Report of the Central Board of Directors on the working of the Reserve Bank of India for the year ended June 30, 2016 submitted to the Central Government in terms of Section 53(2) of the Reserve Bank of India Act, 1934

# RESERVE BANK OF INDIA ANNUAL REPORT 2015-16

भारतीय रिज़र्व बैंक
RESERVE BANK OF INDIA
www.rbi.org.in

**GOVERNOR**

**LETTER OF TRANSMITTAL**

Ref. No. SYD. 755 / 02.16.001 /2016 -17 August 29, 2016

Bhadrapada 7, 1938 (Saka)

**The Finance Secretary**
**Government of India**
**Ministry of Finance**
**New Delhi – 110 001**

Dear Sir:

In pursuance of Section 53(2) of the Reserve Bank of India Act, 1934, I have the pleasure in transmitting the following documents:

(i) A copy of the Annual Accounts for the year ended June 30, 2016 signed by me, the Deputy Governors and the Principal Chief General Manager, and certified by the Bank's Auditors; and

(ii) Two copies of the Annual Report of the Central Board on the working of the Bank during the year ended June 30, 2016.

Yours faithfully

Raghuram G. Rajan

[Raghuram G. Rajan]

## CENTRAL BOARD / LOCAL BOARDS

**GOVERNOR**

Raghuram G. Rajan

**DEPUTY GOVERNORS**

Urjit R. Patel

R. Gandhi

S.S. Mundra

N.S.Vishwanathan

**DIRECTORS NOMINATED UNDER SECTION 8 (1) (b) OF THE RBI ACT, 1934**

Nachiket M. Mor

**DIRECTORS NOMINATED UNDER SECTION 8 (1) (c) OF THE RBI ACT, 1934**

Y.C. Deveshwar

Damodar Acharya

Natarajan Chandrasekaran

Bharat N. Doshi

Sudhir Mankad

**DIRECTORS NOMINATED UNDER SECTION 8 (1) (d) OF THE RBI ACT, 1934**

Shaktikanta Das

Anjuly Chib Duggal

**MEMBER OF LOCAL BOARD**

**WESTERN AREA**

**EASTERN AREA**

Nachiket M. Mor

**NORTHERN AREA**

**SOUTHERN AREA**

# PRINCIPAL OFFICERS

(As on August 10, 2016)

| | |
|---|---|
| **EXECUTIVE DIRECTORS** | Deepak Mohanty |
| | Deepali Pant Joshi |
| | U.S. Paliwal |
| | Chandan Sinha |
| | Michael D. Patra |
| | K.K. Vohra |
| | G. Mahalingam |
| | Meena Hemchandra |
| | Deepak Singhal |
| | B.P. Kanungo |
| | Sudarshan Sen |
| **CENTRAL OFFICE** | |
| Central Vigilance Cell | Surekha Marandi, Principal Chief General Manager |
| Consumer Education and Protection Department | Arun Pasricha, Chief General Manager |
| Corporate Strategy and Budget Department | Saurav Sinha, Chief General Manager |
| Department of Banking Regulation | S.S. Barik, Chief General Manager-in-Charge |
| Department of Banking Supervision | Parvathy V. Sundaram, Chief General Manager-in-Charge |
| Department of Communication | Alpana Killawala, Principal Adviser-Communications |
| Department of Co-operative Bank Regulation | Suma Varma, Principal Chief General Manager |
| Department of Co-operative Bank Supervision | Malvika Sinha, Principal Chief General Manager |
| Department of Corporate Services | S.K. Kar, Chief General Manager |
| Department of Currency Management | P. Vijayakumar, Chief General Manager |
| Department of Economic and Policy Research | B.M. Misra, Principal Adviser |
| Department of External Investments and Operations | R.N. Kar, Chief General Manager-in-Charge |
| Department of Government and Bank Accounts | S. Ramaswamy, Principal Chief General Manager |
| Department of Information Technology | S. Ganeshkumar, Chief General Manager-in-Charge |
| Department of Non-Banking Regulation | C.D. Srinivasan, Chief General Manager |
| Department of Non-Banking Supervision | Sathyan David, Chief General Manager |
| Department of Payment and Settlement Systems | Nanda Dave, Chief General Manager |
| Department of Statistics and Information Management | G. Chatterjee, Officer-in-Charge |
| Financial Inclusion and Development Department | A. Udgata, Principal Chief General Manager |
| Financial Markets Operations Department | M. Rajeshwar Rao, Chief General Manager |
| Financial Markets Regulation Department | R. Subramanian, Chief General Manager |
| Foreign Exchange Department | Shekhar Bhatnagar, Chief General Manager |
| Financial Stability Unit | S. Rajagopal, Chief General Manager |
| Human Resource Management Department | A.K. Sarangi, Chief General Manager-in-Charge |
| Inspection Department | B.P. Vijayendra, Principal Chief General Manager |
| Internal Debt Management Department | Archana Mangalagiri, Chief General Manager |
| International Department | Janak Raj, Adviser-in-Charge |
| Legal Department | Mona Anand, Legal Adviser-in-Charge |
| Monetary Policy Department | B.K. Bhoi, Principal Adviser |
| Premises Department | Arvind Sharma, Chief General Manager-in-Charge |
| Rajbhasha Department | Ramakant Gupta, General Manager |
| Risk Monitoring Department | A.K. Misra, Chief General Manager |
| Secretary's Department | S.K. Maheshwari, Chief General Manager & Secretary |
| **COLLEGES** | **PRINCIPALS** |
| College of Agricultural Banking, Pune | P.K. Panda |
| Reserve Bank Staff College, Chennai | Rabi N. Mishra |
| **OFFICES** | **REGIONAL DIRECTORS** |
| Chennai | J. Sadakkadulla |
| Kolkata | R.G. Warriar |
| Mumbai | Murali Radhakrishnan |
| New Delhi | K.K. Saraf |
| **BRANCHES** | |
| Ahmedabad | J.K. Dash |
| Bengaluru | E.E. Karthak |
| Bhopal | Ajay Michyari |
| Bhubaneswar | P.K. Das, General Manager-in-Charge |
| Chandigarh | Nirmal Chand |
| Dehradun | Subrata Das, General Manager (Officer-in-Charge) |
| Guwahati | B.K. Mishra |
| Hyderabad | R.N. Dash |
| Jaipur | Arnab Roy |
| Jammu | N.K. Sahu |
| Kanpur | Vivek Deep |
| Lucknow | Ajay Kumar |
| Nagpur | J.M. Jivani |
| Patna | M.K. Verma |
| Raipur | Saraswati Shyamaprasad |
| Shimla | I.S. Negi |
| Thiruvananthapuram | S.M. Narasimha Swamy |
| | **OFFICERS-IN-CHARGE** |
| Agartala | N.P. Topno, General Manager (O-i-C) |
| Aizawl | Deng Mary Lainlunkim, General Manager (O-i-C) |
| Belapur | S.N Panda, Chief General Manager |
| Gangtok | Manabendra Misra, General Manager (O-i-C) |
| Imphal | Hauzel Thangzamuan, Chief General Manager |
| Kochi | U. Chiranjeevi, General Manager (O-i-C) |
| Panaji | Jaikish, General Manager (O-i-C) |
| Ranchi | Patric Barla, General Manager (O-i-C) |
| Shillong | Amar Nath, Chief General Manager |
| Srinagar | S.P. Soni, Manager (O-i-C) |

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**APPENDIX TABLES**

## LIST OF ABBREVIATIONS

| | |
|---|---|
| AA | - Account Aggregator |
| ACU | - Asian Clearing Union |
| AD | - Authorised Dealer |
| ADF | - Automated Data Flow |
| ADR | - American Depository Receipts |
| AIFIs | - All-India Financial Institutions |
| AMRMS | - Audit Management and Risk Monitoring System |
| ANBC | - Adjusted Net Bank Credit |
| AQR | - Asset Quality Review |
| ARCs | - Asset Reconstruction Companies |
| ARMS | - Audit and Risk Management Sub-Committee |
| ATBs | - Auction Treasury Bills |
| ATMs | - Automated Teller Machines |
| B2B | - Business-to-Business |
| B2C | - Business-to-Consumer |
| BAs | - Business Areas |
| BBB | - Banks Board Bureau |
| BBPCU | - Bharat Bill Payment Central Unit |
| BBPOU | - Bharat Bill Payment Operating Unit |
| BBPS | - Bharat Bill Payment System |
| BC | - Business Correspondent |
| BCBS | - Basel Committee on Banking Supervision |
| BCM | - Business Continuity Management |
| BCP | - Business Continuity Plans |
| BCSBI | - Banking Codes and Standards Board of India |
| BE | - Budget Estimates |
| BFS | - Board for Financial Supervision |
| BIA | - Business Impact Analysis |
| BIS | - Bank for International Settlements |
| BO | - Banking Ombudsman |
| BoJ | - Bank of Japan |
| BoP | - Balance of Payment |
| BPO | - Business Process Outsourcing |
| BPR | - Business Process Reengineering |
| bps | - Basis Points |
| BPSS | - Board for Payment and Settlement System |
| BRBNMPL | - Bharatiya Reserve Bank Note Mudran Private Limited |
| BRICS | - Brazil, Russia, India, China and South Africa |
| BSBDA | - Basic Savings Bank Deposit Account |
| BSC | - Building Sub-Committee |
| CAB | - College of Agricultural Banking |
| CAD | - Current Account Deficit |
| CAFRAL | - Centre for Advanced Financial Research and Learning |
| CAP | - Corrective Action Plan |
| CBLO | - Collateralised Borrowing and Lending Obligation |
| CBRMC | - Central Bank Risk Managers' Conference |
| CBs | - Central Banks |
| CBS | - Core Banking Solution |
| CCB | - Committee of the Central Board |
| CCC | - Cash Coordination Committee |
| CCIL | - Clearing Corporation of India Limited |
| CCP | - Central Counter Party |
| CCR | - Counterparty Credit Risk |
| CCSO | - Chief Customer Service Officer |
| CCTV | - Closed Circuit Television |

## LIST OF ABBREVIATIONS

| | |
|---|---|
| CD | - Certificate of Deposit |
| CDES | - Currency Distribution & Exchange Scheme |
| CDS | - Credit Default Swaps |
| CEPD | - Consumer Education and Protection Department |
| CERT-In | - Indian Computer Emergency Response Team |
| CGFS | - Committee on the Global Financial System |
| CGM | - Chief General Manager |
| CGTMSE | - Credit Guarantee Trust for Micro and Small Enterprises |
| CIC | - Currency in Circulation |
| CKYCR | - Central Know Your Customer Registry |
| CLSS | - Credit Linked Subsidy Scheme |
| CMA | - Currency Management Architecture |
| CODs | - Central Office Departments |
| CoR | - Certificate of Registration |
| CPC | - Central Pay Commission |
| CPC | - Cheque Processing Centre |
| CPI | - Consumer Price Index |
| CPI-AL | - Consumer Price Index-Agricultural Labourers |
| CPI-C | - Consumer Price Index-Combined |
| CPI-IW | - Consumer Price Index-Industrial Workers |
| CPI-RL | - Consumer Price Index-Rural Labourers |
| CPMI | - Committee on Payments and Market Infrastructure |
| CPs | - Commercial Papers |
| CRA | - Contingent Reserve Arrangement |
| CRILC | - Central Repository of Information on Large Credits |
| CRR | - Cash Reserve Ratio |
| CSBD | - Corporate Strategy and Budget Management |
| CSF | - Consolidated Sinking Fund |
| CSO | - Central Statistics Office |
| CTS | - Cheque Truncation System |
| DBR | - Department of Banking Regulation |
| DBS | - Department of Banking Supervision |
| DCBR | - Department of Co-operative Bank Regulation |
| DCBS | - Department of Co-operative Bank Supervision |
| DCCBs | - District Central Co-operative Banks |
| DCS | - Department of Corporate Services |
| DEIO | - Department of External Investments and Operations |
| DEPR | - Department of Economic and Policy Research |
| DGBA | - Department of Government and Bank Accounts |
| DICGC | - Deposit Insurance and Credit Guarantee Corporation |
| DIF | - Deposit Insurance Fund |
| DISCOM | - Distribution Company |
| DIT | - Department of Information Technology |
| DNBS | - Department of Non-Banking Supervision |
| DP | - Discussion Paper |
| DPSS | - Department of Payment and Settlement Systems |
| DRATs | - Debt Recovery Appellate Tribunals |
| DRG | - Development Research Group |

## LIST OF ABBREVIATIONS

| | |
|---|---|
| DRTs | - Debt Recovery Tribunals |
| DSIM | - Department of Statistics and Information Management |
| e-baat | - Electronic Banking Awareness and Training |
| ECB | - European Central Bank |
| ECBs | - External Commercial Borrowings |
| ECL | - Expected Credit Loss |
| ECS | - Electronic Clearing Service |
| EDMS | - Electronic Document Management System |
| EDPMS | - Export Data Processing and Monitoring System |
| EEFC | - Exchange Earners' Foreign Currency |
| EMEs | - Emerging Market Economies |
| EMV | - Europay, Mastercard and Visa |
| ERM | - Enterprise-wide Risk Management |
| ESOP | - Employee Stock Option |
| ETCD | - Exchange Traded Currency Derivatives |
| EV | - Enterprise Vault |
| EWS | - Early Warning System |
| EXIM Bank | - Export Import Bank of India |
| FBIL | - Financial Benchmark India Private Limited |
| FCA | - Foreign Currency Assets |
| FCCB | - Foreign Currency Convertible Bond |
| FC-GPR | - Foreign Currency Gross Provisional Return |
| FCNR(B) | - Foreign Currency Non-Resident (Bank) Account |
| FCs | - Financial Conglomerates |
| FC-TRS | - Foreign Currency Transfer of Shares |
| FCY | - Foreign Currency |
| FCY-INR | - Foreign Currency-Indian Rupee |
| FDI | - Foreign Direct Investment |
| FED | - Foreign Exchange Department |
| FEMA | - Foreign Exchange Management Act |
| FER | - Foreign Exchange Reserves |
| FETERS | - Foreign Exchange Transactions Electronic Reporting System |
| FFMC | - Full Fledged Money Changers |
| FIAC | - Financial Inclusion Advisory Committee |
| FIDD | - Financial Inclusion Development Department |
| FIF | - Financial Inclusion Fund |
| FII | - Foreign Institutional Investor |
| FIMMDA | - Fixed Income Money Market and Derivatives Association of India |
| FinTech | - Financial Technology |
| FIP | - Financial Inclusion Plan |
| FIRM | - Food Inflation Research and Measurement |
| FIT | - Flexible Inflation Targeting |
| FITF | - Financial Inclusion Technology Fund |
| FLCs | - Financial Literacy Centers |
| FMIs | - Financial Market Infrastructures |
| FMOD | - Financial Markets Operations Department |
| FMRD | - Financial Markets Regulation Department |
| FOMC | - Federal Open Market Committee |
| FPI | - Foreign Portfolio Investment |
| FSAP | - Financial Sector Assessment Programme |
| FSB | - Financial Stability Board |

## LIST OF ABBREVIATIONS

FSDC - Financial Stability and Development Council
FSDC-SC - Financial Stability and Development Council Sub committee
FSR - Financial Stability Report
FSU - Financial Stability Unit
FWG - Framework Working Group
GCC - General Credit Card
GDP - Gross Domestic Product
GDR - Global Depository Receipts
GFCE - Government Final Consumption Expenditure
GFCF - Gross Fixed Capital Formation
GFD - Gross Fiscal Deficit
GFSG - Green Finance Study Group
GNDI - Gross National Disposable Income
GoI - Government of India
GRF - Guarantee Redemption Funds
G-secs - Government Securities
GSIBs - Global Systemically Important Banks
GST - Goods and Services Tax
GSTN - Goods and Services Tax Network
GVA - Gross Value Added
HFCs - Housing Finance Companies
HPC - High Powered Committee on UCBs
HQLA - High Quality Liquid Assets
HRMD - Human Resource Management Department
HRM-SC - Human Resource Management Sub-Committee
HTM - Held-to-Maturity
IADI - International Association of Deposit Insurers
IASS - Integrated Accounting Software Solution
IBA - Indian Banks' Association
IBS - International Banking Statistics
ICD - Institute for Capacity Development
ICSDs - International Central Securities Depositories
ICT - Information & Communication Technology
IDBI - Industrial Development Bank of India
IDPMS - Import Data Processing and Monitoring System
IDRBT - Institute for Development and Research in Banking Technology
IFC - International Finance Corporation
IFCs - Infrastructure Finance Companies
IFI - International Financial Institution
IFRS - International Financial Reporting Standards
IFTAS - Indian Financial Technology and Allied Services
IGIDR - Indira Gandhi Institute of Development Research
IIBM - International Institute of Business Management
IIP - Index of Industrial Production
IMF - International Monetary Fund
IMPS - Immediate Payment Service
Ind AS - Indian Accounting Standards
INR - Indian Rupee
IORWG - International Operational Risk Working Group
IOSCO - International Organisation of Securities Commission
IPOs - Initial Public Offerings

## LIST OF ABBREVIATIONS

| | | |
|---|---|---|
| IRDA | - | Insurance Regulatory and Development Authority |
| IRF | - | Inter-Regulatory Forum |
| IRS | - | Interest Rate Swaps |
| IRTG | - | Inter-Regulatory Technical Group |
| IS | - | Information Security |
| ISI | - | Indian Statistical Institute |
| ISO | - | International Standardisation Organisation |
| ISOC | - | Information Security Operations Centre |
| ISPB | - | Index of Service Production for Banking Sector |
| IT | - | Information Technology |
| ITBs | - | Intermediate Treasury Bills |
| IT-SC | - | Information Technology Sub-Committee |
| JLF | - | Joint Lenders' Forum |
| KCC | - | Kisan Credit Card |
| kWp | - | Kilowatt Peak |
| KYC | - | Know Your Customer |
| LABs | - | Local Area Banks |
| LAF | - | Liquidity Adjustment Facility |
| LCR | - | Liquidity Coverage Ratio |
| LEF | - | Large Exposures Framework |
| LEI | - | Legal Entity Identifier |
| LLP | - | Limited Liability Partnership |
| LMS | - | Litigation Management System |
| LPA | - | Long Period Average |
| LPG | - | Liquefied Petroleum Gas |
| MAT | - | Minimum Alternate Tax |
| MCA | - | Ministry of Corporate Affairs |
| MCCs | - | Mega Currency Chests |
| MCLR | - | Marginal Cost of Funds Based Lending Rate |
| MDR | - | Merchant Discount Rates |
| MEP | - | Minimum Export Price |
| MFI | - | Multilateral Financial Institution |
| MIBOR | - | Mumbai Inter-bank Offer Rate |
| MICR | - | Magnetic Ink Character Recognition |
| MIS | - | Management Information System |
| MIU | - | Market Intelligence Unit |
| MMS | - | Mail Messaging System |
| MGNREGA | - | Mahatma Gandhi National Rural Employment Guarantee Act |
| MoP | - | Ministry of Power |
| MoU | - | Memorandum of Understanding |
| MPC | - | Monetary Policy Committee |
| MPD | - | Monetary Policy Department |
| MPFA | - | Monetary Policy Framework Agreement |
| MPR | - | Monetary Policy Report |
| MSCI | - | Morgan Stanley Capital International |
| MSEs | - | Micro and Small Enterprises |
| MSF | - | Marginal Standing Facility |
| MSMEs | - | Micro, Small and Medium Enterprises |
| MSPs | - | Minimum Support Prices |
| MTDS | - | Medium-Term Debt Management Strategy |
| MTF | - | Medium-Term Framework |
| MTS | - | Mass Transit System |
| MTSS | - | Money Transfer Service Scheme |
| NABARD | - | National Bank for Agriculture and Rural Development |
| NACH | - | National Automated Clearing House |

## LIST OF ABBREVIATIONS

| | |
|---|---|
| NAMCABS | - National Mission for Capacity Building of Bankers for Financing MSME Sector |
| NBFC | - Non-Banking Financial Company |
| NBFC-AA | - NBFC- Account Aggregator |
| NDA | - Net Domestic Assets |
| NDS-OM | - Negotiated Dealing System-Order Matching |
| NDTL | - Net Demand and Time Liabilities |
| NEFT | - National Electronic Funds Transfer |
| NFA | - Net Foreign Assets |
| NFC | - Non Food Credit |
| NFS | - National Financial Switch |
| NGOs | - Non-Government Organisations |
| NHB | - National Housing Bank |
| NIBM | - National Institute of Bank Management |
| NOF | - Net Owned Funds |
| NOFHC | - Non-Operative Financial Holding Company |
| NPA | - Non-Performing Asset |
| NPCI | - National Payments Corporation of India |
| NPI | - Non-Performing Investment |
| NPLL | - Normally Permitted Lending Limit |
| NPS | - National Pension System |
| NRIs | - Non-Resident Indians |
| NRLM | - National Rural Livelihood Mission |
| NRO | - Non-Resident Ordinary Rupee |
| NSEL | - National Spot Exchange Limited |
| NSFR | - Net Stable Funding Ratio |
| OBE | - Off Balance Sheet Exposures |
| OBO | - Office of Banking Ombudsman |
| OD | - Overdraft Facility |
| O-in-Charge | - Officer-in-Charge |
| OMO | - Open Market Operations |
| ORM | - Operational Risk Management |
| OROP | - One Rank One Pension |
| OSMOS | - Off-Site Monitoring and Surveillance System |
| OTC | - Over the Counter |
| P2P | - Peer-to-Peer |
| PACS | - Primary Agricultural Co-operative Societies |
| PDMA | - Public Debt Management Agency |
| PDs | - Primary Dealers |
| PFCE | - Private Final Consumption Expenditure |
| PFMIs | - Principles for Financial Market Infrastructures |
| PIOs | - Person of Indian Origin |
| PMG | - Project Monitoring Group |
| PMI | - Purchasing Managers Index |
| PMJDY | - Pradhan Mantri Jan-Dhan Yojana |
| POL | - Petroleum, Oil and Lubricant |
| PoP | - Point of Presence |
| PoS | - Point of Sale |
| PPIs | - Prepaid Payment Instruments |
| PSBs | - Public Sector Banks |
| PSLCs | - Priority Sector Lending Certificates |
| PSOs | - Payment System Operators |
| PSS | - Payment and Settlement Systems Act |
| PSU | - Public Sector Unit/Undertaking |
| QCCP | - Qualified Central Counterparty |
| QIB | - Qualified Institutional Buyer |

## LIST OF ABBREVIATIONS

QPM - Quarterly Projection Model
RAF - Risk Appetitie Framework
RBI - Reserve Bank of India
RBIA - Risk-Based Internal Audit
RBIQ - Reserve Bank of India Quiz
RBS - Risk-Based Supervision
RBSC - Reserve Bank Staff College
RD - Revenue Deficit
RDDBFI - Recovery of Debts Due to Banks and Financial Institutions
RDs - Regional Directors
RE - Revised Estimate
ReBIT - Reserve Bank Information Technology Private Limited
REER - Real Effective Exchange Rate
RFP - Request For Proposal
RGG - Returns Governance Group
RGS - Risk Governance Structure
RHF - Rural Housing Fund
RIDF - Rural Infrastructure Development Fund
RM - Reserve Money
RMD - Risk Monitoring Department
RO - Regional Office
RoA - Return on Assets
RRBs - Regional Rural Banks
RRs - Risk Registers
RTGS - Real Time Gross Settlement System
RTI - Right to Information Act
RTL - Risk Tolerance Limit
RTS - Risk Tolerance Statement
SAARC - South Asian Association for Regional Cooperation
SARFAESI - Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest
SBAs - Small Borrowal Accounts
SBI - State Bank of India
SCB - Scheduled Commercial Banks
SDDS - Special Data Dissemination Standards
SDL - State Development Loans
SDR - Strategic Debt Restructuring
SEACEN - South East Asian Central Banks
SEBI - Securities and Exchange Board of India
SFBs - Small Finance Banks
SFDB - SAARCFINANCE database
SFMS - Structured Financial Messaging System
SFS - State Finance Secretaries
SG - State Government
SGB - Sovereign Gold Bond
SHGs - Self-Help Groups
SIDBI - Small Industries Development Bank of India
SIDSPL - SWIFT India Domestic Services Private Limited
SIFMIs - Systemically Important Financial Market Infrastructures
SLBCs - State Level Bankers' Committees
SLR - Statutory Liquidity Ratio
SME - Small and Medium Enterprises
SNRR - Special Non- Resident Rupee
SPARC - Supervisory Programme for Assessment of Risk and Capital
SPMCIL - Security Printing and Minting Corporation of India Limited

## LIST OF ABBREVIATIONS

| | | |
|---|---|---|
| SRs | - | Security Receipts |
| StCBs | - | State Co-operative Banks |
| STOs | - | State Treasury Offices |
| STP | - | Straight-Through Processing |
| STRIPS | - | Separate Trading of Registered Interest and Principal of Securities |
| SWIFT | - | Society for Worldwide Interbank Financial Telecommunication |
| SWIPS | - | System-Wide Important Payment Systems |
| TAC | - | Technical Advisory Committee |
| TAG | - | Technical Advisory Group |
| T-Bills | - | Treasury Bills |
| TDS | - | Tax Deduction at Source |
| TE | - | Training Establishment |
| TLAC | - | Total Loss Absorption Capacity |
| TReDS | - | Trade Receivable and Discounting System |
| TV | - | Television |
| UAE | - | United Arab Emirates |
| UCBs | - | Urban Co-operative Banks |
| UDAY | - | Ujwal Discom Assurance Yojana |
| UHF | - | Urban Housing Fund |
| UN-ESCAP | - | United Nations Economic and Social Commission for Asia and the Pacific |
| VAPT | - | Vulnerability Assessment and Penetration Testing |
| VaR | - | Value at Risk |
| VECM | - | Vector Error Correction Model |
| VOFs | - | Visiting Officers Flat |
| WACR | - | Weighted Average Call Rate |
| WALR | - | Weighted Average Lending Rate |
| WI | - | When Issued |
| WLAs | - | White Label ATMs |
| WMA | - | Ways and Means Advances |
| WP | - | Working Paper |
| WPI | - | Wholesale Price Index |
| XBRL | - | eXtensible Business Reporting Language |
| y-o-y | - | Year-on-Year |

**This Report can be accessed on Internet**
**URL : www.rbi.org.in**

# GOVERNOR'S FOREWORD TO ANNUAL REPORT

1. The Reserve Bank's Annual Report informs the public both on the past year – our narrative of economic events as well as what we intended to accomplish during the past year – as well as what we propose to do in the coming year.

**Challenges in the Current Macroeconomic Environment**

2. Both the Government and RBI have been engaged in the last few years in restoring macroeconomic stability to the economy. While the policy actions have had positive effects, there are a number of areas which should be considered "work in progress". From RBI's perspective, three such areas continue to be of importance. First, economic growth, while showing signs of picking up, is still below levels that the country is capable of. The key weakness is in investment, with private corporate investment subdued because of low capacity utilisation, and public investment slow in rolling out in some sectors. Second, inflation projections are still at the upper limits of RBI's inflation objective. With the Reserve Bank needing to balance savers' desire for positive real interest rates with corporate investors' and retail borrowers' need for low nominal borrowing rates, the room to cut policy rates can emerge only if inflation is projected to fall further. Third, the willingness of banks to cut lending rates is muted; not only does weak corporate investment reduce the volume of new profitable loans, their stressed assets have tightened capital positions, which may prevent them from lending freely. Certainly, the reluctance to lend to industry and small businesses is more visible among the more stressed public sector banks compared to the private sector banks.

3. While these areas of concern have not changed significantly over the year, there have been some developments that bode well. Expectations of a good monsoon (corroborated thus far) coupled with more money in the hands of government servants (as a result of the implementation of the 7th Pay Commission recommendations) should boost consumer demand. With final demand picking up, capacity utilisation is likely to increase, and so will investment. A virtuous cycle of growth is possible, reinforced by anticipation of the coming benefits from reforms like the recently passed Goods and Services Tax legislation in Parliament.

4. The short term macroeconomic priorities of the Reserve Bank continue to be to focus on bringing down inflation towards the government-set target of 4 per cent – thus far the RBI has followed a gentle glide path, aiming at 5 per cent by March 2017 after having coming below 6 per cent in January 2016; work with the Government and banks on speeding up the resolution of distressed projects and completing the clean-up of bank balance sheets; ensure banks have the capital to make provisions, support new lending, and thus pass on future possible rate cuts. I elaborate briefly on these priorities.

*Inflation Target and MPC*

5. The Government has notified the inflation target for the RBI, and has outlined the structure and functions of a Monetary Policy Committee. Once the MPC is constituted, it will be entrusted with making future policy decisions. This will be a welcome step forward in strengthening the transparency, continuity, and independence of monetary policy.

*Liquidity Framework*

6. An important aspect of the new monetary framework is liquidity management. RBI has moved to a new liquidity framework in April 2016, after a detailed review. There is now a clearer differentiation between the durable liquidity needs of the system and its short term liquidity needs, with the RBI intending to move closer to neutrality over the medium term on supplying overall durable liquidity needs. When the RBI gets to neutrality, periods of temporary liquidity surplus should be broadly equalled by periods of temporary liquidity deficit over the course of the year. While net permanent liquidity needs will be addressed through open market operations in government bonds, taking into account any net foreign exchange purchases, temporary liquidity needs will be addressed through liquidity windows and overnight/term repos/reverse repos.

*Stressed Assets and Speedy Resolution*

7. A third area of short term focus with macroeconomic relevance is stressed asset resolution. The Asset Quality Review initiated in early 2015-16 has improved recognition of NPAs and provisioning in banks enormously. Some banks have taken significant steps in recognising incipient stress early.

8. Now more focus should move to improving the operational efficiency of stressed assets, and creating the right capital structure so that all stakeholders can benefit. This implies simultaneous action on two fronts. Where necessary, new management teams have to be brought in, sometimes as owners, and where not possible, as managers. Creative search for new management teams, including the possible use of public sector firms or private sector agents, is necessary, as are well-structured performance incentives such as bonuses for meeting cash flow/profit benchmarks and stock options. Of course, if the existing promoter is capable and reliable, they should be retained. Equally important, the capital structure should be tailored to what is reasonable, given the project's situation. If the loan is already an NPA, there is no limit to the kind of restructuring that is possible. If standard but the project is struggling, we have a variety of schemes by which a more sensible capital structure can be crafted for the project. These schemes include the 5/25, the SDR, and the S4A. A caveat is in order: some of the current difficulties comes from an unrealistic application by banks of a scheme so as to postpone recognition of a loan turning NPA rather than because of a carefully analysed move to effect management or capital structure change. RBI will continue monitoring to see that schemes are used as warranted.

**Medium Term Reforms**

9. Moving to the medium term, in the financial sector we need to increase efficiency through greater entry and competition. The most appropriate institutions will prevail when the competitive arena is level, so we have to remove regulatory privileges as well as impediments wherever possible, especially those that are biased towards some form of ownership or some particular institutional form. A critical component of the medium term strategy in the financial sector will be to strengthen our public sector banks in all aspects, including governance, cost structure, and balance sheets. Another intent, applicable to all financial institutions, is to strengthen risk management, including cyber risk. RBI's supervision will look into all these aspects, and also strictly enforce penalties for non-compliance with regulations or remedial action plans.

10. We need more participation in our financial markets to increase their size, depth, and liquidity. Participation is best enhanced not through subventions and subsidies but by creating supporting frameworks and new institutions that improve transparency, contract enforcement, and protections for market participants against abusive practices. Technology can be very helpful in reducing the costs of the supportive frameworks, and can bring hitherto excluded populations into the financial fold.

