	24.4
2.1.2 RBI's Claims on Banks	1,876.6	690.4	1,556.1	1,071.0	1,806.1
2.1.2.1 Loans and Advances to Scheduled Commercial Banks	1,876.1	689.9	1,555.8	1,070.6	1,805.7
2.1.3 RBI's Credit to Commercial Sector	148.5	60.5	69.6	64.7	80.2
2.1.3.1 Loans and Advances to Primary Dealers	24.1	19.8	22.3	22.3	22.9
2.1.3.2 Loans and Advances to NABARD	–	–	–	–	–
2.2 Government's Currency Liabilities to the Public	194.3	192.6	213.1	213.1	213.1
2.3 Net Foreign Exchange Assets of the RBI	21,272.8	20,635.5	23,343.6	23,598.3	23,865.9
2.3.1 Gold	1,191.6	1,246.5	1,143.5	1,201.2	1,201.2
2.3.2 Foreign Currency Assets	20,081.4	19,389.2	22,200.3	22,397.3	22,664.9
2.4 Capital Account	8,166.4	8,193.3	8,636.9	8,834.7	9,078.8
2.5 Other Items (net)	-313.7	-52.0	580.8	677.4	698.1

No. 11: Reserve Money - Components and Sources

(₹ Billion)

Item	Outstanding as on March 31/ last Fridays of the month/ Fridays						
	2014-15	2015	2016				
		Feb. 27	Jan. 29	Feb. 5	Feb. 12	Feb. 19	Feb. 26
	1	2	3	4	5	6	7
Reserve Money (1.1 + 1.2 + 1.3 = 2.1 + 2.2 + 2.3 + 2.4 + 2.5 – 2.6)	19,284.6	18,163.0	20,053.7	20,292.5	20,379.2	20,633.2	20,446.3
1 Components							
1.1 Currency in Circulation	14,483.1	14,256.7	15,839.7	16,019.2	16,209.4	16,237.0	16,205.7
1.2 Bankers' Deposits with RBI	4,655.6	3,820.6	4,080.5	4,146.8	4,044.9	4,124.9	4,113.2
1.3 'Other' Deposits with RBI	145.9	85.8	133.5	126.5	124.9	271.3	127.5
2 Sources							
2.1 Net Reserve Bank Credit to Government	3,645.2	4,368.9	4,140.3	4,857.5	4,281.5	4,444.8	4,487.7
2.2 Reserve Bank Credit to Banks	1,876.6	721.8	1,498.5	1,071.0	1,650.8	1,806.1	1,662.8
2.3 Reserve Bank Credit to Commercial Sector	148.5	59.5	69.6	64.7	81.6	80.2	80.7
2.4 Net Foreign Exchange Assets of RBI	21,272.8	20,743.8	23,490.2	23,598.3	23,952.8	23,865.9	23,707.9
2.5 Government's Currency Liabilities to the Public	194.3	192.6	213.1	213.1	213.1	213.1	213.1
2.6 Net Non- Monetary Liabilities of RBI	7,852.7	7,923.6	9,358.0	9,512.0	9,800.5	9,776.9	9,705.7

No. 12: Commercial Bank Survey

(₹ Billion)

Item	Outstanding as on last reporting Fridays of the month/ reporting Fridays of the month				
	2014-15	2015	2016		
		Feb. 20	Jan. 22	Feb. 5	Feb. 19
	1	2	3	4	5
1 Components					
1.1 Aggregate Deposits of Residents	82,648.9	81,559.7	89,639.1	90,564.3	90,416.6
1.1.1 Demand Deposits	7,940.3	7,590.6	8,212.3	8,500.6	8,496.4
1.1.2 Time Deposits of Residents	74,708.6	73,969.2	81,426.8	82,063.7	81,920.2
1.1.2.1 Short-term Time Deposits	33,618.9	33,286.1	36,642.1	36,928.7	36,864.1
1.1.2.1.1 Certificates of Deposits (CDs)	2,974.5	2,708.9	2,235.3	2,130.0	2,182.1
1.1.2.2 Long-term Time Deposits	41,089.7	40,683.0	44,784.7	45,135.1	45,056.1
1.2 Call/Term Funding from Financial Institutions	2,258.7	2,250.6	2,992.8	2,949.1	3,041.0
2 Sources					
2.1 Domestic Credit	94,881.9	94,021.7	103,372.2	104,506.7	104,230.5
2.1.1 Credit to the Government	24,897.5	25,213.6	27,098.7	27,604.5	27,153.3
2.1.2 Credit to the Commercial Sector	69,984.3	68,808.2	76,273.5	76,902.1	77,077.1
2.1.2.1 Bank Credit	65,364.2	64,257.9	70,903.3	71,534.1	71,727.4
2.1.2.1.1 Non-food Credit	64,420.0	63,260.5	69,881.4	70,447.2	70,649.6
2.1.2.2 Net Credit to Primary Dealers	35.7	44.6	60.2	64.3	57.7
2.1.2.3 Investments in Other Approved Securities	20.7	17.9	26.8	22.3	17.3
2.1.2.4 Other Investments (in non-SLR Securities)	4,563.7	4,487.7	5,283.3	5,281.5	5,274.7
2.2 Net Foreign Currency Assets of Commercial Banks (2.2.1–2.2.2–2.2.3)	–1,831.8	–1,878.6	–2,848.2	–2,696.8	–2,674.3
2.2.1 Foreign Currency Assets	1,647.0	1,567.4	1,300.7	1,440.7	1,564.2
2.2.2 Non-resident Foreign Currency Repatriable Fixed Deposits	2,684.0	2,664.2	3,060.9	3,048.3	3,095.8
2.2.3 Overseas Foreign Currency Borrowings	794.8	781.8	1,088.0	1,089.1	1,142.7
2.3 Net Bank Reserves (2.3.1+2.3.2–2.3.3)	2,741.5	3,259.3	2,869.7	3,399.2	2,644.2
2.3.1 Balances with the RBI	3,730.7	3,433.1	3,807.9	3,897.6	3,871.1
2.3.2 Cash in Hand	533.5	516.2	617.6	572.3	578.9
2.3.3 Loans and Advances from the RBI	1,522.8	689.9	1,555.8	1,070.6	1,805.7
2.4 Capital Account	8,365.4	8,336.3	9,381.7	9,348.9	9,364.1
2.5 Other items (net) (2.1+2.2+2.3–2.4–1.1–1.2)	2,518.6	3,255.8	1,380.1	2,346.8	1,378.7
2.5.1 Other Demand and Time Liabilities (net of 2.2.3)	3,777.2	3,658.5	3,461.1	3,696.4	3,576.0
2.5.2 Net Inter-Bank Liabilities (other than to PDs)	–620.4	–356.4	–478.8	–455.9	–539.9

No. 13: Scheduled Commercial Banks' Investments

(₹ Billion)

Item	As on March 20, 2015	2015	2016		
		Feb. 20	Jan. 22	Feb. 05	Feb. 19
	1	2	3	4	5
1 SLR Securities	24,918.3	25,231.5	26,994.2	27,626.8	27,170.6
2 Commercial Paper	467.9	425.9	874.1	825.4	810.9
3 Shares issued by					
3.1 PSUs	81.8	85.1	80.6	80.5	80.6
3.2 Private Corporate Sector	365.8	354.8	440.7	432.9	431.2
3.3 Others	32.7	31.1	38.6	39.7	45.7
4 Bonds/Debentures issued by					
4.1 PSUs	809.5	821.2	824.4	789.3	802.7
4.2 Private Corporate Sector	1,159.2	1,151.7	1,248.6	1,248.9	1,251.8
4.3 Others	505.1	479.7	568.1	596.9	591.9
5 Instruments issued by					
5.1 Mutual funds	585.6	593.2	687.1	666.0	660.0
5.2 Financial institutions	627.6	620.6	621.3	601.8	599.7

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			
	2014-15	2015	2016		2014-15	2015	2016	
		Feb.	Jan.	Feb.		Feb.	Jan.	Feb.
	1	2	3	4	5	6	7	8
Number of Reporting Banks	214	214	214	214	147	147	147	147
1 Liabilities to the Banking System	**1,619.2**	**1,576.2**	**2,265.7**	**2,213.6**	**1,561.5**	**1,523.8**	**2,206.0**	**2,151.7**
1.1 Demand and Time Deposits from Banks	1,153.7	1,117.6	1,596.2	1,613.9	1,102.0	1,066.9	1,537.5	1,553.3
1.2 Borrowings from Banks	404.1	397.0	524.0	535.2	398.2	395.4	523.1	533.8
1.3 Other Demand and Time Liabilities	61.5	61.6	145.5	64.5	61.4	61.4	145.5	64.5
2 Liabilities to Others	**94,577.6**	**94,554.7**	**103,227.6**	**104,636.2**	**92,163.6**	**92,146.8**	**100,661.8**	**102,024.6**
2.1 Aggregate Deposits	87,651.2	87,304.3	95,329.7	96,225.7	85,332.9	84,994.1	92,870.0	93,722.7
2.1.1 Demand	8,125.7	8,116.0	8,800.8	8,949.7	7,940.3	7,933.3	8,599.6	8,747.7
2.1.2 Time	79,525.6	79,188.3	86,528.8	87,276.1	77,392.6	77,060.9	84,270.4	84,975.0
2.2 Borrowings	2,279.0	2,497.3	3,103.1	3,425.0	2,258.7	2,470.2	3,081.6	3,395.3
2.3 Other Demand and Time Liabilities	4,647.3	4,753.0	4,794.9	4,985.4	4,572.0	4,682.5	4,710.2	4,906.5
3 Borrowings from Reserve Bank	**1,582.5**	**925.5**	**1,535.7**	**1,775.0**	**1,582.0**	**925.0**	**1,535.3**	**1,774.6**
3.1 Against Usance Bills /Promissory Notes	–	–	–	–	–	–	–	–
3.2 Others	1,582.5	925.5	1,535.7	1,775.0	1,582.0	925.0	1,535.3	1,774.6
4 Cash in Hand and Balances with Reserve Bank	4,379.4	4,251.3	4,545.3	4,615.0	4,264.3	4,138.5	4,426.0	4,495.7
4.1 Cash in Hand	544.9	553.8	606.6	645.5	533.55	542.4	594.1	633.2
4.2 Balances with Reserve Bank	3,834.6	3,697.5	3,938.7	3,969.5	3,730.7	3,596.1	3,831.9	3,862.5
5 Assets with the Banking System	**2,581.2**	**2,324.1**	**2,911.2**	**3,101.6**	**2,217.7**	**1,939.0**	**2,553.1**	**2,734.1**
5.1 Balances with Other Banks	1,540.2	1,429.5	1,770.0	1,983.3	1,374.1	1,265.2	1,627.6	1,856.0
5.1.1 In Current Account	109.3	124.9	118.9	129.3	91.3	107.8	101.6	114.3
5.1.2 In Other Accounts	1,430.9	1,304.7	1,651.1	1,854.0	1,282.7	1,157.4	1,525.9	1,741.7
5.2 Money at Call and Short Notice	374.3	357.2	293.4	358.9	225.9	196.5	153.0	200.3
5.3 Advances to Banks	192.5	143.8	286.7	288.6	189.2	140.4	278.9	278.6
5.4 Other Assets	474.2	393.5	561.1	470.9	428.5	336.9	493.7	399.2
6 Investment	**25,610.7**	**26,018.4**	**28,047.4**	**27,794.7**	**24,918.3**	**25,319.2**	**27,294.0**	**27,028.3**
6.1 Government Securities	25,586.6	25,996.3	28,024.4	27,772.5	24,897.5	25,300.9	27,274.2	27,010.3
6.2 Other Approved Securities	24.0	22.1	23.1	22.2	20.7	18.3	19.8	17.9
7 Bank Credit	**67,426.9**	**66,625.5**	**73,079.2**	**74,210.1**	**65,364.2**	**64,597.2**	**70,946.0**	**72,010.4**
7a Food Credit	1,078.0	1,106.3	1,190.4	1,223.1	944.2	972.5	1,027.7	1,060.4
7.1 Loans, Cash-credits and Overdrafts	65,154.2	64,385.4	70,857.0	71,982.9	63,123.9	62,389.0	68,755.9	69,817.1
7.2 Inland Bills-Purchased	348.6	349.6	271.8	264.1	344.1	344.8	265.9	258.4
7.3 Inland Bills-Discounted	1,221.1	1,194.7	1,331.8	1,341.1	1,199.9	1,174.1	1,311.3	1,318.9
7.4 Foreign Bills-Purchased	242.6	254.4	204.0	201.9	241.2	253.1	202.8	200.3
7.5 Foreign Bills-Discounted	460.3	441.3	414.6	420.1	455.2	436.2	410.1	415.6

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

(₹ Billion)