11. Finally, as more institutions and technologies bring more people into the financial system, we have to make sure they are adequately informed and protected. In 2015, RBI came out with 5 principles that banks had to follow in dealing with customers. We asked banks to implement this Charter of Customer Rights, and asked them to appoint an internal ombudsman to monitor the grievance redressal process. We now will examine how banks are faring, and whether further regulations are needed to strengthen consumer protection. In particular, we will focus this year on the issue of mis-selling, especially of insurance products. We will also focus on enhancing our communication with the broader public, with a view to informing them on what they need to do to take best advantage of financial opportunities, as well as protecting themselves. Finally, we will work to enhance grievance redressal procedures, both within the financial institutions, and if the customer is still unsatisfied, subsequently through the RBI's ombudsman scheme. Particularly important will be to strengthen redressal in rural areas, as well as to the weaker sections of society.

12. Internally, the RBI will continue to increase the specialisation of our staff, while strengthening the performance evaluation system so as to identify weaknesses, and the skilling system so as to provide remedial action. For senior staff, the accent will be on building leadership and general management skills, while exposing them to diverse opportunities. The broader effort will be to enhance the incentives for continuous self-improvement for each employee in the Bank, even while promotions take their natural course.

13. Of course, there is far more that the RBI is working on. I do not want to pre-empt the rest of this report, in what is meant to be a brief introduction to a very rich document. Thank you for your interest in it, and more generally, in the working of our central bank.

*For the Year July 1, 2015 to June 30, 2016**

## PART ONE: THE ECONOMY - REVIEW AND PROSPECTS

# I ASSESSMENT AND PROSPECTS

I.1 Against the backdrop of a global environment characterised by anaemic growth and heightened financial market volatility, the Indian economy posted gains in 2015-16. Economic activity picked up pace and the trajectory of growth was underpinned by macroeconomic stability embodied in narrowing fiscal and current account deficits and ebbing inflation. Domestic financial markets exhibited differential responses to episodic shifts in risk sentiment on global spillovers, with money and bond markets remaining relatively sheltered. In the first quarter of 2016-17, global risks intensified after remaining dormant in the aftermath of the turbulence that roiled global financial markets in January. The Brexit referendum initially shocked financial markets, producing overshoots and misalignments of asset prices and frantic churns of capital, but gave way to a reach for returns as an uneasy calm returned. These financial perturbations are increasingly taking a knock-on toll on real activity in advanced and emerging economies and present the biggest risk to their near-term outlook.

I.2 In this turbulent setting, underlying conditions have been firming up in India for scaling up the growth momentum. Progress of the southwest monsoon augurs well for agriculture and the rural economy. The seventh pay commission award may provide a stimulus to consumption spending within the targeted fiscal deficit through the multiplier effects of government consumption expenditure. On the external front, India became a preferred destination for foreign direct investment (FDI), receiving the highest annual net inflow in 2015-16. Indicators of external sustainability recorded a distinct improvement during the year. Elsewhere, however, particularly in the industrial sector, considerable slack and sluggishness continues to weigh upon the outlook. The capex cycle remains weak and private investment activity is listless. Even as the banking sector deals with high stress emanating from deterioration in corporate balance sheets and, therefore, loan quality, efforts have to be redoubled to free up credit flows to the productive sectors of the economy so that growth is supported. Alongside, perseverance with disinflation towards the medium-term CPI inflation goal of 4 per cent under a new monetary policy framework, anchoring states to high quality fiscal consolidation and concerted efforts to reverse the erosion of productivity and competitiveness will assume importance as the ambit of structural reforms widens.

* While the Reserve Bank of India's accounting year is July-June, data on a number of variables are available on a financial year basis, *i.e.*, April-March, and hence, the data are analysed on the basis of the financial year. Where available, the data have been updated beyond March 2016. For the purpose of analysis and for providing proper perspective on policies, reference to past years as also prospective periods, wherever necessary, has been made in this Report.

## ASSESSMENT: 2015-16

I.3 Looking back at the year gone by, private consumption remained the mainstay of the modest acceleration in real GDP growth, as in 2014-15. Fixed investment and exports were the missing drivers. Nonetheless, the sustained improvement in households' financial saving since 2013-14 has been a noteworthy development. The ongoing disinflation is freeing up real incomes, and interest rates – especially on small savings – turned positive in real terms. The significant improvement in corporate profitability, essentially on account of saving on input costs and more recently on sales growth, is expected to boost corporate saving and translate into investment spending going forward. Record inflows of foreign direct investment and the surge of initial public offerings after a four-year lull seem to be providing lead indications of this tipping point.

I.4 On the production side, agriculture weathered two consecutive years of drought conditions and posted modest growth in contrast to the contraction a year ago. This resilience, aided by astute supply management, smoothed breaks in availability of farm output and restrained food price pressures. Industrial output slowed down in relation to a year ago, despite a turnaround in consumer durables. Consumer non-durables posted a decline after six years of expansion, mainly on account of contraction/deceleration in fast moving consumer goods which, in turn, reflected the subdued state of rural demand. Going forward, the improvement expected in agricultural activity could reverse this deterioration and boost rural incomes. A sustained turnaround in capital goods output would, however, await a revival of investment demand. In the services sector, a deceleration was evident across all constituents as new business orders slowed and exports were impacted by weak external demand.

I.5 In the infrastructure space, electricity generation reached 98 per cent of the annual target, with the highest ever annual capacity addition in the solar and wind energy segments. Seventeen states have given in-principle approval/joined the Ujwal DISCOM Assurance Yojana (UDAY). The hope is that as the DISCOMs become debt-lite, their financial and operating efficiency will improve and the slack in demand will progressively decline. However, continuing efforts in these directions, including on enhancing collections and reducing line losses, are needed. In the road sector, there was significant improvement in terms of new constructions, especially in the national highway network. While this progress has been mainly public investment-driven, policy measures such as ease of exit, injection of funds into languishing projects at a pre-determined rate of return and the innovative hybrid annuity model will likely enhance private interest in the sector. Notable progress was also achieved in railways in terms of capital investment, commissioning of broad gauged lines and electrification of railway tracks. Major ports in India, especially private ports, also recorded the highest ever capacity addition in a single year.

I.6 Benign inflation conditions prevailing until August 2015 were dispelled by the sustained elevation in prices of pulses. Consequently, inflation picked up from September and rose month after month till January 2016, *albeit* remaining below the target of 6 per cent set for that month. In the ensuing three months, inflation eased on the back of the seasonal decline in prices of fruits and vegetables but picked up again from May 2016 as food prices firmed up ahead of the onset of the monsoon.

I.7 Monetary conditions reflected an interplay of diverse factors. An unusually high and protracted demand for currency drove up the expansion of reserve money and muted the money multiplier which, in turn, moderated the rate of money supply. Anecdotal evidence suggests several forces at work – the simultaneous conduct of elections in various states; a possible response to increases in the rate of service tax; the jewellers' strike protesting excise duty increases in the Union Budget, which effectively impeded the return flow of currency. Bank credit was generally sluggish in the first half of the year, reflecting lacklustre demand in the economy, asset quality concerns, the ongoing deleveraging through write-offs, recoveries and upgradations, and some amount of disintermediation in favour of relatively cheaper source of funds outside the banking system. In the second half of the year, however, bank credit growth picked up in the retail segment and also to industry and agriculture. Timely recognition of the deterioration in banks' balance sheets through the Reserve Bank's asset quality review resulted in the overall stressed assets ratio rising marginally by end-March 2016 from its level a year ago, with a rise in the gross NPA ratio but a fall in the restructured assets ratio. Banks' profitability was affected by provisioning requirements. Going forward, the stage is set for continued efforts to declog the banking system and enable credit to flow to productive sectors.

I.8 With the fiscal deficit declining to 3.9 per cent of GDP, central finances were revenue-driven in 2015-16 – additional revenue mobilisation through cesses; duty revisions in respect of petrol and diesel; higher dividend and profits; and earnings from spectrum auctions. Significantly, there were no cutbacks to budgeted capital expenditure. By contrast, states overshot the budgeted deficit, mainly on account of shortfall in revenues.

I.9 In the external sector, a faster pace of contraction in imports relative to exports and large terms of trade gains narrowed the current account deficit to 1.1 per cent of GDP, which was comfortably financed along with sizable accretion to reserves. In terms of financing, a noteworthy feature of 2015-16 was the highest ever inflows of foreign direct investment, impervious to the bouts of turbulence in the international financial markets. By the end of the year, the level of reserves was equivalent of 11 months of imports. Other indicators of external sustainability also recorded improvement.

## PROSPECTS: 2016-17

I.10 In the aftermath of the Brexit referendum, the outlook for the global economy has weakened, as reflected in downgrades of projections by multilateral agencies. Although the extreme financial market reactions to its announcement have subsided and financial asset prices have regained lost ground, high uncertainty regarding its evolution may shadow the course of a fragile and slowing global recovery in the year ahead and possibly even beyond.

I.11 So far, the effects of Brexit on the Indian economy have been relatively muted, including the immediate impact on equity and foreign exchange markets. Yet, in view of the linkages to the UK and the euro area, spillovers through trade, finance and expectations channels cannot be ruled out as events unfold. Abstracting from these external shocks, the near-term domestic outlook appears somewhat brighter than the outcome for 2015-16. While a durable pick-up in investment activity remains elusive, consumption will continue to provide the main support to aggregate demand and may receive a boost from the revival of rural demand in response to the above-normal and spatially well-distributed southwest monsoon as well as from the seventh pay commission's award. Notably, the impact of the fifth and sixth pay commissions' awards on growth was also positive. Agricultural and allied activities are expected to benefit substantially from the distinct improvement in moisture conditions.

I.12 Industrial activity has been in contraction mode in the early months of 2016-17, pulled down by manufacturing. Looking ahead, no strong drivers are discernible at this juncture that could engineer a turnaround. Export demand also remains anaemic. Successive downgrades of global growth projections by multilateral agencies and the continuing sluggishness in world trade points to further slackening of external demand going forward. Some support to industrial activity may, however, stem from the recent measures taken by the Government such as 100 per cent FDI in defence, civil aviation, pharmaceuticals and broadcasting.

I.13 Service sector activity is likely to receive a stimulus especially under the category of public administration, defence and other services as public expenditure on wages, salaries and pensions translates into disposable incomes. Overall GVA growth is, therefore, projected at 7.6 per cent in 2016-17, up from 7.2 per cent last year. A better than anticipated agricultural performance and the possibility of allowances under the seventh pay commission's award being paid out in Q4 of 2016-17 provide upsides to this projection. On the other hand, a rise in the implicit GVA deflator as WPI inflation hardens will operate as a statistical downside.

I.14 Headline CPI inflation has ranged above target in the first quarter of 2016-17, driven up by the seasonal surge in prices of fruits and vegetables and protein-rich items on top of still elevated prices of pulses and sugar. With the steady progress of the southwest monsoon, however, these prices are likely to moderate over the ensuing months. A heartening development is the recent softening of inflation excluding food and fuel, which could sustain if international crude prices remain soft and, in turn, hold down prices of petrol and diesel embedded in transport and communication services. Further, pulses production may likely increase with a softening impact on food inflation. Thus, headline inflation is expected to trend towards the target of 5 per cent by the last quarter of the year, although at the current juncture, upside risks are prominent. If the current softness in crude prices proves to be transient and as the output gap continues to close, inflation excluding food and fuel may likely trend upwards and counterbalance the benefit of the expected easing of food inflation. It is also important to take note of the impact of the implementation of the seventh pay commission's award on the future trajectory of headline inflation. The largest effects are expected to emanate from increased house rent allowance in the CPI, which may raise headline inflation in a purely statistical manner. In addition, indirect effects through demand and expectations channels could add to the headline CPI's path. In aggregate, the impact of the pay commission is expected to peak by September 2017. Separating statistical effects from those that impart a durable upside to inflation will complicate the setting of monetary policy going forward, especially in the management of inflation expectations.

I.15 The commitment of the central government to the path of fiscal consolidation in 2016-17 has enhanced the credibility of fiscal policy, which will, in turn, help in anchoring inflation expectations and in improving the business environment, including by fostering credibility among international investors. A conducive environment has also been created through appropriate incentives/penalties for states to renew their fiscal consolidation. The passage of the Goods and Services Tax (GST) Bill marks a new era in co-operative fiscal federalism and a growing political consensus for economic reforms. The implementation of the GST would boost trade, investment and growth by reducing supply chain rigidities, encouraging scale economies, cutting down transportation and transaction costs, as also promoting efficiency gains. By eliminating the cascading impact of taxes on production and distribution costs, the GST would also improve the overall competitiveness of the economy. The impact of GST on CPI inflation would largely depend on the standard rate that would be decided by the GST council; however, the impact is likely to be low, with around 54 per cent of the CPI basket exempt from the GST. As regards public finances, the GST is expected to widen the tax base, result in better tax compliance and reduce the cost of tax collection.

I.16 As regards implementation of the recommendations of the pay commission, it is noteworthy that nearly 90 per cent of the estimated payout on account of pay, pension and arrears in 2016-17 has already been provided for in the Union Budget. However, states tend to mimic central pay and pension implementation. To the extent that states have provided for these outgoes, no deviations from the budgeted targets are envisaged at this juncture. For states that have not made such provisions in their respective 2016-17 budgets, the implementation of the pay commission's recommendations may impose a deviation from fiscal targets in the absence of off-setting fiscal measures, entailing a risk to general government finances, with spillovers to aggregate demand.

I.17 India's external position is viable and well-buffered to sustain a pick-up in non-oil non-gold imports as growth gathers momentum. Nevertheless, the external environment continues to pose challenges stemming from large currency movements, a rising incidence of protectionist measures, swift and massive movements of capital and the amplification of uncertainty by the Brexit vote. Furthermore, the sustenance of terms of trade gains would be predicated upon movements in international commodity prices. Even as the outlook for capital inflows is optimistic with the recent liberalisation of FDI policy, the repayment of FCNR(B) deposits under the special swap scheme due in September to November 2016 will need to be managed carefully. In this context, the level of reserves and covering through forward assets provide ample resources.

I.18 Turning to the agenda of structural reforms to reap efficiency and productivity gains, several important steps that are underway need to be persevered with and taken to their logical conclusion. The UDAY scheme has provided a one-time opportunity to DISCOMs to regain financial viability. Going forward, it is important to avoid the recurrence of loss building processes for DISCOMs. In this regard, the MoUs signed by the state governments with the Government of India need to be monitored closely and clauses with regard to user charges and administrative reforms need to be enforced. Another important area of ongoing reforms is the banking sector for which stressed assets need to be unlocked and put back to work. The enactment of the Insolvency and Bankruptcy Code will make it easier for sick companies to either wind up or turn around, and for investors to exit. The Parliament has also passed amendments to strengthen the Debt Recovery Tribunals for speedier resolution of stressed assets. Efforts need to be made to re-energise asset reconstruction companies (ARCs) – which have played a critical role in managing NPAs in many countries – by resolving issues relating to their capital requirements and enabling price discovery for NPAs/security receipts so that they can be traded in open, competitive markets that ensure liquidity. In all these issues, harnessing asset management expertise of foreign investors could offer synergies with their business models. The financial landscape is poised to undergo a significant transformation with the setting up of new institutions and enabling niche strategies. On-tap licensing of banks will facilitate expanding the universal banking network. Furthermore, the arrival of peer-to-peer lending and other Fin Tech-leveraged financial entities is expected to expand the reach of finance through innovative technological platforms.

I.19 Finally, the need for intensifying structural reforms in factor markets, particularly land and labour, is now widely seen as necessary for realising the potential of the economy and for avoiding jobless growth. In this context, various levels of government need to act together for the best results. First, labour regulations are often cited to be a significant barrier to growth, particularly with regard to large and medium scale manufacturing firms. Initiatives taken by some state governments to amend labour laws are a good starting point. Second, land acquisition processes are another critical factor affecting the pace of investment. State governments may consider putting in place a transparent and viable framework, de-bottlenecking land constraints, *e.g.*, as in Andhra Pradesh, to drive the capex cycle. Third, marketing infrastructure is critical. The National Agriculture Market (NAM) – a pan-India electronic trading platform – is an important example towards setting up a common agriculture market.

# II ECONOMIC REVIEW

*A moderate recovery characterised domestic macroeconomic conditions in 2015-16, set against a global economy struggling to gain traction. Notwithstanding anaemic external conditions combined with sudden swings in asset prices and capital flows on global cues, macroeconomic stability and external viability were sustained. Stimulating private investment and reinvigorating the banking sector while maintaining macroeconomic stability remain the key challenges in the year ahead.*

## II.1 THE REAL ECONOMY

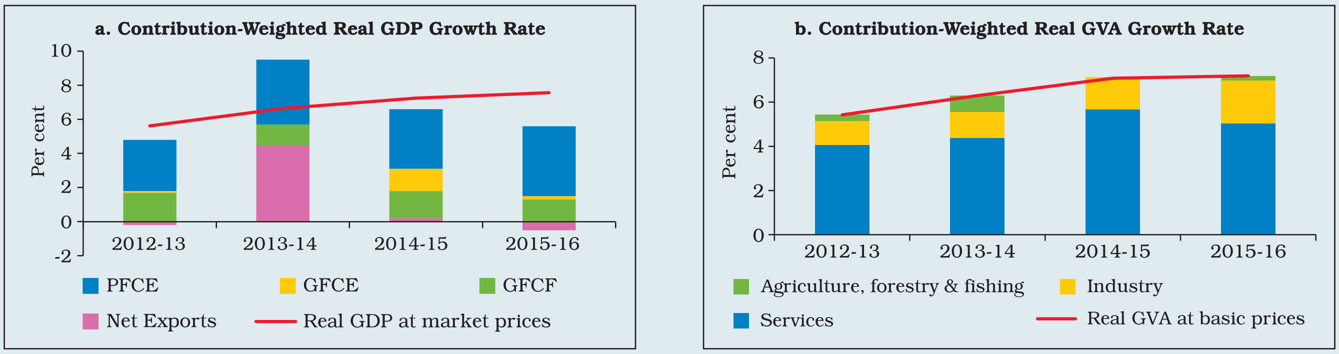
II.1.1 Provisional estimates of the Central Statistics Office (CSO) indicate that a moderate recovery characterised macroeconomic conditions in 2015-16, with a slight pick-up in pace in the second half of the year despite the drag from slowing investment. Private final consumption remained the bedrock of domestic demand, expanding to contribute over half of the overall GDP growth. Ongoing fiscal consolidation restrained government consumption during 2015-16. Net exports were muted by the still depressed global trading environment as in the preceding year; however, a turnaround in their contribution to the growth of aggregate demand occurred in the second half of the year. This was in part due to the pace of contraction of imports outpacing that of exports, and in part due to gains in net terms of trade.

II.1.2 As regards aggregate supply, agricultural and allied activities were buffeted by headwinds from deficiencies in precipitation and coverage in both monsoon seasons during the year, as well as floods and cyclones in the southern region in Q3 and unseasonal rains and hail in the western region in Q4. That the sector managed to post positive growth in sharp contrast to a year ago – despite an absolute contraction in Q3 – attests to its growing resilience and weather-proofing, and the rising profile of horticulture and allied activities that are relatively less rain-dependent. Value added in industry gathered momentum, especially in the second half of 2015-16, with the large boost provided by the decline in input costs offsetting the stalling evolution of industrial output and more recently, on sales growth. Activity in the services sector maintained a stable pace of expansion across constituents, although financial services, real estate and professional services experienced some slackening of pace in the second half. Overall, domestic economic activity was shored up by macroeconomic stability as reflected in falling inflation and narrowing current account and fiscal deficits. The stable pace of expansion of the economy, though moderate by pre-crisis standards, stood out in a weakening global economy facing an accentuation of downside risks and heightened financial volatility.

*Aggregate Demand*

II.1.3 The pace of expansion in real GDP at market prices gained further momentum in 2015-16 (Chart II.1a). Among the constituents of aggregate demand, private final consumption expenditure (PFCE) benefited from higher real incomes enabled by the steady disinflation and rebounded in 2015-16 from the deceleration that set in a year ago. The improvement was powered by urban consumption as reflected in the coincident surge in sales of passenger vehicles. By contrast, rural consumption was subdued, with two consecutive years of deficient monsoons having taken a toll on rural incomes. Moreover, rural wage

**Chart II.1: Growth of Real GDP and Real GVA**

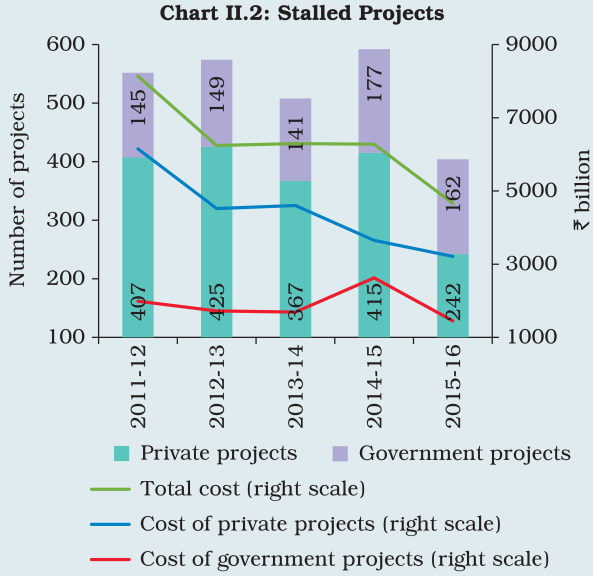



PFCE: Private final consumption expenditure; GFCE: Government final consumption expenditure; GFCF: Gross fixed capital formation.
**Note:** Component-wise contributions do not add up to real GDP growth as change in stocks, valuables and discrepancies are not included.

growth moderated as falling inflation allowed for nominal wages growth to ease and market wage rates converged to minimum wage levels induced by the MGNREGA effect.

II.1.4 Gross fixed capital formation (GFCF) remained subdued during 2015-16. At the same time, business sentiment improved in response to several initiatives such as 'Make in India' and faster clearances of stalled projects, particularly, in respect of non-environmental permissions (Chart II.2). The Project Monitoring Group cleared 168 large projects in 2015-16, involving a year-on-year doubling of the value of investment, with the majority of these projects in the power, roads, coal and petroleum sectors. Although private investment remained muted and risk aversion tightened financial conditions, drivers appear to be coming together to provide a congenial ecosystem for a possible turnaround in the capex cycle. Accordingly, the slackening of the overall rate of investment in 2014-15 – for the third year in succession – could have bottomed out in 2015-16. The continuing improvement in saving by private non-financial corporations and a steady reduction in dis-saving by the general government sector are likely to partially offset the decline in households' physical saving and the pressure on the resources of public sector financial and non-financial corporations. Preliminary estimates showed that the household net financial saving rate increased to 7.7 per cent of gross national disposable income (GNDI) in 2015-16 from 7.5 per cent in 2014-15 and 7.4 per cent in 2013-14. The improvement reflected a higher rate of increase in gross financial assets in relation to that in financial liabilities. The increase in gross financial assets was driven primarily by a turnaround in small savings and increases in investment in equities and mutual funds, tax-free bonds by public sector units and currency holdings

**Chart II.2: Stalled Projects**




**Source:** Centre for Monitoring Indian Economy (CMIE).

**Table II.1: Financial Saving of the Household Sector**

(Per cent of GNDI)

| Item | 2011-12 | 2012-13 | 2013-14* | 2014-15* | 2015-16* |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| **A. Gross financial saving** | **10.4** | **10.4** | **10.4** | **10.0** | **10.8** |
| *Of which:* | | | | | |
| 1. Currency | 1.2 | 1.1 | 0.9 | 1.1 | 1.4 |
| 2. Deposits | 6.0 | 6.0 | 5.8 | 4.9 | 4.7 |
| 3. Shares and debentures | 0.2 | 0.2 | 0.4 | 0.4 | 0.7 |
| 4. Claims on government | -0.2 | -0.1 | 0.1 | 0.0 | 0.4 |
| 5. Insurance funds | 2.2 | 1.8 | 1.6 | 1.9 | 2.0 |
| 6. Provident and pension funds | 1.1 | 1.5 | 1.6 | 1.6 | 1.5 |
| **B. Financial liabilities** | **3.2** | **3.2** | **3.0** | **2.5** | **3.0** |
| **C. Net financial saving (A-B)** | **7.2** | **7.2** | **7.4** | **7.5** | **7.7** |

*: As per the latest estimates of the Reserve Bank; GNDI : Gross national disposable income.
**Note:** Figures may not add up to total due to rounding off.
**Source**: CSO.

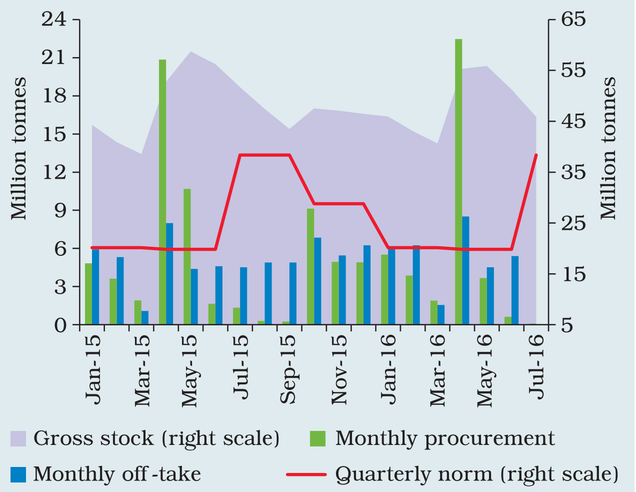
even as the growth in bank deposits held by the households moderated (Table II.1). Financial liabilities also surged reflecting higher borrowings from banks and housing finance companies by the households during the year.

*Aggregate Supply*

II.1.5 Real gross value added (GVA) growth at basic prices recorded a marginal pick-up in 2015-16, held back by the slowing rate of growth in the services sector even as industrial activity accelerated and agriculture and allied activities recovered from the contraction a year ago.

II.1.6 GVA from agriculture and allied activities posted a modest growth in 2015-16, in spite of a second consecutive sub-normal monsoon year. The southwest monsoon fell short of normal precipitation levels by 14 per cent on top of the deficiency of 12 per cent in the preceding year's season, with 17 sub-divisions out of 36 receiving deficient rainfall. The northeast monsoon was also below the long period average (LPA) by 23 per cent with a highly skewed distribution. Weather vagaries in the form of cyclones took their toll towards the close of the season. Reservoir levels were depleted to decadal lows. Notwithstanding these setbacks, the fourth advance estimates of the Ministry of Agriculture have placed foodgrains production for the year at 0.1 per cent higher than in the previous year, mainly due to increase in wheat production. All other major foodgrains as well as commercial crops fell below 2014-15 levels. However, buffer stocks of foodgrains ended the year comfortably above the food stock norms for Q4 due to higher procurement, which also supported higher off-take during the year (Chart II.3). In 2016-17 so far, despite a delayed and tepid

**Chart II.3: Food Stock and its Determinants**




**Note:** Data for off-take up to June 2016.
**Source:** Food Corporation of India and Ministry of Consumer Affairs, Food and Public Distribution.

beginning, the southwest monsoon has gained momentum since the third week of June, bridging the gaps in precipitation across the agro-climatic regions of the country. As on August 18, 2016, the cumulative rainfall was at its LPA level as against 9 per cent below LPA in the corresponding period of the previous year, leading to an increase of 6.5 per cent in *kharif* sowing, thus far.

II.1.7 In the industrial sector, value added and its contribution to overall GVA growth surged during 2015-16 (Chart II.1b). In terms of volumes, there was a slowdown from the subdued turnaround in industrial production in the preceding year (Table II.2). While mining accelerated to its highest growth in the past five years, a sharp deceleration in basic metals and contraction in food processing suppressed manufacturing output. The continuing contraction in hydel power constrained a fuller overall expansion in electricity generation. Hamstrung demand from financially stressed DISCOMs operated as a major dampener for plant load factor in respect of thermal power. The disconnect between the largely subdued production and the robust value added for manufacturing reflected the changes in methodology of compilation and data sources of the new GVA series as well as the sharp decline in input costs, shoring up value added and profits. The lacklustre performance of manufacturing continued through the first quarter of 2016-17, dragging overall index of industrial production (IIP) growth lower than that in the corresponding period of the previous year, even as mining and electricity witnessed improvement. Hydel power generation that has been in prolonged contraction mode, however, is expected to pick-up as reservoirs get replenished.

II.1.8 In terms of use-based activity, capital goods output contracted during 2015-16, extending a protracted lacklustre performance that set in from 2011-12 except 2014-15. The production of insulated rubber cables turned out to be the main drag in this constituent. Excluding lumpy and order-based insulated rubber cables, which have a miniscule weight in the IIP but suffered an average monthly decline of 85.6 per

**Table II.2: Index of Industrial Production**

(Per cent)

| Industry Group | Weight in IIP | Growth Rate | | | | | |
|---|---|---|---|---|---|---|---|
| | | 2012-13 | 2013-14 | 2014-15 | 2015-16 | April-June | |
| | | | | | | 2015 | 2016 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| **Overall IIP** | **100.0** | **1.1** | **-0.1** | **2.8** | **2.4** | **3.3** | **0.6** |
| Mining | 14.2 | -2.3 | -0.6 | 1.5 | 2.2 | 0.4 | 2.3 |
| Manufacturing | 75.5 | 1.3 | -0.8 | 2.3 | 2.0 | 3.7 | -0.7 |
| Electricity | 10.3 | 4.0 | 6.1 | 8.4 | 5.7 | 2.3 | 9.0 |
| **Use-Based** | | | | | | | |
| Basic goods | 45.7 | 2.5 | 2.1 | 7.0 | 3.6 | 4.7 | 4.8 |
| Capital goods | 8.8 | -6.0 | -3.6 | 6.4 | -2.9 | 2.0 | -18.0 |
| Intermediate goods | 15.7 | 1.6 | 3.1 | 1.7 | 2.5 | 1.6 | 4.1 |
| Consumer goods | 29.8 | 2.4 | -2.8 | -3.4 | 3.0 | 2.5 | 0.6 |
| Consumer durables | 8.5 | 2.0 | -12.2 | -12.6 | 11.3 | 3.7 | 7.8 |
| Consumer non-durables | 21.3 | 2.8 | 4.8 | 2.8 | -1.8 | 1.7 | -4.1 |

**Source:** CSO.

cent during November-March 2015-16, capital goods output would have risen by 6.0 per cent and the overall IIP by 3.5 per cent. Nonetheless, the depressed production of capital goods, especially machinery, reflects subdued investment demand in the economy. The drag of insulated rubber cables continued beyond 2015-16 into April-June 2016 and is expected to persist for some more time. Excluding insulated rubber cables, IIP growth during April-June 2016 would have been 3.6 per cent, instead of growth of 0.6 per cent. Consumer goods output in 2015-16 came out of contraction in the preceding two years, driven up by durables (mainly gems and jewellery) which offset the decline in consumer non-durables (mainly food products and beverages). The turnaround of consumer goods production was, however, tentative and primarily powered by favourable base effect. Trends in consumer goods production – both for durables and non-durables in April-June 2016 remained broadly unchanged.

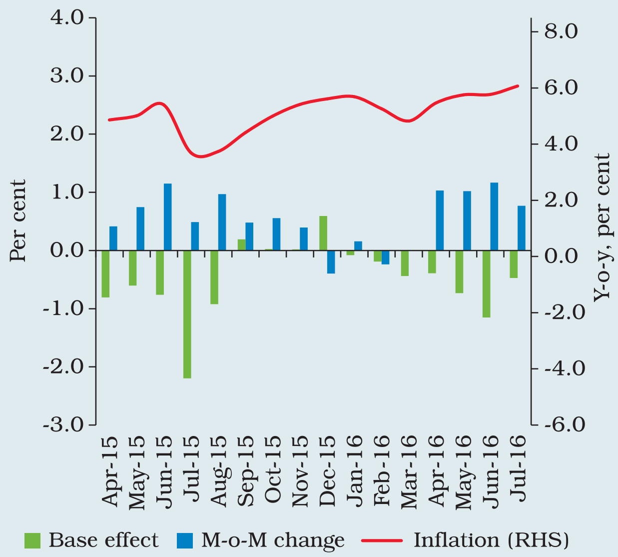
II.1.9 GVA in the services sector decelerated across-the-board in 2015-16, with the slowdown concentrated in public administration, defence and other services. Lead/coincident indicators were mostly softer than a year ago. Steel consumption and cement production improved in Q4. As regards transportation activity, freight/cargo handled by railways, ports and domestic aviation decelerated. On the other hand, domestic air passenger traffic and sales of commercial and passenger vehicles rose strongly and mitigated the downturn in the sub-sector. Communication activity was impacted by slowing net additions to cell phone connections due to the introduction of inter-state number portability. Trade, hotels and restaurants were affected by a deceleration in foreign tourist arrivals. The category of public administration, defence and other services was held down by the ongoing restraint on public expenditure. The performance of services sector indicators during April-June 2016, continues to emit mixed signals with auto sales, port cargo, tourist arrivals and cement production accelerating even as railway freight and steel consumption contracted while the aviation sector decelerated.

II.1.10 The favourable impact of the normal monsoon is expected to work in conjunction with the implementation of the seventh pay commission's recommendations to provide a boost to consumption demand. Keeping in view the provision made by the central government for additional expenditure on account of pay and pension in its budget for 2016-17, its overall impact is estimated at around 30 basis points (bps) in the GVA growth projected by the Reserve Bank for 2016-17.

## II.2 PRICE SITUATION

II.2.1 Inflation, as measured by the consumer price index (CPI), evolved through three phases during 2015-16. In the early months of the year, food price pressures stemming from unseasonal rains and subsequently from a delayed and skewed onset of the southwest monsoon were muted by strong favourable base effects. By July-August, 2015 inflation ebbed to an intra-year low of 3.7 per cent, the lowest since November 2014. In the second phase from September, the base effects dissipated and inflation rose unrelentingly month after month to 5.7 per cent in January 2016, *albeit* falling below the target of 6 per cent set for that month in the medium-term disinflation glide path (Chart II.4). Prices of pulses – in particular, *arhar* – emerged as the main driver of this upsurge. In February-March 2016, *i.e.*, in the third phase, vegetable prices declined and surprised on the downside. Favourable tailwinds from corrections in prices of pulses and downward adjustments in fuel prices pulled down headline inflation to 4.8 per cent in March 2016.

Chart II.4: Movements in Headline Inflation

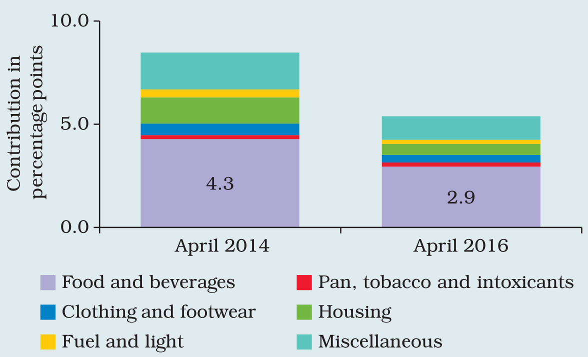



II.2.2 For the year as a whole, inflation averaged 4.9 per cent, down from 5.8 per cent in the preceding year (Appendix Table 4). Sub-group wise, annual average inflation declined across all the major categories, except in the case of fuel and light. The current phase of disinflation in India is driven by a combination of positive developments on the supply side such as fall in global commodity prices and the proactive role played by the government in managing food prices as also the anti-inflationary monetary policy stance of the Reserve Bank (Box II.1). Households' inflation expectations, which had been persistently elevated, adapted to these developments and current perceptions as well as near-term expectations edged down. Inflation

## Box II.1
## Decoding Disinflation

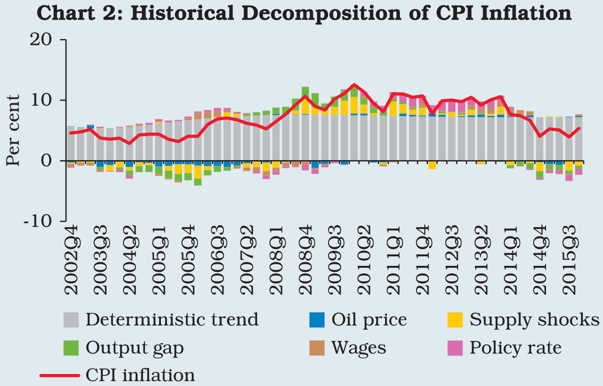
Estimated relative contributions of different sub-groups within the consumer price index (CPI) point to significant roles of both favourable supply side factors and the lagged effects of anti-inflationary thrust of monetary policy. A statistical decomposition of contribution of different sub-groups within CPI indicates that the major contribution to disinflation emanated from the food group mainly on account of the government's astute supply management policies and also from the fall in global food prices (Chart 1).

Chart 1: Contribution to Inflation Moderation




In order to disentangle the roles of demand, supply and policy interventions, a historical decomposition from a vector autoregression (VAR) on CPI inflation, policy rate, crude oil price, output gap and rural wages using quarterly data from 2002:Q4 onwards was attempted. This showed that policy rate changes accounted for about one-fourth of the decline in inflation during April 2014 to December 2015 (Chart 2).

Chart 2: Historical Decomposition of CPI Inflation




Historical decomposition allows identifying the contribution of shocks emanating from each exogenous variable during a specific period in the sample unlike the conventionally used variance decomposition, which explains the forecast error over the whole sample.

Slowdown in rural wage growth, supply management policies and the decline in oil prices were other facilitating factors.

**References:**

Anand, Rahul, Ding Ding and Volodymyr Tulin (2014). "Food Inflation in India – The Role of Monetary Policy", IMF Working Paper WP/14/178, September.

Rajan, Raghuram (2016). "Policy and Evidence" – speech delivered at the 10th Statistics Day Conference 2016, Reserve Bank of India, Mumbai.

expectations of other agents also mirrored this downshift.

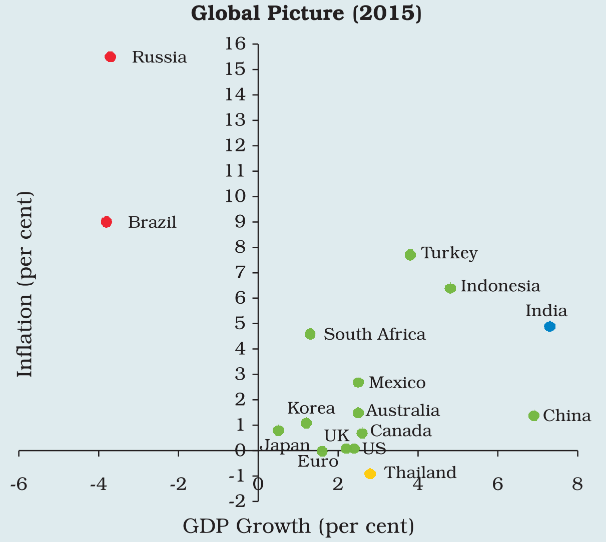
II.2.3 During April-July 2016, a sharper than anticipated upturn in the prices of vegetables, sugar, protein-rich items, fruits and pass-through of the increase in global crude oil prices to pump prices of petrol and diesel, reversed the tide. Consequently, inflation recorded a 23-month high at 6.1 per cent in July 2016.

II.2.4 Cost conditions were relatively benign during 2015-16, contributing to the disinflationary momentum. Globally, a sizable slack and weak commodity prices kept inflation subdued, with the UK, Japan, Europe and Thailand overcast with deflation risks. In some EMEs even as recession set in (Brazil and Russia), currency depreciation and structural bottlenecks kept inflation elevated (Chart II.5).

II.2.5 Crude oil prices treaded softly throughout the year – barring short-lived upticks on incoming data – and dipped to US$ 28 a barrel in January 2016, a 12-year low in terms of the Indian basket of crude oil. Non-energy commodity prices, particularly of metals and agricultural products also remained soft in the presence of spare capacity and weak demand (Chart II.6). These developments depressed input costs in India considerably, especially those relating to raw materials and intermediates.

II.2.6 Falling costs, especially on account of declining international commodity prices, kept wholesale price index (WPI) inflation in negative territory for 17 consecutive months up to March 2016. Other indicators of inflation as measured by CPI-IW, CPI-AL, CPI-RL and the GVA deflator also eased during 2015-16. Minimum support price (MSP) increases were much more moderate in 2015-16 than in earlier years. Growth rates of rural wages and employee compensation in the organised sector were modest and the corporate sector reported slower growth in staff costs. Although input prices picked up towards the latter part of the year as polled in purchasing managers' indices (PMIs) and surveys of business (including the Reserve Bank's Business Expectations Survey), the weakness in pricing power prevented a complete translation into output price increases.

**Chart II.5: GDP Growth and Inflation - Global Picture (2015)**




**Source:** World Economic Outlook Database, April 2016.

**Chart II.6: Trends in International Commodity Prices**

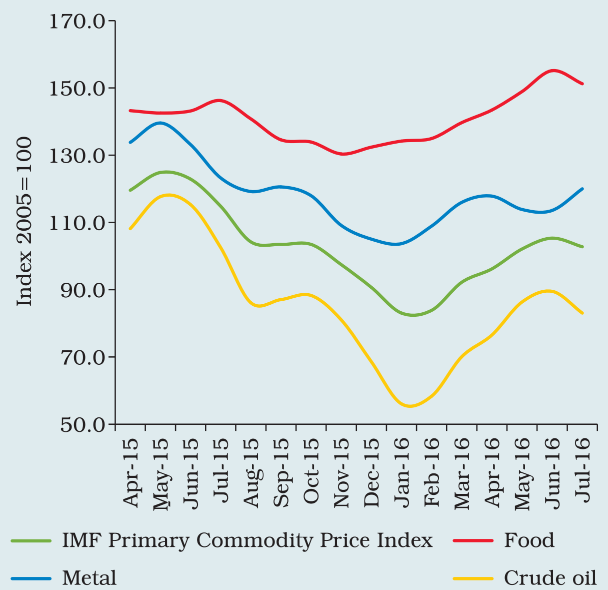


Chart II.7: Reconciliation of CPI and WPI Inflation Divergence

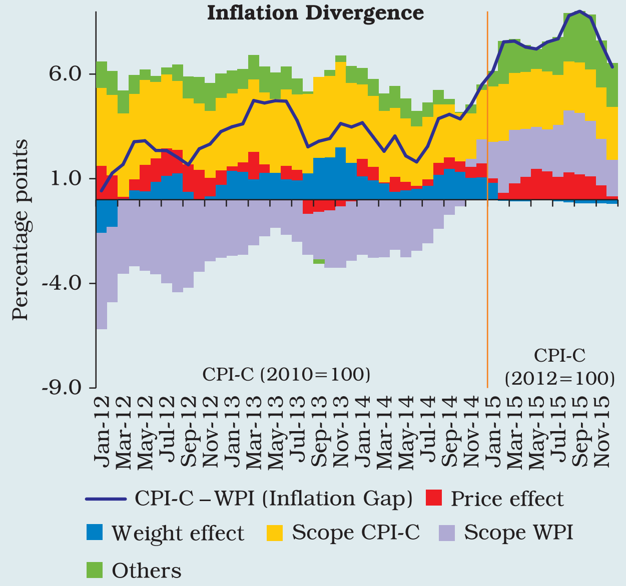
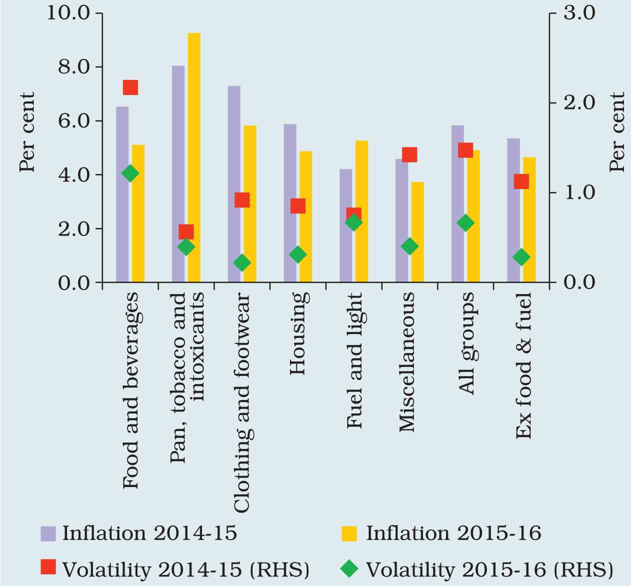



Chart II.8: Inflation and Inflation Volatility




II.2.7 The wide divergence between inflation measured by CPI and WPI was a striking feature of price developments during 2015-16. The divergence in inflation of 7.6 percentage points during 2015 can be explained as the combined impact from: a) difference in prices recorded for similar items (0.9 percentage points); b) difference in weights for similar items (0.03 percentage points); c) difference in inflation for dissimilar items, that is, scope effects (4.9 percentage points); and d) other effects including the differences in the formulae for compilation of these indices (1.8 percentage points)[1]. The large contribution of scope effects to the overall divergence is unique to 2015 - WPI deflation was concentrated in tradables like basic and intermediate commodities whereas CPI inflation with respect to non-tradables like services, including housing, showed unusual persistence. In a period of rising commodity prices, however, these scope effects tend to cancel out (Chart II.7).

*Constituents of Inflation*

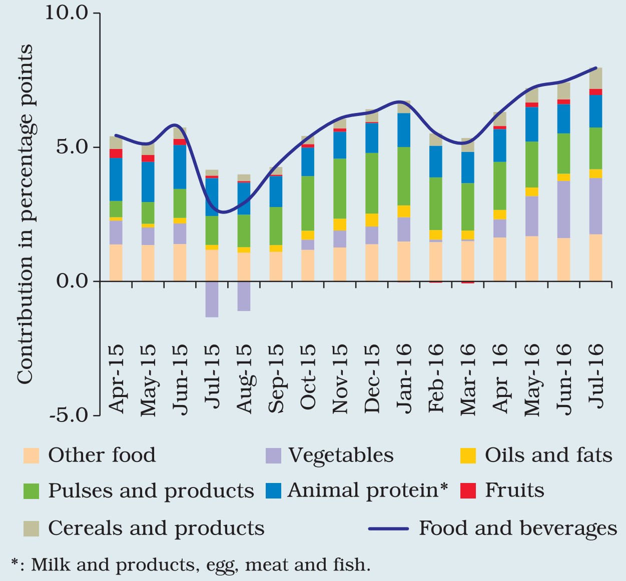
II.2.8 Inflation generally edged down across constituent categories and its volatility was also seen ebbing across the major sub-groups (Chart II.8). While the fuel group was an outlier, the downward inflexibility and persistence in inflation excluding food and fuel, over the greater part of the year was another noteworthy development with implications for inflation dynamics going forward.

*Food*

II.2.9 The category comprising food items constitutes 45.9 per cent of CPI and contributed 50 per cent to overall inflation in 2015-16. Within this category, inflation with respect to cereals, fruits and animal-based protein items remained broadly range-bound; pulses and products were the main contributors to food inflation (Chart II.9). Pulses alone contributed 15 per cent to overall inflation during 2015-16 despite a relatively small

[1] Das, P. and A. T. George, (2016), "Comparison of Consumer and Wholesale Price Indices in India: An Empirical Examination of the Properties, Source of Divergence and Underlying Inflation Trends", UN-ESCAP, Asia-Pacific Statistics Week, May. http://communities.unescap.org/economic-statistics/asia-pacific-economic-statistics-week/seminar-papers-and-presentations.

**Chart II.9: Drivers of Food Inflation**




weight of 2.4 per cent in CPI. Besides the shortfall in production during 2014-15 and the absence of a procurement mechanism until 2015-16, a number of structural factors such as sensitivity to pests and natural calamities kept inflation with respect to pulses at elevated levels. Unseasonal rainfall and temporary supply-demand mismatches pushed up vegetable prices, particularly of onions, during June-September 2015. A number of measures were taken by the government to break the food inflation spiral as part of a comprehensive and rapidly deployed food management strategy – higher MSPs to incentivise production of pulses; procurement of pulses with a view to creating buffer stock; banning exports of most pulses; zero import duty on pulses and onions; raising minimum export prices (MEPs) of onions; and allowing states to impose stock limits for certain essential commodities such as onions, edible oils and pulses. In the case of cereals despite a second successive year of sub-normal monsoon, the prices increased only marginally on account of mild increase in MSPs and higher offtake by the states to check price pressures.

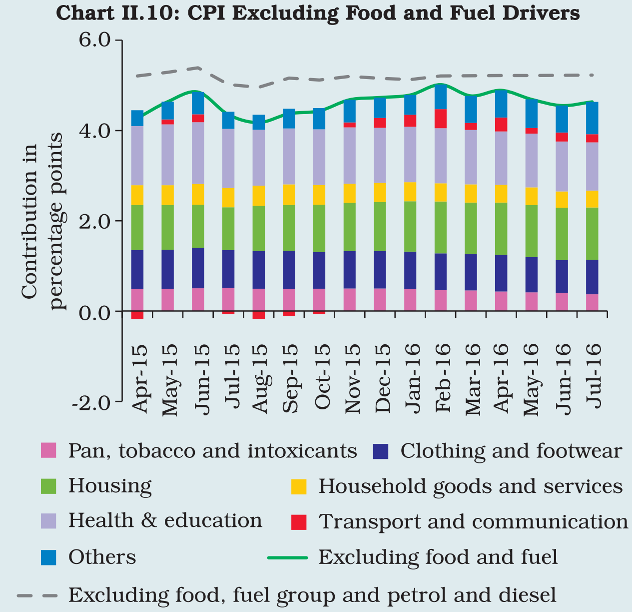
*Fuel*

II.2.10 The fuel group has a weight of 6.8 per cent in the CPI and it accounted for 7.1 per cent of headline inflation during the year. Inflation in this category primarily reflects administered price changes in respect of coal, electricity and LPG as well as other household fuels including firewood and chips. The prices of these items remained sticky during the year.

*Non-Food Non-Fuel*

II.2.11 CPI inflation excluding food and fuel edged up gradually through the year and stood at 4.9 per cent in December 2015, before giving ground in the last quarter of the year, and edging lower in July 2016 to 4.6 per cent. These movements were primarily driven by price pressures in the sub-groups of transport and communication, housing, personal care and effects, and health and education (Chart II.10). The cumulative increase of ₹12 per litre and ₹14 per litre, respectively, in petrol and diesel excise duties since November 2014 dampened the pass-through of falling global crude prices into the transport and communication sub-

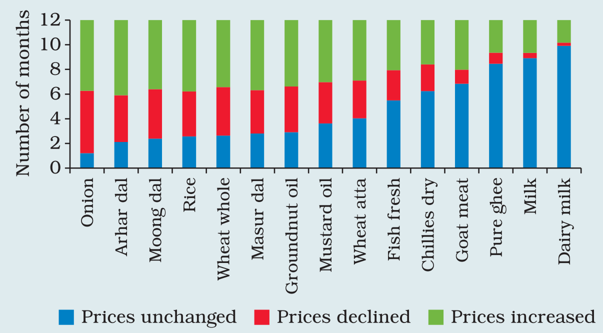
**Chart II.10: CPI Excluding Food and Fuel Drivers**



## Box II.2
## Price Setting Behaviour in India

A random effect ordered probit model estimated for the panel of companies covered in the Reserve Bank's Industrial Outlook Survey from 2010 to 2014 suggests that raw material costs, labour costs (proxied by employment) and the cost of finance influence price setting behaviour with decreasing order of influence. Pricing decisions generally vary based on company size, past price changes and seasonality as well as firms' adjustments to shocks. The study's findings show that firms respond more often to a positive price shock by adjusting prices upwards than in the opposite direction. Similarly, strong demand conditions induce a higher increase in prices, whereas the likelihood of lowering prices during weak demand conditions is lower.

**Chart 1: Price Change Behaviour in Select Food Items**




**Source:** Labour Bureau and staff calculations

Using actual retail price data[2] for 15 prominent food items over a period of 10 years (2006-15), a measure of price rigidity (constructed as the average number of months in a year when prices either remain unchanged, increase or decline) indicates that the extent of price rigidity varies significantly – while onion prices on an average remained unchanged only in one month during a year, milk prices remained unchanged for about 8-9 months (Chart 1). There is also evidence of price rigidities in protein-rich food items.

**Reference:**

Kumari, Shweta and Indrajit Roy (2012), "Price Setting Behaviour of Companies: Evidence from Industrial Outlook Survey", *mimeo*.

group wherein petrol and diesel are embedded. Removing petrol and diesel components of transportation, inflation excluding food and fuel averaged 5.2 per cent in 2015-16, hovering above 5 per cent for the greater part of the year. Housing inflation increased gradually since September 2015. While inflation in personal care and effects edged up a bit in the second half of 2015-16, inflation in services such as health and education exhibited persistent price pressures. Such persistence in price pressures calls for a better understanding of the price-setting behaviour in the economy (Box II.2).

II.2.12 The implementation of the revised pay scales under the seventh pay commission award from August 01, 2016 (with retrospective effect from January 1, 2016) is expected to increase headline inflation with a cumulative impact of 10 basis points by March 2017 over the baseline scenario set out in the bi-monthly monetary policy statement of June 2016 (which excluded the impact of the CPC implementation). This reflects indirect effects stemming from an increase in personal consumption expenditures pushing up aggregate demand. The full impact on CPI inflation, which mainly comes through the direct effects of an increase in house rent allowance when it is effected, will be reflected in a staggered manner over ensuing months. In this regard, the Government has constituted a committee to examine the recommendations of the CPC on allowances. Indirect effects through the expectations channel could also feed back into inflation outcomes. State governments are likely to follow up with revisions of salaries and allowances for their employees. Therefore, most of the inflation impact is likely to spill over into the next financial year.

[2] Collected by the Labour Bureau for constructing the CPI for industrial workers for 78 centres spread across the country on a monthly frequency.

## II.3 MONEY AND CREDIT

II.3.1 The evolution of monetary and credit conditions during 2015-16 was a study in contrast to the preceding year. Whereas the slow pace of economic growth had restrained monetary and credit aggregates in 2014-15, a growing disconnect from underlying economic activity became evident in 2015-16, especially in the second half of the year. Notwithstanding the lower accretion to net foreign assets than a year ago, reserve money expanded at a faster pace, propelled by unusually high and persisting demand for currency. The growth of money supply ($M_3$), on the other hand, slowed in relation to the preceding year, warranting a careful scrutiny of the impact of currency expansion on the relationship between base money and money supply (details given in para II.3.7). As credit conditions improved with a modest lowering of lending rates, banks rebalanced their loans portfolio in favour of the relatively stress-free personal loans segment. The resulting pick-up in credit growth enabled some re-intermediation by the banking system in the flow of funds to the commercial sector.

*Reserve Money*

II.3.2 Reserve money (RM) increased by 13.1 per cent on a y-o-y basis in 2015-16, higher than 11.3 per cent a year ago. The resulting injection of liquidity of ₹2.5 trillion during 2015-16 was sizably higher than that in the preceding year. In 2015-16, in a recurring phenomenon characterising intra-year patterns of RM, about 54 per cent of the whole year's increase in reserve money took place in March, with the period March 25-31, 2016 accounting for 31 per cent of the annual increase. Various factors drove this build-up including high demand for liquidity from banks as they strove to meet year-end targets, particularly when government balances surged with the last instalment of advance tax collection. On the components side, this spike got reflected in accretion to bankers' deposits with the Reserve Bank, with banks accumulating excess reserves to the extent of 23 per cent over and above the statutory requirement on March 31, 2016. On the sources side, it showed up in the form of reversible net domestic asset creation which fell back in early April.

II.3.3 The expansion in RM in 2015-16 primarily took the form of currency in circulation (CIC) which increased by 14.9 per cent. This acceleration – from 11.3 per cent in the previous year – reflects the interplay of several factors such as jewellers' strike, festival related demand, elections and the like – that are difficult to disentangle quantitatively with precision – which superimposed themselves on the normal requirements of base money by the economy and vitiated the usual seasonal ebb and flow of currency in the system (Box II.3). On the other hand, the growth of bankers' deposits with the Reserve Bank moderated to 7.8 per cent, reflecting subdued deposit growth and some evening out of excess reserves by banks. However, the usual stockpiling with the Reserve Bank at the end of March 2016 was observed. From early April, there has been further moderation in these holdings of excess reserves, reflecting greater confidence of banks in their ability to access liquidity under the refinements effected by the Reserve Bank in its liquidity management framework (details in Chapter III).

II.3.4 On the sources side, compositional shifts marked the profile of RM expansion in 2015-16. Net foreign assets (NFA), which had been the main driver of RM in the year before, fluctuated widely between accretions during April-October 2015 and depletion during February and early

## Box II.3
## Currency Demand in India

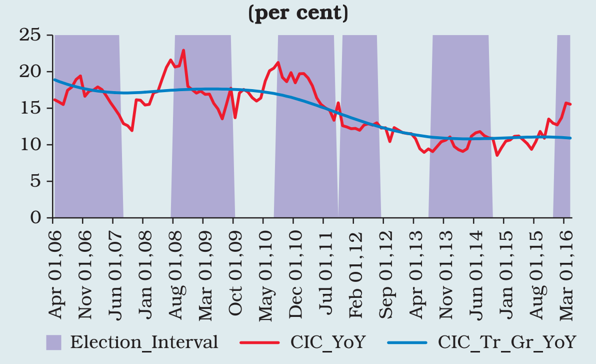
Currency demand is governed by several behavioural and institutional factors such as banking habits, sophistication in payment and settlement systems, development of the financial sector, besides the level of income and the opportunity cost of holding currency.

The long-run relationship between the demand for currency and its underlying determinants indicates that the income elasticity of currency demand has been more than unity over the period 1989-2011. More recent evidence suggests that the income elasticity of demand for currency is closer to unity. Apart from these fundamental determinants, currency demand is influenced by several frictional factors, *e.g.,* festivals, jewellers' strike and elections at the union/state levels. The increase in CIC early in the year 2016-17 was also noticeable in states that were not going for elections.

Since 2012-13, 26 general elections for state legislative assembly and one for the Lok Sabha have been conducted so far. A surge in currency demand by around 11 per cent on a year-on-year basis in May 2014 across India coincided with the general election. State elections also coincided with large currency demand in those states and/or neighbouring states. The increase in currency in absolute terms during April-May 2014, was around ₹650 billion, ₹268 billion higher than that in April-May 2013.

The growth of CIC (y-o-y) and its trend (using Hodrick–Prescott filter) during the election window (Lok Sabha and cluster of states) of 7 months, with election results in the centre of the interval show that there has generally been an upward movement in currency in the election run-up period, which subsides after election results (Chart 1).

**Chart 1: CIC (y-o-y) Growth and its Trend Component (per cent)**




**Note:** CIC_YoY and CIC_Tr_Gr_YoY are CIC (y-o-y) growth and CIC (y-o-y) trend growth respectively; sample period: 2005-2016.

In order to check the empirical regularity of this phenomenon, a model using monthly data on CIC, lagged CIC to control for persistence in currency demand and election dummies was estimated as under:

$$\Delta CIC_t = a + b * \Delta CIC_{t-1} + b_i * \sum_{-3}^{0} E_i + b_j * \sum_{1}^{3} E_j + c * \mathrm{April\_dummy} + d * \mathrm{festival\_dummy} + u_t$$

where $E_i$ represents dummy variable for the $i^{th}$ month before election, $E_0$ is the dummy for the election result month and $E_j$ represents a dummy in the $j^{th}$ month after election. The increase in CIC (m-o-m, per cent) was used as a dependent variable. Regression coefficients for months prior to the election were found to be positive and significant, which suggest that CIC increases in the run up to the election. Currency demand in the run-up to elections accounted for close to a fifth of the overall increase in CIC during January-March 2016. CIC is known for its seasonal fluctuations, which picks up in April because of large government expenditure and procurements, and in October/November due to festivals (Dussehra and Diwali). After controlling for these seasonal factors with appropriate dummies, the coefficients of most of the pre-election dummies were found to be positive and statistically significant. Finally, the joint statistical significance of election dummies was evaluated using the Wald Test, which lent credence to these findings. However, post-election month dummies were not found to be statistically significant, though most of them had the expected negative signs.

To sum up, the sharp increase in currency demand during 2015-16 may be attributed to a cluster of state elections, apart from other frictional factors such as festival-related demand and jewellers' strike, even as the underlying relationship between the demand for currency and its fundamental determinants such as income, inflation and interest rates remained stable.

**Reference:**

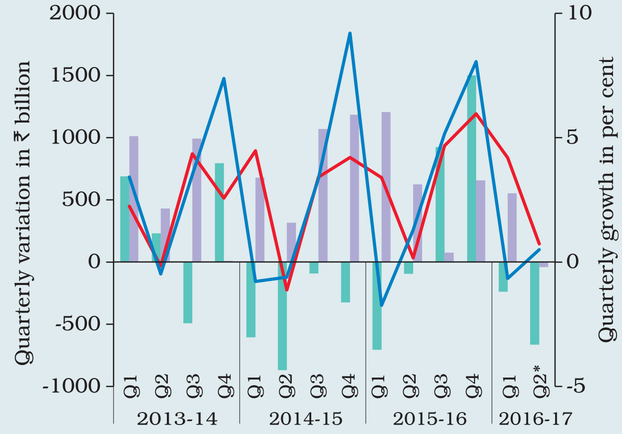
Nachane, D.M., Chakraborty, A.B., Mitra, A.K. and Bordoloi, S. (2013), "Modelling Currency Demand in India: An Empirical Study", DRG Study No. 39, Reserve Bank of India, February.

March 2016, reflecting bouts of turbulence in global financial markets that rendered capital flows and asset prices highly volatile. It was only in the latter part of March, that risk aversion abated and capital flows to India resumed, enabling some rebuilding of NFA. In the event, the net increase in NFA through purchases of foreign currency from authorised dealers was of the order of ₹631 billion as against ₹3,431 billion a year ago, accounting for 25 per cent of the RM expansion.

II.3.5 Net domestic assets (NDA) operations played a stabilising role and also supported the growth of liquidity, constituting around 65 per cent of RM. Within NDA, net RBI credit to the Government increased by ₹605 billion (Chart II.11). Net open market purchases (outright) were around ₹523 billion – comprising net purchases of ₹631 billion through auctions and net sale of ₹108 billion through NDS-OM – as against a net sale of around ₹640 billion a year ago. However, the liquidity impact of these operations was partially offset by increases in cash balances of the Government with the Reserve Bank. Net Reserve Bank credit to banks and the commercial sector, reflecting net repo auctions that injected liquidity into the system to tide over transient episodes of liquidity tightness, increased by around ₹1 trillion during the year to ₹3 trillion as on March 31, 2016 and fell sharply thereafter. The Reserve Bank also transferred a surplus of ₹658.96 billion during the year to the Government, which expanded liquidity as it translated into public spending.

II.3.6 In 2016-17 so far (up to August 12), RM grew at 15.0 per cent, far higher than 9.8 per cent in the corresponding period last year, mainly driven by CIC which increased by ₹823 billion as compared with ₹461 billion last year. Another major development has been the OMO (outright) injection of ₹905 billion during the year so far in

**Chart II.11: Reserve Money: Sources and Components**




*: Data up to August 12, 2016

**Note:** NDA relating to government, banks and commercial sector.

pursuance of the move to a liquidity position closer to neutrality, as against an OMO sale of ₹223 billion in the comparable period last year, which has reduced the banks' dependence on the overnight and term windows of the Reserve Bank. Net purchase from authorised dealers, a source of autonomous liquidity has remained relatively muted in 2016-17 so far.