Item	Outstanding as on				Growth (%)	
	Mar. 20, 2015	2015	2016		Financial year so far	Y-o-Y
		Feb. 20	Jan. 22	Feb. 19	2015-16	2016
	1	2	3	4	5	6
1 Gross Bank Credit	**61,023**	**59,954**	**64,983**	**65,779**	**7.8**	**9.7**
1.1 Food Credit	**994**	**1,041**	**1,002**	**1,041**	**4.8**	**0.1**
1.2 Non-food Credit	**60,030**	**58,913**	**63,981**	**64,738**	**7.8**	**9.9**
1.2.1 Agriculture & Allied Activities	**7,659**	**7,544**	**8,514**	**8,564**	**11.8**	**13.5**
1.2.2 Industry	**26,576**	**26,058**	**27,244**	**27,455**	**3.3**	**5.4**
1.2.2.1 Micro & Small	3,800	3,695	3,776	3,759	–1.1	1.7
1.2.2.2 Medium	1,265	1,287	1,155	1,144	–9.6	–11.1
1.2.2.3 Large	21,511	21,076	22,313	22,552	4.8	7.0
1.2.3 Services	**14,131**	**13,779**	**14,732**	**14,970**	**5.9**	**8.6**
1.2.3.1 Transport Operators	916	911	984	986	7.7	8.3
1.2.3.2 Computer Software	172	170	187	188	9.2	10.9
1.2.3.3 Tourism, Hotels & Restaurants	370	367	371	375	1.1	1.9
1.2.3.4 Shipping	101	101	103	106	4.5	4.9
1.2.3.5 Professional Services	844	828	1,033	1,041	23.3	25.7
1.2.3.6 Trade	3,657	3,521	3,662	3,730	2.0	6.0
1.2.3.6.1 Wholesale Trade	1,801	1,736	1,650	1,686	–6.4	–2.8
1.2.3.6.2 Retail Trade	1,856	1,785	2,012	2,044	10.1	14.5
1.2.3.7 Commercial Real Estate	1,665	1,665	1,766	1,766	6.1	6.0
1.2.3.8 Non-Banking Financial Companies (NBFCs)	3,117	3,001	3,260	3,311	6.2	10.3
1.2.3.9 Other Services	3,289	3,216	3,367	3,467	5.4	7.8
1.2.4 Personal Loans	**11,663**	**11,532**	**13,491**	**13,749**	**17.9**	**19.2**
1.2.4.1 Consumer Durables	153	150	170	171	11.7	14.0
1.2.4.2 Housing	6,285	6,186	7,238	7,359	17.1	19.0
1.2.4.3 Advances against Fixed Deposits	625	604	639	680	8.7	12.5
1.2.4.4 Advances to Individuals against share & bonds	54	54	58	59	7.9	9.3
1.2.4.5 Credit Card Outstanding	305	311	386	385	26.4	23.6
1.2.4.6 Education	633	635	683	682	7.7	7.4
1.2.4.7 Vehicle Loans	1,246	1,275	1,420	1,432	14.9	12.3
1.2.4.8 Other Personal Loans	2,362	2,317	2,898	2,982	26.3	28.7
1.2A Priority Sector	**20,103**	**19,724**	**21,724**	**21,853**	**8.7**	**10.8**
1.2A.1 Agriculture & Allied Activities	7,659	7,544	8,514	8,560	11.8	13.5
1.2A.2 Micro & Small Enterprises	8,003	7,774	8,346	8,380	4.7	7.8
1.2A.2.1 Manufacturing	3,800	3,695	3,776	3,759	–1.1	1.7
1.2A.2.2 Services	4,203	4,079	4,570	4,621	9.9	13.3
1.2A.3 Housing	3,224	3,203	3,392	3,416	5.9	6.6
1.2A.4 Micro-Credit	177	173	188	188	6.2	8.6
1.2A.5 Education Loans	592	592	607	605	2.1	2.1
1.2A.6 State-Sponsored Orgs. for SC/ST	3	4	5	5	43.0	41.1
1.2A.7 Weaker Sections	4,049	3,984	4,650	4,703	16.1	18.0
1.2A.8 Export Credit	426	405	346	371	–13.0	–8.5

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

(₹ Billion)

Industry	Outstanding as on				Growth (%)	
	Mar. 20, 2015	2015	2016		Financial year so far	Y-o-Y
		Feb. 20	Jan. 22	Feb. 19	2015-16	2016
	1	2	3	4	5	6
1 Industry	**26,576**	**26,058**	**27,244**	**27,455**	**3.3**	**5.4**
1.1 Mining & Quarrying (incl. Coal)	**360**	**364**	**387**	**392**	**9.0**	**7.7**
1.2 Food Processing	**1,715**	**1,636**	**1,525**	**1,534**	**–10.6**	**–6.2**
1.2.1 Sugar	414	375	365	380	–8.3	1.3
1.2.2 Edible Oils & Vanaspati	211	200	193	196	–7.2	–2.3
1.2.3 Tea	32	32	36	36	12.4	12.1
1.2.4 Others	1,058	1,029	931	923	–12.8	–10.3
1.3 Beverage & Tobacco	**186**	**185**	**178**	**185**	**–0.7**	**0.2**
1.4 Textiles	**2,019**	**1,998**	**2,027**	**2,044**	**1.2**	**2.3**
1.4.1 Cotton Textiles	1,000	990	1,017	1,029	2.9	3.9
1.4.2 Jute Textiles	22	22	22	22	–2.3	–2.1
1.4.3 Man-Made Textiles	204	203	208	209	2.6	3.1
1.4.4 Other Textiles	793	783	780	784	–1.1	0.2
1.5 Leather & Leather Products	**102**	**101**	**103**	**104**	**1.5**	**3.4**
1.6 Wood & Wood Products	**98**	**97**	**96**	**96**	**–2.0**	**–0.9**
1.7 Paper & Paper Products	**341**	**339**	**362**	**358**	**5.2**	**5.7**
1.8 Petroleum, Coal Products & Nuclear Fuels	**561**	**539**	**477**	**475**	**–15.3**	**–11.8**
1.9 Chemicals & Chemical Products	**1,545**	**1,504**	**1,562**	**1,589**	**2.9**	**5.7**
1.9.1 Fertiliser	254	243	229	256	0.7	5.1
1.9.2 Drugs & Pharmaceuticals	493	481	513	518	5.1	7.7
1.9.3 Petro Chemicals	331	334	362	354	7.0	5.9
1.9.4 Others	467	446	458	462	–1.2	3.5
1.10 Rubber, Plastic & their Products	**378**	**375**	**363**	**368**	**–2.6**	**–1.8**
1.11 Glass & Glassware	**88**	**89**	**89**	**88**	**0.1**	**–0.8**
1.12 Cement & Cement Products	**560**	**559**	**538**	**537**	**–4.2**	**–4.0**
1.13 Basic Metal & Metal Product	**3,854**	**3,760**	**4,099**	**4,145**	**7.6**	**10.2**
1.13.1 Iron & Steel	2,834	2,753	3,037	3,090	9.0	12.3
1.13.2 Other Metal & Metal Product	1,020	1,007	1,062	1,055	3.5	4.8
1.14 All Engineering	**1,540**	**1,521**	**1,526**	**1,539**	**–0.1**	**1.1**
1.14.1 Electronics	368	363	379	382	3.8	5.2
1.14.2 Others	1,172	1,158	1,147	1,157	–1.3	–0.1
1.15 Vehicles, Vehicle Parts & Transport Equipment	**682**	**667**	**679**	**678**	**–0.5**	**1.7**
1.16 Gems & Jewellery	**718**	**714**	**718**	**728**	**1.3**	**1.9**
1.17 Construction	**743**	**746**	**739**	**746**	**0.4**	**0.0**
1.18 Infrastructure	**9,245**	**9,115**	**9,883**	**9,944**	**7.6**	**9.1**
1.18.1 Power	5,576	5,514	5,992	6,045	8.4	9.6
1.18.2 Telecommunications	919	858	937	939	2.1	9.4
1.18.3 Roads	1,687	1,675	1,789	1,794	6.4	7.1
1.18.4 Other Infrastructure	1,064	1,068	1,165	1,166	9.6	9.3
1.19 Other Industries	**1,839**	**1,751**	**1,892**	**1,904**	**3.5**	**8.8**

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

(₹ Billion)

Item	Last Reporting Friday (in case of March)/Last Friday/ Reporting Friday					
	2014-15	2014	2015			
		Nov. 28	Oct. 16	Oct. 30	Nov. 13	Nov. 27
	1	2	3	4	5	6
Number of Reporting Banks	31	31	31	31	31	31
1 Aggregate Deposits (2.1.1.2+2.2.1.2)	**422.3**	**400.5**	**443.5**	**447.2**	**71.1**	**365.8**
2 Demand and Time Liabilities						
2.1 Demand Liabilities	**148.1**	**137.9**	**143.0**	**145.5**	**32.1**	**117.9**
2.1.1 Deposits						
2.1.1.1 Inter-Bank	33.7	24.8	30.2	30.2	7.0	26.9
2.1.1.2 Others	77.7	77.3	72.4	73.6	19.8	53.5
2.1.2 Borrowings from Banks	9.3	10.3	10.1	10.5	–	8.3
2.1.3 Other Demand Liabilities	27.4	25.5	30.4	31.1	5.2	29.2
2.2 Time Liabilities	**854.6**	**844.1**	**873.0**	**872.7**	**91.2**	**722.0**
2.2.1 Deposits						
2.2.1.1 Inter-Bank	499.2	509.0	492.2	489.2	39.5	404.5
2.2.1.2 Others	344.6	323.1	371.2	373.6	51.2	312.3
2.2.2 Borrowings from Banks	0.1	0.1	–	0.4	–	–
2.2.3 Other Time Liabilities	10.8	11.9	9.6	9.5	0.5	5.1
3 Borrowing from Reserve Bank	–	–	–	–	–	–
4 Borrowings from a notified bank / State Government	450.9	421.3	437.0	437.5	1.2	308.1
4.1 Demand	174.9	168.6	165.0	160.5	–	61.0
4.2 Time	276.0	252.7	272.1	277.0	1.2	247.1
5 Cash in Hand and Balances with Reserve Bank	**40.5**	**37.1**	**41.1**	**40.8**	**4.0**	**33.7**
5.1 Cash in Hand	2.4	2.5	3.6	2.2	0.5	2.0
5.2 Balance with Reserve Bank	38.1	34.6	37.5	38.6	3.5	31.7
6 Balances with Other Banks in Current Account	10.0	7.8	7.0	7.2	1.7	3.6
7 Investments in Government Securities	282.4	278.8	274.7	275.7	35.9	230.6
8 Money at Call and Short Notice	198.8	188.1	176.9	193.7	4.7	140.8
9 Bank Credit (10.1+11)	**426.4**	**377.3**	**443.7**	**428.8**	**57.0**	**363.7**
10 Advances						
10.1 Loans, Cash-Credits and Overdrafts	**426.4**	**377.2**	**443.6**	**428.8**	**57.0**	**363.7**
10.2 Due from Banks	709.2	686.4	693.9	701.7	12.9	487.6
11 Bills Purchased and Discounted	0.1	0.1	–	–	–	–

Prices and Production

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

Group/Sub group	2014-15			Rural			Urban			Combined		
	Rural	Urban	Combined	Feb. 15	Jan. 16	Feb. 16	Feb. 15	Jan. 16	Feb. 16	Feb. 15	Jan. 16	Feb. 16
	1	2	3	4	5	6	7	8	9	10	11	12
1 Food and beverages	**122.6**	**124.1**	**123.1**	**122.8**	**131.4**	**130.3**	**123.7**	**131.2**	**129.1**	**123.1**	**131.3**	**129.9**
1.1 Cereals and products	122.0	123.9	122.6	123.4	126.8	127.2	124.3	124.7	124.8	123.7	126.1	126.4
1.2 Meat and fish	122.3	125.5	123.5	124.4	133.2	133.7	126.5	135.9	135.2	125.1	134.1	134.2
1.3 Egg	119.0	118.4	118.7	122.1	126.5	127.5	119.5	132.0	130.4	121.1	128.6	128.6
1.4 Milk and products	122.3	122.7	122.5	125.8	130.3	130.7	125.6	129.2	129.6	125.7	129.9	130.3
1.5 Oils and fats	110.6	103.7	108.1	111.5	118.9	118.4	104.9	109.7	108.4	109.1	115.5	114.7
1.6 Fruits	128.6	126.1	127.4	129.4	131.6	130.4	121.6	119.0	118.6	125.8	125.7	124.9
1.7 Vegetables	140.0	146.7	142.3	128.2	140.1	130.9	131.8	144.1	129.2	129.4	141.5	130.3
1.8 Pulses and products	115.1	117.8	116.0	118.8	163.8	162.6	125.1	184.2	176.3	120.9	170.7	167.2
1.9 Sugar and confectionery	102.8	99.5	101.7	100.0	97.7	98.7	95.0	96.7	99.1	98.3	97.4	98.8
1.10 Spices	115.0	122.6	117.5	118.6	129.6	130.6	127.7	139.5	139.7	121.6	132.9	133.6
1.11 Non-alcoholic beverages	116.4	114.9	115.8	118.8	124.3	124.8	116.8	120.5	120.6	118.0	122.7	123.0
1.12 Prepared meals, snacks, sweets	123.0	125.4	124.1	126.8	135.9	136.5	128.6	134.7	135.2	127.6	135.3	135.9
2 Pan, tobacco and intoxicants	**120.0**	**123.7**	**120.9**	**124.2**	**133.6**	**134.2**	**128.1**	**139.5**	**140.0**	**125.2**	**135.2**	**135.7**
3 Clothing and footwear	**121.7**	**118.5**	**120.5**	**125.0**	**132.6**	**133.3**	**120.6**	**124.9**	**125.3**	**123.3**	**129.5**	**130.1**
3.1 Clothing	122.1	119.2	121.0	125.4	133.2	133.9	121.3	125.8	126.2	123.8	130.3	130.9
3.2 Footwear	119.6	114.7	117.6	122.7	128.9	129.7	116.5	119.8	120.1	120.1	125.1	125.7
4 Housing	**--**	**116.1**	**116.1**	**--**	**--**	**--**	**118.1**	**123.4**	**124.4**	**118.1**	**123.4**	**124.4**
5 Fuel and light	**116.5**	**112.3**	**114.9**	**120.0**	**126.2**	**127.4**	**114.0**	**116.9**	**116.0**	**117.7**	**122.7**	**123.1**
6 Miscellaneous	**113.6**	**113.1**	**113.4**	**115.0**	**120.1**	**120.8**	**113.2**	**116.8**	**117.2**	**114.1**	**118.5**	**119.1**
6.1 Household goods and services	116.9	115.8	116.4	119.6	126.6	127.2	117.7	121.6	121.8	118.7	124.2	124.6
6.2 Health	114.9	112.5	114.0	117.7	123.7	124.2	114.1	119.1	119.5	116.3	122.0	122.4
6.3 Transport and communication	112.0	110.3	111.1	110.9	113.6	113.7	106.8	108.9	109.1	108.7	111.1	111.3
6.4 Recreation and amusement	112.8	113.3	113.1	114.8	121.4	122.2	114.9	118.5	118.8	114.9	119.8	120.3
6.5 Education	116.4	118.4	117.6	118.7	126.2	127.0	120.4	126.4	126.3	119.7	126.3	126.6
6.6 Personal care and effects	109.4	110.2	109.7	110.8	114.9	116.7	111.7	114.0	116.2	111.2	114.5	116.5
General Index (All Groups)	**119.5**	**118.1**	**118.9**	**120.6**	**128.1**	**127.8**	**118.7**	**124.2**	**123.8**	**119.7**	**126.3**	**125.9**

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

No. 19: Other Consumer Price Indices

Item	Base Year	Linking Factor	2014-15	2015	2016	
				Feb.	Jan.	Feb.
	1	2	3	4	5	6
1 Consumer Price Index for Industrial Workers	2001	4.63	251	253	269	267
2 Consumer Price Index for Agricultural Labourers	1986-87	5.89	800	803	849	843
3 Consumer Price Index for Rural Labourers	1986-87	–	802	806	854	849

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

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

Item	2014-15	2015	2016	
		Feb.	Jan.	Feb.
	1	2	3	4
1 Standard Gold (₹ per 10 grams)	27,415	27,075	25,998	28,252
2 Silver (₹ per kilogram)	40,558	38,262	34,287	36,917

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	2014-15	2015		2016	
			Feb.	Dec.	Jan. (P)	Feb. (P)
	1	2	3	4	5	6
1 ALL COMMODITIES	**100.000**	**181.2**	**175.6**	**176.8**	**175.7**	**174.0**
1.1 PRIMARY ARTICLES	**20.118**	**248.8**	**240.9**	**255.6**	**253.3**	**244.7**
1.1.1 Food articles	**14.337**	**253.4**	**250.7**	**272.0**	**267.6**	**259.1**
1.1.1.1 Food Grains	4.090	235.0	237.6	262.4	260.1	257.1
1.1.1.1.1 Cereals	3.373	233.6	233.5	237.8	236.7	236.1
1.1.1.1.2 Pulses	0.717	241.4	256.7	378.5	370.1	356.4
1.1.1.2 Fruits & Vegetables	3.843	257.3	234.9	270.8	257.5	229.0
1.1.1.2.1 Vegetables	1.736	276.6	227.8	315.6	289.4	220.2
1.1.1.2.2 Fruits	2.107	241.5	240.8	234.0	231.2	236.1
1.1.1.3 Milk	3.238	242.6	247.4	250.9	250.8	251.7
1.1.1.4 Eggs, Meat & Fish	2.414	282.3	288.4	296.6	297.3	298.4
1.1.1.5 Condiments & Spices	0.569	298.8	314.3	372.6	363.3	357.2
1.1.1.6 Other Food Articles	0.183	249.4	233.9	245.3	252.6	246.8
1.1.2 Non-Food Articles	**4.258**	**212.1**	**205.8**	**224.2**	**224.5**	**217.9**
1.1.2.1 Fibres	0.877	215.3	191.8	208.7	213.7	210.1
1.1.2.2 Oil Seeds	1.781	208.9	202.6	218.3	215.3	210.0
1.1.2.3 Other Non-Food Articles	1.386	215.6	213.8	233.2	231.1	228.4
1.1.2.4 Flowers	0.213	202.6	238.6	278.3	302.9	249.2
1.1.3 Minerals	**1.524**	**308.5**	**247.7**	**189.0**	**199.2**	**183.0**
1.1.3.1 Metallic Minerals	0.489	388.6	353.0	246.6	258.0	243.6
1.1.3.2 Other Minerals	0.135	211.8	217.8	198.9	202.6	198.3
1.1.3.3 Crude Petroleum	0.900	279.6	195.1	156.3	166.9	147.8
1.2 FUEL & POWER	**14.910**	**203.5**	**181.2**	**176.8**	**171.6**	**169.6**
1.2.1 Coal	2.094	189.8	189.8	189.9	189.9	189.9
1.2.2 Mineral Oils	9.364	219.6	183.4	173.8	165.5	162.3
1.2.3 Electricity	3.452	168.0	170.1	177.2	177.2	177.2
1.3 MANUFACTURED PRODUCTS	**64.972**	**155.1**	**154.0**	**152.4**	**152.7**	**153.1**
1.3.1 Food Products	**9.974**	**172.9**	**170.6**	**174.9**	**176.7**	**178.1**
1.3.1.1 Dairy Products	0.568	199.5	206.3	205.7	205.1	203.8
1.3.1.2 Canning, Preserving & Processing of Food	0.358	167.2	165.8	165.7	165.6	165.3
1.3.1.3 Grain Mill Products	1.340	175.1	176.3	182.3	182.7	184.2
1.3.1.4 Bakery Products	0.444	149.2	146.6	148.6	148.6	148.9
1.3.1.5 Sugar, Khandsari & Gur	2.089	182.7	173.7	166.8	172.8	178.4
1.3.1.6 Edible Oils	3.043	145.0	145.6	149.9	149.6	150.2
1.3.1.7 Oil Cakes	0.494	227.0	222.4	251.7	260.5	259.6
1.3.1.8 Tea & Coffee Proccessing	0.711	189.7	174.9	190.8	189.9	185.8
1.3.1.9 Manufacture of Salt	0.048	197.3	204.8	199.8	199.8	199.8
1.3.1.10 Other Food Products	0.879	194.1	197.0	209.5	211.8	214.1
1.3.2 Beverages, Tobacco & Tobacco Products	**1.762**	**200.8**	**202.7**	**206.1**	**206.4**	**207.2**
1.3.2.1 Wine Industries	0.385	137.0	136.2	137.2	137.2	137.0
1.3.2.2 Malt Liquor	0.153	177.5	179.4	180.7	181.0	183.0
1.3.2.3 Soft Drinks & Carbonated Water	0.241	162.6	167.1	166.9	166.9	166.3
1.3.2.4 Manufacture of Bidi, Cigarettes, Tobacco & Zarda	0.983	238.7	241.3	246.6	247.3	248.6
1.3.3 Textiles	**7.326**	**142.6**	**140.4**	**139.6**	**139.4**	**139.6**
1.3.3.1 Cotton Textiles	2.605	162.6	157.9	155.1	154.9	155.4
1.3.3.1.1 Cotton Yarn	1.377	179.2	170.0	162.8	162.7	163.8
1.3.3.1.2 Cotton Fabric	1.228	144.0	144.4	146.5	146.1	145.8
1.3.3.2 Man-Made Textiles	2.206	135.3	132.4	129.7	129.4	129.1
1.3.3.2.1 Man-Made Fibre	1.672	134.5	131.2	127.9	127.9	127.6
1.3.3.2.2 Man-Made Fabric	0.533	138.0	136.3	135.1	133.9	133.4
1.3.3.3 Woollen Textiles	0.294	159.5	159.9	151.2	151.7	151.2
1.3.3.4 Jute, Hemp & Mesta Textiles	0.261	192.9	200.0	232.1	231.4	234.0
1.3.3.5 Other Misc. Textiles	1.960	115.0	115.3	116.1	116.1	116.2
1.3.4 Wood & Wood Products	**0.587**	**187.8**	**189.5**	**195.3**	**195.3**	**195.9**
1.3.4.1 Timber/Wooden Planks	0.181	156.9	157.5	165.5	165.7	165.9
1.3.4.2 Processed Wood	0.128	191.1	191.8	195.3	195.3	193.7
1.3.4.3 Plywood & Fibre Board	0.241	214.9	218.6	225.1	225.2	227.3
1.3.4.4 Others	0.038	152.6	149.5	148.6	147.9	147.5

No. 21: Wholesale Price Index (Concld.)

(Base: 2004-05 = 100)

Commodities	Weight	2014-15	2015		2016	
			Feb.	Dec.	Jan. (P)	Feb. (P)
	1	2	3	4	5	6
1.3.5 Paper & Paper Products	**2.034**	**150.7**	**151.4**	**155.0**	**155.7**	**155.5**
1.3.5.1 Paper & Pulp	1.019	149.8	149.8	151.1	151.2	150.9
1.3.5.2 Manufacture of boards	0.550	133.8	134.7	136.0	136.3	135.4
1.3.5.3 Printing & Publishing	0.465	172.4	175.0	186.2	188.7	189.2
1.3.6 Leather & Leather Products	**0.835**	**145.0**	**142.0**	**144.6**	**144.8**	**145.2**
1.3.6.1 Leathers	0.223	116.0	113.9	114.5	114.3	114.9
1.3.6.2 Leather Footwear	0.409	161.9	157.7	160.4	161.0	161.2
1.3.6.3 Other Leather Products	0.203	143.1	141.1	145.9	145.9	146.1
1.3.7 Rubber & Plastic Products	**2.987**	**149.9**	**147.9**	**145.5**	**145.2**	**145.0**
1.3.7.1 Tyres & Tubes	0.541	177.3	177.2	177.2	177.1	176.1
1.3.7.1.1 Tyres	0.488	177.5	177.7	178.0	177.9	176.4
1.3.7.1.2 Tubes	0.053	175.7	172.3	169.9	169.9	172.8
1.3.7.2 Plastic Products	1.861	140.2	137.2	133.6	133.4	133.1
1.3.7.3 Rubber Products	0.584	155.3	155.3	153.7	153.6	154.0
1.3.8 Chemicals & Chemical Products	**12.018**	**152.8**	**150.6**	**149.8**	**149.7**	**149.5**
1.3.8.1 Basic Inorganic Chemicals	1.187	156.1	155.2	154.5	154.9	154.3
1.3.8.2 Basic Organic Chemicals	1.952	150.9	143.8	138.2	138.0	136.9
1.3.8.3 Fertilisers & Pesticides	3.145	152.0	152.9	155.4	155.9	155.4
1.3.8.3.1 Fertilisers	2.661	154.9	155.6	158.5	158.7	158.4
1.3.8.3.2 Pesticides	0.483	135.7	138.1	138.6	140.5	139.0
1.3.8.4 Paints, Varnishes & Lacquers	0.529	149.9	149.7	152.2	152.0	152.2
1.3.8.5 Dyestuffs & Indigo	0.563	144.8	142.1	142.2	141.9	142.0
1.3.8.6 Drugs & Medicines	0.456	129.3	129.7	128.6	128.6	128.5
1.3.8.7 Perfumes, Cosmetics, Toiletries etc.	1.130	160.7	160.4	163.2	163.1	163.7
1.3.8.8 Turpentine, Plastic Chemicals	0.586	156.4	154.5	153.5	153.4	153.3
1.3.8.9 Polymers including Synthetic Rubber	0.970	152.3	150.7	144.9	146.2	147.6
1.3.8.10 Petrochemical Intermediates	0.869	162.0	149.7	147.1	142.7	142.8
1.3.8.11 Matches, Explosives & other Chemicals	0.629	153.5	154.4	152.1	152.7	153.0
1.3.9 Non-Metallic Mineral Products	**2.556**	**172.9**	**176.2**	**178.3**	**178.6**	**177.7**
1.3.9.1 Structural Clay Products	0.658	192.4	195.3	199.2	200.4	200.0
1.3.9.2 Glass, Earthenware, Chinaware & their Products	0.256	135.5	137.7	141.6	141.8	142.2
1.3.9.3 Cement & Lime	1.386	169.6	174.0	174.7	174.5	173.6
1.3.9.4 Cement, Slate & Graphite Products	0.256	177.7	177.8	180.9	181.0	178.9
1.3.10 Basic Metals, Alloys & Metal Products	**10.748**	**165.6**	**163.6**	**149.5**	**149.6**	**150.4**
1.3.10.1 Ferrous Metals	8.064	155.6	152.8	136.1	136.1	135.9
1.3.10.1.1 Iron & Semis	1.563	156.7	151.3	131.6	133.4	132.4
1.3.10.1.2 Steel: Long	1.630	164.7	161.0	141.8	142.5	142.5
1.3.10.1.3 Steel: Flat	2.611	150.8	147.4	125.5	124.4	124.5
1.3.10.1.4 Steel: Pipes & Tubes	0.314	133.4	133.7	125.2	124.6	124.5
1.3.10.1.5 Stainless Steel & alloys	0.938	167.3	167.7	158.8	158.0	158.7
1.3.10.1.6 Castings & Forgings	0.871	145.6	146.3	142.8	142.8	141.8
1.3.10.1.7 Ferro alloys	0.137	158.9	155.7	148.8	148.5	148.7
1.3.10.2 Non-Ferrous Metals	1.004	168.6	168.1	162.8	162.6	163.0
1.3.10.2.1 Aluminium	0.489	144.9	145.2	134.6	134.8	135.0
1.3.10.2.2 Other Non-Ferrous Metals	0.515	191.1	189.9	189.6	189.0	189.6
1.3.10.3 Metal Products	1.680	211.6	212.7	205.7	206.7	212.5
1.3.11 Machinery & Machine Tools	**8.931**	**134.6**	**135.2**	**134.9**	**134.9**	**135.1**
1.3.11.1 Agricultural Machinery & Implements	0.139	148.7	149.8	149.0	149.0	149.0
1.3.11.2 Industrial Machinery	1.838	152.3	153.3	153.5	153.9	153.7
1.3.11.3 Construction Machinery	0.045	141.1	141.5	141.5	141.5	141.5
1.3.11.4 Machine Tools	0.367	165.0	165.8	165.7	165.7	170.8
1.3.11.5 Air Conditioner & Refrigerators	0.429	120.6	120.6	120.9	121.2	121.2
1.3.11.6 Non-Electrical Machinery	1.026	126.9	127.9	127.8	127.6	127.9
1.3.11.7 Electrical Machinery, Equipment & Batteries	2.343	138.6	139.0	138.3	138.4	138.2
1.3.11.8 Electrical Accessories, Wires, Cables etc.	1.063	156.0	156.8	154.5	154.6	154.6
1.3.11.9 Electrical Apparatus & Appliances	0.337	119.8	121.4	121.7	121.7	122.0
1.3.11.10 Electronics Items	0.961	89.6	89.3	89.3	89.3	89.4
1.3.11.11 IT Hardware	0.267	91.5	91.7	91.9	91.7	91.7
1.3.11.12 Communication Equipments	0.118	98.7	99.6	99.6	99.6	99.6
1.3.12 Transport, Equipment & Parts	**5.213**	**136.2**	**137.1**	**138.0**	**138.2**	**138.2**
1.3.12.1 Automotives	4.231	135.3	136.1	137.0	137.2	137.3
1.3.12.2 Auto Parts	0.804	138.1	139.7	140.3	140.4	140.4
1.3.12.3 Other Transport Equipments	0.178	150.1	150.2	150.7	150.6	150.6