*Money Supply*

II.3.7 A break in the organic relationship between RM and $M_3$ became discernible in 2015-16, beginning from September 2015 right up to August 2016. Driving the unusually high expansion of RM during the year, the acceleration of currency demand to a multi-year high pushed up the currency-deposit (c/d) ratio to a level last observed in May 2012. With the accompanying deceleration in deposit growth, the elevation in the c/d ratio which encapsulates a possible behavioural preference of society for cash *vis-à-vis* bank deposits, dampened the money multiplier through which RM changes transform into the

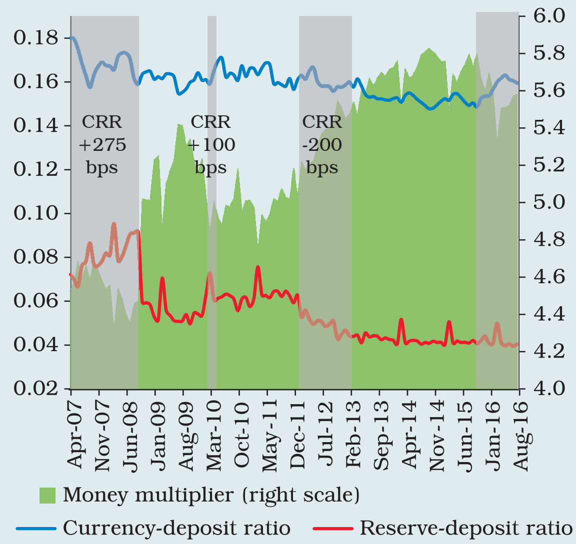
**Table II.3: Monetary Aggregates**

| Item | Outstanding as on August 05, 2016 (₹ billion) | Year-on-year growth (per cent) | | |
|---|---|---|---|---|
| | | 2014-15 | 2015-16 | 2016-17 (as on August 05) |
| 1 | 2 | 3 | 4 | 5 |
| I. Reserve Money | 21,772 | 11.3 | 13.1 | 15.0 |
| II. Broad Money ($M_3$) | 121,338 | 10.9 | 10.1 | 10.7 |
| **III. Major Components of $M_3$** | | | | |
| 1. Currency with the public | 16,644 | 11.3 | 15.2 | 16.7 |
| 2. Aggregate deposits | 104,555 | 10.6 | 9.4 | 9.9 |
| **IV. Major Sources of $M_3$** | | | | |
| 1. Net bank credit to government | 38,063 | -1.2 | 7.7 | 12.8 |
| 2. Bank credit to commercial sector | 78,316 | 9.4 | 10.7 | 9.3 |
| 3. Net foreign exchange assets of the banking sector | 25,839 | 17.0 | 12.6 | 10.0 |
| V. $M_3$ net of FCNR(B) | 118,328 | 11.0 | 10.1 | 10.8 |
| $M_3$ Multiplier | 5.6 | | | |

**Notes:** 1. The latest data for Reserve Money pertain to August 12, 2016.
2. Data are provisional.

broader monetary aggregate. This is also corroborated by the upturn observed in the c/d ratio for the household sector since 2014-15. The other determinant of the money multiplier – the reserve-deposit (r/d) ratio – remained broadly stable by contrast, barring the usual end-March spike caused by banks' overwhelming predilection for balances with the Reserve Bank. This is the first instance in the recent past when the c/d ratio influenced the money multiplier by itself; during April 2007-September 2008, February 2010-April 2010 and January 2012-February 2013, the behaviour of currency demand had either reinforced or offset the impact of changes in the cash reserve ratio (CRR) on the multiplier. These developments pulled down the growth of $M_3$ in 2015-16, especially in the second half of the year, to 10.1 per cent (y-o-y), lower than 10.9 per cent in the previous year (Table II.3). The money multiplier declined to 5.3 in 2015-16 from 5.5 a year ago (Chart II.12). The $M_3$ growth in 2016-17 so far (up to August 05, 2016) at 10.7 per cent remained at the same level as in the previous year.

**Chart II.12: Currency-Deposit, Reserve-Deposit Ratio and Money Multiplier**

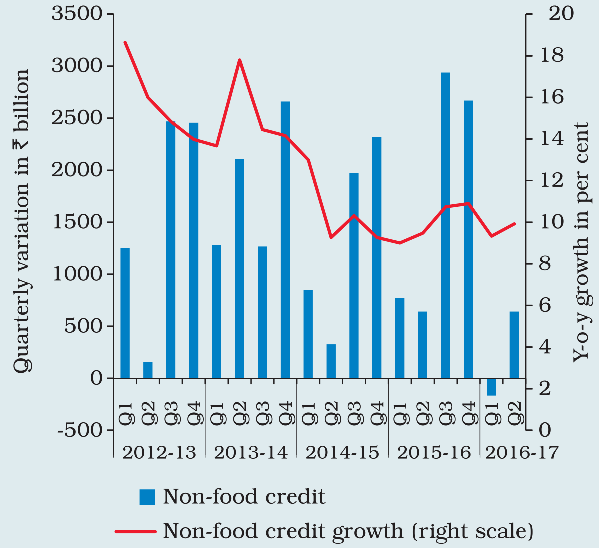


II.3.8 In terms of the components of $M_3$, demand deposit growth broadly tracked the movements in credit. Time deposits were muted by the moderation in deposit rates (both nominal and real), which also reduced the opportunity cost of holding cash. Large issuances of long term tax free bonds by various public sector units contributed to the deceleration in deposits, besides the higher returns on small savings which are not subject to tax deduction at source (TDS). As a result, scheduled commercial banks' (SCBs') deposits decelerated to 9.3 per cent in 2015-16, the lowest since 1963-64. The wedge between credit and deposits in terms of growth rates imparted a structural character to liquidity developments during the year.

*Credit*

II.3.9 Developments in bank credit during 2015-16 reflected the interplay of several factors. Non-food credit (NFC) growth stalled in the first half of the year, weighed down by subdued off-take and headwinds from asset quality concerns among banks. Beginning November, however, there was a pick-up in credit demand as banks shifted loan portfolio allocations away from the stress-ridden industrial sector and expanded their personal loan exposures, and in particular, housing in which delinquency had been relatively low. Notwithstanding the uncertainty over liquidity coverage ratio (LCR) in January-February 2016 affecting short term rates, NFC growth increased to 10.9 per cent for the year as a whole (10.4 per cent adjusted for UDAY bonds and Bandhan Bank and IDFC Bank, which began reporting data from September and December 2015, respectively), from 9.3 per cent in the preceding year (Chart II.13).

**Chart II.13: Quarterly Movement in Credit-offtake**




For Q2: 2016-17, data up to August 05, 2016

II.3.10 Credit to agriculture, which accounts for 13.5 per cent of NFC, rose by 15.3 per cent, marginally up from 15.0 per cent last year (Table II.4). On the other hand, net flows to the industrial sector slowed markedly to 2.7 per cent – from 5.6 per cent a year ago – reflecting the stress in the larger constituents such as infrastructure, construction, petroleum and coal. Stalling of projects in the power and road segments and dwindling cash flows which affected the quality of bank assets deterred new lending to infrastructure. The credit profile of the construction sector was impacted by the slowdown in real estate and the pressure of unsold house inventories. Basic metal and metal products, chemicals and chemical products, and textiles, on the other hand, absorbed higher credit flows. The credit offtake was also impacted by the high incidence of asset quality stress on balance sheets of banks as well as corporate de-leveraging, especially in Q4. Personal loans turned out to be the strongest driver of bank credit, rising by 19.4 per cent as against 15.5 per cent a year earlier. Within this category, housing loans, which account for more than 50 per

**Table II.4: Credit Deployment to Select Sectors**

| Sectors | Outstanding as on June 24, 2016 (₹ billion) | Year-on-year growth (per cent) | | |
|---|---|---|---|---|
| | | 2014-15 | 2015-16 | 2016-17 (up to June 24, 2016) |
| 1 | 2 | 3 | 4 | 5 |
| **Non-food Credit (1 to 4)** | **65,538** | **8.6** | **9.1** | **7.9** |
| **1 Agriculture & allied activities** | **9,044** | **15.0** | **15.3** | **13.8** |
| **2 Industry (micro & small, medium and large)** | **26,469** | **5.6** | **2.7** | **0.6** |
| (i) Infrastructure | 9,140 | 10.5 | 4.4 | -2.1 |
| *Of which:* | | | | |
| (a) Power | 5,288 | 14.5 | 4.0 | -7.7 |
| (b) Telecommunications | 910 | 4.2 | -0.7 | 2.0 |
| (c) Roads | 1,840 | 6.9 | 5.2 | 9.9 |
| (ii) Basic metal & metal product | 4,195 | 6.8 | 7.9 | 9.6 |
| (iii) Food processing | 1,460 | 17.3 | -12.5 | -9.3 |
| **3 Services** | **15,651** | **5.7** | **9.1** | **9.2** |
| **4 Personal loans** | **14,374** | **15.5** | **19.4** | **18.5** |

**Note:** Data are provisional and relate to select banks which cover about 95 per cent of total non-food credit extended by all SCBs.

cent, went up by 18.8 per cent as against 16.7 per cent a year ago. Credit to the services sector also picked up on the back of higher lending to NBFCs, followed by professional services.

II.3.11 Bank group-wise, public sector banks (PSBs) recorded credit growth of 6.6 per cent during 2015-16 (6.5 per cent in 2014-15) *vis-à-vis* 24.7 per cent (17.4 per cent in 2014-15) clocked by private sector banks. PSBs witnessed slowdown in credit mainly in respect of industry and infrastructure, *i.e.,* the sectors to which they have large exposure and high incidence of stressed assets. Private sector banks, on the other hand, registered robust credit growth in these segments. In the personal loans segment, both the groups of banks showed higher credit growth during 2015-16, spurred by the lower incidence of stressed assets.

II.3.12 NFC growth improved to 9.9 per cent during 2016-17 so far (up to August 05, 2016) from 9.2 per cent in the corresponding period of the previous year. Adjusting for the impact of two new banks and UDAY bonds, NFC growth works out to be 10.4 per cent as on August 05, 2016. Sectoral pattern of credit for June 2016 indicated that personal loans continued to show strong growth, while credit growth to industry remained moderate.

II.3.13 The total flow of resources to the commercial sector was far higher by around 14 per cent in 2015-16 than in the preceding year, mainly on account of a pick-up in flows from the banking sources – higher credit disbursal and investment in non-SLR assets (Table II.5). Domestic non-banking fund flows were lower due to the decline in private placements and net issuances of commercial papers (CPs). Initial public offerings (IPOs) picked up in 2015-16 after a lull of around four years. Resource flows from foreign sources were buoyed by the large inflows of foreign direct investment marking an all-time high and compensating for the absolute decline in

**Table II.5: Flow of Financial Resources to Commercial Sector**

(₹ billion)

| Sources | April-March | | | April 01 - August 05 | |
|---|---|---|---|---|---|
| | 2013-14 | 2014-15 | 2015-16 | 2015-16 | 2016-17 |
| 1 | 2 | 3 | 4 | 5 | 6 |
| **A. Adjusted non-food bank credit** | **7,627** | **5,850** | **7,754** | **1,161** | **1,014** |
| i) Non-food credit | 7,316 | 5,464 | 7,024 | 999 | 472 |
| *of which: petroleum and fertiliser credit* | 42 | -139 | -18 | -91 | -23^ |
| ii) Non-SLR investment by SCBs | 311 | 386 | 731 | 162 | 542 |
| **B. Flow from non-banks (B1+B2)** | **6,505** | **7,005** | **7,052** | **2,521** | **1,859** |
| ***B1. Domestic sources*** | **4,302** | **4,740** | **4,593** | **1,978** | **1,613** |
| 1 Public issues by non-financial entities | 199 | 87 | 378 | 105 | 45# |
| 2 Gross private placements by non-financial entities | 1,314 | 1,277 | 1,095 | 333 | 311# |
| 3 Net issuance of CPs subscribed to by non-banks | 138 | 558 | 320 | 1,060 | 1,063# |
| 4 Net credit by housing finance companies | 737 | 954 | 1,145 | 99 | 153* |
| 5 Total accommodation by 4 RBI regulated AIFIs - NABARD, NHB, SIDBI & EXIM Bank | 436 | 417 | 446 | -57 | -35^ |
| 6 Systematically important non-deposit taking NBFCs (net of bank credit) | 1,124 | 1,046 | 840 | 376 | 35^ |
| 7 LIC's net investment in corporate debt, infrastructure and social sector | 354 | 401 | 369 | 62 | 41^ |
| ***B2. Foreign Sources*** | **2,203** | **2,265** | **2,459** | **543** | **246** |
| 1 External commercial borrowings/FCCB | 661 | 14 | -388 | -11 | -167^ |
| 2 ADR/GDR issues excluding banks and financial institutions | 1 | 96 | 0 | - | - |
| 3 Short-term credit from abroad | -327 | -4 | -96 | - | - |
| 4 Foreign direct investment to India | 1,868 | 2,159 | 2,943 | 554 | 413* |
| **C. Total flow of resources (A+B)** | **14,132** | **12,855** | **14,806** | **3,682** | **2,873** |
| *Memo: Net resource mobilisation by Mutual Funds through debt (non-Gilt) schemes* | *405* | *49* | *147* | *293* | *827* |

*: Up to May 2016. ^:Up to June 2016. #: Upto July 2016. -: Not Available.

ADR: American depository receipts; GDR: Global depository receipts; FCCB: Foreign currency convertible bond; LIC: Life Insurance Corporation of India.

net disbursements of external commercial borrowings (ECBs). The early months of 2016-17 indicated a slowdown in both bank and non-bank funding for the commercial sector.

## II.4 FINANCIAL MARKETS

II.4.1 Global financial markets were roiled by bouts of turbulence during 2015-16 as incoming data renewed concerns about the health of the global economy even as monetary policy stances of systemic economies began to diverge. Domestic markets were impacted by these global cues, although there were differential responses across segments. Equity and foreign exchange markets were most affected by global spillovers and were rendered vulnerable to sporadic overshooting and heightened volatility in response to fluctuations in global financial asset prices and portfolio flows. By contrast, debt markets were shaped more by domestic developments. After yields eased in the first half of the year, they rose in the second half before a generalised moderation set in after the presentation of the Union Budget for 2016-17. Credit and money markets were relatively sheltered and activity in these segments was driven by domestic factors – asset quality concerns in the former, and the evolution of liquidity in the latter.

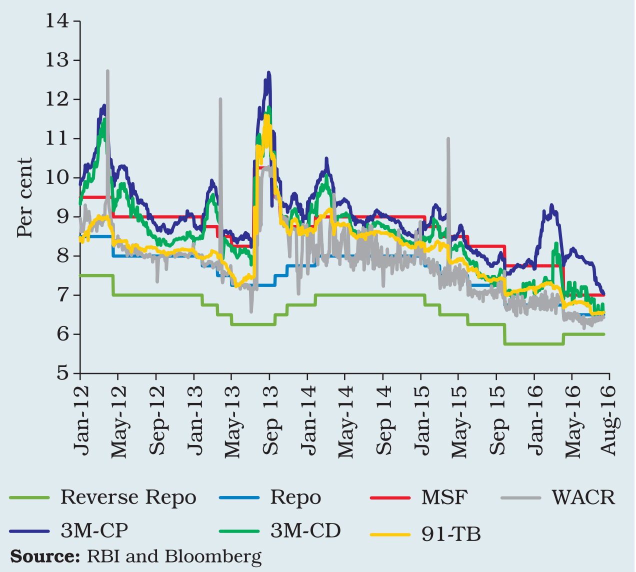
*Money Market*

II.4.2 Money market activity broadly tracked its usual intra-year pattern in 2015-16. Easy conditions ensued in the beginning of the year – as end-2014-15 balance sheet adjustments unwound – and prevailed right up to the first half of October, interrupted by a brief interlude in the second half of April and in May when liquidity dried up due to a passing slowdown in fiscal spending and again in mid-September due to tax outflows. Money market rates trended below the policy rate with a sustained downside bias, except during mid-April to May. Notably, besides the resumption of public expenditure from June, a structural mismatch between deposit mobilisation and credit off-take during this period engendered surplus liquidity in the money market. The volatility of the weighted average call money rate (WACR) fell significantly. Interest rates in the collateralised borrowing and lending obligation (CBLO) and market repo segments were tightly aligned with the WACR but with a distinct softening tendency. Interest rates on commercial papers (CPs), certificates of deposits (CDs) and 91-day treasury bills also traded on an easing note and priced in 50 bps reduction in the policy rate announced at end-September. Turnover in all segments of the overnight market generally picked up in the first half of the year starting from May 2015.

II.4.3 From the second half of October, money market rates, which had dropped by 68 bps in response to the end-September policy rate reduction, began to firm up reflecting the tightening of liquidity on account of slowdown in government expenditure in the run-up to the end-year fiscal targets and increase in currency demand. With deposit growth slipping into single digit along with pick up in NFC, liquidity management was further complicated on account of currency leakage from the banking system on a durable basis (see Box II.3). The WACR firmed up a little above the repo rate, hardening further during the advance tax outflows in mid-December. Other money market rates rose in sync, with spreads relative to the WACR rising to the peak of 28 bps in case of market repo and 29 bps in CBLO in the second half of December 2015.

II.4.4 Fiscal rectitude was visible in the general rise in cash balances of the Government throughout the last quarter of the year. Moreover, with the pick-up in NFC during this period, CP and CD rates firmed up and their spread over WACR widened by over 50 bps (Chart II.14). With cash balances of the government and banks being built up to an intra-year peak, the WACR spiked to 10.05 per cent as on March 31, 2016 – a typical end-year phenomenon. Other money market rates also hardened considerably to 7.36 per cent in the CBLO segment and to 7.91 per cent in the market repo segment. Through the second half of the year, turnover in money market segments increased, mainly reflecting the call money and market repo

**Chart II.14: Key Policy and Other Important Rates**




**Source:** RBI and Bloomberg

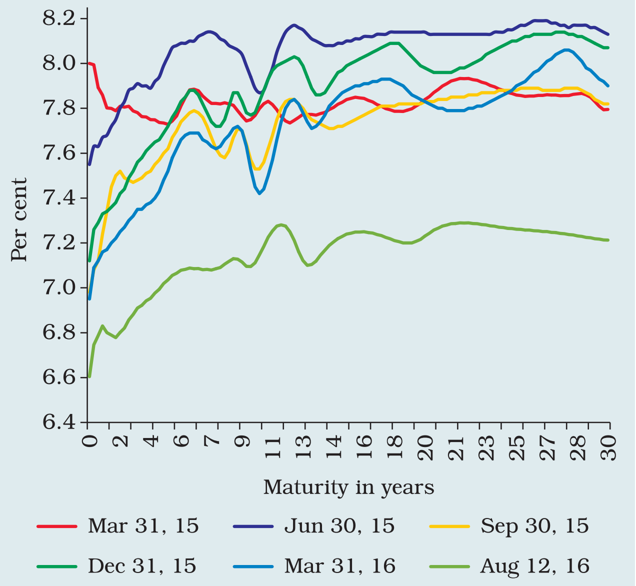
segments, even as the CBLO segment showed a decline.

II.4.5 During 2016-17 so far (up to August 11), money market rates have generally exhibited a softening trend on the back of comfortable liquidity situation in the domestic financial system. The WACR remained anchored to the policy rate with a softening bias on account of 25 bps reduction in the policy repo rate in April 2016, narrowing of interest rate corridor to 100 bps, reduction in the minimum daily maintenance of CRR to 90 per cent of the requirement and significant easing of liquidity conditions. The liquidity conditions mostly remained in a surplus mode during July and August 2016 (up to August 11), on the back of pick-up in government spending coupled with the injection of durable liquidity amounting to ₹905 billion by the Reserve Bank through OMO purchases (outright) in consonance with the revised liquidity framework unveiled in April 2016, which envisages lowering the average *ex ante* liquidity deficit in the system to a position closer to neutrality. Other money market rates, *viz.*, CBLO, market repo, CD and CP rates also softened in sync.

*G-secs Market*

II.4.6 In the government securities (g-secs) market, yields hardened in the beginning of 2015 -16 on prevailing bearish sentiments in the market and also tracking a weak rupee. By mid-May, the drying up of liquidity and emergence of stress in the German bund market triggered sell-offs and hardening of yields globally, including in India. Expectations of another sub-normal monsoon also kept yields elevated through June 2015 (Chart II.15). After trading tightly range-bound, yields started to ease from the last week of August as expectations of monetary policy accommodation domestically gained ground, aided by the US Federal Open Market Committee (FOMC) keeping

**Chart II.15: G-Sec Yield Curve**



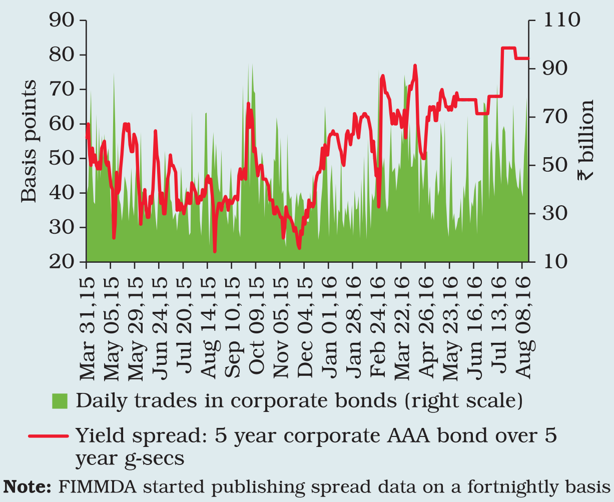

the policy rate on hold in its September meeting. Over the first half of the year, yield moved in a range of 7.53 per cent to 8.09 per cent. Average daily turnover picked up in the secondary g-secs market, up by over 7 per cent from a year ago. From the second week of October, yields firmed up in response to a glut of primary issuances. Expectations of an interest rate hike by the US Fed in December, some increase in inflation and the continuing oversupply of securities due to borrowings by states, concerns on issuance of UDAY bonds, and borrowing by public sector entities through tax-free bonds, also contributed to the firming up of yields. The announcement of the Union Budget 2016-17 including adherence to the fiscal consolidation brought some relief, with the yields easing on a positive sentiment, supported by low inflation during February-March 2016 as well as favourable global developments, particularly the Fed's dovish guidance.

II.4.7 From April to mid-June 2016, the g-secs yields traded range-bound with a marginal hardening bias tracking inflation concerns. Since mid-June 2016, markets have rallied and yields softened on the back of the Brexit referendum, easy liquidity conditions supported by a series of OMO purchases (outright), lower inflation concerns due to normal monsoon so far and expectations of rate cut. The Brexit vote has led to market expectations of easy accommodative stance and low rates by central banks the world over. Further, status quo on interest rate maintained by the US Fed also supported the g-sec yield. As a result, demand for safe haven assets increased and bonds of select EMEs including India rallied on expectations of increased FPI inflows into high yielding bonds.

*Corporate Debt Market*

II.4.8 In 2015-16, there was a surge in public issuances of corporate bonds. In the secondary market, however, activity was subdued reflecting low liquidity. Yield spreads over g-secs increased during the year on concerns relating to balance sheet stress and debt servicing capabilities of less than AAA rated corporate issuers (Chart II.16). In the second half of the year, following the September reduction in the policy repo rate and again towards the close of the year, yields of AAA rated corporate bonds eased, following g-secs yields. Foreign portfolio investment in corporate bonds stood at about ₹3.4 trillion at end-March 2016, amounting to around 80 per cent of the limit. Turnover in the corporate bond market declined by 6.3 per cent in relation to the previous year. The corporate bond yields also declined following easing of g-secs yields during 2016-17 so far (up to August 16). Taking advantage of low yields *vis-à-vis* bank lending rates, corporates raised more resources from the bond market in the recent period.

**Chart II.16: Corporate Bond Trade Volume and Yield Spread**



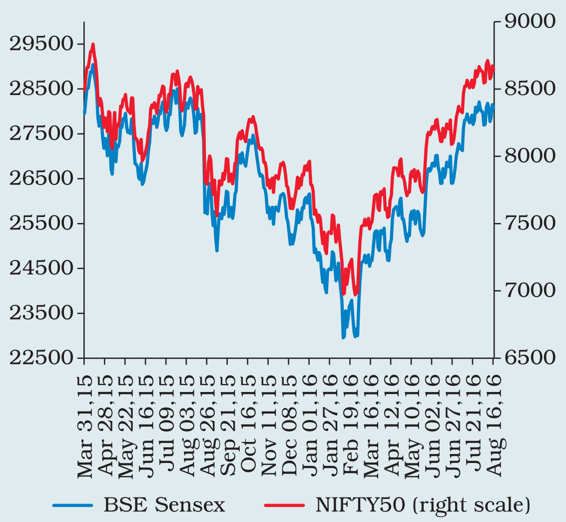

**Note:** FIMMDA started publishing spread data on a fortnightly basis w.e.f June 2016 as against daily basis earlier.
**Source:** SEBI, FIMMDA and Bloomberg.

*Equity Market*

II.4.9 The equity market came off the highs scored in 2014-15 and began 2015-16 on a more subdued tone as the slowdown in China followed by the plunge in its equity markets spread bearish sentiment globally. Domestic factors such as mixed corporate performance, deficient monsoon, concerns about the minimum alternate tax (MAT), asset quality in the banking system, sluggish investment activity and depreciation of rupee engendered by portfolio outflows weighed on the market.

II.4.10 Market sentiment was boosted by the policy rate cut on September 29, 2015 and supported by signs of improvement in global financial conditions. The indications of additional monetary accommodation by the European Central Bank and the Bank of Japan and of the Fed staying on hold instilled risk-on investor appetite and portfolio flows returned to Indian markets. By the end of October, the tide turned as greater certainty seemed to form around rate action by the Fed in its December meeting. Moreover, weak corporate performance and disappointing domestic cues in the form of inflation rising alongside a loss of momentum in industrial activity kept equity markets weak up to the end of December. The new year (2016) was marked by extreme turbulence in global markets as fears of a China slowdown resurfaced, fanned by the plunge in crude oil prices to a 12-year low. There was an outflow of portfolio investment funds from the emerging economies and India was not immune to this, with associated weakening of the rupee. As public sector banks in India started posting large erosion in profits/losses, a bank led downturn in the equity market took the Sensex down by 17.9 per cent (over end-March 2015) on February 11, 2016, its lowest level since May 2014. The presentation of the Union Budget at the end of February marked a clear turning point. Optimism returned as portfolio flows resumed and the improvement in sentiment provided upside to the rupee. The rally in Asian markets, more generally, aided the rise of the Sensex in March 2016 (Chart II.17). Over 2015-16, the Sensex declined by 9.4 per cent. However, Indian equity markets have shown resilience as compared to other emerging markets. The price to earning (P/E) ratio of MSCI-India was much higher than that of MSCI-EME during this period.

**Chart II.17: Movement in BSE Sensex and Nifty 50 Indices**




**Source:** BSE and NSE.

II.4.11 In 2016-17 so far (upto August 18), the Sensex has gained by nearly 11 per cent over end-March 2016 on the back of investor optimism over good progress of monsoon, initiation of reform measures by the government, implementation of the seventh CPC's recommendations, sustained FPI buying and passage of the GST Bill by the Parliament. Even though the Indian stock market was temporarily affected by Brexit in tandem with sell-off in the global equity markets, it rebounded strongly and pared all its losses in the subsequent sessions.

*Primary Market Mobilisation*

II.4.12 The primary segment of the equity market was disconnected from the high turbulence affecting the secondary segment. During 2015-16, primary resource mobilisation in the form of IPOs surged to its highest level since 2011-12, with 73 IPOs raising resources of the order of ₹143 billion which was four times the mobilisation in the previous year. Resources raised through non-convertible debentures increased by 262 per cent on a year-on-year basis, garnering resources of ₹341 billion. Public sector units (PSUs) raised ₹435 billion through both public issuance and private placement of tax free bonds during 2015-16. Resource mobilisation through IPOs continued to be buoyant and aggregated around ₹75 billion during April-July 2016 as compared with ₹29 billion during the corresponding period of the previous year.

*Foreign Exchange Market*

II.4.13 A combination of global and domestic developments impacted the foreign exchange market in the early months of 2015-16. The exchange rate of the rupee traded with a downside bias, and was vulnerable to spillovers from the

Greek crisis, global sell-offs, hawkish FOMC guidance and the uncertainty surrounding the evolution of international crude prices. Domestic developments amplified these pressures – the persistent shrinking of exports; portfolio outflows in response to MAT; and projections of a sub-normal monsoon. After a brief lull of range-bound movements, the exchange rate came under renewed downward pressure in mid-August with sudden devaluation of the renminbi and the sell-offs in Chinese equity markets. The rupee crossed the level of ₹66 against the US dollar at the end of August before stabilising and trading tightly range-bound through September. Through this eventful period for emerging market currencies, the rupee turned out to be better performing among the peer currencies.

II.4.14 In the second half of October, depreciating pressures set in again with growing anticipation of policy rate action by the Fed in December. The exit of portfolio investors from Indian debt and equity markets accentuated the pressures on the rupee. Eventually, the increase in the target Federal Funds rate in December turned out to be fully discounted by markets.

II.4.15 While the turmoil in international financial markets kept the rupee under pressure through January and the first half of February 2016, conditions stabilised thereafter. The presentation of the Union Budget 2016-17, followed by resumption of portfolio flows on dovish Fed guidance, helped stabilise the rupee and imparted a modest appreciation bias by the close of the year. The depreciation of the rupee against the US dollar during 2015-16 was moderate relative to other EMEs (Table II.6). In nominal terms, it depreciated by 6.6 per cent against the US dollar during the year, while in real effective terms it appreciated by 2.9 per cent against a basket of 36 currencies. Forward premia generally showed a declining trend during 2015-16 reflecting, *inter alia*, the declining interest rate differential between India and the US. While the interbank segment maintained the previous year's level in terms of activity, there was a slight dip in merchant turnover. Overall, the spot segment saw an uptick in volumes while forward/swap activity dropped during 2015-16. During 2016-17 so far (up to August 16), the rupee broadly remained range bound with a mild depreciating bias under transient pressure due to Brexit.

**Table II.6: Movements in Exchange Rate of Major Currencies in 2015-16 (Based on Average)**

(Per cent)

| Countries | Local Currency *vis-à-vis* US dollar | REER |
|---|---|---|
| 1 | 2 | 3 |
| Brazil | -31.0 | -19.3 |
| Russia | -29.2 | -14.5 |
| South Africa | -19.7 | -8.1 |
| Mexico | -17.5 | -12.2 |
| Malaysia | -17.2 | -9.3 |
| Australia | -15.5 | -8.7 |
| Euro Area | -12.4 | -5.8 |
| Indonesia | -10.8 | 1.3 |
| Japan | -8.4 | -3.1 |
| Korea | -8.2 | -1.5 |
| Thailand | -7.2 | -1.4 |
| Singapore | -7.0 | -1.6 |
| UK | -6.4 | 3.0 |
| India | -6.6 | 2.9# |
| Philippines | -4.2 | 3.5 |
| China | -2.6 | 7.5 |
| US | 11.7* | 10.2 |

#: REER based on 36-currency trade- weighted basket.

*: Based on US dollar Index against the currencies of a large group of major US trading partners; REER: real effective exchange rate.