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	2013-14	2014-15	April-January		January	
				2014-15	2015-16	2015	2016
	1	2	3	4	5	6	7
General Index	**100.00**	**172.0**	**176.9**	**174.3**	**179.0**	**189.2**	**186.3**
1 Sectoral Classification							
1.1 Mining and Quarrying	14.16	124.7	126.5	124.0	126.6	136.7	138.4
1.2 Manufacturing	75.53	181.9	186.1	183.0	187.5	200.7	195.0
1.3 Electricity	10.32	164.7	178.6	180.1	188.5	176.7	188.3
2 Use-Based Classification							
2.1 Basic Goods	45.68	156.9	167.8	166.8	172.2	175.4	178.5
2.2 Capital Goods	8.83	242.6	258.0	251.0	249.5	270.5	215.3
2.3 Intermediate Goods	15.69	151.3	153.8	152.9	156.0	158.3	162.5
2.4 Consumer Goods	29.81	185.3	178.9	174.5	180.6	202.3	202.2
2.4.1 Consumer Durables	8.46	264.2	231.0	225.9	252.1	246.6	260.8
2.4.2 Consumer Non-Durables	21.35	154.0	158.3	154.1	152.3	184.8	179.0

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			
	2015-16 (Revised Estimates)	2014-15 (Actuals)	2015-16 (Actuals)	Percentage to Revised Estimates	
				2014-15	2015-16
	1	2	3	4	5
1 Revenue Receipts	12,060.8	8,162.4	9,470.5	72.5	78.5
1.1 Tax Revenue (Net)	9,475.1	6,514.2	7,357.8	71.7	77.7
1.2 Non-Tax Revenue	2,585.8	1,648.2	2,112.7	75.7	81.7
2 Capital Receipts	5,793.1	6,433.0	6,088.2	115.9	105.1
2.1 Recovery of Loans	189.1	110.6	174.3	101.6	92.2
2.2 Other Receipts	253.1	297.0	185.2	94.7	73.2
2.3 Borrowings and Other Liabilities	5,350.9	6,025.3	5,728.7	117.5	107.1
3 Total Receipts (1+2)	17,853.9	14,595.4	15,558.7	86.8	87.1
4 Non-Plan Expenditure	13,081.9	10,582.2	11,586.6	87.2	88.6
4.1 On Revenue Account	12,126.7	9,770.9	10,615.8	87.1	87.5
4.1.1 Interest Payments	4,426.2	3,462.6	3,794.9	84.2	85.7
4.2 On Capital Account	955.3	811.3	970.8	88.8	101.6
5 Plan Expenditure	4,772.0	4,013.2	3,972.2	85.8	83.2
5.1 On Revenue Account	3,350.0	3,224.0	2,762.8	87.9	82.5
5.2 On Capital Account	1,421.9	789.1	1,209.4	78.1	85.1
6 Total Expenditure (4+5)	17,853.9	14,595.4	15,558.7	86.8	87.1
7 Revenue Expenditure (4.1+5.1)	15,476.7	12,994.9	13,378.6	87.3	86.4
8 Capital Expenditure (4.2+5.2)	2,377.2	1,600.4	2,180.1	83.2	91.7
9 Revenue Deficit (7-1)	3,415.9	4,832.5	3,908.1	133.3	114.4
10 Fiscal Deficit {6-(1+2.1+2.2)}	5,350.9	6,025.3	5,728.7	117.5	107.1
11 Gross Primary Deficit [10-4.1.1]	924.7	2,562.8	1,933.9	253.1	209.1

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

No. 24: Treasury Bills – Ownership Pattern

(₹ Billion)

Item	2015-16	2015	2016					
		Feb. 27	Jan. 22	Jan. 29	Feb. 5	Feb. 12	Feb. 19	Feb. 26
	1	2	3	4	5	6	7	8
1 14-day								
1.1 Banks	–	–	–	–	–	–	–	–
1.2 Primary Dealers	–	–	–	–	–	–	–	–
1.3 State Governments	599.3	995.5	724.8	813.6	750.5	711.4	650.4	1,046.2
1.4 Others	10.1	6.0	9.7	16.1	7.2	16.4	10.3	15.8
2 91-day								
2.1 Banks	–	367.5	403.3	369.2	392.3	399.8	377.7	386.6
2.2 Primary Dealers	–	233.7	321.3	295.9	252.8	262.3	265.1	268.2
2.3 State Governments	–	480.8	679.4	669.4	624.4	673.9	673.7	514.9
2.4 Others	–	398.4	453.1	424.9	453.0	428.6	456.2	356.0
3 182-day								
3.1 Banks	–	255.7	193.2	194.5	201.1	201.0	199.7	181.9
3.2 Primary Dealers	–	361.3	434.6	425.9	419.5	429.7	435.1	415.8
3.3 State Governments	–	14.9	92.8	92.8	92.8	92.8	92.8	62.8
3.4 Others	–	117.7	124.6	132.0	131.9	121.7	117.6	104.9
4 364-day								
4.1 Banks	–	393.0	449.5	443.7	454.7	477.6	470.2	467.5
4.2 Primary Dealers	–	686.0	697.5	692.9	608.9	620.6	658.0	652.2
4.3 State Governments	–	12.0	19.6	19.6	19.6	19.6	19.6	19.6
4.4 Others	–	393.5	313.7	324.0	396.9	362.3	332.3	340.7
5 Total	609.4	4,716.1	4,917.1	4,914.5	4,805.5	4,817.7	4,758.6	4,833.0

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	10
91-day Treasury Bills										
2015-16										
Jan. 27	90	62	227.23	10.12	–	–	–	–	–	–
Feb. 3	80	91	251.39	21.14	59	80.00	21.14	101.14	98.20	7.3521
Feb. 10	80	86	333.08	90.12	53	80.00	90.12	170.12	98.20	7.3521
Feb. 17	80	86	329.14	21.22	61	80.00	21.22	101.22	98.20	7.3521
Feb. 24	80	78	292.89	60.11	–	–	–	–	–	–
182-day Treasury Bills										
2015-16										
Jan. 27	60	45	203.19	–	8	60.00	–	60.00	96.52	7.2308
Feb. 10	60	51	193.25	–	17	60.00	–	60.00	96.50	7.2738
Feb. 24	60	50	152.89	–	–	–	–	–	–	–
364-day Treasury Bills										
2015-16										
Jan. 6	60	60	365.96	0.10	5	60.00	0.10	60.10	93.29	7.2124
Jan. 20	60	81	317.13	–	19	60.00	–	60.00	93.29	7.2124
Feb. 3	60	73	239.22	–	38	60.00	–	60.00	93.24	7.2700
Feb. 17	60	55	182.24	–	22	60.00	–	60.00	93.23	7.2816

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, 2016	5.70-7.10	6.69
February	2, 2016	5.00-7.10	6.65
February	3, 2016	5.70-7.40	6.63
February	4, 2016	5.60-7.35	6.68
February	5, 2016	5.00-7.25	6.73
February	6, 2016	5.00-7.60	7.10
February	8, 2016	5.80-7.65	6.89
February	9, 2016	5.80-7.15	6.75
February	10, 2016	5.80-7.45	6.85
February	11, 2016	5.00-7.55	6.97
February	12, 2016	5.00-7.10	6.62
February	15, 2016	5.00-7.05	6.85
February	16, 2016	5.00-7.05	6.75
February	17, 2016	5.00-7.00	6.81
February	18, 2016	5.00-7.10	6.78
February	20, 2016	4.50-7.05	6.48
February	22, 2016	5.60-7.00	6.81
February	23, 2016	5.00-6.95	6.68
February	24, 2016	5.60-7.15	6.89
February	25, 2016	5.60-7.20	6.68
February	26, 2016	5.60-7.00	6.62
February	29, 2016	5.00-7.50	7.03
March	1, 2016	5.60-7.25	6.69
March	2, 2016	5.00-7.05	6.72
March	3, 2016	5.00-7.00	6.72
March	4, 2016	2.50-6.90	6.71
March	5, 2016	4.80-8.00	7.07
March	8, 2016	5.00-7.55	6.92
March	9, 2016	5.00-8.00	6.88
March	10, 2016	5.60-7.10	6.70
March	11, 2016	5.00-7.30	6.54
March	14, 2016	5.10-7.60	6.95
March	15, 2016	5.00-7.10	6.75

Note: Includes Notice Money.

No. 27: Certificates of Deposit

Item	2015	2016			
	Feb. 20	Jan. 8	Jan. 22	Feb. 5	Feb. 19
	1	2	3	4	5
1 Amount Outstanding (₹ Billion)	2,615.0	2,002.2	2,174.9	2,177.3	2,243.8
1.1 Issued during the fortnight (₹ Billion)	343.0	297.8	106.3	182.1	282.4
2 Rate of Interest (per cent)	7.75-9.09	7.09-7.77	7.20-7.90	7.25-8.25	7.30-8.51

No. 28: Commercial Paper

Item	2015	2016			
	Feb. 28	Jan. 15	Jan. 31	Feb. 15	Feb. 29
	1	2	3	4	5
1 Amount Outstanding (₹ Billion)	2,493.5	3,643.7	3,553.8	3,876.1	3,557.8
1.1 Reported during the fortnight (₹ Billion)	517.8	718.3	513.9	911.8	671.8
2 Rate of Interest (per cent)	8.04-12.19	6.89-11.42	7.30-11.18	7.14-11.31	7.33-12.00

No. 29: Average Daily Turnover in Select Financial Markets

(₹ Billion)

Item	2014-15	2015	2016					
		Feb. 27	Jan. 22	Jan. 29	Feb. 5	Feb. 12	Feb. 19	Feb. 26
	1	2	3	4	5	6	7	8
1 Call Money	190.3	162.3	296.3	236.2	195.3	249.8	250.1	284.9
2 Notice Money	65.4	74.5	3.0	84.7	92.0	3.2	109.8	11.2
3 Term Money	4.8	4.4	7.4	5.2	7.9	5.2	9.1	6.4
4 CBLO	1,168.3	1,286.5	1,030.2	1,223.9	1,030.4	965.8	1,195.6	1,252.6
5 Market Repo	1,217.5	1,124.7	1,319.9	1,688.0	1,561.0	1,426.2	1,623.0	1,265.6
6 Repo in Corporate Bond	0.3	–	1.9	0.9	0.5	0.7	0.3	1.5
7 Forex (US $ million)	55,215	63,810	48,896	65,244	64,557	52,173	51,504	64,117
8 Govt. of India Dated Securities	712.8	440.1	779.6	661.0	791.3	635.0	494.7	646.8
9 State Govt. Securities	27.5	32.2	19.2	44.2	18.6	25.9	16.0	45.9
10 Treasury Bills								
10.1 91-Day	40.8	20.9	35.9	35.6	45.4	43.8	38.4	24.6
10.2 182-Day	11.8	13.1	10.7	28.1	15.0	4.3	1.8	12.0
10.3 364-Day	19	21.3	18.3	10.5	26.2	5.5	12.8	14.4
10.4 Cash Management Bills		–	–	–	–	–	–	–
11 Total Govt. Securities (8+9+10)	811.9	527.6	863.8	779.4	896.5	714.5	563.7	743.8
11.1 RBI	–	0.7	22.3	0.1	1.9	20.1	1.5	1.1

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

(Amount in ₹ Billion)

Security & Type of Issue	2014-15		2014-15 (Apr.-Feb.)		2015-16 (Apr.-Feb.) *		Feb. 2015		Feb. 2016 *	
	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	**63**	**93.1**	**50**	**61.1**	**70**	**223.1**	**2**	**2.8**	**6**	**9.0**
1A Premium	53	76.8	42	46.5	64	209.8	2	2.7	5	8.7
1.1 Prospectus	46	30.4	35	14.3	58	130.2	1	0.0	6	9.0
1.1.1 Premium	40	28.0	31	12.6	53	122.7	1	–	5	8.7
1.2 Rights	17	62.8	15	46.8	12	92.9	1	2.8	–	–
1.2.1 Premium	13	48.8	11	33.9	11	87.1	1	2.7	–	–
2 Preference Shares	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
2.1 Prospectus	–	–	–	–	–	–	–	–	–	–
2.2 Rights	–	–	–	–	–	–	–	–	–	–
3 Debentures	**23**	**77.4**	**22**	**74.4**	**9**	**27.1**	**4**	**13.4**	**–**	**–**
3.1 Convertible	–	–	–	–	–	–	–	–	–	–
3.1.1 Prospectus	–	–	–	–	–	–	–	–	–	–
3.1.2 Rights	–	–	–	–	–	–	–	–	–	–
3.2 Non-Convertible	23	77.4	22	74.4	9	27.1	4	13.4	–	–
3.2.1 Prospectus	23	77.4	22	74.4	9	27.1	4	13.4	–	–
3.2.2 Rights	–	–	–	–	–	–	–	–	–	–
4 Bonds	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
4.1 Prospectus	–	–	–	–	–	–	–	–	–	–
4.2 Rights	–	–	–	–	–	–	–	–	–	–
5 Total (1+2+3+4)	**86**	**170.6**	**72**	**135.5**	**79**	**250.3**	**6**	**16.2**	**6**	**9.0**
5.1 Prospectus	69	107.8	57	88.7	67	157.3	5	13.4	6	9.0
5.2 Rights	17	62.8	15	46.8	12	92.9	1	2.8	–	–

* : Data is Provisional

Source: Based on prospectus/advertisements issued by companies, replies to Reserve Bank's questionnaire and information received from SEBI, stock exchanges, press reports, etc.