**Note:** (-) represents depreciation of local currency.

**Source:** BIS, US Federal Reserve Board, Reserve Bank and Reuters.

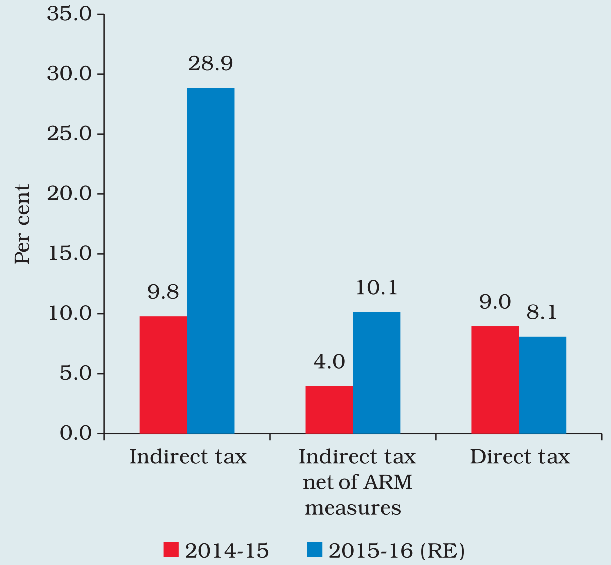
## II.5 GOVERNMENT FINANCES[3]

II.5.1 The central government achieved the budgetary targets set for 2015-16 through a revenue effort in contrast to preceding years when curtailment of expenditure, often across-the-board rather than targeted, was the main instrument of consolidation. This had positive implications for the quality of central government finances since budgeted capital spending was largely preserved. Further, revenue expenditure declined as a proportion to GDP. The government has reaffirmed its determination to stay the course on consolidation through 2016-17 and bring down the gross fiscal deficit (GFD) to 3.0 per cent of GDP by 2017-18. At the sub-national level, state governments budgeted for a retrenchment in capital outlay in 2015-16 in order to renew their fiscal rectitude after the expansion in capital outlay pushed up GFD in 2014-15. While the return to the path of consolidation is welcome, the potential erosion in the quality of expenditure – the theme of the Reserve Bank's report on State Finances in 2015-16 – raises concerns.

### Central Government Finances in 2015-16

II.5.2 The fiscal strategy for 2015-16 was mainly revenue-driven. Additional revenue mobilisation (ARM) accounted for around 15 per cent of indirect tax revenue, imparting significantly higher growth to collections (Chart II.18). Revenue from union excise duty was 23.6 per cent higher than budgeted, reflecting upward duty revisions on petroleum products for consumption-smoothing in the face of a sharp decline in international crude prices. Custom duty collections rose modestly on the back of rate increases, including countervailing and anti-

**Chart II.18: Growth in Tax Collection**




dumping interventions, even as the tax base, *i.e.,* imports shrank. Revenues from service tax rose 25 per cent on account of the revision in the service tax rate from 12.36 per cent to 14.0 per cent during the year and the imposition of the Swachh Bharat cess; also, the negative list (introduced in 2012-13) was pruned, resulting in some increase in the tax base. In contrast, direct tax collections recorded a shortfall of 5.8 per cent relative to budget estimates (BE). Collection of direct and indirect tax revenues in 2015-16 (provisional accounts) was ₹14.57 trillion as against the revised estimate (RE) of ₹14.60 trillion. The total collection thus represents a growth of 17.0 per cent over the previous year. Non-tax revenues exceeded budgetary targets by 16.6 per cent due to higher dividends and profits. Accordingly, notwithstanding the shortfall of 63.6 per cent in the disinvestment target, non-debt receipts turned out to be marginally higher than budgeted.

[3] Comparisons are based on 2015-16 (RE) unless otherwise stated.

II.5.3 Capital outlay was higher than in 2014-15, mainly on irrigation, defence and roads and bridges. Apart from the revenue efforts, it was non-plan capital expenditure that bore the brunt of fiscal adjustment. Revenue expenditure grew at a modest rate of 5.5 per cent.

II.5.4 Reflecting these developments, the budgeted targets for the GFD-GDP ratio of 3.9 per cent and for the primary deficit (PD) of 0.7 per cent were met as borne out in the revised estimates and provisional accounts. In spite of the shortfall in direct tax revenues, the revenue deficit (RD) at 2.5 per cent was significantly lower than budgeted (2.8 per cent) (Table II.7).

### Central Government Finances in 2016-17

II.5.5 Set against the backdrop of the fiscal performance in 2015-16, revenue mobilisation through taxes is likely to lose some buoyancy in 2016-17 – buoyancy of gross tax revenue is budgeted to decline from 2.0 to 1.1. While the growth of gross tax revenue is projected to decelerate over the year, non-tax revenues and disinvestment proceeds have been budgeted to grow sharply during 2016-17. Net receipts from communication services – spectrum auctions, spectrum renewals and licence fees – are budgeted at ₹990 billion while disinvestment proceeds are projected to grow by 123.2 per cent.

II.5.6 The central government's total expenditure is budgeted to pick up in 2016-17 in order to accommodate, *inter alia,* additional revenue expenditure relating to the implementation of the seventh pay commission and One-Rank-One-Pension (OROP) awards. However, amidst this expansion, capital expenditure – both including and excluding defence – is projected to grow at a considerably slower pace and, in fact, decline as a proportion to GDP. Notwithstanding the deceleration, an allocation of ₹250 billion has been made for recapitalisation of public sector banks (PSBs) under the Indradhanush plan announced in August 2015. Of this amount, the government has already provided ₹229 billion to 13 PSBs in the current fiscal. Among the constituents of revenue expenditure, pensions are set to rise sharply in conjunction with the pay commission

**Table II.7: The Central Government's Fiscal Performance**

(Per cent to GDP)

| Item | 2004-08 | 2008-10 | 2010-15 | 2013-14 | 2014-15 | 2015-16 (RE) | 2015-16 (PA) | 2016-17 (BE) |
|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| **Non-Debt Receipts** | **10.4** | **9.5** | **9.5** | **9.4** | **9.2** | **9.2** | **9.1** | **9.6** |
| Tax Revenue (Net) | 7.8 | 7.5 | 7.3 | 7.2 | 7.2 | 7.0 | 7.0 | 7.0 |
| a) Direct Tax | 5.0 | 5.9 | 5.6 | 5.7 | 5.6 | 5.5 | 5.5 | 5.6 |
| b) Indirect Tax | 5.5 | 4.3 | 4.5 | 4.4 | 4.4 | 5.2 | 5.3 | 5.2 |
| Non-tax Revenue | 2.1 | 1.8 | 1.8 | 1.8 | 1.6 | 1.9 | 1.8 | 2.1 |
| Non-debt Capital Receipts | 0.4 | 0.3 | 0.4 | 0.4 | 0.4 | 0.3 | 0.3 | 0.4 |
| **Total Expenditure** | **13.8** | **15.8** | **14.3** | **13.8** | **13.3** | **13.2** | **13.1** | **13.1** |
| Revenue Expenditure | 11.9 | 14.1 | 12.6 | 12.2 | 11.7 | 11.4 | 11.3 | 11.5 |
| Capital Expenditure | 1.9 | 1.7 | 1.7 | 1.7 | 1.6 | 1.8 | 1.7 | 1.6 |
| Plan Expenditure | 4.0 | 4.8 | 4.3 | 4.0 | 3.7 | 3.5 | 3.5 | 3.7 |
| Non-plan Expenditure | 10.2 | 11.0 | 10.0 | 9.8 | 9.6 | 9.6 | 9.6 | 9.5 |
| **Revenue Deficit** | **2.0** | **4.9** | **3.5** | **3.2** | **2.9** | **2.5** | **2.5** | **2.3** |
| **Gross Fiscal Deficit** | **3.4** | **6.2** | **4.8** | **4.5** | **4.1** | **3.9** | **3.9** | **3.5** |

BE: Budget Estimates; RE: Revised Estimates; PA: Provisional Accounts.
**Note:** Direct tax and indirect tax as per cent to GDP do not add up to net tax revenue, which represents tax revenue for the central government net of devolution to the states.

award; however, expenditure on major subsidies (food, fertiliser and petroleum) is estimated to fall to 1.5 per cent of GDP from 1.8 per cent a year ago, indicating rationalisation across-the-board. Reflecting these projections, GFD is estimated to fall to 3.5 per cent of GDP in 2016-17 alongside a decline in other key deficit indicators.

II.5.7 As per the latest information available, the fiscal position of the central government deteriorated during April-June 2016-17 as compared to the corresponding period of the previous year. RD and GFD, both at their current levels and as per cent of BE, were higher than those in the corresponding period of the previous year. During this period, a substantial increase in tax revenue was offset by the increase in revenue expenditure, particularly plan revenue expenditure. Revenue mobilisation was robust on account of growth in both direct and indirect taxes. Revenue expenditure grew by 24.3 per cent as compared to a growth of 2.4 per cent in the corresponding period of the previous year. Capital expenditure registered a significant decline, both under plan and non-plan heads.

II.5.8 As per the seventh pay commission's recommendations, the total burden for the central government on account of pay, pensions and arrears will amount to ₹606.08 billion in 2016-17. The central government has provisioned for ₹538.44 billion in Union Budget for this, which suggests a shortfall of ₹67.64 billion (0.04 per cent of GDP)[4] for 2016-17. The government will get direct tax revenue from the beneficiaries of higher salaries and pensions as well as indirect taxes on goods and services purchased, which, to a large extent, would have been factored in the budget estimates.

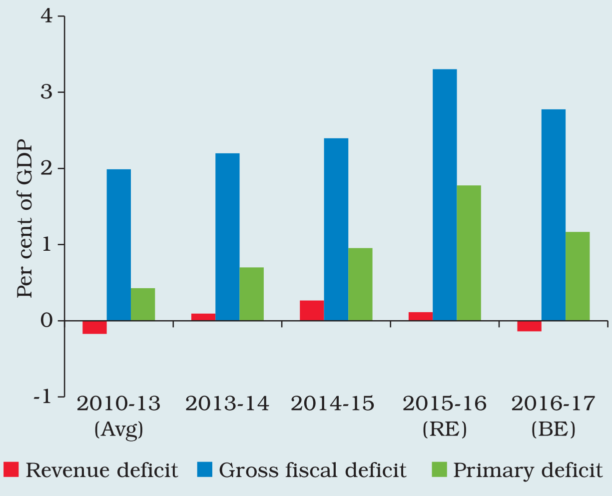
### State Finances in 2015-16

II.5.9 The partial information available with respect to 26 states[5] suggests that the key deficit indicators in 2015-16 (RE) have deteriorated from BE. As against the budgeted GFD-GDP ratio of 2.4 per cent for 2015-16, states' GFD-GDP ratio increased to 3.3 per cent in 2015-16 (RE) due to deterioration in revenue account, while capital outlay remained stable. The revenue account deteriorated mainly due to decline in both tax and non-tax revenues.

### State Finances in 2016-17

II.5.10 The GFD-GDP ratio for state governments for 2016-17 is budgeted at 2.8 per cent while the revenue account is expected to turnaround from a deficit to a surplus mode, indicating the states' intentions to revert to the process of fiscal consolidation (Chart II.19). Improvements in the fiscal position are based on budgeted higher tax revenues and lower development expenditure (Box II.4).

**Chart II.19: Key Deficit Indicators of State Governments**




**Note**: Data for 2014-15 to 2016-17 are based on budget documents for 2016-17 pertaining to 26 states out of which 3 are Vote on Account.

4 GDP for 2016-17 has been projected at ₹150,650.10 billion in the Union Budget 2016-17.

5 Data for 2015-16 and 2016-17 are based on budget documents for 2016-17 pertaining to 26 states out of which three are Vote on Account. These 26 states usually account for around 95 per cent of the total expenditure.

## Box II.4
## Regional Imbalance in Socio-economic Development

The impact of growth on socio-economic development has not been uniform across all Indian States. If the indicators of economic growth, installed power capacity and the credit to deposit (C-D) ratio are factored in, only a few states have emerged as leading in terms of both growth and economic development (Table 1).

Goa (5.1 per cent), Kerala (7.1 per cent), Himachal Pradesh (8.1 per cent), Sikkim (8.2 per cent) and Punjab (8.3 per cent) registered the lowest poverty rates and performed much better than the all-India average of 21.9 per cent during 2011-12. State-wise data on human development indicators also display considerable variations. Jammu and Kashmir, Assam and Manipur are usually unable to attract sizable private investments due to poor infrastructure which would be difficult to upgrade due to lack of resources. The challenge, in essence, is to break this vicious circle.

**Table 1 : Classification of States (2004-05 to 2013-14)**

| Indicators | Best Performing States | Average Performing States | Least Performing States |
|---|---|---|---|
| Economic Growth (CAGR) | **(>8.5)** Sikkim, Uttarakhand, Delhi, Goa, Gujarat, Haryana, Maharashtra, Tamil Nadu, Tripura, Bihar, Mizoram | **(>6.0 but <8.5)** Andhra Pradesh, Arunachal Pradesh, Chhattisgarh, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, UP, Rajasthan, Punjab, West Bengal, Odisha, Nagaland, Meghalaya | **(<6.0)** J&K, Assam, Manipur |
| Installed Capacity of Power (CAGR) | **(>15.0)** Chhattisgarh | **(>7.5 but <15.0)** Delhi, Gujarat, Haryana, Himachal Pradesh, Madhya Pradesh, Maharashtra, Odisha, Sikkim | **(<7.5)** Assam, Nagaland, Rajasthan, Karnataka, Tamil Nadu, Uttar Pradesh, Uttarakhand, J&K, Tripura, Andhra Pradesh, West Bengal, Punjab, Bihar, Arunachal Pradesh, Goa, Mizoram, Kerala, Manipur, Meghalaya, Jharkhand |
| C-D Ratio (CAGR) | **(>4.0)** Nagaland, Punjab, Delhi, Rajasthan, Andhra Pradesh, Sikkim, Kerala, Haryana, Uttarakhand, Arunachal Pradesh, Gujarat, Tripura | **(>1.0 but <4.0)** Uttar Pradesh, Chhattisgarh, Jharkhand, Bihar, Tamil Nadu, Maharashtra, West Bengal, Madhya Pradesh, Karnataka | **(<1.0)** Goa, Assam, Himachal Pradesh, J&K, Manipur, Meghalaya, Mizoram, Odisha |

CAGR: Compound Annual Growth Rate (per cent).

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Nachane, D. M., P. Ray, and S. Ghosh (2002), “Does Monetary Policy Have Differential State-Level Effects? An Empirical Evaluation”, *Economic and Political Weekly*.

### General Government Finances in 2015-16

II.5.11 In view of the deterioration in state finances during 2015-16, the general government gross fiscal deficit increased to 7.2 per cent of GDP from 6.5 per cent in 2014-15. The combined finances of the central and state governments, however, reflect the resolve towards consolidation, with the general government GFD budgeted at 6.3 per cent of GDP for 2016-17.

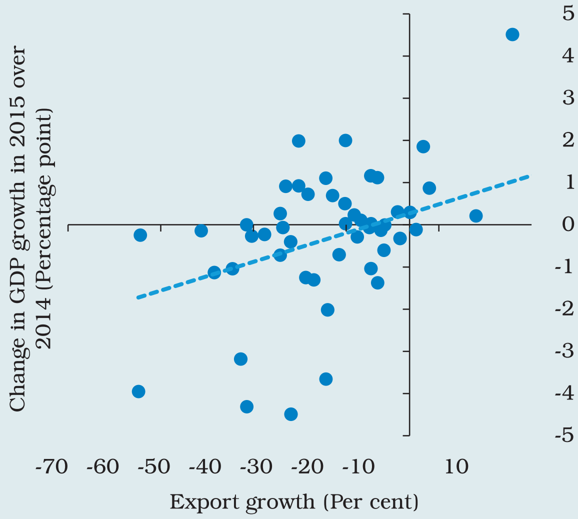
## II.6 EXTERNAL SECTOR

II.6.1 India faced a testing international environment in 2015-16, as did other EMEs, with still weakening global trade and growth rendering external demand anaemic. The pass-through of soft international commodity prices to import prices was quick *albeit* uneven while the dent in commodity export prices was more moderate. Consequently, the terms of trade gains that accrued were larger than in the preceding year. Even as the drag from external demand pulled down exports, imports continued to shrink at a faster pace and the trade deficit narrowed to its lowest level since 2010-11. Bouts of volatility because of high turbulence in global financial markets produced misalignments and overshoots in major exchange rates and asset prices. As a result, the Indian economy was exposed to sudden shifts in sentiment on global cues and considerable flux in net capital flows, particularly portfolio flows, which impacted the financial account of India's balance of payments (BoP)[6]. Notwithstanding these challenging developments, astute management including a progressively liberal FDI policy ensured a steady improvement in external sector sustainability, with the level of reserves being built up by US$ 17.9 billion on a BoP basis in 2015-16.

*Merchandise Exports*

II.6.2 The slump in commodity prices, weak global demand and a surge in protectionist measures across advanced and emerging economies pulled exports into contraction for the second consecutive year in 2015-16

**Chart II.20: Destination-wise Demand Conditions and India's Export Growth**

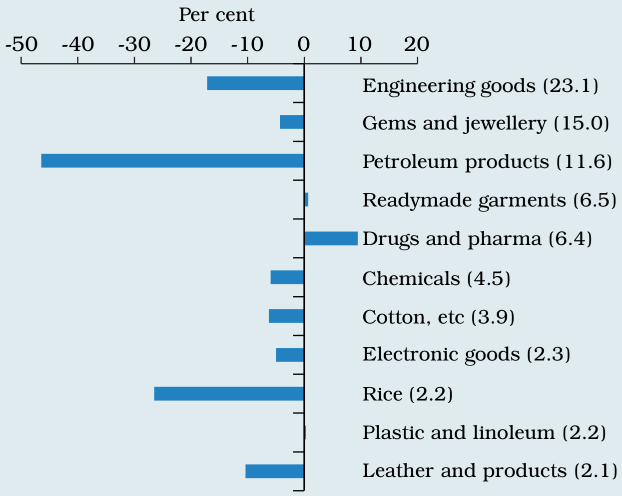



**Source:** DGCI&S and IMF (WEO).

(Chart II.20). Overall, exports declined by 15.5 per cent to US$ 262.3 billion in 2015-16. Further, the decline was pervasive across constituents, with several items shrinking in terms of both volume and value (Chart II.21). Lower oil prices brought refined petroleum exports to about half their level a year ago. Non-oil exports declined by 8.5 per cent, with exports of key products including engineering goods, electronics, leather and gems and jewellery contracting in terms of either volume or value or both. Sector-specific constraints were also manifest: for engineering goods, demand weakened in key markets; for gems and jewellery, declining gold prices interacted with weak demand; and for cotton exports, it was the sharp slowdown in demand from China. In contrast, drugs and pharmaceutical exports benefited from India's dominant position as a global supplier of generic drugs and were resilient in the face of various

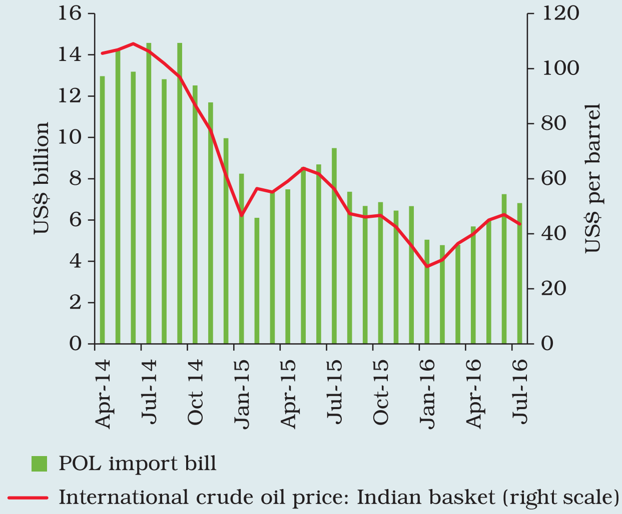
[6] Under the new format of balance of payments presentation - which adopts IMF's BPM6 Manual – the 'capital account' in the old format has been bifurcated into 'capital account' and 'financial account' with a clear distinction between capital account transactions (covering only capital transfers and 'non-produced and non-financial assets') and financial account transactions (covering transactions related to net acquisition and disposal of financial assets and liabilities).

**Chart II.21: Sectoral Export Performance in 2015-16 (Growth)**




**Note:** Figures in brackets are shares in total exports.
**Source:** DGCI&S.

**Chart II.22: International Crude Oil Prices and POL imports**



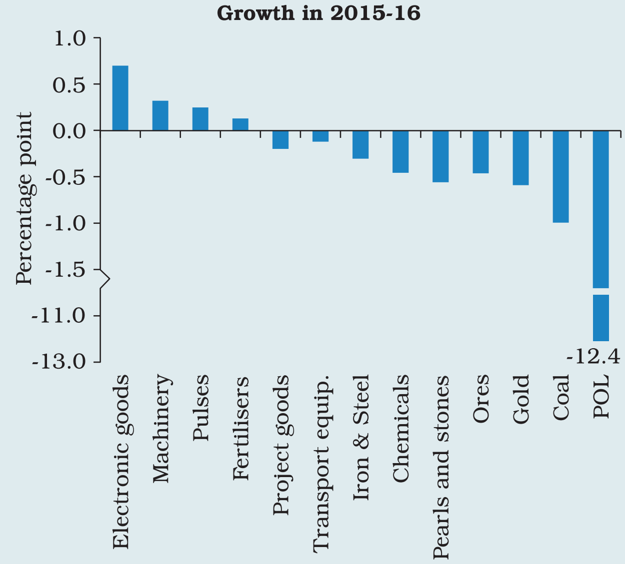

**Source:** DGCI&S.

regulatory actions initiated by the US. Readymade garments, particularly high-value apparel, expanded their market share in North America and Europe. Various measures were undertaken during the year to boost exports, including expanded coverage of the Merchandise Exports from India Scheme, raising of duty drawback rates for select sectors and re-introduction of the interest stabilisation scheme. Amid global trade uncertainties, however, exports are yet to show a firm recovery which declined in July 2016 after expanding for the first time in 19 months in June.

*Merchandise Imports*

II.6.3 Imports contracted by 15.0 per cent to US$ 381.0 billion in 2015-16, primarily due to a sharp reduction in the oil import bill (Chart II.22). With the price of imported crude oil declining by about 45 per cent during the year, petroleum, oil and lubricant (POL) imports fell by about 40 per cent even as volume picked up by 10.6 per cent over the previous year's level. Gold imports fell by 7.7 per cent, despite import volumes gaining by 5.7 per cent and inching towards the 2011-12 peak. Non-oil non-gold imports recorded a broad-based decline, barring a few items such as machinery, pulses, fertilisers and electronic goods which rose sharply to either bridge the widening domestic supply gaps or in response to a turnaround in sector-specific investments (Chart II.23). Notably, imports of iron and steel rose

**Chart II.23: Relative Contribution to Import Growth in 2015-16**




**Source:** Calculations based on DGCI&S data.

in volume terms despite the application of customs/ safeguard duties and imposition of floor prices. However, urea imports fell in response to a record domestic production, but other types of fertiliser imports rose in both value and volume terms. The strong revival of domestic coal production reduced imports sizably. Notwithstanding the mild recovery in global crude oil prices and rise in volume of POL imports, the double-digit decline in merchandise imports continued during April-July 2016.

*Invisibles*

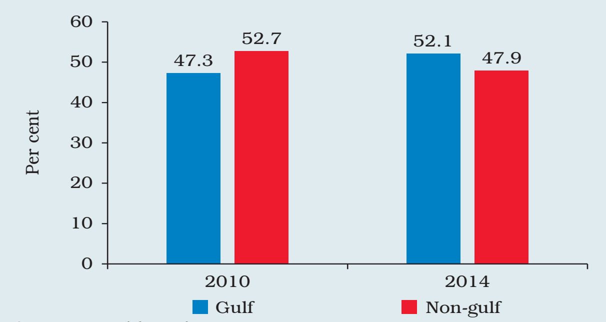
II.6.4 Net surpluses from invisibles have traditionally provided support to BoP by offsetting a part of the trade deficit. The difficult international trade environment impacted these invisible transactions diversely in 2015-16. Among services, exports of merchandise trade related transportation services were significantly impacted by the deceleration in global trade and cargo movements. On the other hand, the launching of e-tourist visas in November 2014 and depreciation of the rupee during the year seem to have benefited inbound tourist arrivals and exports of travel services. India's software exports remained broadly resilient in the face of slow global growth, benefiting from higher demand in banking, financial services and insurance, retail distribution and manufacturing in major destinations such as the US and continental Europe. Among other items of invisibles, remittances inflows weakened in 2015-16 reflecting sluggish activity, particularly in the Gulf region which accounts for more than half of the total remittances received in India (Box II.5). With a rise in both income receipts and

## Box II.5
## Factors Influencing Remittances to India

In India, remittances have financed about 21 per cent of the trade deficit over the last five years. Even though remittances are a relatively durable source of receipts, a number of studies suggest that they are prone to various push and pull factors.

Since the Gulf region is a major host of migrants from India, the downtrend in international crude oil prices since the second half of 2014-15 has apparently impacted the momentum in inbound remittance flows. Furthermore, subdued income conditions in other advanced economies in the post-crisis period may also have accentuated the slowdown in remittances inflows to India (Chart 1).

**Chart 1: Sources of Remittances to India (Share)**




**Source:** World Bank.

A vector error correction model (VECM), using annual data from 1982 to 2015, shows that the long-run elasticity of remittances with respect to crude oil prices is about 0.7 (Table 1). An increase in per capita income in non-Gulf

**Table 1: VECM Estimates of Remittances to India**

| | ECT | Cointegrating Equation | | | | | | DUMEXP | $R^2$ | Adj $R^2$ |
|---|---|---|---|---|---|---|---|---|---|---|
| | | C | LOP | LPEXP | LPCY (-1) | LER | DR | | | |
| Eq.1 | -0.61* | -1.96 | 0.71* | | 0.99* | 0.70* | 0.10* | | 0.47 | 0.20 |
| Eq.2 | -0.38* | -2.59 | 0.59* | | 1.41* | 0.36* | 0.09* | -0.21* | 0.62 | 0.43 |
| Eq.3 | -0.42* | -1.91 | | 0.84* | 0.83* | 0.50* | 0.08* | | 0.57 | 0.38 |

LOP: International crude oil price (Dubai fateh); LPEXP: Public expenditure in Gulf countries; LPCY: Per capita income of top six non-gulf countries, viz., US, Canada, UK, Singapore, Australia and Italy weighted by their share in India's total remittances; LER: Rupee exchange rate *vis-à-vis* the US dollar (₹/US$); DR: Domestic interest rate on deposits with 3 to 5 years maturity; DUMEXP: Dummy as a control variable for years when both crude prices and public expenditure fall; ECT: Error correction term.

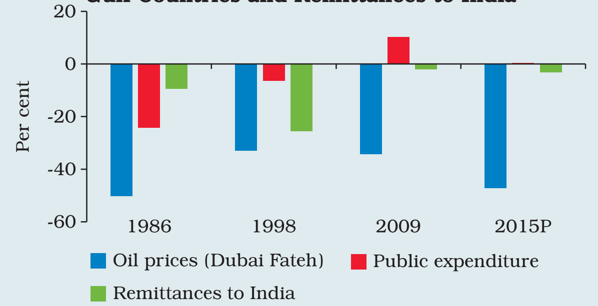
*Significant at 1 or 5 per cent level.

*(Contd...)*

source countries boosts remittance flows to India. Since the fiscal policy in the Gulf countries is highly dependent on oil revenues, crude prices and public expenditure in these countries are highly correlated (Chart 2). The impact of oil prices on remittances is relatively subdued if not accompanied by a corresponding decline in public expenditure. As expected, a depreciation of the rupee leads to higher remittance flows to India.

Notwithstanding the sharp decline in oil prices in 2015, the fall in remittances to India has remained modest, offset by other factors such as rupee depreciation, a modest rise in overall public expenditure in gulf countries, growth in per capita income in advanced economies and a favourable interest rate differential.

**Chart 2: Oil Prices, Public Expenditure in Major Gulf Countries and Remittances to India**



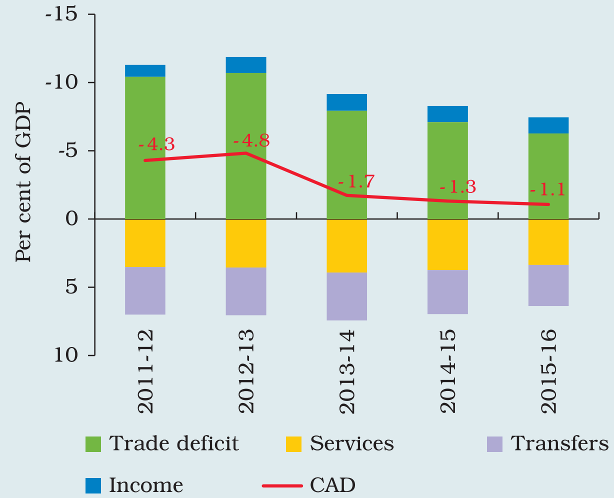

**Source:** IMF, Bloomberg and RBI.

payments, the net outgo for income payments remained almost stable in 2015-16.

*Current Account Deficit*

II.6.5 Notwithstanding the decline in net invisibles, the sharp fall in the merchandise trade deficit enabled a narrowing of the current account deficit (CAD) from 1.3 per cent of GDP in 2014-15 to 1.1 per cent in 2015-16, the lowest since 2007-08. It is noteworthy that since 2013-14, CAD has remained well within the limits of external sustainability, aided by fall in gold imports and favourable terms of trade (Chart II.24).