External Sector

No. 31: Foreign Trade

Item	Unit	2014-15	2015				2016	
			Feb.	Oct.	Nov.	Dec.	Jan.	Feb.
		1	2	3	4	5	6	7
1 Exports	₹ Billion	18,963.5	1,363.8	1,394.0	1,288.7	1,498.2	1,408.7	1,415.2
	US $ Million	310,338.5	21,983.4	21,427.5	19,490.6	22,496.9	20,945.8	20,738.6
1.1 Oil	₹ Billion	3,460.8	158.5	165.8	150.6	166.4	133.1	125.1
	US $ Million	56,794.2	2,555.5	2,548.9	2,277.2	2,499.1	1,979.4	1,833.1
1.2 Non-oil	₹ Billion	15,502.7	1,205.3	1,228.2	1,138.1	1,331.8	1,275.5	1,290.1
	US $ Million	253,544.4	19,427.9	18,878.5	17,213.4	19,997.8	18,966.3	18,905.5
2 Imports	₹ Billion	27,370.9	1,782.1	2,013.1	1,964.0	2,269.4	1,925.9	1,861.6
	US $ Million	448,033.4	28,725.4	30,943.3	29,704.9	34,078.0	28,637.5	27,280.4
2.1 Oil	₹ Billion	8,428.7	378.8	446.1	426.9	443.3	338.0	325.3
	US $ Million	138,325.5	6,106.3	6,857.2	6,457.5	6,656.7	5,026.0	4,767.7
2.2 Non-oil	₹ Billion	18,942.1	1,403.2	1,567.0	1,537.1	1,826.1	1,587.9	1,536.2
	US $ Million	309,707.9	22,619.1	24,086.1	23,247.5	27,421.4	23,611.4	22,512.7
3 Trade Balance	₹ Billion	–8,407.4	–418.3	–619.1	–675.3	–771.3	–517.3	–446.4
	US $ Million	–137,694.9	–6,742.0	–9,515.8	–10,214.3	–11,581.1	–7,691.7	–6,541.8
3.1 Oil	₹ Billion	–4,967.9	–220.3	–280.3	–276.4	–276.9	–204.9	–200.3
	US $ Million	–81,531.4	–3,550.8	–4,308.3	–4,180.2	–4,157.5	–3,046.6	–2,934.6
3.2 Non-oil	₹ Billion	–3,439.5	–198.0	–338.8	–399.0	–494.4	–312.4	–246.1
	US $ Million	–56,163.5	–3,191.1	–5,207.6	–6,034.1	–7,423.6	–4,645.1	–3,607.2

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

No. 32: Foreign Exchange Reserves

Item	Unit	2015	2016					
		Mar. 20	Feb. 12	Feb. 19	Feb. 26	Mar. 4	Mar. 11	Mar. 18
		1	2	3	4	5	6	7
1 Total Reseves	**₹ Billion**	**21,229**	**23,910**	**23,827**	**23,668**	**23,501**	**23,615**	**23,637**
	US $ Million	**339,992**	**351,832**	**350,365**	**346,788**	**350,864**	**353,408**	**355,947**
1.1 Foreign Currency Assets	₹ Billion	19,674	22,427	22,346	22,187	21,901	22,015	22,037
	US $ Million	314,887	330,020	328,583	325,027	327,475	329,999	332,505
1.2 Gold	₹ Billion	1,226	1,201	1,201	1,201	1,326	1,326	1,326
	US $ Million	19,837	17,697	17,697	17,697	19,325	19,325	19,325
1.3 SDRs	SDRs Million	2,889	2,889	1,066	1,066	1,066	1,066	1,066
	₹ Billion	249	278	102	102	100	100	100
	US $ Million	3,979	4,061	1,487	1,480	1,479	1,487	1,499
1.4 Reserve Tranche Position in IMF	₹ Billion	81	4	178	178	174	174	174
	US $ Million	1,290	54	2,598	2,585	2,585	2,597	2,618

No. 33: NRI Deposits

(US$ Million)

Scheme	Outstanding				Flows	
	2014-15	2015	2016		2014-15	2015-16
		Feb.	Jan.	Feb.	Apr.-Feb.	Apr.-Feb.
	1	2	3	4	5	6
1 NRI Deposits	**115,163**	**114,468**	**121,763**	**121,667**	**12,423**	**13,645**
1.1 FCNR(B)	42,824	42,753	44,586	44,743	930	1,920
1.2 NR(E)RA	62,746	62,058	67,625	67,449	10,700	10,942
1.3 NRO	9,593	9,657	9,552	9,475	793	783

No. 34: Foreign Investment Inflows

(US$ Million)

Item	2014-15	2014-15	2015-16	2015	2016	
		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)	**31,252**	**29,664**	**34,046**	**3,215**	**4,135**	**2,473**
1.1.1 Direct Investment to India (1.1.1.1–1. 1.1.2)	**35,284**	**32,966**	**42,018**	**3,489**	**5,145**	**3,208**
1.1.1.1 Gross Inflows/Gross Investments	**45,148**	**41,615**	**51,636**	**4,704**	**6,312**	**4,375**
1.1.1.1.1 Equity	31,911	29,705	38,487	3,377	5,065	3,206
1.1.1.1.1.1 Government (SIA/FIPB)	2,219	1,977	3,476	65	105	496
1.1.1.1.1.2 RBI	22,530	20,889	30,759	2,920	4,251	2,379
1.1.1.1.1.3 Acquisition of shares	6,185	5,949	3,300	303	620	241
1.1.1.1.1.4 Equity capital of unincorporated bodies	978	889	953	89	89	89
1.1.1.1.2 Reinvested earnings	9,988	9,076	9,138	912	912	912
1.1.1.1.3 Other capital	3,249	2,834	4,011	415	336	257
1.1.1.2 Repatriation/Disinvestment	**9,864**	**8,649**	**9,618**	**1,215**	**1,167**	**1,167**
1.1.1.2.1 Equity	9,612	8,421	9,501	1,191	1,160	1,160
1.1.1.2.2 Other capital	252	228	117	24	7	7
1.1.2 Foreign Direct Investment by India (1.1.2.1+1.1.2.2+1.1.2.3–1.1.2.4)	**4,031**	**3,302**	**7,972**	**274**	**1,010**	**735**
1.1.2.1 Equity capital	3,867	3,326	5,253	367	696	497
1.1.2.2 Reinvested Earnings	3,337	3,059	3,059	278	278	278
1.1.2.3 Other Capital	3,476	2,993	3,080	201	268	191
1.1.2.4 Repatriation/Disinvestment	6,649	6,076	3,420	572	232	232
1.2 Net Portfolio Investment (1.2.1+1.2.2+1.2.3–1.2.4)	**42,205**	**38,896**	**–7,196**	**3,774**	**–1,465**	**–2,375**
1.2.1 GDRs/ADRs	1,271	–	373	–	–	–
1.2.2 FIIs	40,923	38,890	–7,844	3,769	–1,471	–2,381
1.2.3 Offshore funds and others	–	–	–	–	–	–
1.2.4 Portfolio investment by India	–11	–6	–275	–5	–6	–6
1 Foreign Investment Inflows	**73,457**	**68,560**	**26,850**	**6,989**	**2,669**	**98**

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

(US$ Million)

Item	2014-15	2015		2016	
		Feb.	Dec.	Jan.	Feb.
	1	2	3	4	5
1 Outward Remittances under the LRS	**1,325.8**	**122.5**	**447.2**	**534.1**	**449.3**
1.1 Deposit	51.4	3.6	7.1	10.4	7.3
1.2 Purchase of immovable property	45.5	7.0	6.6	4.7	8.7
1.3 Investment in equity/debt	195.5	18.6	19.9	18.4	19.9
1.4 Gift	403.5	38.8	48.2	35.2	38.7
1.5 Donations	3.2	0.5	0.3	0.1	0.1
1.6 Travel	11.0	0.8	32.7	40.8	131.5
1.7 Maintenance of close relatives	174.4	14.6	154.7	151.6	137.2
1.8 Medical Treatment	7.2	0.4	1.6	2.0	1.1
1.9 Studies Abroad	277.1	24.8	127.5	213.9	87.0
1.10 Others	157.1	13.3	48.6	56.9	17.8

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

Item	2013-14	2014-15	2015	2016	
			March	February	March
	1	2	3	4	5
36-Currency Export and Trade Based Weights (Base: 2004-05=100)					
1 Trade-Based Weights					
1.1 NEER	72.32	74.07	76.79	72.76	73.66
1.2 REER	103.27	108.96	113.18	110.25	111.61
2 Export-Based Weights					
2.1 NEER	73.56	75.22	78.02	74.30	75.30
2.2 REER	105.48	111.25	115.59	112.36	113.88
6-Currency Trade Based Weights					
1 Base: 2004-05 (April-March) =100					
1.1 NEER	67.76	68.60	71.21	65.51	66.25
1.2 REER	112.80	119.92	125.90	120.06	121.44
2 Base: 2014-15 (April-March) =100					
2.1 NEER	98.78	100.00	103.82	95.50	96.59
2.2 REER	94.07	100.00	104.99	100.12	101.27

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

(Amount in US$ Million)

Item	2014-15	2015	2016	
		Feb.	Jan.	Feb.
	1	2	3	4
1 Automatic Route				
1.1 Number	733	52	56	65
1.2 Amount	19,215	1,233	1,391	1,023
2 Approval Route				
2.1 Number	88	5	4	1
2.2 Amount	9,170	1,030	4	330
3 Total (1+2)				
3.1 Number	821	57	60	66
3.2 Amount	28,385	2,263	1,395	1,353
4 Weighted Average Maturity (in years)	6.49	12.88	4.60	7.10
5 Interest Rate (per cent)				
5.1 Weighted Average Margin over 6-month LIBOR or reference rate for Floating Rate Loans	2.12	1.81	1.56	1.70
5.2 Interest rate range for Fixed Rate Loans	0.00-13.50	0.00-7.65	0.00-7.00	0.00-11.50

No. 38: India's Overall Balance of Payments

(US $ Million)

Item	Oct-Dec 2014 (PR)			Oct-Dec 2015 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance of Payments(1+2+3)	**263,890**	**250,709**	**13,182**	**238,119**	**234,062**	**4,056**
1 CURRENT ACCOUNT (1.1+ 1.2)	**140,757**	**148,478**	**–7,721**	**122,556**	**129,637**	**–7,081**
1.1 MERCHANDISE	**80,102**	**118,736**	**–38,635**	**64,937**	**98,941**	**–34,004**
1.2 INVISIBLES (1.2.1+1.2.2+1.2.3)	**60,655**	**29,742**	**30,913**	**57,619**	**30,696**	**26,923**
1.2.1 Services	39,648	19,666	19,982	37,885	19,802	18,083
1.2.1.1 Travel	5,461	3,676	1,786	5,761	3,352	2,409
1.2.1.2 Transportation	4,698	4,125	573	3,310	3,450	–140
1.2.1.3 Insurance	570	314	256	449	334	115
1.2.1.4 G.n.i.e.	158	224	–66	147	123	25
1.2.1.5 Miscellaneous	28,761	11,328	17,433	28,217	12,543	15,675
1.2.1.5.1 Software Services	18,692	848	17,844	19,057	639	18,418
1.2.1.5.2 Business Services	7,207	7,068	139	6,667	7,633	–967
1.2.1.5.3 Financial Services	1,334	736	598	958	887	72
1.2.1.5.4 Communication Services	537	222	315	483	223	260
1.2.2 Transfers	17,536	1,108	16,428	15,936	687	15,250
1.2.2.1 Official	130	222	–92	163	218	–55
1.2.2.2 Private	17,406	885	16,521	15,773	469	15,305
1.2.3 Income	3,471	8,968	–5,497	3,798	10,207	–6,409
1.2.3.1 Investment Income	2,545	8,351	–5,806	2,918	9,643	–6,725
1.2.3.2 Compensation of Employees	926	617	309	880	564	316
2 CAPITAL ACCOUNT (2.1+2.2+2.3+2.4+2.5)	**123,133**	**100,270**	**22,864**	**114,962**	**104,426**	**10,536**
2.1 Foreign Investment (2.1.1+2.1.2)	**67,209**	**54,015**	**13,194**	**62,919**	**52,343**	**10,576**
2.1.1 Foreign Direct Investment	11,625	4,712	6,913	17,050	6,265	10,785
2.1.1.1 In India	9,826	2,152	7,674	16,383	2,399	13,984
2.1.1.1.1 Equity	6,605	2,084	4,521	13,127	2,363	10,763
2.1.1.1.2 Reinvested Earnings	2,569	–	2,569	2,631	–	2,631
2.1.1.1.3 Other Capital	652	68	584	626	36	590
2.1.1.2 Abroad	1,799	2,560	–761	667	3,866	–3,199
2.1.1.2.1 Equity	1,799	1,025	775	667	1,921	–1,254
2.1.1.2.2 Reinvested Earnings	–	834	–834	–	834	–834
2.1.1.2.3 Other Capital	–	701	–701	–	1,111	–1,111
2.1.2 Portfolio Investment	55,583	49,303	6,280	45,869	46,078	–209
2.1.2.1 In India	55,354	49,204	6,150	45,758	45,957	–200
2.1.2.1.1 FIIs	55,354	49,204	6,150	45,758	45,957	–200
2.1.2.1.1.1 Equity	40,972	40,728	243	35,921	37,148	–1,228
2.1.2.1.1.2 Debt	14,382	8,475	5,906	9,837	8,809	1,028
2.1.2.1.2 ADR/GDRs	–	–	–	–	–	–
2.1.2.2 Abroad	230	99	130	111	121	–9
2.2 Loans (2.2.1+2.2.2+2.2.3)	**26,575**	**27,763**	**–1,188**	**28,999**	**31,356**	**–2,358**
2.2.1 External Assistance	1,387	1,099	288	1,513	1,175	338
2.2.1.1 By India	15	97	–82	15	129	–113
2.2.1.2 To India	1,372	1,002	370	1,498	1,047	451
2.2.2 Commercial Borrowings	7,618	7,741	–123	6,756	7,666	–910
2.2.2.1 By India	410	38	373	432	200	232
2.2.2.2 To India	7,208	7,704	–496	6,324	7,466	–1,142
2.2.3 Short Term to India	17,570	18,923	–1,353	20,729	22,515	–1,786
2.2.3.1 Suppliers' Credit > 180 days & Buyers' Credit	16,821	18,923	–2,102	20,062	22,515	–2,453
2.2.3.2 Suppliers' Credit up to 180 days	749	–	749	667	–	667
2.3 Banking Capital (2.3.1+2.3.2)	**23,650**	**13,149**	**10,501**	**17,348**	**16,033**	**1,315**
2.3.1 Commercial Banks	23,335	13,149	10,186	17,347	16,033	1,314
2.3.1.1 Assets	6,526	446	6,081	3,731	3,941	–211
2.3.1.2 Liabilities	16,809	12,703	4,105	13,616	12,092	1,524
2.3.1.2.1 Non-Resident Deposits	14,493	10,910	3,583	11,829	10,279	1,550
2.3.2 Others	315	–	315	2	–	2
2.4 Rupee Debt Service	–	–	–	–	–	–
2.5 Other Capital	5,700	5,343	357	5,696	4,694	1,002
3 Errors & Omissions	**–**	**1,961**	**–1,961**	**601**	**–**	**601**
4 Monetary Movements (4.1+ 4.2)	–	**13,182**	**–13,182**	–	**4,056**	**–4,056**
4.1 I.M.F.	–	–	–	–	–	–
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	–	13,182	–13,182	–	4,056	–4,056