**Chart II.24: Composition of India's Current Account Deficit**

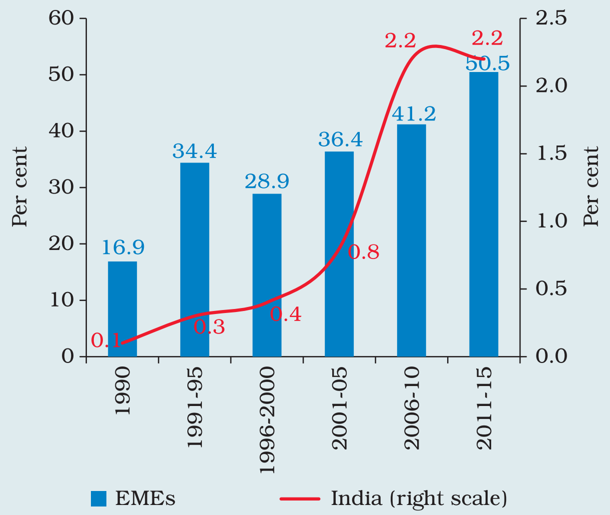



**Source:** RBI.

*External Financing*

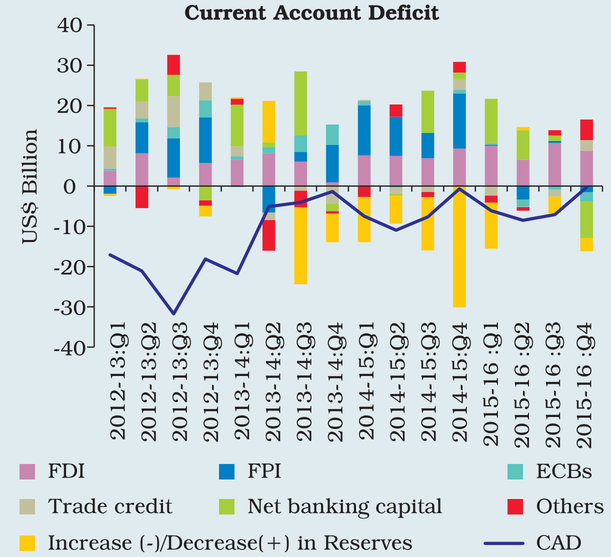
II.6.6 Buoyed by measures to enhance FDI – including raising the ceiling for investments in several important sectors such as broadcasting and defence, as well as rationalising and simplifying procedures and the Make in India initiative – net inflows of FDI surged to US$ 36 billion in 2015-16, the highest annual net inflow thus far and about 15 per cent higher than in the previous year. Even gross FDI flows to India were at a record high of US$ 55.6 billion during the year. Defying the dominance of mergers and acquisitions in global FDI inflows, green-field investments largely dominated FDI flows to India tripling over the level in 2014 and replacing China as the top destination for green-field FDI (Charts II.25 & II.26). Inflows in the form of deposits by non-resident Indians also remained strong, growing to nearly US$ 16 billion during the year. Net portfolio flows turned negative during the year with estimated net outflows of US$ 3.5 billion from the equity market and US$ 0.5 billion from debt, in line with the experience of

**Chart II.25: Share of EMEs and India in Global FDI Inflows (Period Average)**




**Source:** UNCTAD.

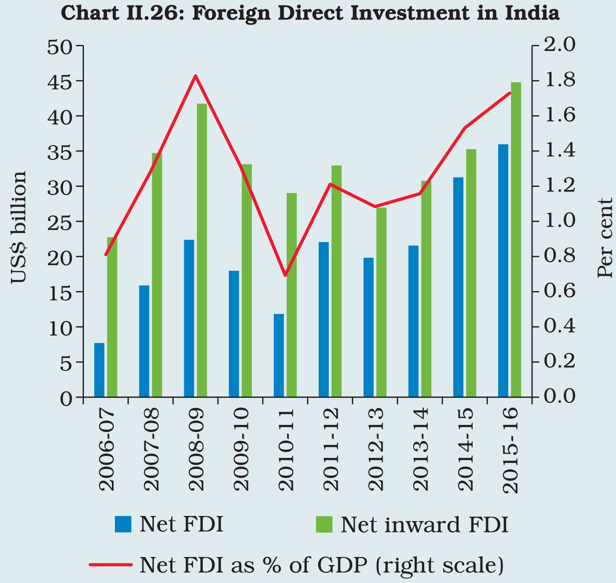
**Chart II.27: Capital Flows Financing Current Account Deficit**




**Source:** RBI.

other emerging markets. The sell-off across EMEs reflected concerns about interest rates rising in the US and diverging monetary policy stances in other advanced economies, the slowdown in key emerging markets and heightened geo-political tensions. Other debt-creating flows such as ECBs and trade credits also were negative under the weight of repayments which exceeded fresh disbursements (Chart II.27).

**Chart II.26: Foreign Direct Investment in India**




**Source:** RBI.

*Sustainability*

II.6.7 External vulnerability indicators improved in 2015-16 as lower CAD and relatively ample net capital inflows enabled a build-up of foreign exchange reserves as buffers against external shocks. By the end of 2015-16, India's foreign exchange reserves reached a record level of US$ 360.2 billion and improved most of the reserve-based indicators of external vulnerability (Table II.8). Furthermore, FCNR(B) deposits and swaps undertaken under the Special Scheme in 2013 and maturing between September and November 2016 are adequately covered by the Reserve Bank's forward purchases and are unlikely to pose any serious downward risk to foreign exchange reserves. Going forward, the viability of the external sector outlook will hinge around (i) CAD remaining within sustainable limits; (ii) gains from terms of trade as long as they can be reaped; (iii) a sustained revival of exports,

**Table II.8: External Sector Vulnerability Indicators**

(Per cent)

| Indicator | End-Mar 2013 | End-Mar 2014 | End-Mar 2015 | End-Mar 2016 |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| 1. External Debt to GDP Ratio | 22.4 | 23.8 | 23.8 | 23.7 |
| 2. Ratio of Short-term to Total Debt (original maturity) | 23.6 | 20.5 | 18.0 | 17.2 |
| 3. Ratio of Short-term to Total Debt (residual maturity) | 42.1 | 39.7 | 38.5 | 42.6 |
| 4. Ratio of Concessional Debt to Total Debt | 11.1 | 10.4 | 8.8 | 9.0 |
| 5. Ratio of Reserves to Total Debt | 71.3 | 68.2 | 71.9 | 74.2 |
| 6. Ratio of Short-term Debt to Reserves | 33.1 | 30.1 | 25.0 | 23.1 |
| 7. Ratio of Short-term Debt (residual maturity) to Reserves | 59.0 | 58.2 | 53.5 | 57.4 |
| 8. Reserves Cover of Imports (in months) | 7.0 | 7.8 | 8.9 | 10.9 |
| 9. Debt Service Ratio | 5.9 | 5.9 | 7.6 | 8.8 |
| 10. External Debt (US$ bn) | 409.4 | 446.2 | 475.0 | 485.6 |
| 11. Net International Investment Position (IIP) (US$ bn)* | -326.7 | -340.8 | -364.6 | -361.5 |
| 12. Net IIP/GDP Ratio | -17.8 | -18.2 | -18.3 | -17.7 |
| 13. CAD/GDP Ratio | 4.8 | 1.7 | 1.3 | 1.1 |

**Note:***: (-) sign implies net claims of non-residents on India.
**Source:** RBI.

drawing on improvements in competitiveness and productivity rather than a boost from world demand; and (iv) the pace of domestic structural reforms to instil confidence among international investors in India as a preferred investment destination.

## PART TWO: THE WORKING AND OPERATIONS OF THE RESERVE BANK OF INDIA

# III MONETARY POLICY OPERATIONS

*A Monetary Policy Framework Agreement (MPFA) was signed between the Government of India and the Reserve Bank on February 20, 2015. The policy rate was reduced by 75 bps during 2015-16 and 25 bps during 2016-17 so far, in support of an accommodative policy stance. The target for CPI inflation below 6 per cent by January 2016 was met and the focus has shifted to attaining the inflation target of 5 per cent by the end of 2016-17. Effective liquidity management kept the weighted average call rate (WACR) tightly around the policy repo rate during 2015-16. In April 2016, the liquidity management framework was revised to progressively move to a position closer to neutrality. The policy rate corridor around the repo rate was narrowed to +/- 50 bps. The Reserve Bank introduced the Marginal Cost of Funds based Lending Rate (MCLR) system effective April 1, 2016. The Union Budget 2016-17 announced the constitution of a Monetary Policy Committee (MPC) by amending the RBI Act, 1934. The amendment to the Act was notified in the Gazette of India on May 14, 2016 and came into force on June 27, 2016.*

III.1 The conduct of monetary policy during 2015-16 was steered by the MPFA signed between the Government of India and the Reserve Bank on February 20, 2015 (Box III.1). Empowered by the MPFA, the Reserve Bank set out an agenda for its monetary policy operations: entrenching a durable disinflationary process to take consumer price index (CPI) inflation to the targets set for January 2016 and March 2017; improving transmission of the policy rate to bank lending rates by ensuring appropriate liquidity management consistent with the monetary policy stance; and dampening volatility of the WACR and other money market rates around the repo rate, *i.e.,* securing the first leg of monetary transmission.

### Agenda for 2015-16: Implementation Status

*Disinflation*

III.2 The first bi-monthly policy statement of the Reserve Bank for 2015-16 maintained accommodative stance for monetary policy while keeping focus on a gradual and durable disinflation path that would take the CPI inflation below 6 per cent by January 2016. The assessment at that time was that inflation would be at 5.8 per cent by the end of the year. Upside risks to the forecast such as less than normal rainfall, large administered price revisions, faster closing of the output gap and possible geo-political spill-overs were expected to be largely offset by downside risks originating from global deflationary/disinflationary tendencies and a soft outlook on global commodity prices. Accordingly, the policy rate was kept unchanged while awaiting transmission of past rate reductions into banks' lending rates, policy efforts to improve food supply management and the unravelling of global developments including the normalisation of the US monetary policy. In June 2015, even as concerns about a sub-normal south west monsoon and its implications for food inflation remained, the Reserve Bank reduced the policy repo rate by

**Box III.1**
**Monetary Policy Framework Agreement (MPFA)**

With the signing of the MPFA between the Government of India and the Reserve Bank on February 20, 2015, flexible inflation targeting (FIT) has been formally adopted in India. Under the MPFA, the objective of monetary policy is to primarily maintain price stability while keeping in view the objective of growth. The Reserve Bank was to bring CPI inflation below 6 per cent by January 2016. The target for 2016-17 and all subsequent years was set at 4 per cent with a band of +/- 2 per cent. The MPFA also requires the Reserve Bank to establish an operating target and an operating procedure for monetary policy through which the operating target is to be achieved. The Reserve Bank shall be seen to have failed to meet the target if inflation remains above 6 per cent or below 2 per cent for three consecutive quarters. In such circumstances, the Reserve Bank is required to provide the reasons for the failure, and propose remedial measures and the expected time to return inflation to the target. The Reserve Bank shall publish a document explaining the sources of inflation as well as forecasts of inflation for the next six to eighteen months.

The Reserve Bank has been publishing a bi-annual Monetary Policy Report (MPR) since September 2014, which provides forecasts of inflation and growth as well as an assessment of the overall macroeconomic conditions. The MPR also sets out the operating target and gives details of the operating procedure of monetary policy and any changes thereto.

With the amendment to the RBI Act on May 14, 2016, several provisions of MPFA were subsumed in the amended Act. The Central Government, in consultation with the Reserve Bank, has notified the inflation target of 4.0 per cent (with 6.0 per cent and 2.0 per cent as the upper and lower tolerance levels, respectively) in the Official Gazette on August 5, 2016. This inflation target is applicable for the period from August 5, 2016 to March 31, 2021. Moreover, factors that constitute a failure to achieve the inflation target – *i.e.,* if the average inflation is more/less than the upper/lower tolerance level for three consecutive quarters – have also been defined and notified in the Official Gazette on June 27, 2016.

**References:**

RBI (2014), “Report of the Expert Committee to Revise and Strengthen the Monetary Policy Framework” (Chairman: Urjit R. Patel), January.

Government of India (2015), “Agreement on Monetary Policy Framework between the Government of India and the Reserve Bank of India”, February.

25 bps, considering the weak investment climate and the need to mitigate supply constraints. In August 2015, the policy rate was kept unchanged while awaiting clarity on domestic and global developments and further transmission by banks.

III.3 By September 2015, the receding inflationary pressure emanating from benign cereal prices and moderation in international crude oil prices opened up space for monetary policy action. The Reserve Bank front-loaded the policy action by effecting a 50 bps cut in the policy repo rate to boost domestic demand and stimulate investment.

III.4 From September onwards, inflation began rising prompting status quo on the policy rate in December 2015. In February 2016, with a softening in food and fuel inflation, it became clear that the January 2016 disinflation target would be met and the subsequent data release which placed CPI inflation for January 2016 at 5.7 per cent confirmed this. With the target for January 2016 achieved, the focus of monetary policy shifted to attaining the inflation target of 5 per cent by the end of fiscal year 2016-17. Based on an assessment that the target of 5 per cent inflation by March 2017 was achievable, particularly when the Union Budget 2016-17 adhered to fiscal consolidation and announced measures to re-invigorate the rural economy, upgrade the social and physical infrastructure, deepen institutional reforms and improve the environment for business, the policy rate was reduced further by 25 bps to 6.5 per cent in April 2016, the lowest since March 2011. The policy rate was kept unchanged in June 2016 in view of uncertainties due to larger than seasonal inflationary pressures emanating from food items and reversal in commodity prices. Continuing with the accommodative stance, a status quo on the policy repo rate was maintained in August 2016 as a sharper-than-anticipated increase in food prices pushed up the projected trajectory of inflation over the rest of the year.

*Operating Framework*

III.5 The goal of the operating framework of monetary policy is to modulate liquidity conditions in order to align the operating target – the WACR – closely with the policy repo rate. During 2015-16, a considerable flux in autonomous liquidity flows necessitated a pro-active assessment of liquidity conditions and nimble responses through a combination of regular facilities and fine-tuning operations in the form of variable rate repo/reverse repo auctions, drawing upon the revised liquidity framework instituted in September 2014 (Chart III.1). Liquidity conditions generally remained tight during the second half of the year due to festival related currency requirements and advance tax outflows in Q3, followed by balance sheet considerations and restraint in government spending in Q4. Accordingly, the daily recourse to the Reserve Bank for liquidity which averaged ₹1.2 trillion during the second half of 2015-16 through all liquidity windows, peaked at ₹3 trillion at end-March 2016. The end-year spike in WACR was due to the usual build-up of cash balances by banks and the government. Effective liquidity management, however, kept the WACR within +/- 10 bps and +/- 20 bps of the repo rate for 36 per cent and 79 per cent of the total number of trading days, respectively, during 2015-16.

III.6 With the institution of the revised liquidity management framework, the role of term repo auctions under the liquidity adjustment facility (LAF) has become significant. Normal 14-day and fine tuning term repos of varying tenors ranging from 2 to 56-day accounted for about 90 per cent of the average net liquidity injection under the LAF during the year (Chart III.2). Since July 22, 2015, the Financial Benchmark India Private Limited (FBIL) has started compiling the Mumbai Inter-Bank Offer Rate (MIBOR) based on actual data of the interbank call market transactions covering a one hour time span – from 9.00 a.m. to

**Chart III.1: Liquidity Management and WACR**

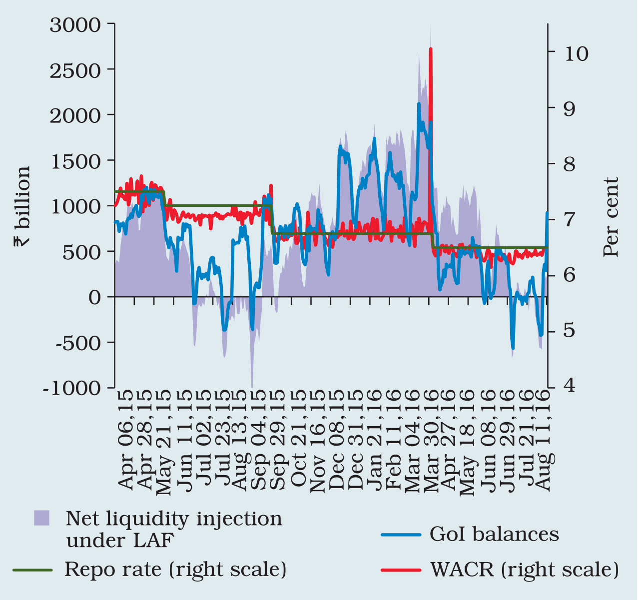



**Chart III.2: Liquidity Management: Various Instruments**

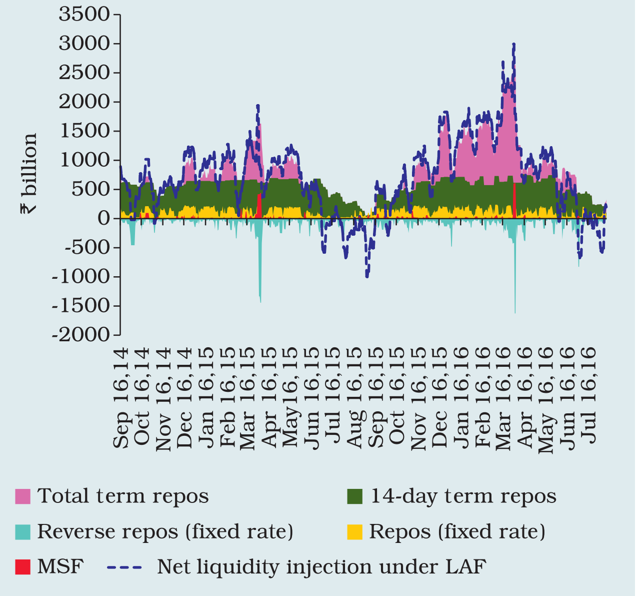
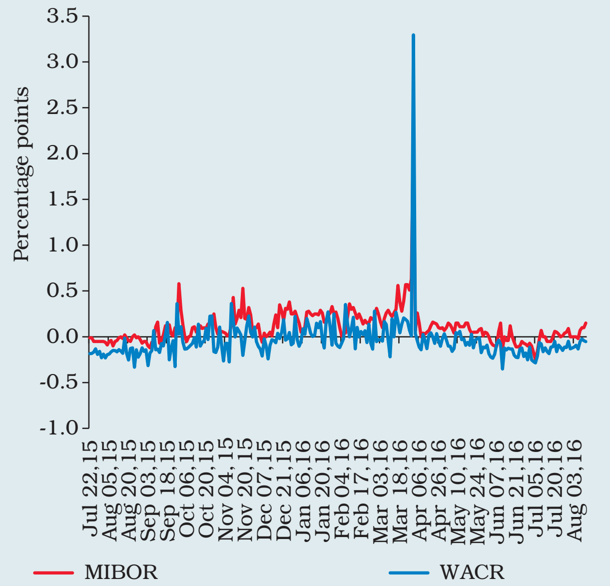


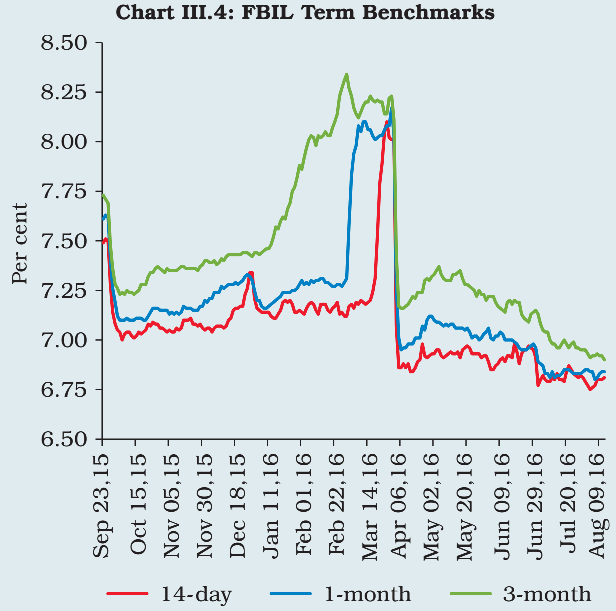
**Chart III.3: Deviation from Policy Repo Rate**




10.00 a.m. Given the market microstructure, thick trading in the first hour usually elevates MIBOR above WACR (Chart III.3). The FBIL has started generating quote-based term benchmarks, but their use in pricing of financial products and transactions is yet to pick up (Chart III.4).

III.7 In April 2016, the liquidity management framework was revised in a move to progressively lower the average *ex ante* liquidity deficit to a position closer to neutrality. The Reserve Bank assured the market of meeting the requirements of durable liquidity and then using its fine-tuning operations to make short-term liquidity conditions consistent with the stated policy stance. Accordingly, in Q1 of 2016-17 the Reserve Bank injected permanent liquidity of ₹805 billion through open market operations (outright), more than offsetting the impact of currency leakage of ₹696 billion during the same period. For ensuring non-disruptive FCNR(B) redemptions, the Reserve Bank pro-actively injected ₹100 billion through open market purchase auction on August 11, 2016. With a view to further minimising volatility in WACR, as also easing liquidity management for banks without abandoning liquidity discipline, the minimum daily maintenance of the cash reserve ratio (CRR) was lowered from 95 per cent of the requirement to 90 per cent effective April 16, 2016. Furthermore, the policy rate corridor around the repo rate was narrowed from +/-100 bps to +/- 50 bps.

**Chart III.4: FBIL Term Benchmarks**




III.8 During 2015-16, as a part of the phased implementation of the liquidity coverage ratio (LCR), the minimum required high quality liquid assets (HQLA) was raised from 60 per cent to 70 per cent of the total net cash outflow over the next 30 calendar days under the stress scenario effective January 01, 2016, which correspondingly limited the capacity of banks to use the excess statutory liquidity ratio (SLR) securities to access collateralised liquidity from money markets and the Reserve Bank. Recognising the scope for providing greater flexibility to banks within the prescribed SLR, effective February 11, 2016, the Reserve Bank allowed banks to reckon additional government securities held by them up to three per cent of their NDTL within the mandatory SLR requirement as level 1 HQLA for the purpose of computing their LCR on top of the five per cent

permitted in November 2014. On July 21, 2016, additional headroom equivalent to 1 per cent of NDTL was provided within the prescribed SLR. Together, the total carve-out from SLR available to banks stands at 11 per cent of their NDTL, including 2 per cent of NDTL available under MSF.

### Monetary Policy Transmission

III.9 In response to the reduction in the policy repo rate by 150 bps during January 15, 2015 through April 05, 2016, the median base rate of banks declined by 60 bps as against a higher decline of 92 bps in median term deposit rates, reflecting banks' preference to protect profitability in the wake of deteriorating asset quality and higher provisioning (Table III.1). The weighted average lending rate (WALR) on fresh rupee loans declined by 100 bps (up to June 2016), significantly more than the decline of 65 bps in WALR on outstanding rupee loans.

**Table III.1: Deposit and Lending Rates of SCBs (Excluding RRBs)**

(Per cent)

| End-Month | Repo Rate | Term Deposit Rates | | Lending Rates | | |
|---|---|---|---|---|---|---|
| | | Median Term Deposit Rate | WADTDR | Median Base Rate | WALR - Outstanding Rupee Loans | WALR - Fresh Rupee Loans |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Dec-14 | 8.00 | 7.55 | 8.64 | 10.25 | 11.84 | 11.45 |
| Mar-15 | 7.50 | 7.50 | 8.57 | 10.20 | 11.76 | 11.07 |
| Jun-15 | 7.25 | 7.22 | 8.43 | 9.95 | 11.61 | 11.03 |
| Sep-15 | 6.75 | 7.02 | 8.03 | 9.90 | 11.53 | 10.77 |
| Dec-15 | 6.75 | 6.77 | 7.83 | 9.65 | 11.31 | 10.59 |
| Mar-16 | 6.75 | 6.77 | 7.73 | 9.65 | 11.20 | 10.47 |
| Jun-16 | 6.50 | 6.63 | 7.52 | 9.65 | 11.19 | 10.45 |
| **Variation (Percentage Points) (Jun-16 over Dec-14)** | **-1.50** | **-0.92** | **-1.12** | **-0.60** | **-0.65** | **-1.00** |

WADTDR: Weighted average domestic term deposit rate.

*Sectoral Lending Rates*

III.10 Since December 2014, lending rates across various sectors (except credit card) have declined in the range of 16-110 bps, reflecting the varied credit conditions and risk appetite of banks (Table III.2). Interest rates on fresh rupee loans sanctioned for housing – personal and commercial – declined more than that of the respective categories of vehicle loans (Table III.3).

**Table III.2: Sector-wise WALR of SCBs (Excluding RRBs) - Outstanding Rupee Loans**
(at which 60 per cent or more business is contracted)

(Per cent)

| End-Month | Agriculture | Industry (Large) | MSMEs | Infra-structure | Trade | Profes-sional Services | Personal Loans | | | | | Rupee Export Credit |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Housing | Vehicle | Education | Credit Card | Other | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| Dec-14 | 10.93 | 12.95 | 13.05 | 13.05 | 13.09 | 12.39 | 10.76 | 11.83 | 12.90 | 37.86 | 14.24 | 12.16 |
| Mar-15 | 10.96 | 12.80 | 12.91 | 12.89 | 13.07 | 12.46 | 10.99 | 11.62 | 12.87 | 37.88 | 13.94 | 12.04 |
| Jun-15 | 10.76 | 12.62 | 12.36 | 12.24 | 12.52 | 12.03 | 10.81 | 11.39 | 12.58 | 37.87 | 13.75 | 11.63 |
| Sep-15 | 10.73 | 12.39 | 12.43 | 12.18 | 12.51 | 12.17 | 10.63 | 11.49 | 12.51 | 37.34 | 13.24 | 11.89 |
| Dec-15 | 10.51 | 12.47 | 12.34 | 12.25 | 12.72 | 12.74 | 10.36 | 11.00 | 12.35 | 34.04 | 13.86 | 11.60 |
| Mar-16 | 10.74 | 12.36 | 12.25 | 12.06 | 12.50 | 11.81 | 10.56 | 11.65 | 12.48 | 38.00 | 13.90 | 11.46 |
| Jun-16 | 10.77 | 12.17 | 12.08 | 12.20 | 11.99 | 11.64 | 10.50 | 11.39 | 12.32 | 38.26 | 13.96 | 11.17 |
| **Variation (Percent-age Points) (Jun-16 over Dec-14)** | **-0.16** | **-0.78** | **-0.97** | **-0.85** | **-1.10** | **-0.75** | **-0.26** | **-0.44** | **-0.58** | **0.40** | **-0.28** | **-0.99** |

MSMEs: Micro, Small and Medium Enterprises.

**Table III.3: WALR of Select Sectors of SCBs (Excluding RRBs) - Fresh Rupee Loans Sanctioned**

(Per cent)

| End-Month | Personal | | Commercial | |
|---|---|---|---|---|
| | Housing | Vehicle | Housing | Vehicle |
| 1 | 2 | 3 | 4 | 5 |
| Dec-14 | 10.53 | 12.29 | 11.74 | 12.53 |
| Mar-15 | 10.47 | 12.42 | 12.05 | 12.30 |
| Jun-15 | 10.10 | 12.53 | 12.06 | 12.29 |
| Sep-15 | 10.22 | 12.24 | 11.79 | 11.90 |
| Dec-15 | 10.02 | 11.97 | 11.08 | 11.64 |
| Mar-16 | 9.79 | 11.99 | 11.15 | 11.21 |
| Jun-16 | 9.64 | 11.80 | 10.53 | 11.49 |
| **Variation (Percentage Points) (June-16 over Dec-14)** | **-0.89** | **-0.49** | **-1.21** | **-1.04** |

*Experience of the MCLR System*

III.11 As set out in the agenda for 2015-16, the Reserve Bank introduced the Marginal Cost of Funds based Lending Rate (MCLR) system for scheduled commercial banks (excluding RRBs), effective April 1, 2016 whereby all new rupee loans sanctioned and credit limits renewed would be priced with reference to the MCLR.

III.12 Under the MCLR system, banks determine their benchmark lending rates linked to marginal cost of funds which is more sensitive to changes in the policy rate, unlike the earlier base rate system where banks adopted different methodologies (average/marginal/blended principles) for computing their cost of funds. MCLR consists of four components: (a) marginal cost of funds (marginal cost of borrowings comprising deposits and other borrowings, and return on net worth), (b) negative carry on account of CRR, (c) operating costs and (d) term premium. The MCLR *plus* spread is the actual lending rates for borrowers. The spread comprises of only two components, *viz.*, business strategy and credit risk premium.

III.13 Under the MCLR system, transmission to WALR is expected to improve on the assumption that the marginal cost of funds is more sensitive to changes in the policy rate than the average cost of funds. As expected, the MCLR for the overnight segment, one year segment and up to three-year segment (as on July 31, 2016) was lower by 70 bps, 25 bps and 36 bps, respectively, than the base rate of 9.65 per cent (Table III.4).

III.14 There has hardly been any transmission of a reduction in the policy rate to the actual lending rates charged to customers during 2016-17 so far (up to June). While the cost of funding by banks has declined somewhat leading to a decline in shorter maturity MCLR, there has been an increase in the term premia in respect of term loans of one year and above, thereby

**Table III.4: MCLR and Base Rate of SCBs (Excl. RRBs)**

(Per cent)

| Tenor | Median MCLR | | Variation [col. 3-col. 2] (Percentage Points) |
|---|---|---|---|
| | April 04, 2016 | July 31, 2016 | |
| 1 | 2 | 3 | 4 |
| Overnight | 9.05 | 8.95 | -0.10 |
| 1-Month | 9.20 | 9.03 | -0.17 |
| 3-Month | 9.30 | 9.20 | -0.10 |
| 6-Month | 9.40 | 9.28 | -0.12 |
| 1-Yr | 9.45 | 9.40 | -0.05 |
| 2-Yr | 9.60 | 9.55 | -0.05 |
| 3-Yr | 9.65 | 9.63 | -0.02 |
| 4-Yr | 9.65 | 9.68 | 0.03 |
| 5-Yr | 9.70 | 9.70 | 0.00 |
| 6-Yr | 9.73 | 9.73 | 0.00 |
| 7-Yr | 9.73 | 9.73 | 0.00 |
| 8-Yr | 9.73 | 9.73 | 0.00 |
| 9-Yr | 9.73 | 9.73 | 0.00 |
| 10-Yr | 9.73 | 9.73 | 0.00 |
| Up to 3-yrs | 9.38 | 9.29 | -0.09 |
| Median Base Rate | | | |
| | 9.65 | 9.65 | 0.00 |
| Variation (MCLR over Base Rate) (Percentage Points) | | | |
| As on | Overnight | 1-Yr | Up to 3-Yrs |
| April 04, 2016 | -0.60 | -0.20 | -0.27 |
| July 31, 2016 | -0.70 | -0.25 | -0.36 |

attenuating the transmission to actual lending rates charged to customers. Moreover, banks may have been loading (i) a higher credit risk premia on their new customers in order to attain their desired return on net worth in a rising NPA environment; and/or (ii) a higher strategic risk premia on their riskier loans as part of their business strategy to reorient their lending operations towards less risky activities. The consequent rise in the spread is reflected in a near unchanged WALR in respect of both outstanding and fresh rupee loans during 2016-17 so far (up to June).

III.15 In a competitive environment, it is expected that the return on net worth of banks would vary in a narrow range. Data for the month of June 2016, however, show wide variations in the expected return on net worth – between 0.33 per cent and 26.44 per cent (Table III.5).

**Agenda for 2016-17**

III.16 In the first bi-monthly policy statement for 2016-17, the Reserve Bank set a target for CPI inflation at 5 per cent by March 2017. The eventual aim is to move towards 4 per cent CPI inflation by the end of 2017-18.

III.17 To strengthen the monetary policy framework, the Union Budget 2016-17 announced the formal constitution of a Monetary Policy Committee (MPC) by amending the RBI Act, 1934, which will be vested with the responsibility of setting the policy rate. With the introduction of MPC, the decision making process will imbue diversity of views, specialised experience and independence of opinion, which will bring transparency to the overall decision-making process. In this context, as the cross-country experience shows, there is an increasing recognition of the merit in following a collegial approach to monetary policy decision making, irrespective of whether the countries are following inflation targeting or not (Box III.2).

III.18 The amended RBI Act, which was notified in the Gazette of India on May 14, 2016 mandates a Monetary Policy Committee to determine the policy interest rate to achieve the inflation target set by the Government. MPC is a new institutional structure. The MPC shall consist of the Governor of the Reserve Bank, the Deputy Governor-in-charge of monetary policy, one officer of the Bank to be nominated by the Central Board of the Reserve Bank and three members to be appointed by the Central Government. Each member shall have one vote, and in the event of a tie, the Governor can exercise a casting or second vote. The institution of the MPC is the culmination of several preceding processes and draws on the recommendations of technical committees including the Committee on Fuller Capital Account Convertibility, 2006 (Chairman: Shri S.S. Tarapore); the Committee on Financial Sector Reforms, 2009 (Chairman: Dr. Raghuram G. Rajan); the Committee on Financial Sector Assessment, 2009 (Chairman: Dr. Rakesh Mohan); the Financial Sector Legislative Reforms Commission (FSLRC), 2013 (Chairman: Shri B.N. Srikrishna) and the Expert Committee to Revise and Strengthen the Monetary Policy Framework, 2014 (Chairman: Dr. Urjit R. Patel). It also represents a progressive graduation of the initial efforts towards collegial decision making under the aegis of the Technical Advisory Committee on Monetary Policy. The learning experience gained

**Table III.5: Return on Net Worth Expected by Banks - June 2016**

(Per cent)

| Bank Group | Min | Max | Median |
|---|---|---|---|
| Public Sector Banks | 2.00 | 25.00 | 16.00 |
| Private Sector Banks | 2.81 | 22.00 | 16.50 |
| Old | 2.81 | 22.00 | 15.25 |
| New | 6.25 | 20.00 | 18.00 |
| Foreign Banks | 0.33 | 26.44 | 10.00 |
| SCBs | 0.33 | 26.44 | 14.00 |

## Box III.2
## Committee Approach to Monetary Policy: International Experience

A committee approach to monetary policy decisions has emerged as the preferred framework across the globe. Several advantages have been cited for this: enabling a confluence of specialised knowledge and expertise on the subject domain; bringing together different stakeholders and diverse opinion and improving representativeness; and collective wisdom making the whole greater than the sum of the parts (Blinder and Morgan, 2005 and Maier, 2010). Even for countries like Canada, Israel and New Zealand where the Governor is responsible for decision making *de jure*, she/he is typically supported by an advisory committee *de facto*. Within this committee approach, there are several variants in terms of size and composition of the committee, representation of the government, the manner in which the members are appointed, the frequency of committee meetings and how a decision is arrived at, *i.e.*, by voting or consensus, and whether there are external members or not and if so full time or part time, all of which impact policy outcomes (Table 1).