No. 39: India's Overall Balance of Payments

(₹ Billion)

Item	Oct-Dec 2014 (PR)			Oct-Dec 2015 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
Overall Balance of Payments(1+2+3)	**16,344**	**15,527**	**816**	**15,698**	**15,430**	**267**
1 CURRENT ACCOUNT (1.1+ 1.2)	**8,717**	**9,196**	**–478**	**8,079**	**8,546**	**–467**
1.1 MERCHANDISE	**4,961**	**7,354**	**–2,393**	**4,281**	**6,523**	**–2,242**
1.2 INVISIBLES (1.2.1+1.2.2+1.2.3)	**3,757**	**1,842**	**1,915**	**3,798**	**2,024**	**1,775**
1.2.1 Services	2,456	1,218	1,238	2,497	1,305	1,192
1.2.1.1 Travel	338	228	111	380	221	159
1.2.1.2 Transportation	291	255	35	218	227	–9
1.2.1.3 Insurance	35	19	16	30	22	8
1.2.1.4 G.n.i.e.	10	14	–4	10	8	2
1.2.1.5 Miscellaneous	1,781	702	1,080	1,860	827	1,033
1.2.1.5.1 Software Services	1,158	53	1,105	1,256	42	1,214
1.2.1.5.2 Business Services	446	438	9	439	503	–64
1.2.1.5.3 Financial Services	83	46	37	63	58	5
1.2.1.5.4 Communication Services	33	14	20	32	15	17
1.2.2 Transfers	1,086	69	1,017	1,051	45	1,005
1.2.2.1 Official	8	14	–6	11	14	–4
1.2.2.2 Private	1,078	55	1,023	1,040	31	1,009
1.2.3 Income	215	555	–340	250	673	–423
1.2.3.1 Investment Income	158	517	–360	192	636	–443
1.2.3.2 Compensation of Employees	57	38	19	58	37	21
2 CAPITAL ACCOUNT (2.1+2.2+2.3+2.4+2.5)	**7,626**	**6,210**	**1,416**	**7,579**	**6,884**	**695**
2.1 Foreign Investment (2.1.1+2.1.2)	4,162	3,345	817	4,148	3,451	697
2.1.1 Foreign Direct Investment	720	292	428	1,124	413	711
2.1.1.1 In India	609	133	475	1,080	158	922
2.1.1.1.1 Equity	409	129	280	865	156	710
2.1.1.1.2 Reinvested Earnings	159	–	159	173	–	173
2.1.1.1.3 Other Capital	40	4	36	41	2	39
2.1.1.2 Abroad	111	159	–47	44	255	–211
2.1.1.2.1 Equity	111	63	48	44	127	–83
2.1.1.2.2 Reinvested Earnings	–	52	–52	–	55	–55
2.1.1.2.3 Other Capital	–	43	–43	–	73	–73
2.1.2 Portfolio Investment	3,442	3,053	389	3,024	3,038	–14
2.1.2.1 In India	3,428	3,047	381	3,017	3,030	–13
2.1.2.1.1 FIIs	3,428	3,047	381	3,017	3,030	–13
2.1.2.1.1.1 Equity	2,538	2,522	15	2,368	2,449	–81
2.1.2.1.1.2 Debt	891	525	366	648	581	68
2.1.2.1.2 ADR/GDRs	–	–	–	–	–	–
2.1.2.2 Abroad	14	6	8	7	8	–1
2.2 Loans (2.2.1+2.2.2+2.2.3)	**1,646**	**1,719**	**–74**	**1,912**	**2,067**	**–155**
2.2.1 External Assistance	86	68	18	100	77	22
2.2.1.1 By India	1	6	–5	1	8	–7
2.2.1.2 To India	85	62	23	99	69	30
2.2.2 Commercial Borrowings	472	479	–8	445	505	–60
2.2.2.1 By India	25	2	23	28	13	15
2.2.2.2 To India	446	477	–31	417	492	–75
2.2.3 Short Term to India	1,088	1,172	–84	1,367	1,484	–118
2.2.3.1 Suppliers' Credit > 180 days & Buyers' Credit	1,042	1,172	–130	1,323	1,484	–162
2.2.3.2 Suppliers' Credit up to 180 days	46	–	46	44	–	44
2.3 Banking Capital (2.3.1+2.3.2)	**1,465**	**814**	**650**	**1,144**	**1,057**	**87**
2.3.1 Commercial Banks	1,445	814	631	1,144	1,057	87
2.3.1.1 Assets	404	28	377	246	260	–14
2.3.1.2 Liabilities	1,041	787	254	898	797	100
2.3.1.2.1 Non-Resident Deposits	898	676	222	780	678	102
2.3.2 Others	20	–	20	–	–	–
2.4 Rupee Debt Service	–	–	–	–	–	–
2.5 Other Capital	353	331	22	375	309	66
3 Errors & Omissions	–	**121**	**–121**	**40**	–	**40**
4 Monetary Movements (4.1+ 4.2)	–	**816**	**–816**	–	**267**	**–267**
4.1 I.M.F.	–	–	–	–	–	–
4.2 Foreign Exchange Reserves (Increase - / Decrease +)	–	816	–816	–	267	–267

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

(US $ Million)

Item	Oct-Dec 2014 (PR)			Oct-Dec 2015 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	**140,748**	**148,457**	**–7,709**	**122,544**	**129,615**	**–7,071**
1.A Goods and Services (1.A.a+1.A.b)	**119,750**	**138,403**	**–18,653**	**102,822**	**118,743**	**–15,921**
1.A.a Goods (1.A.a.1 to 1.A.a.3)	**80,102**	**118,736**	**–38,635**	**64,937**	**98,941**	**–34,004**
1.A.a.1 General merchandise on a BOP basis	80,102	107,593	–27,491	64,162	89,915	–25,753
1.A.a.2 Net exports of goods under merchanting	–	–	–	776	–	776
1.A.a.3 Nonmonetary gold	–	11,143	–11,143	–	9,027	–9,027
1.A.b Services (1.A.b.1 to 1.A.b.13)	**39,648**	**19,666**	**19,982**	**37,885**	**19,802**	**18,083**
1.A.b.1 Manufacturing services on physical inputs owned by others	28	5	24	24	10	14
1.A.b.2 Maintenance and repair services n.i.e.	66	54	12	37	93	–56
1.A.b.3 Transport	4,698	4,125	573	3,310	3,450	–140
1.A.b.4 Travel	5,461	3,676	1,786	5,761	3,352	2,409
1.A.b.5 Construction	351	273	78	345	180	165
1.A.b.6 Insurance and pension services	570	314	256	449	334	115
1.A.b.7 Financial services	1,334	736	598	958	887	72
1.A.b.8 Charges for the use of intellectual property n.i.e.	181	1,300	–1,120	130	1,245	–1,114
1.A.b.9 Telecommunications, computer, and information services	19,279	1,155	18,124	19,590	949	18,641
1.A.b.10 Other business services	7,207	7,068	139	6,667	7,633	–967
1.A.b.11 Personal, cultural, and recreational services	289	403	–114	261	161	100
1.A.b.12 Government goods and services n.i.e.	158	224	–66	147	123	25
1.A.b.13 Others n.i.e.	26	334	–309	205	1,385	–1,180
1.B Primary Income (1.B.1 to 1.B.3)	**3,471**	**8,968**	**–5,497**	**3,798**	**10,207**	**–6,409**
1.B.1 Compensation of employees	926	617	309	880	564	316
1.B.2 Investment income	2,153	8,296	–6,143	2,318	9,538	–7,220
1.B.2.1 Direct investment	1,283	3,126	–1,843	1,352	4,062	–2,710
1.B.2.2 Portfolio investment	29	1,662	–1,633	42	2,336	–2,294
1.B.2.3 Other investment	97	3,507	–3,410	159	3,139	–2,981
1.B.2.4 Reserve assets	744	1	744	766	1	766
1.B.3 Other primary income	392	55	338	600	105	495
1.C Secondary Income (1.C.1+1.C.2)	**17,527**	**1,086**	**16,441**	**15,925**	**665**	**15,259**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	17,406	885	16,521	15,773	469	15,305
1.C.1.1 Personal transfers (Current transfers between resident and/ non-resident households)	16,773	803	15,970	15,282	412	14,869
1.C.1.2 Other current transfers	633	82	551	492	57	435
1.C.2 General government	121	201	–80	151	197	–46
2 Capital Account (2.1+2.2)	**191**	**81**	**111**	**64**	**46**	**18**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	152	23	129	10	5	5
2.2 Capital transfers	39	58	–18	54	41	13
3 Financial Account (3.1 to 3.5)	**122,951**	**113,392**	**9,559**	**114,909**	**108,457**	**6,452**
3.1 Direct Investment (3.1A+3.1B)	**11,625**	**4,712**	**6,913**	**17,050**	**6,265**	**10,785**
3.1.A Direct Investment in India	9,826	2,152	7,674	16,383	2,399	13,984
3.1.A.1 Equity and investment fund shares	9,174	2,084	7,090	15,757	2,363	13,394
3.1.A.1.1 Equity other than reinvestment of earnings	6,605	2,084	4,521	13,127	2,363	10,763
3.1.A.1.2 Reinvestment of earnings	2,569	–	2,569	2,631	–	2,631
3.1.A.2 Debt instruments	652	68	584	626	36	590
3.1.A.2.1 Direct investor in direct investment enterprises	652	68	584	626	36	590
3.1.B Direct Investment by India	1,799	2,560	–761	667	3,866	–3,199
3.1.B.1 Equity and investment fund shares	1,799	1,859	–59	667	2,755	–2,088
3.1.B.1.1 Equity other than reinvestment of earnings	1,799	1,025	775	667	1,921	–1,254
3.1.B.1.2 Reinvestment of earnings	–	834	–834	–	834	–834
3.1.B.2 Debt instruments	–	701	–701	–	1,111	–1,111
3.1.B.2.1 Direct investor in direct investment enterprises	–	701	–701	–	1,111	–1,111
3.2 Portfolio Investment	**55,583**	**49,303**	**6,280**	**45,869**	**46,078**	**–209**
3.2.A Portfolio Investment in India	55,354	49,204	6,150	45,758	45,957	–200
3.2.1 Equity and investment fund shares	40,972	40,728	243	35,921	37,148	–1,228
3.2.2 Debt securities	14,382	8,475	5,906	9,837	8,809	1,028
3.2.B Portfolio Investment by India	230	99	130	111	121	–9
3.3 Financial derivatives (other than reserves) and employee stock options	**3,146**	**4,209**	**–1,063**	**3,362**	**2,788**	**574**
3.4 Other investment	**52,596**	**41,987**	**10,610**	**48,628**	**49,270**	**–642**
3.4.1 Other equity (ADRs/GDRs)	–	–	–	–	–	–
3.4.2 Currency and deposits	14,808	10,910	3,898	11,831	10,279	1,552
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	315	–	315	2	–	2
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	14,493	10,910	3,583	11,829	10,279	1,550
3.4.2.3 General government	–	–	–	–	–	–
3.4.2.4 Other sectors	–	–	–	–	–	–
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	17,847	11,079	6,768	13,787	14,595	–808
3.4.3.A Loans to India	17,422	10,945	6,477	13,339	14,266	–927
3.4.3.B Loans by India	425	135	291	447	329	118
3.4.4 Insurance, pension, and standardized guarantee schemes	211	135	76	311	441	–130
3.4.5 Trade credit and advances	17,570	18,923	–1,353	20,729	22,515	–1,786
3.4.6 Other accounts receivable/payable - other	2,161	940	1,221	1,970	1,440	530
3.4.7 Special drawing rights	–	–	–	–	–	–
3.5 Reserve assets	–	**13,182**	**–13,182**	–	**4,056**	**–4,056**
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)	–	13,182	–13,182	–	4,056	–4,056
4 Total assets/liabilities	**122,951**	**113,392**	**9,559**	**114,909**	**108,457**	**6,452**
4.1 Equity and investment fund shares	55,531	49,114	6,417	56,129	45,616	10,513
4.2 Debt instruments	65,259	50,156	15,103	56,810	57,345	–535
4.3 Other financial assets and liabilities	2,161	14,121	–11,961	1,970	5,497	–3,526
5 Net errors and omissions	–	**1,961**	**–1,961**	**601**	–	**601**

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

(₹ Billion)

Item	Oct-Dec 2014 (PR)			Oct-Dec 2015 (P)		
	Credit	Debit	Net	Credit	Debit	Net
	1	2	3	4	5	6
1 Current Account (1.A+1.B+1.C)	**8,717**	**9,194**	**-477**	**8,079**	**8,545**	**-466**
1.A Goods and Services (1.A.a+1.A.b)	**7,416**	**8,572**	**-1,155**	**6,778**	**7,828**	**-1,050**
1.A.a Goods (1.A.a.1 to 1.A.a.3)	**4,961**	**7,354**	**-2,393**	**4,281**	**6,523**	**-2,242**
1.A.a.1 General merchandise on a BOP basis	4,961	6,664	-1,703	4,230	5,927	-1,698
1.A.a.2 Net exports of goods under merchanting	–	–	–	51	–	51
1.A.a.3 Nonmonetary gold	–	690	-690	–	595	-595
1.A.b Services (1.A.b.1 to 1.A.b.13)	**2,456**	**1,218**	**1,238**	**2,497**	**1,305**	**1,192**
1.A.b.1 Manufacturing services on physical inputs owned by others	2	–	1	2	1	1
1.A.b.2 Maintenance and repair services n.i.e.	4	3	1	2	6	-4
1.A.b.3 Transport	291	255	35	218	227	-9
1.A.b.4 Travel	338	228	111	380	221	159
1.A.b.5 Construction	22	17	5	23	12	11
1.A.b.6 Insurance and pension services	35	19	16	30	22	8
1.A.b.7 Financial services	83	46	37	63	58	5
1.A.b.8 Charges for the use of intellectual property n.i.e.	11	81	-69	9	82	-73
1.A.b.9 Telecommunications, computer, and information services	1,194	72	1,122	1,291	63	1,229
1.A.b.10 Other business services	446	438	9	439	503	-64
1.A.b.11 Personal, cultural, and recreational services	18	25	-7	17	11	7
1.A.b.12 Government goods and services n.i.e.	10	14	-4	10	8	2
1.A.b.13 Others n.i.e.	2	21	-19	14	91	-78
1.B Primary Income (1.B.1 to 1.B.3)	**215**	**555**	**-340**	**250**	**673**	**-423**
1.B.1 Compensation of employees	57	38	19	58	37	21
1.B.2 Investment income	133	514	-380	153	629	-476
1.B.2.1 Direct investment	79	194	-114	89	268	-179
1.B.2.2 Portfolio investment	2	103	-101	3	154	-151
1.B.2.3 Other investment	6	217	-211	10	207	-197
1.B.2.4 Reserve assets	46	–	46	51	0	50
1.B.3 Other primary income	24	3	21	40	7	33
1.C Secondary Income (1.C.1+1.C.2)	**1,085**	**67**	**1,018**	**1,050**	**44**	**1,006**
1.C.1 Financial corporations, nonfinancial corporations, households, and NPISHs	1,078	55	1,023	1,040	31	1,009
1.C.1.1 Personal transfers (Current transfers between resident and/ non-resident households)	1,039	50	989	1,007	27	980
1.C.1.2 Other current transfers	39	5	34	32	4	29
1.C.2 General government	7	12	-5	10	13	-3
2 Capital Account (2.1+2.2)	**12**	**5**	**7**	**4**	**3**	**1**
2.1 Gross acquisitions (DR.)/disposals (CR.) of non-produced nonfinancial assets	9	1	8	1	0	0
2.2 Capital transfers	2	4	-1	4	3	1
3 Financial Account (3.1 to 3.5)	**7,615**	**7,023**	**592**	**7,575**	**7,150**	**425**
3.1 Direct Investment (3.1A+3.1B)	**720**	**292**	**428**	**1,124**	**413**	**711**
3.1.A Direct Investment in India	609	133	475	1,080	158	922
3.1.A.1 Equity and investment fund shares	568	129	439	1,039	156	883
3.1.A.1.1 Equity other than reinvestment of earnings	409	129	280	865	156	710
3.1.A.1.2 Reinvestment of earnings	159	–	159	173	–	173
3.1.A.2 Debt instruments	40	4	36	41	2	39
3.1.A.2.1 Direct investor in direct investment enterprises	40	4	36	41	2	39
3.1.B Direct Investment by India	111	159	-47	44	255	-211
3.1.B.1 Equity and investment fund shares	111	115	-4	44	182	-138
3.1.B.1.1 Equity other than reinvestment of earnings	111	63	48	44	127	-83
3.1.B.1.2 Reinvestment of earnings	–	52	-52	–	55	-55
3.1.B.2 Debt instruments	–	43	-43	–	73	-73
3.1.B.2.1 Direct investor in direct investment enterprises	–	43	-43	–	73	-73
3.2 Portfolio Investment	**3,442**	**3,053**	**389**	**3,024**	**3,038**	**-14**
3.2.A Portfolio Investment in India	3,428	3,047	381	3,017	3,030	-13
3.2.1 Equity and investment fund shares	2,538	2,522	15	2,368	2,449	-81
3.2.2 Debt securities	891	525	366	648	581	68
3.2.B Portfolio Investment by India	14	6	8	7	8	-1
3.3 Financial derivatives (other than reserves) and employee stock options	**195**	**261**	**-66**	**222**	**184**	**38**
3.4 Other investment	**3,257**	**2,600**	**657**	**3,206**	**3,248**	**-42**
3.4.1 Other equity (ADRs/GDRs)	–	–	–	–	–	–
3.4.2 Currency and deposits	917	676	241	780	678	102
3.4.2.1 Central bank (Rupee Debt Movements; NRG)	20	–	20	–	–	0
3.4.2.2 Deposit-taking corporations, except the central bank (NRI Deposits)	898	676	222	780	678	102
3.4.2.3 General government	–	–	–	–	–	–
3.4.2.4 Other sectors	–	–	–	–	–	–
3.4.3 Loans (External Assistance, ECBs and Banking Capital)	1,105	686	419	909	962	-53
3.4.3.A Loans to India	1,079	678	401	879	940	-61
3.4.3.B Loans by India	26	8	18	29	22	8
3.4.4 Insurance, pension, and standardized guarantee schemes	13	8	5	20	29	-9
3.4.5 Trade credit and advances	1,088	1,172	-84	1,367	1,484	-118
3.4.6 Other accounts receivable/payable - other	134	58	76	130	95	35
3.4.7 Special drawing rights	–	–	–	–	–	–
3.5 Reserve assets	–	**816**	**-816**	–	**267**	**-267**
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)	–	816	-816	–	267	-267
4 Total assets/liabilities	**7,615**	**7,023**	**592**	**7,575**	**7,150**	**425**
4.1 Equity and investment fund shares	3,439	3,042	397	3,700	3,007	693
4.2 Debt instruments	4,042	3,106	935	3,745	3,780	-35
4.3 Other financial assets and liabilities	134	875	-741	130	362	-232
5 Net errors and omissions	**–**	**121**	**-121**	**40**	**–**	**40**

No. 42: International Investment Position

(US$ Million)

Item	As on Financial Year /Quarter End							
	2014-15		2014		2015			
			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	132,741	265,521	131,524	252,817	135,768	271,019	138,967	282,273
1.1 Equity Capital and Reinvested Earnings	91,457	254,055	91,145	241,931	92,975	258,420	95,063	269,456
1.2 Other Capital	41,283	11,466	40,379	10,887	42,794	12,599	43,904	12,817
2 Portfolio Investment	1,429	233,393	1,412	215,142	1,701	225,555	1,692	224,823
2.1 Equity	1,050	153,641	1,034	145,045	1,581	143,583	1,572	141,098
2.2 Debt	378	79,752	379	70,097	120	81,972	120	83,725
3 Other Investment	46,594	388,359	38,207	380,436	41,736	390,734	41,656	387,570
3.1 Trade Credit	5,495	83,690	6,840	81,062	4,712	81,314	4,548	79,541
3.2 Loan	5,664	177,158	4,169	176,215	4,273	172,700	3,683	171,804
3.3 Currency and Deposits	19,432	115,313	11,935	110,199	16,667	122,008	17,322	122,800
3.4 Other Assets/Liabilities	16,003	12,199	15,263	12,960	16,084	14,712	16,103	13,425
4 Reserves	341,639	–	320,649	–	350,288	–	350,381	–
5 Total Assets/ Liabilities	522,402	887,273	491,792	848,396	529,493	887,307	532,697	894,666
6 IIP (Assets - Liabilities)		–364,871		–356,603		–357,814		–361,969

Payment and Settlement Systems

No. 43: Payment System Indicators

System	Volume (Million)				Value (₹ billion)			
	2014-15	2015	2016		2014-15	2015	2016	
		Dec.	Jan.	Feb.		Dec.	Jan.	Feb.
	1	2	3	4	5	6	7	8
1 RTGS	**92.78**	**8.03**	**8.22**	**8.23**	**929,332.89**	**89,031.27**	**82,659.68**	**86,727.77**
1.1 Customer Transactions	88.39	7.67	7.86	7.87	631,050.74	58,712.64	55,307.40	59,496.12
1.2 Interbank Transactions	4.38	0.36	0.36	0.35	122,981.62	10,211.40	11,210.31	10,845.84
1.3 Interbank Clearing	0.012	0.001	0.001	0.001	175,300.73	20,107.23	16,141.98	16,385.82
2 CCIL Operated Systems	**3.03**	**0.25**	**0.26**	**0.27**	**752,000.42**	**69,114.62**	**65,553.48**	**67,673.94**
2.1 CBLO	0.21	0.02	0.02	0.02	167,645.96	15,567.72	13,104.45	12,827.82
2.2 Govt. Securities Clearing	1.09	0.08	0.08	0.08	258,916.76	23,147.93	23,750.43	24,179.71
2.2.1 Outright	0.98	0.07	0.07	0.07	101,561.62	7,946.88	7,702.02	7,370.78
2.2.2 Repo	0.109	0.012	0.012	0.015	157,355.15	15,201.05	16,048.41	16,808.93
2.3 Forex Clearing	1.73	0.15	0.16	0.17	325,437.69	30,398.97	28,698.60	30,666.41
3 Paper Clearing	**1,196.51**	**93.75**	**87.49**	**93.24**	**85,434.14**	**6,935.57**	**6,376.98**	**6,726.08**
3.1 Cheque Truncation System (CTS)	964.86	82.07	77.58	83.54	66,769.93	6,026.51	5,546.26	5,946.61
3.2 MICR Clearing	22.43	-	-	-	1,850.40	–	–	–
3.2.1 RBI Centres	7.50	-	-	-	614.51	–	–	–
3.2.2 Other Centres	14.93	-	-	-	1,235.89	–	–	–
3.3 Non-MICR Clearing	209.82	11.67	9.91	9.70	16,939.34	909.06	830.72	779.47
4 Retail Electronic Clearing	**1,687.44**	**299.35**	**290.25**	**298.44**	**65,365.51**	**8,879.97**	**7,863.67**	**7,985.34**
4.1 ECS DR	226.01	31.57	13.36	10.98	1,739.78	153.06	99.01	81.88
4.2 ECS CR (includes NECS)	115.35	2.09	2.94	1.61	2,019.14	89.69	71.54	71.30
4.3 EFT/NEFT	927.55	119.61	118.97	110.17	59,803.83	8,197.21	7,086.75	7,278.60
4.4 Immediate Payment Service (IMPS)	78.37	20.52	22.48	23.86	581.87	150.73	165.59	169.67
4.5 National Automated Clearing House (NACH)	340.17	125.56	132.50	151.82	1,220.88	289.29	440.77	383.89
5 Cards	**8,423.99**	**886.02**	**887.73**	**864.39**	**25,415.27**	**2,565.13**	**2,516.85**	**2,468.78**
5.1 Credit Cards	619.41	69.90	70.22	67.69	1,922.63	214.69	188.86	209.21
5.1.1 Usage at ATMs	4.29	0.53	0.55	0.56	23.47	2.75	2.66	2.70
5.1.2 Usage at POS	615.12	69.37	69.68	67.14	1,899.16	211.94	186.20	206.51
5.2 Debit Cards	7,804.57	816.12	817.51	796.69	23,492.65	2,350.44	2,327.99	2,259.57
5.2.1 Usage at ATMs	6,996.48	708.00	707.63	691.73	22,279.16	2,204.61	2,181.88	2,130.04
5.2.2 Usage at POS	808.09	108.12	109.88	104.96	1,213.49	145.83	146.11	129.54
6 Prepaid Payment Instruments (PPIs)	**314.46**	**68.67**	**65.25**	**57.57**	**213.42**	**44.34**	**49.09**	**46.19**
6.1 m-Wallet	255.00	53.70	48.74	49.02	81.84	20.63	22.14	22.51
6.2 PPI Cards	58.91	14.93	16.46	8.51	105.35	21.28	24.62	21.51
6.3 Paper Vouchers	0.55	0.05	0.05	0.04	26.24	2.42	2.34	2.17
7 Mobile Banking	**171.92**	**39.49**	**42.80**	**42.75**	**1,035.30**	**490.29**	**465.21**	**464.73**
8 Cards Outstanding	**574.56**	**665.94**	**677.14**	**682.20**	–	–	–	–
8.1 Credit Card	21.11	22.75	23.78	24.13	–	–	–	–
8.2 Debit Card	553.45	643.19	653.36	658.07	–	–	–	–
9 Number of ATMs (in actuals)	**181398**	**193622**	**195933**	**197292**	–	–	–	–
10 Number of POS (in actuals)	**1126735**	**1245447**	**1337310**	**1363344**	–	–	–	–
11 Grand Total (1.1+1.2+2+3+4+5+6)	**11,718.19**	**1,356.06**	**1,339.20**	**1,322.14**	**1,682,461.11**	**156,463.67**	**148,877.77**	**155,242.29**

Note : Data for latest 12 month period is provisional.