**Table 1: Structure of MPC in Select Countries**

| Country | Started | Internal Members | External Members | Government Representative (s) | External Members | Decision Making | |
|---|---|---|---|---|---|---|---|
| | | | | | Full time/ part time | Voting | Consensus |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Australia | 1959 | 3 | 6 | Yes | Part time | ✓ | |
| Brazil | 1996 | 8 | 0 | No | NA | | ✓ |
| Chile | 1990 | 5 | 0 | No | NA | ✓ | |
| Czech Republic | 1998 | 7 | 0 | No | NA | ✓ | |
| ECB | – | 6 | 19 | No | Full time* | | ✓ |
| Hungary | 1993 | 4-6 | 1-3 | No | Full time | ✓ | |
| Indonesia | 2005 | 6 | 0 | No | NA | | ✓ |
| Japan | 1998 | 3 | 6 | Yes – no voting rights | Full time | ✓ | |
| Mexico | 1994 | 5 | 0 | No | NA | ✓ | |
| Norway | 2001 | 2 | 5 | No | Part time | ✓ | |
| Poland | 1998 | 1 | 9 | No | Full time | ✓ | |
| South Africa | 1999 | 8 | 0 | No | NA | ✓ | |
| South Korea | 1997 | 2 | 5 | No | Full time | ✓ | |
| Sweden | 1999 | 6 | 0 | No | NA | ✓ | |
| Thailand | 2001 | 3 | 4 | No | Full time | | ✓ |
| Turkey | 2001 | 6 | 1 | Yes – no voting rights | Full time | | ✓ |
| UK | 1997 | 5 | 4 | Yes – no voting rights | Part time | ✓ | |
| US | 1935 | 12 | 0 | No | NA | ✓ | |

NA: Not applicable.
*: External members are governors of member central banks.
**Sources:** Central bank websites and CCBS Handbook No. 29, February 2012.

**References:**

Blinder A. and J. Morgan (2005), 'Are Two Heads Better than One? An Experimental Analysis of Group versus Individual Decision-making', *Journal of Money, Credit and Banking* 35(5).

Maier, P. (2010), 'How Central Banks Take Decisions: An Analysis of Monetary Policy Meetings' in P.L. Siklos, M.T. Bohl and M.E. Woher (eds), *Challenges in Central Banking: The Current Institutional Environment and Forces Affecting Monetary Policy*, Cambridge University Press, Cambridge.

by the Reserve Bank will help refine and entrench decision making under MPC with the passage of time.

III.19 The revised liquidity management framework being implemented since April 2016 is expected to smoothen the supply of durable liquidity over the year and progressively lower the average *ex ante* liquidity deficit in the system to a position closer to neutrality. This warrants continuous monitoring and preparedness to calibrate instruments to unforeseen liquidity developments in pursuit of this objective. In particular, the risk of easy liquidity conditions either driving WACR below the repo rate or the associated lower term repo auction volumes dampening the prospect of development of a term money market will have to be avoided. The Reserve Bank will objectively assess the efficacy of MCLR *vis-à-vis* the earlier base rate system in terms of monetary policy transmission.

# IV CREDIT DELIVERY AND FINANCIAL INCLUSION

*During 2015-16, the Reserve Bank intensified its efforts towards expanding formal banking facilities covering hitherto excluded sections of society. Greater focus was placed on ensuring adequate credit flow to various segments in the priority sectors. Measures such as introduction of Priority Sector Lending Certificates (PSLCs) and implementation of the recommendations of the Committee on Medium Term Path on Financial Inclusion are expected to provide further impetus to financial inclusion in the country.*

IV.1 The Reserve Bank continued its focus on ensuring the availability of banking services throughout the country and instituting an efficient and comprehensive credit delivery mechanism catering to the productive sectors of the economy. During 2015-16, efforts were directed at fostering a more conducive environment for flow of credit to priority sectors, in particular to the micro, small and medium enterprises (MSME) sector. A national programme for capacity building of bankers was launched with the sole objective of upgrading skills related to the financing of the MSME sector. The Committee on Medium-Term Path on Financial Inclusion submitted its report charting out a measurable action plan for financial inclusion that will guide the financial inclusion process going forward. The Financial Inclusion and Development Department (FIDD) is the nodal department for the seamless implementation of the Reserve Bank's financial inclusion agenda.

### Agenda 2015-16: Implementation Status

*Priority Sector Lending*

IV.2 During 2015-16, PSLCs were introduced as a mechanism for incentivising banks having surplus in lending[1] to different categories of the priority sector thereby enhancing lending to these sectors (Box IV.1). Like carbon credit trading, PSLCs will allow the market mechanism to drive priority sector lending by leveraging the comparative strengths of different banks. For trading purposes, a dedicated portal was launched in April 2016. In view of the critical role played by regional rural banks (RRBs) in driving the financial inclusion agenda, priority sector lending guidelines were revised for RRBs in December 2015 and an overall target of 75 per cent of the total outstanding loans to the priority sector was set for them.

*Initiatives for MSME Sector*

IV.3 In August 2015, the banks were advised to review their existing lending policies to the micro and small enterprises (MSEs) sector and fine-tune them by allowing for standby credit facilities in case of term loans, additional working capital limits, mid-term review of regular working capital limits and timelines for credit decisions. Subsequent to the notification of a 'Framework for Revival and Rehabilitation of Micro, Small and Medium Enterprises' by the Government to provide a simpler and faster mechanism for addressing the stress in MSME accounts, the Reserve Bank issued related guidelines along with operating instructions on March 17, 2016. Under this framework, the revival and rehabilitation of MSME

[1] For instance, a bank with expertise in lending to small farmers can over-perform there and get benefits by selling its over-performance through PSLCs.

**Box IV.1**
**Priority Sector Lending Certificates (PSLCs)**

A scheme of PSLCs was introduced in April 2016. The Reserve Bank provided a platform to enable trading in the certificates through its core banking solution (CBS) portal (e-Kuber). All scheduled commercial banks (including RRBs), urban co-operative banks, small finance banks (when they become operational) and local area banks are eligible to participate in trading. Some of the main features of the scheme are:

- Four kinds of PSLCs: Agriculture, Small and Marginal farmers (SF/MF), Micro enterprises and General can be bought and sold *via* the platform.
- The certificates will have a standard lot size of ₹2.5 million and its multiples.
- There will be no transfer of credit risk on underlying assets as there is no transfer of tangible assets or related cash flows.
- Banks will be permitted to issue PSLCs up to 50 per cent of the previous year's priority sector lending achievement without having the underlying in their books. Banks should meet priority sector targets through direct lending and net PSLCs.
- Banks may be required to invest in the Rural Infrastructure Development Fund (RIDF)/other funds to the extent of the shortfall.
- A bank with a shortfall in achieving any sub-target (for example, SF/MF, micro enterprises) will have to buy specific PSLCs to achieve the target. However, if a bank has a shortfall only with respect to the overall target, it could buy any PSLC.
- PSLCs will not be valid beyond the reporting date (March 31), irrespective of the date of first sale.
- A bank's priority sector lending achievement will be computed as the sum of outstanding priority sector loans and the net nominal value of the PSLCs issued and purchased. Such computation will be done separately where sub-targets are prescribed as on the reporting date.

units having loan limits up to ₹250 million will be undertaken. Banks were also required to put in place Board approved policies to operationalise the framework not later than June 30, 2016.

IV.4 In a move to boost entrepreneurial sensitivity among banks' field-level functionaries, the Reserve Bank in collaboration with the College of Agricultural Banking (CAB), Pune, launched the National Mission for Capacity Building of Bankers for financing the MSME sector (NAMCABS). Since its inception, NAMCABS has imparted training to about 3,000 bankers.

*Natural Calamities and Policy Response*

IV.5 Following the Government's revision of the criteria for crop loss from 50 per cent to 33 per cent for providing input subsidies (compensation) to farmers, State Level Bankers' Committees/ District Level Consultative Committees/banks were allowed to take a view on rescheduling of loans if the crop loss turned out to be 33 per cent or more. Banks were permitted to allow a maximum period of repayment of up to two years (including the moratorium period of one year) if the loss was between 33 per cent and 50 per cent. If the crop loss is 50 per cent or more, the restructured period for repayment can be extended to a maximum of five years (including the moratorium period of one year).

## CREDIT DELIVERY

*Priority Sector*

IV.6 The objective of priority sector lending is to ensure that timely and adequate credit is available to vulnerable sections of society. Priority sector loans include small value loans to farmers for agriculture and allied activities; MSMEs; loans up to ₹2.5 million for low cost housing and up to ₹1 million to students for education; social infrastructure and renewable energy; and to other low income groups and weaker sections of society. Usually these categories of people/activities are unable to access credit due to a perceived lack of viability and creditworthiness even though there are some recent signs of improvement on this front (Box IV.2).

## Box IV.2
## Bank Credit to Small Borrowers: Some Insights

The term 'small' in 'small borrowers' has been redefined from time to time. Currently, accounts with a credit limit of ₹200,000 are taken as small borrowal accounts (SBAs). The credit limit for SBAs was ₹25,000 till 1998 and ₹10,000 till 1983.

There has been a fall in the share of SBAs in total loan accounts and amount since the 1990s (Charts 1 and 2). However, real bank credit per SBA has been on the rise in rural areas; this is contrary to the trend in urban areas (Chart 3). Secondly, gender disparities in bank credit too appear to have been on a decline in rural areas. On average, for every 100 SBAs held by rural men, rural women held about 32 accounts in 2015. As against this, urban women held only 16 loan accounts per every 100 accounts held by urban men. Thirdly, the ratio of bank credit per capita (under SBA) for rural women to urban women has also been largely on a rising trend (Chart 4).

This underlines the need for focused attention to urban poor, keeping in view the increasing urbanisation. Besides expanding the branch network, tailor-made platforms and products need to be designed to reach out to small borrowers in urban areas, including slum-dwellers and domestic workers.

**Chart 1: Share of SBAs in total bank accounts**

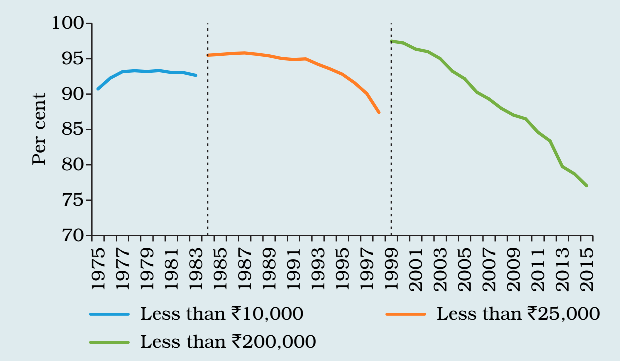



**Chart 3: Real amount per account, SBAs**

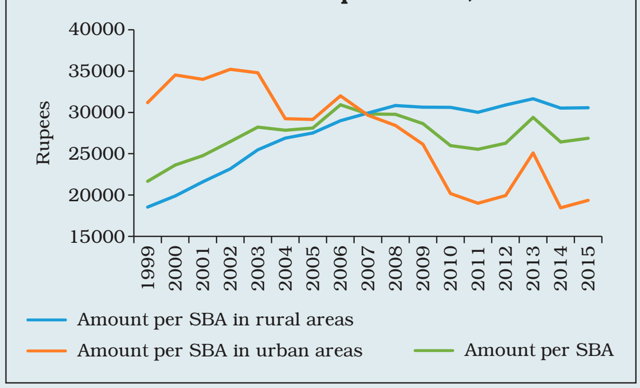



**Chart 2: Share of SBAs in total bank credit**

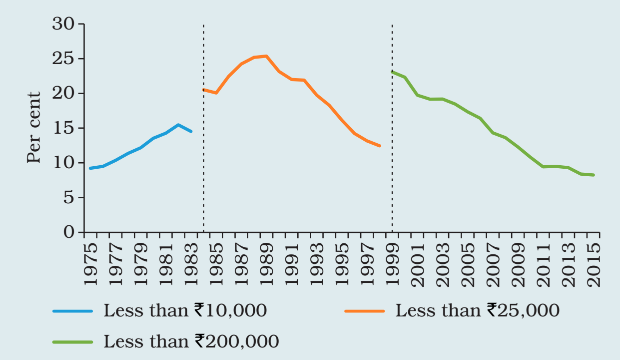
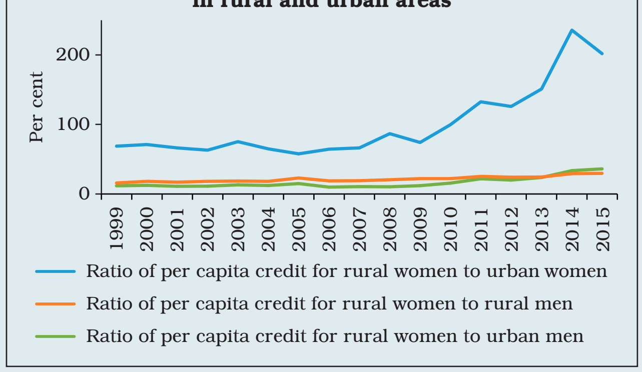



**Chart 4: Ratio of per capita credit (under SBAs) in rural and urban areas**




**Reference:**

Chavan, Pallavi (2016), '*Bank Credit to Small Borrowers: An Analysis based on Supply and Demand-side Indicators*', *mimeo*.

**Table IV.1: Performance in Achievement of Priority Sector Lending Targets**

(₹ billion)

| End-March | Public Sector Banks | Private Sector Banks | Foreign Banks |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 2015 | 17,512 (37.3) | 5,303 (42.8) | 970 (35.9) |
| 2016* | 19,850 (39.3) | 6,480 (44.1) | 1,104 (35.3) |

**Notes:** Figures in parentheses are percentage to adjusted net bank credit (ANBC) or credit equivalent of off balance sheet exposures (OBE), whichever is higher, in the respective groups.
* Provisional.

IV.7 The performance of various bank groups in achieving priority sector targets is given in Table IV.1.

*Flow of Credit to Agriculture*

IV.8 Led by the performance of scheduled commercial banks (SCBs), the actual credit flow to agriculture exceeded the target fixed by the Government for 2015-16 (Table IV.2).

*Credit to the MSME Sector*

IV.9 Reflecting several of the Government's initiatives for the MSME sector, such as 'Make in India', 'Start-up India', 'Ease of Doing Business' and *'Udyog Aadhar'*, which were reinforced by the Reserve Bank's initiatives such as capacity building of field level banking functionaries, addressing life-cycle needs of enterprises and providing simpler and faster mechanisms to address the stress in MSME accounts, credit to this sector has improved in recent times (Table IV.3).

**Table IV.2: Targets and Achievements for Agricultural Credit**

(₹ billion)

| Year | Scheduled Commercial Banks | | Cooperative Banks | | Regional Rural Banks | | Total | |
|---|---|---|---|---|---|---|---|---|
| | Target | Achievement | Target | Achievement | Target | Achievement | Target | Achievement |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 2014-15 | 5,400 | 6,044 | 1,400 | 1,385 | 1,200 | 1,025 | 8,000 | 8,453 |
| 2015-16* | 5,900 | 6,047 | 1,400 | 1,533 | 1,200 | 1,193 | 8,500 | 8,772 |

*: Provisional.
**Source:** NABARD.

**Table IV.3: Credit Flow to MSEs**

| Year | Number of Accounts (million) | Amount Outstanding (₹ billion) | MSE credit as per cent of ANBC |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 2014-15 | 13.8 | 9,612 | 15.5 |
| 2015-16 * | 20.5 | 9,957 | 14.6 |

* Provisional.

*Studies on the Efficacy of Credit Delivery Models*

IV.10 A number of studies were commissioned during the year to assess the efficacy of various schemes and models for credit delivery and financial inclusion – the business correspondent (BC) model, self-help group (SHG)-bank linkage programme, credit guarantee trust for micro and small enterprises (CGTMSE), and the lead bank scheme. A study on farmers' funding requirements was also undertaken in collaboration with CAB, Pune.

IV.11 The study on the efficacy of the BC model brought out the need for certification-training programmes for BCs along with providing them other support in terms of timely and adequate remuneration, effective ways of cash management and improving the acceptance infrastructure and technology. The need for creating a BC registry and effective monitoring and supervision involving banks were also highlighted in the study. The study on the efficacy of SHG-bank linkage found that banks could consider appointing Bank Mitras functioning under the Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM) as BC agents so that they can formally transact the banking business for SHG members as well as for other customers of banks in a specific area. The study also recommended that the SHG-bank linkage activity may be treated as corporate social responsibility. Furthermore, there could be an SHG specific mark for every product involving the engagement of SHGs. A cadre of last mile delivery nodes may be created by leveraging the BC model.

## FINANCIAL INCLUSION

IV.12 The Reserve Bank continued its efforts towards fulfilling the financial inclusion agenda during the year. In this direction, the Committee on Medium-Term Path on Financial Inclusion suggested improvements in the governance system as a means of strengthening credit infrastructure and augmenting the government's social cash transfers to the poor, propelling the economy on to a medium-term sustainable inclusion path (Box IV.3).

*Financial Inclusion Plan*

IV.13 The Financial Inclusion Plan (FIP) provides a structured and planned approach to financial inclusion with a commitment at the highest echelons within banks in terms of Board approval of the plans. Out of 2,259 rural bank branches opened during April 2015-March 2016, 1,670 branches were opened in unbanked rural centres under FIP. Around 71 million basic savings bank deposit accounts were added taking the total to 469 million by March 2016. The total number

### Box IV.3
### Committee on Medium-Term Path on Financial Inclusion

The Committee on Medium-Term Path on Financial Inclusion (Chairman: Shri Deepak Mohanty) which was constituted to work out a medium-term (five year) measurable action plan for financial inclusion, submitted its report in December 2015. The Committee recognised that substantial progress had been made in terms of access to financial products and services especially after the launch of the *Pradhan Mantri Jan Dhan Yojana* (PMJDY). The Committee identified significant gaps in terms of usage, inadequate 'last mile' service delivery, exclusion of women and small and marginal farmers and a very low formal link for micro and small enterprises. Against this background, the committee set a much wider vision of financial inclusion as 'convenient' access to a basket of basic formal financial products and services that should include savings, remittances, credit, government-supported insurance and pension products to small and marginal farmers and low-income households at reasonable costs with adequate protection progressively supplemented by social cash transfers. The Committee also suggested increasing micro and small enterprises' access to formal finance with a greater reliance on technology to cut costs and improve service delivery, such that by 2021 over 90 per cent of the hitherto underserved sections of society become active stakeholders in economic progress empowered by formal finance.

Some of the recommendations of the committee are:

1. Welfare scheme "Sukanya Shiksha" for the girl child with a view to linking education with banking habits.
2. A low-cost solution based on mobile technology for enhancing the effectiveness of last mile delivery as also to facilitate usage.
3. Phasing out of the interest subvention scheme and ploughing the amount into universal crop insurance.
4. An open specialised interest-free window with simple products like demand deposits, agency and participation securities, offering products based on cost-plus financing, deferred payment and deferred delivery contracts.
5. Exploring a system of professional credit intermediaries/advisors for MSMEs to help bridge the information gap and thereby help banks take better credit decisions.
6. Creating a registry for BCs, encouraging BC certification/training programmes.
7. Inter-operability for pre-paid instruments and mobile transactions.
8. Strengthening the financial literacy centre (FLC) network and grievance redressal mechanism and devising a scheme based on transparent criteria that incentivises banks to expeditiously address customer grievances.

of small farm sector credits (Kisan Credit Cards) and small non-farm sector credits (General Credit Cards) stood at 47 million and 11 million, respectively (Table IV.4). With the conclusion of FIP's Phase II (2013-16) on March 31, 2016, all domestic scheduled commercial banks (including RRBs) were advised to set new Board approved FIP targets for the next three years (April 2016 to March 2019).

*Roadmap for Banking Facilities in Unbanked Villages*

IV.14 Banks were initially advised to complete Phase II of the roadmap for covering all 490,298 unbanked villages with population less than 2,000 by March 31, 2016. The timeline was advanced to August 14, 2015 in view of the on-going implementation of the *Pradhan Mantri Jan Dhan Yojana* (PMJDY). At end-March 2016, as reported by the State Level Bankers' Committees (SLBCs), 450,686 villages (91.9 per cent of the target) had been covered by 14,901 branches, 415,207 villages through BCs and 20,578 villages through other modes such as ATMs and mobile vans. Keeping in view the necessity of brick and mortar branches for promoting banking penetration and financial inclusion, a roadmap for establishing such branches in villages with population above 5,000 but without a bank branch of a scheduled commercial bank was rolled out in December 2015. SLBC convenor banks have been advised to ensure opening of bank branches under this roadmap by March 2017.

*Financial Inclusion Advisory Committee (FIAC)*

IV.15 The Reserve Bank set up an advisory body, the FIAC, in 2012 to review financial inclusion policies on an on-going basis and to provide expert advice to the Reserve Bank in this matter. Given the renewed focus on financial inclusion by the Government of India, the on-going implementation of the PMJDY and the need for convergence of

**Table IV.4: Financial Inclusion Plan – A Progress Report**

| Particulars | End-March 2010 | End-March 2015 | End-March 2016 |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| Banking Outlets in Villages – Branches | 33,378 | 49,571 | 51,830 |
| Banking Outlets in Villages – Branchless Mode | 34,316 | 504,142 | 534,477 |
| Banking Outlets in Villages –Total | 67,694 | 553,713 | 586,307 |
| Urban Locations covered through BCs | 447 | 96,847 | 102,552 |
| BSBDA-Through branches (No. in million) | 60 | 210 | 238 |
| BSBDA-Through branches (₹ billion) | 44 | 365 | 474 |
| BSBDA-Through BCs (No. in million) | 13 | 188 | 231 |
| BSBDA-Through BCs (₹ billion) | 11 | 75 | 164 |
| BSBDA-Total (No. in million) | 73 | 398 | 469 |
| BSBDA Total (₹ billion) | 55 | 440 | 638 |
| OD facility availed in BSBDAs (No. in million) | 0.2 | 8 | 9 |
| OD facility availed in BSBDAs (₹ billion) | 0.1 | 20 | 29 |
| KCCs -Total (No. in million) | 24 | 43 | 47 |
| KCCs -Total (₹ billion) | 1,240 | 4,382 | 5,131 |
| GCC-Total (No. in million) | 1 | 9 | 11 |
| GCC-Total (₹ billion) | 35 | 1,302 | 1,493 |
| ICT-A/Cs-BC-Total Transactions (No. in million) | 26.5 | 477.0 | 826.8 |
| ICT-A/Cs-BC-Total Transactions (₹ billion) | 6.9 | 859.8 | 1,686.9 |

the efforts of various stakeholders, FIAC was re-constituted in June 2015. Its revised terms of reference include: (i) preparing a national strategy for financial inclusion which aims at converging financial inclusion efforts of various stakeholders and PMJDY, apart from monitoring the progress; (ii) monitoring progress on FIP; and (iii) monitoring progress on financial literacy.

*Financial Inclusion Fund (FIF)*

IV.16 The financial inclusion fund (FIF) and the financial inclusion technology fund (FITF) were set up in 2007-08 for a period of five years with a corpus of ₹5 billion for each to be contributed by the Government of India, the Reserve Bank and NABARD in the ratio of 40:40:20. The Government of India merged FIF and FITF to form a single financial inclusion fund in July 2015 with a corpus of ₹20 billion. The new FIF, which will be administered by an advisory Board constituted by the Government, will be maintained by NABARD. The fund will be in operation for another three years or till such period as may be decided by the Government of India and the Reserve Bank in consultation with other stakeholders. FIF aims to support developmental and promotional activities leading to greater financial inclusion, for example, the creation of FI infrastructure across the country, capacity building of stakeholders, spreading awareness to address demand side issues, enhanced investments in green information and communication technology (ICT) solutions, research and transfer of technology and improving the technological absorption capacity of financial service providers/users. The fund will not be utilised for normal business/banking activities.

## FINANCIAL LITERACY

IV.17 Financial literacy is crucial for imparting efficacy to financial inclusion initiatives. In the context of a changing financial landscape, especially with the introduction of PMJDY, the emphasis is on keeping new bank accounts operationally active. Banks were, accordingly, advised in January 2016 to focus on enhancing the efficacy of financial literacy programmes through: (i) Board-level policies for a stronger financial literacy architecture; (ii) a tailor-made approach to financial literacy and organising camps for different target groups; and (iii) following a concerted approach among various stakeholders at the district/panchayat/village level (local officials of NABARD and the Reserve Bank, district and local administration, block level officials, NGOs, SHGs, BCs, farmers' clubs, panchayats, primary agricultural credit society (PACS), and village level functionaries).

IV.18 As at end-March 2016, 1,384 financial literacy centres (FLCs) were operational in the country, up from 1,181 FLCs at end-March 2015. During the year ended March 2016, 87,710 financial literacy activities were conducted by FLCs as against 84,089 activities during the preceding year.

### Agenda for 2016-17

IV.19 Going forward, an action plan based on the recommendations of the Committee on Medium-Term Path on Financial Inclusion will be worked out. Three recommendations of the committee, *viz.,* creating a BC registry; formalising certification-training programmes for BCs; and designing a framework for accreditation of credit counsellors have been identified for immediate implementation. Formulating a National Strategy for Financial Inclusion, which forms part of the revised terms of reference of FIAC, will be taken up during the year. District level data on the progress made by banks under FIP will also be collected for better monitoring of banks' FI initiatives. As an impetus to financial literacy activities, capacity building programmes for financial literacy counsellors will be launched in collaboration with CAB, Pune.

# V FINANCIAL MARKETS AND FOREIGN EXCHANGE MANAGEMENT

*During 2015-16, the Reserve Bank undertook measures aimed at broadening participation – both domestic and foreign, widening the range of products and bolstering the financial market infrastructure. Initiatives in the money market included proactive liquidity management, providing market participants more flexibility, reducing volatility and improving transmission of monetary policy signals. The regulatory regime for the foreign exchange market was further streamlined in terms of rules for transactions and reporting requirements.*

V.1 The Reserve Bank has, over time, guided and nurtured the evolution of financial markets in India in tune with the needs of a growing economy, but making them more accessible and globally integrated has been a recent focus. Efforts have also been directed at improving ease of doing business by way of rationalising existing regulations on an on-going basis and simplifying documentation requirements. At the same time, steps have also been taken to render the financial markets more resilient to external as well as internal shocks.

## FINANCIAL MARKETS REGULATION DEPARTMENT (FMRD)

V.2 FMRD is primarily responsible for regulating and developing money, government securities (g-secs), foreign exchange and related derivatives markets. The department took concerted steps to fulfil its mandate of easing market norms for all participants, improving accessibility, increasing the number of financial products, strengthening market infrastructure as also employing market analytics and surveillance mechanism for policy inputs.

### Agenda 2015-16: Implementation Status

V.3 Towards developing a more predictable investment regime, a medium-term framework (MTF) was announced in October 2015 for a phased increase in foreign portfolio investment limits for central government securities and state development loans. Based on the recommendations of the Implementation Group on Encouraging Greater Retail Participation in G-Secs (Chairperson: Smt. Rekha Warriar), the Clearing Corporation of India Ltd. (CCIL) was advised to enable participation of demat account holders in negotiated dealing system order-matching (NDS-OM).

V.4 A Working Group (Chairman: Harun R. Khan), set up under the aegis of the Financial Stability and Development Council Sub-committee (FSDC-SC) considered several measures for strengthening participation, improving market infrastructure and easing the issuance process for corporate bonds. Unlisted securities and securitised debt instruments will shortly be added to the basket of corporate debt for foreign portfolio investor (FPI) investments.

V.5 Guidelines on the introduction of cross-currency futures and options on exchanges were issued on December 10, 2015. Covered options against underlying currency exposures have been allowed. Comments were sought from market participants on the recommendations of the Working Group on Introduction of Interest Rate Options (Chairman: Professor P.G. Apte).

V.6 With a view to further liberalising existing hedging facilities and harmonising the OTC and exchange traded markets, the limits for all resident individuals, firms and companies to book foreign exchange forwards and foreign currency-Indian rupee (FCY-INR) options contracts on the basis of declaration have been increased from US$ 250,000 to US$ 1,000,000. Indian residents having long term foreign currency (FCY) borrowings were permitted to enter into FCY-INR swaps with multilateral or international financial institutions (MFIs/IFIs), in which the Government of India is a shareholding member provided such swaps were undertaken by the MFI/IFI concerned on a back-to-back basis with an authorised dealer (AD) Category-I bank in India.

V.7 Existing guidelines on various financial instruments were comprehensively reviewed with a view to rationalising participation. In the when-issued (WI) market, scheduled commercial banks were allowed to take short positions whereas all eligible entities were permitted to take long positions. Primary dealers (PDs) were allowed to participate in exchange traded currency futures market. For a more broad based participation in OTC derivatives, regulated entities other than banks and PDs such as mutual funds and insurance companies have been enabled to trade in such derivatives on electronic platforms with guaranteed settlements by the CCIL.

V.8 In a move to a more informed policy making process, a standing group on OTC derivatives reforms was constituted under the Technical Advisory Committee on Financial Markets.

V.9 The Financial Benchmarks India Pvt. Ltd. (FBIL) took over the administration of the benchmark for the overnight inter-bank rate based on the actual traded rates on July 22, 2015, replacing the existing 'FIMMDA-NSE Overnight MIBID/MIBOR' by 'FBIL-Overnight MIBOR'. FBIL started publishing the polled term Mumbai interbank offer rate (MIBOR) for three tenors, *viz.,* 14-day, one month and three months from September 23, 2015. In continuation of these efforts, it started publishing the FBIL FC-Rupee Options Volatility Matrix rates from May 05, 2016. FBIL proposes to take over the administration of foreign exchange benchmarks and other Indian rupee (INR) interest rate benchmarks over a period of time in consultation with the stakeholders. The CCIL trade repository expanded the public dissemination of data on a gross basis in pursuit of enhanced transparency. In addition to data on interbank OTC trades on interest rate swaps/ forward rate agreements, credit default swaps (CDS) and USD/INR forwards and options, CCIL has also started disseminating data on short term USD/INR interbank near maturity swaps, *i.e.,* Cash-Tom, Tom-Spot and Cash-Spot from December 28, 2015.