Occasional Series

No. 44: Small Savings

(₹ Billion)

Scheme		2014-15	2014	2015		
			Aug.	Jun.	Jul.	Aug.
		1	2	3	4	5
1 Small Savings	**Receipts**	**2,411.58**	**193.28**	**262.63**	**284.91**	**280.12**
	Outstanding	**6,323.39**	**6,230.58**	**6,352.52**	**6,379.56**	**6,411.77**
1.1 Total Deposits	**Receipts**	**2,137.49**	**174.51**	**230.85**	**252.18**	**244.01**
	Outstanding	**3,961.81**	**3,923.71**	**3,996.94**	**4,018.44**	**4,040.92**
1.1.1 Post Office Saving Bank Deposits	Receipts	1,142.29	90.99	124.18	135.15	129.36
	Outstanding	474.28	446.10	497.13	508.47	517.28
1.1.2 MGNREG	Receipts	–	–	–	–	–
	Outstanding	–	–	–	–	–
1.1.3 National Saving Scheme, 1987	Receipts	0.44	0.05	–0.01	0.10	0.01
	Outstanding	36.89	37.26	35.77	35.49	35.86
1.1.4 National Saving Scheme, 1992	Receipts	0.03	0.02	–	–	–
	Outstanding	2.32	2.51	1.90	2.08	2.01
1.1.5 Monthly Income Scheme	Receipts	215.69	18.71	25.42	29.07	28.91
	Outstanding	2,005.57	2,016.36	1,989.80	1,983.97	1,979.07
1.1.6 Senior Citizen Scheme	Receipts	30.11	2.17	5.74	7.89	8.44
	Outstanding	179.75	211.26	171.61	170.09	172.45
1.1.7 Post Office Time Deposits	Receipts	330.69	28.28	39.23	41.77	40.74
	Outstanding	517.57	456.93	549.38	564.73	579.74
1.1.7.1 1 year Time Deposits	Outstanding	361.53	313.66	387.50	400.11	412.22
1.1.7.2 2 year Time Deposits	Outstanding	20.31	18.93	21.29	21.75	22.24
1.1.7.3 3 year Time Deposits	Outstanding	41.42	39.88	41.75	42.00	42.43
1.1.7.4 5 year Time Deposits	Outstanding	94.31	84.46	98.84	100.87	102.85
1.1.8 Post Office Recurring Deposits	Receipts	418.24	34.29	36.24	38.20	36.55
	Outstanding	745.13	753.01	751.00	753.26	754.16
1.1.9 Post Office Cumulative Time Deposits	Outstanding	0.08	0.06	0.08	0.08	0.08
1.1.10 Other Deposits	Outstanding	0.22	0.22	0.27	0.27	0.27
1.2 Saving Certificates	**Receipts**	**192.52**	**14.26**	**25.94**	**27.68**	**31.63**
	Outstanding	**1,834.10**	**1,839.66**	**1,834.01**	**1,837.99**	**1,845.99**
1.2.1 National Savings Certificate VIII issue	Receipts	165.84	14.28	10.12	10.05	8.83
	Outstanding	856.08	798.09	863.44	867.20	870.22
1.2.2 Indira Vikas Patras	Receipts	0.04	–	–	–	–
	Outstanding	8.87	8.91	8.87	8.86	8.87
1.2.3 Kisan Vikas Patras	Receipts	5.54	–0.02	0.47	0.37	–0.61
	Outstanding	848.41	958.06	794.76	774.77	754.94
1.2.4 Kisan Vikas Patras - 2014	Receipts	21.1	–	15.35	17.26	23.41
	Outstanding	26.71	–	65.68	83.22	106.63
1.2.5 National Saving Certificate VI issue	Outstanding	–0.82	–0.81	–0.84	–0.85	–0.86
1.2.6 National Saving Certificate VII issue	Outstanding	–0.53	–0.53	–0.54	–0.54	–0.55
1.2.7 Other Certificates	Outstanding	95.38	75.94	102.64	105.33	106.74
1.3 Public Provident Fund	**Receipts**	**81.57**	**4.51**	**5.84**	**5.05**	**4.48**
	Outstanding	**527.48**	**467.21**	**521.57**	**523.13**	**524.86**

Source: Accountant General, Post and Telegraphs.

No. 45: Ownership Pattern of Government of India Dated Securities

(Per cent)

Category	2014	2015			
	Dec.	Mar.	Jun.	Sep.	Dec.
	1	2	3	4	5
1 Commercial Banks	42.77	43.30	43.14	43.03	43.59
2 Non-Bank PDs	0.34	0.31	0.35	0.54	0.35
3 Insurance Companies	21.02	20.87	21.37	22.09	21.90
4 Mutual Funds	1.68	1.89	2.37	2.69	2.52
5 Co-operative Banks	2.57	2.62	2.73	2.64	2.71
6 Financial Institutions	0.73	2.07	0.70	0.60	0.68
7 Corporates	1.12	1.25	1.12	0.84	0.86
8 Foreign Portfolio Investors	3.62	3.67	3.59	3.57	3.68
9 Provident Funds	7.47	7.58	7.08	7.17	7.11
10 RBI	14.50	13.48	13.06	12.08	12.07
11 Others	4.18	2.96	4.49	4.75	4.51

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

(₹ Billion)

Item	2010-11	2011-12	2012-13	2013-14	2014-15 RE	2015-16 BE
	1	2	3	4	5	6
1 Total Disbursements	**21,451.45**	**24,217.68**	**26,949.34**	**30,002.99**	**35,553.32**	**38,489.78**
1.1 Developmental	12,676.97	14,209.38	15,741.62	17,142.21	20,936.80	22,117.71
1.1.1 Revenue	10,260.24	11,394.64	12,807.14	13,944.26	16,605.59	17,168.72
1.1.2 Capital	1,935.80	2,163.39	2,446.11	2,785.08	3,879.33	4,509.66
1.1.3 Loans	480.93	651.35	488.38	412.88	451.87	439.33
1.2 Non-Developmental	8,520.46	9,695.88	10,850.47	12,427.83	14,076.23	15,832.87
1.2.1 Revenue	7,765.94	8,923.61	9,991.40	11,413.65	13,029.81	14,562.35
1.2.1.1 Interest Payments	3,485.61	4,000.03	4,543.06	5,342.30	5,963.23	6,675.34
1.2.2 Capital	747.48	754.79	837.14	990.37	1,016.49	1,227.85
1.2.3 Loans	7.04	17.48	21.93	23.81	29.93	42.67
1.3 Others	254.02	312.42	357.24	432.95	540.29	539.20
2 Total Receipts	**21,535.61**	**24,540.62**	**27,690.29**	**30,013.72**	**35,140.39**	**38,422.08**
2.1 Revenue Receipts	15,788.20	16,926.79	19,716.19	22,114.75	26,367.48	28,862.73
2.1.1 Tax Receipts	12,500.67	14,427.52	16,879.59	18,465.45	20,915.50	23,375.73
2.1.1.1 Taxes on commodities and services	7,393.66	8,745.55	10,385.91	11,257.81	12,691.71	14,446.61
2.1.1.2 Taxes on Income and Property	5,087.19	5,654.12	6,462.73	7,176.34	8,189.41	8,893.35
2.1.1.3 Taxes of Union Territories (Without Legislature)	19.82	27.85	30.94	31.30	34.38	35.77
2.1.2 Non-Tax Receipts	3,287.53	2,499.27	2,836.60	3,649.30	5,451.99	5,486.99
2.1.2.1 Interest Receipts	250.78	288.70	355.43	401.62	386.19	348.78
2.2 Non-debt Capital Receipts	322.93	441.23	389.20	391.13	438.66	774.15
2.2.1 Recovery of Loans & Advances	82.06	253.70	129.29	93.85	93.47	77.84
2.2.2 Disinvestment proceeds	240.87	187.53	259.91	297.28	345.18	696.32
3 Gross Fiscal Deficit [1 - (2.1 + 2.2)]	**5,340.32**	**6,849.66**	**6,843.95**	**7,497.11**	**8,747.18**	**8,852.90**
3A Sources of Financing: Institution-wise						
3A.1 Domestic Financing	5,104.76	6,725.18	6,771.94	7,424.19	8,650.13	8,741.17
3A.1.1 Net Bank Credit to Government	3,147.10	3,898.30	3,352.80	3,358.58	–387.13	..
3A.1.1.1 Net RBI Credit to Government	1,849.70	1,391.80	548.40	1,081.30	–3,341.85	..
3A.1.2 Non-Bank Credit to Government	1,957.66	2,826.88	3,419.14	4,065.61	9,037.26	..
3A.2 External Financing	235.56	124.48	72.01	72.92	97.05	111.73
3B Sources of Financing: Instrument-wise						
3B.1 Domestic Financing	5,104.76	6,725.18	6,771.94	7,424.19	8,650.13	8,741.17
3B.1.1 Market Borrowings (net)	4,151.75	6,195.07	6,536.94	6,391.99	6,953.18	7,283.27
3B.1.2 Small Savings (net)	–545.34	190.88	–85.70	–142.81	–577.67	–327.45
3B.1.3 State Provident Funds (net)	362.36	334.33	329.94	312.90	353.82	348.58
3B.1.4 Reserve Funds	35.62	178.51	–4.12	34.63	–127.46	56.50
3B.1.5 Deposits and Advances	342.92	122.10	27.22	255.45	203.85	131.87
3B.1.6 Cash Balances	–84.16	–322.94	–740.96	–10.72	412.94	67.70
3B.1.7 Others	841.61	27.23	708.62	582.75	1,431.47	1,180.69
3B.2 External Financing	235.56	124.48	72.01	72.92	97.05	111.73
4 Total Disbursements as per cent of GDP	*27.6*	*27.7*	*27.1*	*26.6*	*28.5*	*28.4*
5 Total Receipts as per cent of GDP	*27.7*	*28.1*	*27.8*	*26.6*	*28.1*	*28.3*
6 Revenue Receipts as per cent of GDP	*20.3*	*19.4*	*19.8*	*19.6*	*21.1*	*21.3*
7 Tax Receipts as per cent of GDP	*16.1*	*16.5*	*17.0*	*16.4*	*16.7*	*17.2*
8 Gross Fiscal Deficit as per cent of GDP	*6.9*	*7.8*	*6.9*	*6.7*	*7.0*	*6.5*

Source : Budget Documents of Central and State Governments.

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
NM_2 and NM_3 do not include FCNR (B) deposits.
2.4: Consist of paid-up capital and reserves.
2.5: includes other demand and time liabilities of the banking system.

Table No. 9
Financial institutions comprise EXIM Bank, SIDBI, NABARD and NHB.
L_1 and L_2 are compiled monthly and L_3 quarterly.
Wherever data are not available, the last available data have been repeated.

Table No. 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 & 1.1.1.1.1.4: 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 multilateral net settlement batches.
3.1: Pertain to two centres - New Delhi and Chennai.
3.3: Pertain to clearing houses managed by 21 banks.
6: Available from December 2010.
7: Include IMPS transactions.

Table No. 45
The holdings of RBI have been revised since December 2014, based on the revised liquidity management framework.

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 2016	₹200 per copy (over the counter) ₹240 per copy (inclusive of postage) ₹2,800 (one year subscription - inclusive of postage)	US$ 11 per copy (inclusive of postage) US$ 130 (one-year subscription) (inclusive of air mail courier charges)
2. Handbook of Statistics on the Indian Economy 2014-15	₹400 (Normal) ₹450 (inclusive of postage) ₹300 (concessional) ₹375 (concessional with postage)	US$ 40 (inclusive of air mail courier charges)
3. 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)
4. 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)
5. 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)
6. Handbook of Statistics on State Government Finances 2010	CD-ROM ₹80 (normal) ₹105 (inclusive of postage) ₹60 (concessional) ₹85 (concessional inclusive of postage)	US$ 16 per CD (inclusive of air mail courier charges) US$ 4 per CD (inclusive of registered air mail charges)
7. CD Compendium of Articles on State Finances (1950-51 to 2010-11)	₹280 (over the counter) ₹305 (inclusive of postal charges) ₹210 (concessional) ₹235 (concessional inclusive of postage)	US$ 8 (inclusive of air mail book post charges)
8. Mint Road Milestones RBI at 75	₹1,650 per copy (over the counter)	US$ 50 per copy (inclusive of air mail courier charges)
9. India's Financial Sector, An Assessment Vol. I to VI 2009	₹2,000 per copy (over the counter) ₹2,300 per copy (inclusive postal charges) ₹1,500 per copy (concessional price) ₹1,800 per copy (concessional inclusive of postage)	US$ 40 per set and US$ 120 per set (inclusive of air mail courier charges)
10. The Paper and the Promise: A Brief History of Currency & Banknotes in India, 2009	₹200 per copy (over the counter)	US$ 30 per copy (inclusive of air mail courier charges)
11. Report of the committee on Fuller Capital account Convertibility (Tarapore Committee Report II)	₹140 per copy (normal) ₹170 (per copy by post)	US$ 25 per copy ((inclusive of air mail courier charges)
12. A Profile of Banks 2012-13	₹80 per copy (over the counter) ₹110 per copy (inclusive of postal charges)	US$ 7 per copy (inclusive of air mail courier charges)

Name of Publication	Price	
	India	Abroad
13. Selected Banking Indicators 1981 to 2002 (On CD-ROM)	₹250 per CD (over the counter) ₹300 per CD (including postal charges)	US$ 75 (per CD) (inclusive of air mail courier charges)
14. Statistical Tables Relating to Banks in India 2012-13	₹240 per copy (over the counter) ₹300 (inclusive of postage)	US$ 13 per copy (inclusive of air mail courier charges)
15. Quarterly Statistics on Deposits and Credit of Scheduled Commercial Banks 1981-2003 (on CD-ROM)	₹185 per copy (over the counter) ₹240 per copy (including postal charges)	US$ 20 per copy US$ 55 per copy (inclusive of air mail courier charges)
16. Basic Statistical Returns of Scheduled Commercial Banks in India Vol. 41 March 2012	₹270 per copy (over the counter) ₹310 per copy (inclusive of postal charges)	US$ 10 per copy (inclusive of air mail courier charges)
17. Private Corporate Business Sector in India - Selected Financial Statistics from 1950-51 to 1997-98	₹500 per CD (over the counter)	US$ 100 per CD ROM (inclusive of air mail courier charges)
18. Banking Glossary (2012)	₹80 per copy (over the counter) ₹120 per copy (inclusive of postal charges)	
19. Anuvad Ke Vividh Aayam (Hindi)	₹165 per copy (over the counter) ₹205 per copy (inclusive of postal charges)	

Notes

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

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