**Agenda for 2016-17**

V.10 Initiatives currently under consideration include changes in e-Kuber to facilitate seamless transfer of g-secs between demat accounts and subsidiary general ledger/gilt accounts and operationalising electronic platforms for repo in corporate bonds in coordination with the Securities and Exchange Board of India (SEBI). Public feedback on the draft framework to comprehensively review documentation requirements in the OTC foreign exchange market has been received and is being examined for implementation. Guidelines on commercial paper (CP), CDS and Separate Trading of Registered Interest and Principal of Securities (STRIPS) will be reviewed to bolster trading activity in these products. Guidelines on currency options relating to suitability and appropriateness will be revisited to make them less restrictive. Taking into account the feedback received from the market, final guidelines on introduction of interest rate options will be issued. In order to further develop the rupee futures market, money market futures will be introduced.

V.11 In fulfilment of the G20 mandate for shifting OTC derivatives on to exchanges or electronic trading platforms, where appropriate, a framework for authorisation of such platforms will be put in place. The legal entity identifier (LEI) uniquely identifies parties to financial transactions globally, the need for which was felt in the aftermath of the global financial crisis. The implementation of the LEI regime for financial market entities will begin during the year. The scope of dissemination of OTC forex derivative transactions by the CCIL Trade Repository will be expanded.

V.12 Market surveillance will be strengthened through use of technology. Data analytics will be leveraged to enhance surveillance capabilities across market segments. Towards leveraging the benefits of Fin Tech, the adoption of various innovations in strengthening market infrastructure will be explored by engaging with industry participants and other central banks.

V.13 Exposure of Indian entities to commodity price risks has been accentuated by the growing integration of the Indian economy with the rest of the world and increasing volumes of cross border trade. An expert group will be set up to review the existing framework for hedging of commodity price risks by Indian entities in the overseas markets with the objective of addressing the gaps in terms of commodities covered, permitted products and users.

## FINANCIAL MARKETS OPERATIONS DEPARTMENT (FMOD)

V.14 FMOD is responsible for conducting financial markets operations in consonance with the policy stance of the Reserve Bank for supporting monetary policy transmission.

### Agenda 2015-16: Implementation Status

*Money Markets and Liquidity Management*

V.15 Efforts at maintaining appropriate level of liquidity in the financial system continued through liquidity management operations, using the fixed/variable rate repo/reverse repo under liquidity adjustment facility (LAF), the overnight marginal standing facility (MSF), other standing facilities and outright open market operations (OMOs) with a view to aligning money market rates with the policy rate for more efficient transmission of monetary policy signals. Towards promoting the term money segment while keeping in view evolving liquidity conditions, a 56-day variable rate repo was conducted in January 2016. As part of the technological up-gradation for smoothening liquidity operations, straight through processing (STP) was introduced for fixed rate repo and reverse repo, and MSF on August 03, 2015, enabling eligible participants to receive credit/debit immediately on placement of bids/offers. More flexibility was imparted to LAF/MSF windows with the extension of timing from November 30, 2015.

V.16 With the second and the fourth Saturdays every month being public holidays for banks under Section 25 of the Negotiable Instruments Act, 1881, it was decided to keep open all money market segments on the working Saturdays from September 01, 2015. Towards aligning liquidity operations with the payment system, reverse repo and MSF are being conducted from February 19, 2016 on all Mumbai holidays when the real time gross settlement (RTGS) system is in operation.

*RBI Reference Rate*

V.17 The Committee on Financial Benchmarks (Chairman: Shri P. Vijaya Bhaskar) constituted by the Reserve Bank to study various issues relating to financial benchmarks in India recommended that the derivation of the USD/INR RBI reference rate should be based on actual market transactions so as to ensure that it appropriately represents the prevailing spot rate. Accordingly, from May 02, 2016, the Reserve Bank reference rate is being computed on the basis of the volume weighted average of the actual market transactions that have taken place during a randomly selected 15-minute window between 11.30 a.m. and 12.30 p.m. every weekday (excluding Saturdays, Sundays and bank holidays in Mumbai). The other three reference rates, *viz.,* EUR/INR, GBP/INR and JPY/INR will continue to be computed by crossing the USD/INR reference rate with the ruling EUR/USD, GBP/USD and USD/JPY rates.

*Foreign Exchange Market*

V.18 Orderly conditions were maintained in the forex market during the year through operations in the spot, forward and futures segments. As an additional instrument to address the volatility in the foreign exchange market, intervention in the exchange traded currency derivatives (ETCD) segment commenced in September 2015. Over the last few months, it has proved to be a useful supplementary tool.

**Agenda for 2016-17**

V.19 The department aims to carry out liquidity management operations effectively as per the revised framework, which entails, *inter alia,* lowering the average *ex-ante* liquidity deficit in the system to a position closer to neutrality by supplying durable liquidity over the year. It will continue to conduct foreign exchange operations, including interventions, in an effective manner. The department will be watchful of market conditions to ensure smooth unwinding of concessional foreign exchange swaps against foreign currency non resident (bank) account [FCNR(B)] deposits maturing from September 2016 onwards.

V.20 The department also intends to introduce measures which are likely to facilitate development of the term money market such as introducing substitution of securities in the LAF window for a specified tenor of repo transactions and accepting collateral based on market value of securities for the LAF/MSF windows. It has taken up a number of research studies on market movements/behaviour over the year which has helped in shaping the policy and operational framework. The department proposes to continue policy oriented research on financial markets.

**FOREIGN EXCHANGE DEPARTMENT (FED)**

V.21 The mandate of the FED is to promote the orderly development and maintenance of the foreign exchange market in India and to facilitate external trade and payments. Accordingly, the measures undertaken during 2015-16 aimed at promoting ease of doing business, focusing particularly on dealing with increasing complexities of international transactions and also reducing the regulatory costs by rationalising, reviewing and revising regulations and returns.

**Agenda 2015-16: Implementation Status**

V.22 The guidelines on external commercial borrowings (ECBs) were rationalised and liberalised during 2015-16 in tune with macroeconomic developments and the experience gained in administering ECBs over the years. The overarching principles of the revised framework for ECBs are: (i) fewer restrictions on end-uses, higher all-in-cost ceiling for long term FCY borrowings as the extended term makes repayments more sustainable and minimises rollover risks for a borrower; (ii) a more liberal approach for INR denominated ECBs where the currency risk is borne by the lender; (iii) expansion of the list of eligible overseas lenders to include long term lenders like sovereign wealth funds and pension funds; and (iv) alignment of the list of infrastructure entities eligible for ECBs with the harmonised list of the Government of India.

V.23 To provide greater flexibility in structuring of trade credit arrangements for imports, resident importers were allowed to raise trade credits in INR allowing the transfer of currency risk to overseas lenders. To facilitate rupee denominated borrowings/bonds from abroad, a framework for such issuance has been put in place with defined parameters such as eligible borrowers, recognised investors, maturity, amount and end-uses (Box V.1).

V.24 After the operationalisation of the export data processing and monitoring system (EDPMS), leading to improved monitoring of export transactions, an analogous information technology based system for monitoring import transactions [import data processing and monitoring system (IDPMS)], is being operationalised.

V.25 The Foreign Exchange Management Act (FEMA), 1999 enacted with 25 original notifications has since undergone over 300 amendments. In this context, the task of rationalising FEMA notifications (which are subordinate legislations) was undertaken. So far 15 original notifications and 95 amendments thereof have been rationalised and consolidated into 13 notifications with 'R' series. In addition, 17 Master Directions covering foreign exchange transactions have been issued

**Box V.1**
**Masala Bonds**

Foreign currency denominated funding through debt – including external commercial borrowings (ECBs), trade credits and bonds – accounts for about one-fifth of the total corporate funding in India (IMF, 2016). Corporates are thus exposed to exchange rate risks, if insufficiently hedged. This makes a case for raising foreign debt (both contractual and marketable) in Indian rupees.

Issuers from a few countries have floated offshore local currency bonds in recent years. However, such issuances have not grown significantly, except in China. Efforts by Chinese authorities to internationalise the Chinese yuan (CNY), a large offshore Renminbi deposit base and gradual CNY appreciation during 2010-14 led to a surge in issuances of offshore CNY bonds. However, CNY depreciation, default by some Chinese entities and improved access to local markets have dampened investor appetite recently. In 2015, offshore CNY bond issuances slumped to USD equivalent 17 billion after hitting a record USD equivalent 33 billion in 2014 with no new issuances in the first two months of 2016. Mexico, Brazil and Philippines have also seen some amount of offshore local currency bond issuances. In summary, offshore domestic currency bonds still form a very small portion of issuances from emerging market countries.

In India, while rupee denominated contractual borrowings from abroad were permitted in September 2011, in September 2015 the Reserve Bank also allowed Indian entities to issue rupee denominated bonds overseas. Prior to this general permission by the Reserve Bank, international financial institutions like the Asian Development Bank and the International Finance Corporation (IFC) had already obtained permission from the Reserve Bank to issue rupee denominated bonds overseas. IFC, which named its rupee denominated bonds as 'Masala Bonds', has been successful in issuing such bonds on multiple occasions with maturity as long as 15 years. A robust macroeconomic scenario in India and a relatively stable currency view could attract investors to rupee bonds issued overseas by Indian corporates. Foreign investors already involved in the Indian domestic currency space could also be interested in the overseas rupee product. Rupee bonds overseas offer ease of access compared to the process of direct investments in India (registration as a foreign portfolio investor (FPI) and involvement of domestic custodians and brokers and local settlement systems). With restrictions primarily in the form of minimum maturity and no restrictions on cost and end-uses virtually opened up, the window for rupee denominated bonds overseas is expected to become a meeting ground for fund seeking Indian corporates and return seeking foreign investors. The window which witnessed initial activities in the form of private placements of bonds overseas, has gathered steam with diverse offshore investors now getting interested in rupee denominated paper of Indian companies. Total agreements for such papers till the first week of August 2016 by Indian companies were to the tune of ₹60 billion. The borrowings would help in discovery of benchmark rates. Further, addressing of issues like: (i) tax adjusted returns to investors and comparative costs for borrowers and (ii) liquidity in the secondary market for overseas bonds, will render the route even more attractive.

**Reference:**

International Monetary Fund (IMF), 2016 Country Report No. 16/76 – India, March.

which cover different classes of transactions permitted as per the rules and regulations framed under FEMA. The Master Directions are updated simultaneously whenever there is a change in rules/regulations or there is a change in policy.

*Easing of Foreign Investment Regime*

V.26 During the year, regulations pertaining to the employee stock options (ESOP) scheme were reframed in sync with the SEBI regulations (for listed companies) and the Ministry of Corporate Affairs' regulations (for unlisted companies). Furthermore, the National Pension System (NPS) was made an eligible investment option for non-resident Indians (NRIs).

V.27 Following the revisions in the foreign direct investment (FDI) policy announced by the Government, the regulations have been amended as: (i) wherever sectoral limits/caps on foreign investment are in place, such limits/caps are required to be reckoned in a composite manner aggregating both FDI and FPI and the 'total foreign investment' in an Indian company is to be taken as the sum total of direct and indirect foreign investments; (ii) foreign investment in limited liability partnership (LLP) is permitted under the automatic route for sectors where 100 per cent FDI is allowed without attendant FDI-linked performance conditionality; (iii) foreign investment up to 100 per cent under the automatic route is permitted in the plantation sector which now includes tea, coffee, rubber, cardamom, palm oil tree and olive oil tree plantations; (iv) the definition of 'real estate business' has been modified and rent income on lease of a property, not amounting to transfer, will not be considered as 'real estate business'; (v) manufacturing has been given a precise definition wherein foreign investment up to 100 per cent under the automatic route is permitted; (vi) entities engaged in single brand retail trading through brick and mortar stores are permitted to undertake retail trading through e-commerce; and (vii) foreign investment in the insurance sector under the automatic route has been increased to 49 per cent from 26 per cent.

*Startups*

V.28 Pursuant to the Monetary Policy Statement of February 02, 2016, several steps have been initiated to facilitate the ease of doing business and contribute to an ecosystem that is conducive to the growth of startups. Accordingly, a dedicated mailbox was set up to provide assistance and guidance to the startup sector. Further, online submission of form A2 for outward remittances has been enabled. Certain transactions related to startups have been clarified/notified as under: (i) issue of shares without cash payment through sweat equity is permitted, provided that the scheme has been drawn either in terms of regulations issued by the SEBI or the government; (ii) issue of shares against legitimate payment owed by the investee company, remittance of which does not require permission under FEMA, is permitted subject to adherence to the FDI policy; (iii) having an escrow arrangement or paying the consideration on a deferred basis for an amount up to 25 per cent of the total consideration for a period not exceeding 18 months in respect of transfer of shares between a resident and a non-resident and (iv) a startup having an overseas subsidiary has been permitted to open an FCY account with a bank outside India for the purpose of crediting to it foreign exchange earnings out of exports/sales made by the said startup and/or the receivables, arising out of exports/sales, of its overseas subsidiary. Furthermore, payments in foreign exchange arising out of its own or its subsidiaries' sales/exports, have been allowed as a permissible credit to an Indian startup's exchange earners' foreign currency (EEFC) account. In addition, the following proposals are under consideration, in consultation with the Government of India: (i) permitting startups to access rupee loans under the ECB framework with relaxations in respect of eligible lender, end-use and cost of borrowing, *etc.*; (ii) issuance of innovative FDI instruments like convertible notes by startups; (iii) streamlining of overseas investment operations for startups; and (iv) simplifying the process for dealing with delayed reporting of FDI related transactions by building a penalty structure into the regulation itself.

*Setting up a Liaison Office, Branch Office or Project Office in India*

V.29 In order to improve the ease of doing business in India, the Reserve Bank has liberalised the approval process for setting up liaison/branch/project office in India by delegating most of the authorities to AD banks except for applications received from citizens of/companies registered or incorporated in Pakistan. Furthermore, applications received from citizens of/companies registered in Bangladesh, Sri Lanka, Afghanistan, Iran, China, Hong Kong or Macau for opening offices in Jammu and Kashmir, the Northeast region, and Andaman and Nicobar Islands would require the prior approval of the Reserve Bank.

*Non-Resident Deposits and Foreign Currency Accounts of Residents*

V.30 Transfers between non-resident ordinary rupee (NRO) accounts have been permitted. Further, NRIs and persons of Indian origin (PIOs) have been permitted to open NRO accounts jointly with other NRIs/PIOs. While permitting remittances outside the country from the balances held in NRO accounts maintained by NRIs and PIOs, ADs are now required to obtain a declaration that the remittances represent the account holder's legitimate receivables in India and do not represent any borrowing from any other person or transfer from any other NRO account. Non-residents having a business interest in India are permitted to open a repatriable special non-resident rupee (SNRR) account with balances commensurate with business operations. An Indian company receiving foreign investment under the FDI route has been permitted to open and maintain an FCY account with an AD in India provided it has impending FCY expenditure. The account needs to be closed immediately after the requirements are completed or within six months from the date of opening of such account, whichever is earlier.

*Black Money Act*

V.31 Pursuant to the enactment of the Black Money (Undisclosed Foreign Income and Assets) and Imposition of Tax Act on May 26, 2015, the Reserve Bank has put in place a process for regularising assets declared under the Act which are being held in contravention of FEMA or the rules and regulations framed thereunder.

*Trade Transactions and Settlement*

V.32 Use of Nostro accounts of commercial banks of the Asian Clearing Union (ACU) member countries, *i.e.*, the ACU dollar and ACU euro accounts, has been allowed for settling payments for both exports and imports of goods and services among the ACU countries.

V.33 Guidelines were issued to banks for settling export/import transactions where the invoicing is in a freely convertible currency and the settlement takes place in the currency of the beneficiary, which though convertible, does not have a direct exchange rate.

V.34 To ease operational difficulties faced by importers of rough, cut and polished diamonds, AD banks have been delegated the powers to permit clean credit for an additional period of up to 180 days over and above the 180 days prescribed period, subject to certain conditions.

*Rationalisation of Returns*

V.35 Towards rationalisation of returns and liberalisation of procedures, the physical filing of three FDI related returns, *viz.*, advance remittance form (ARF), form foreign currency gross provisional return (FC-GPR) and form foreign currency transfer of shares (FC-TRS) has been replaced with online filing on the Government's e-Biz portal. Reporting by AD banks to the Reserve Bank under the Diamond Dollar Account scheme has been dispensed with. Filing of returns showing details of trade related loans and advances by exporters to overseas importers from their EEFC accounts has also been dispensed with. The submission of documents by full-fledged money changers (FFMC)/AD Category-II while opening additional branches has been relaxed while the single/bulk filing of the SOFTEX form for certification has been made available to all software exporters.

*Compounding of Contraventions under FEMA, 1999*

V.36 With a view to imparting transparency and providing greater disclosure, the compounding orders passed on or after June 01, 2016 are being put on the Reserve Bank website. For the general public's information, the guidance note on the methodology used for calculating the amount imposed under the compounding process has been hosted on the Reserve Bank website.

**Agenda for 2016-17**

V.37 To further facilitate trade, payments and investments, the department will: (i) complete the task of rationalising and simplifying notifications issued under FEMA; (ii) rationalise returns to reduce the regulatory burden on users of foreign exchange; (iii) operationalise IDPMS for monitoring of import transactions and (iv) put in place a simplified revised framework for dealing with delayed reporting of FDI transactions. Furthermore, proposals with respect to startups as mentioned above (para V.28) will be implemented in consultation with the government.

# VI REGULATION, SUPERVISION AND FINANCIAL STABILITY

*Despite a moderate revival in economic activity coupled with an upturn in credit growth during the year, the Indian banking sector continued to battle with significant deterioration in loan quality. Consequently, the Reserve Bank had to undertake supervisory measures including an asset quality review (AQR) for restoring the health of the banking system over the medium term. On the regulatory front, the Reserve Bank continued its efforts to strengthen the prudential policy framework to effectively address the challenge of rising stressed assets and facilitate the restoration of stalled projects. The process of transition of banks in India to the Indian Accounting Standards (Ind AS) converged with International Financial Reporting Standards (IFRS) was initiated. The commitment to enhancing financial inclusion and competition in the banking sector was reinforced with the approval to set up small finance and payments banks and a move to on-tap licensing of universal banks. With the objective of encouraging competition while reducing regulatory arbitrage, the process of aligning the regulatory frameworks for various segments of the financial system was carried forward. The year also witnessed complete operationalisation of the Charter of Customer Rights, which will play a pivotal role in ensuring consumer protection in the banking sector in the years to come.*

VI.1 Notwithstanding the moderate pick-up in economic growth and credit conditions, the banking sector continued to grapple with the challenge of rising non-performing assets (NPAs) during 2015-16. To address the concerns of asset quality, the Reserve Bank initiated supervisory action in the form of an asset quality review (AQR) during the year. Based on the observations made during the AQR, banks proactively recognised stressed assets, which resulted in a predictable increase in provisioning and a decline in profitability, particularly of public sector banks (PSBs). While stressed assets affected the overall performance of banks, there was an improvement in capital positions during the year due to changes in the regulations governing capital adequacy which aligned them with global regulatory norms.

VI.2 While being vigilant about the regulation and supervision of commercial banks, the Reserve Bank remained committed to the ongoing agenda of harmonising prudential regulations across various segments of the financial sector, *viz*., co-operative banks, non-banking financial companies (NBFCs) and commercial banks. The year witnessed the entry of new players in the banking sector with the establishment of small finance and payments banks. These banks are expected to cater to niche domains and under-served segments of the population, and thereby further financial inclusion while fostering competition in the banking sector.

VI.3 An important concern in achieving financial inclusion and stability relates to customer services and protection. Towards this end, the Reserve Bank fully operationalised the Charter of Customer Rights. It also undertook a comprehensive review of the Banking Ombudsman (BO) scheme to address challenges posed by the recent growth in banking consumers following the implementation of the Pradhan Mantri Jan-Dhan Yojana (PMJDY).

VI.4 Thus, the year witnessed a slew of policy actions in pursuance of the three pillars envisaged by the Reserve Bank for improving the regulation and supervision of the financial sector, *viz*., strengthening the banking structure through new players; expanding financial access; and improving the system's ability to deal with distress.

## FINANCIAL STABILITY UNIT

VI.5 The Financial Stability Unit (FSU) within the Reserve Bank is entrusted with the responsibility of macro-prudential surveillance through systemic stress tests and other tools as well as dissemination of information relating to the status of and challenges to financial stability through the bi-annual Financial Stability Report (FSR). It also acts as a secretariat to the Sub-Committee of the apex institutional mechanism for financial stability in the country, *viz.*, the Financial Stability and Development Council (FSDC).

### Agenda for 2015-16: Implementation Status

VI.6 In 2015-16, the FSR was published in December 2015 (along with the Report on Trend and Progress of Banking in India) and June 2016, as planned. The stress testing framework was refined by incorporating sectoral probability of defaults and modelling corporate sector distress. In addition, distress in select industrial sectors and its impact on the banking sector was examined.

VI.7 The Sub-Committee of FSDC held two meetings in 2015-16 and reviewed various issues relating to, *inter alia,* central know your customer registry (CKYCR), International Financial Services Centre, development of corporate bond market, peer-to-peer (P2P) lending, regulation of credit guarantee schemes, risks in deposit mobilisation by multi-state co-operative societies and the Stewardship Code.[1] The Sub-Committee recommended the formation of an inter-regulatory group on financial technology (FinTech) to examine the models followed internationally and determine an appropriate regulatory framework in this regard (also see Box VI.2). The Sub-Committee also agreed to set up a working group to formulate an effective and comprehensive 'National Gold Policy'. Furthermore, a Working Group on Corporate Bonds (Chairman: H. R. Khan) with representation from the central government and various financial sector regulators was constituted following the recommendations of the Sub-Committee.

VI.8 Through its two meetings, the Inter-Regulatory Technical Group (IRTG) – a sub-group of the FSDC Sub-Committee – deliberated upon a range of issues, such as legal entity identifier (LEI), a regulatory framework for NBFC-account aggregator (AA), securitisation, a single entity undertaking multiple activities and progress on the Shadow Banking Implementation Group.

### Agenda for 2016-17

VI.9 Going forward, besides macro-prudential surveillance, the publication of the bi-annual FSR is envisaged along with conducting meetings of the FSDC Sub-Committee. The study of select industries, especially with regard to the banking sector's exposure to these industries, will also be undertaken during the year.

## REGULATION OF FINANCIAL INTERMEDIARIES

### Commercial Banks: Department of Banking Regulation (DBR)

VI.10 DBR, which is the nodal department for regulation of commercial banks, has been proactively addressing both the time and cross-sectional dimensions of risks to preserve systemic stability. Apart from stability, its focus has also been on developing an inclusive and competitive banking structure through appropriate regulatory measures. The regulatory framework is also tweaked in tune with the requirements of the Indian

[1] The Stewardship Code aims to enhance the quality of engagement between asset managers and companies to help improve the long-term risk-adjusted returns to shareholders.

economy while suitably adopting international best practices.

## Agenda for 2015-16: Implementation Status

*Financial Stress and Reinforcements*

VI.11 During 2015-16, the Reserve Bank continued to fortify the regulatory framework for dealing with stressed assets, *inter alia*, by way of a more effective joint lenders' forum (JLF) with senior-level representation from banks, change of ownership in borrowing entities even outside the strategic debt restructuring (SDR) scheme, and specifying the criterion for divestment of banks' holdings in favour of new promoters under the SDR scheme. Furthermore, to strengthen the ability of lenders for deep financial restructuring, the Reserve Bank introduced the Scheme for Sustainable Structuring of Stressed Assets (S4A). The Insolvency and Bankruptcy Code was also passed during the year to strengthen the framework for resolution of corporate entities, partnership firms and individuals in a time-bound manner. To further improve recovery, amendments to the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act, 2002 and Recovery of Debts Due to Banks and Financial Institutions (RDDBFI) Act, 1993 have been passed by Parliament (Box VI.1).

### Box VI.1
### Enforcement of Security Interest and Recovery of Debts Laws and Miscellaneous Provisions (Amendment) Bill, 2016

In view of the difficulties faced by banks and financial institutions in recovering loans and enforcing securities charged with them, a need was felt to amend the existing debt laws. Accordingly, the Enforcement of Security Interest and Recovery of Debts Laws and Miscellaneous Provisions (Amendment) Bill, 2016 has been passed by Parliament in August 2016.

A. Amendments to the SARFAESI Act, 2002 are proposed to improve recovery and augment ease of doing business. These, *inter alia,* include:

- Registration of creation, modification and satisfaction of security interest by all secured creditors and provision for integration of registration systems under different laws relating to property rights with the Central Registry to create a central database of security interests on property rights;
- Enabling non-institutional investors to invest in security receipts;
- Bringing hire purchase, financial lease and conditional sale under its ambit;
- Strengthening the regulation of asset reconstruction companies (ARCs) by the Reserve Bank, including powers to audit, inspect, change directors, issue directions for regulation of management fee and impose penalties;
- Making debenture trustees at par with secured creditors;
- Specifying the timeline for taking possession of secured assets; and
- According priority to secured creditors in repayment of debts over all other debts.

B. Amendments to the RDDBFI Act, 1993 are proposed to reduce stressed assets in the banking system. These, *inter alia,* include:

- Expeditious adjudication of recovery applications and empowering the central government to provide uniform procedural rules for conducting proceedings in Debt Recovery Tribunals (DRTs) and Debt Recovery Appellate Tribunals (DRATs);
- Instituting electronic filing of recovery applications, documents and written statements; issuing summons by the tribunals in electronic forms; and display of interim and final orders of DRTs and DRATs on their websites; and
- According priority to secured creditors in repayment of debts over all other claimants including claims of the central government, state government or local authorities.

C. The Bill also seeks to amend the Indian Stamp Act, 1899 to exempt assignment of loans in favour of ARCs from stamp duty; and the Depositories Act, 1996 to facilitate the transfer of shares held in pledge or on conversion of debt into shares in favour of banks and financial institutions.

VI.12 A discussion paper (DP) on 'Large Exposures Framework and Enhancing Credit Supply through Market Mechanism' was released by the Reserve Bank in March 2015. The DP included proposals on the convergence of extant exposure norms with the 'Large Exposures Framework' (LEF) of the Basel Committee on Banking Supervision (BCBS) as also a proposal to encourage market mechanism for reducing the reliance of large corporate borrowers on the banking system. While the former addressed the concentration risks for individual banks, the latter dealt with those at the systemic level.

VI.13 In view of the importance of concentration risks at the systemic level, a separate DP was also released in May 2016 on the 'Framework for Enhancing Credit Supply for Large Borrowers through Market Mechanism'. This DP defined a 'specified borrower' and a 'normally permitted lending limit' (NPLL) for such a borrower. Furthermore, it proposed a disincentive mechanism for incremental borrowing by such a borrower from the banking system beyond NPLL.

*Small Finance and Payments Banks*

VI.14 As part of its initiatives towards financial inclusion through a bouquet of banking products, including small credit, small savings and payments/ remittances, the Reserve Bank issued in-principle approval for setting up of 11 payments banks and ten small finance banks (SFBs) in September 2015 and October 2015, respectively. The Reserve Bank also worked towards finalising the regulatory framework for these new entities. Furthermore, in March 2016, the first SFB licence was granted to Capital Small Finance Bank Limited – a case of conversion of a local area bank (LAB) into a SFB. The first payments bank licence was granted to Airtel Payment Bank Ltd. in April 2016. In June 2016, the second SFB licence was granted to Equitas Small Finance Bank.

*Lending Rate based on Marginal Cost of Funds*

VI.15 In order to improve transparency in the methodology followed for determining lending rates and strengthening monetary policy transmission, banks were mandated to price their credit using the marginal cost of funds based lending rate (MCLR) as the internal benchmark. Details about MCLR are given in Chapter III.

*On-tap Licensing of Banks*

VI.16 With the objective of encouraging greater competition and innovation in the banking system, guidelines for on-tap licensing of universal banks were released in August 2016. Apart from instituting a continuous process of licensing of banks in the private sector, these guidelines have mooted, *inter alia*, inclusion of resident individuals/ professionals with experience in banking and finance but exclusion of large industrial/business houses as eligible promoters, and making a non-operative financial holding company (NOFHC) mandatory only under certain conditions.

*Transition to Indian Accounting Standards (Ind AS)*

VI.17 To pave the way for a time-bound transition of the existing accounting framework for banks in India to the Indian Accounting Standards (Ind AS) converged with IFRS, banks were advised in February 2016 to comply with the Ind AS in the preparation of financial statements for the accounting periods beginning April 1, 2018 with comparatives for the period ending March 31, 2018. Banks were also advised to initiate the implementation process with immediate effect under the oversight of the audit committees of their boards.

*Master Directions*

VI.18 Following the announcement in the Reserve Bank's Annual Report 2014-15, ten Master Directions, *viz.*, on interest rate on deposits and advances; KYC (consolidating all relevant instructions issued by different departments of the Reserve Bank); amalgamation; issue and pricing of shares of private sector banks; ownership in private sector banks; prior approval for acquisition of shares or voting rights in private sector banks; Gold Monetisation Scheme; financial services provided by banks; and presentation, disclosure and reporting by All-India Financial Institutions (AIFIs) were issued during the year. These directions are expected to impart more clarity and focus to communication with stakeholders.

*Future of Local Area Banks (LABs) and Ownership in Private Banks*

VI.19 Consultations with the central government on broad options for the future set-up of LABs were underway during the year. The extant guidelines on ownership in private sector banks were revisited with a view to meeting the need for additional capital consequent to the implementation of Basel III capital regulations and rationalisation of the ownership limits for these banks.

*Governance Reforms in Public Sector Banks*

VI.20 Following the recommendations made by the Committee to Review Governance of Boards of Banks in India (Chairman: Shri P. J. Nayak), the Banks Board Bureau (BBB) was set up by the central government with support from the Reserve Bank to infuse greater professionalism in the constitution and operation of the boards of PSBs. The BBB started functioning from April 8, 2016.

**Agenda for 2016-17**

VI.21 In pursuance of the regulatory stance in 2015-16, the Reserve Bank will continue to monitor and respond to banks' asset quality issues in 2016-17. Furthermore, the policy on prudential and implementation aspects of the expected credit loss (ECL) approach, as envisaged in Ind AS 109, is intended to be finalised. A review of the guidelines/instructions on various aspects relating to Ind AS will be undertaken during the year. Efforts will also be initiated for capacity building on Ind AS both internally and in banks.

VI.22 Draft guidelines for computing exposure for counterparty credit risk (CCR) arising from derivative transactions and capital requirements for bank exposures to central counterparties (CCPs) were issued for comments in June 2016. The final guidelines shall be issued by end-December 2016 for implementation from April 1, 2017. A discussion paper on margin requirements for non-centrally cleared derivatives was also released in May 2016. Final guidelines in this regard will be issued during the first half of 2016-17. Furthermore, draft guidelines on the LEF and the revised securitisation framework in alignment with the BCBS standards are also proposed to be issued during the year.

VI.23 In May 2015, draft guidelines on the net stable funding ratio (NSFR) were issued, taking into account the BCBS's final rules of October 2014. The objective of NSFR is to ensure that banks maintain stable funding profiles in relation to the composition of their assets and off-balance sheet activities, limiting their over-reliance on short-term wholesale funding. The final guidelines on NSFR will be issued in the second half of 2016-17 after a consultative process, for implementation from January 1, 2018.

VI.24 It is proposed to review and rationalise the branch authorisation framework for domestic scheduled commercial banks and the existing guidelines with regard to export credit. It is also planned to extend the Basel III framework to AIFIs in 2016-17. Banking, like many other fields, has been revolutionised by digital innovations in recent years. To assess the potential in this sector, the Reserve Bank has set up an Inter-regulatory Working Group on Fin Tech and Digital Banking (Box VI.2). The report of the Working Group will help in designing an appropriate regulatory framework for these innovative institutions and

**Box VI.2**
**Fin Tech and Digital Innovation – Opportunities, Challenges and Risks**

Financial services, including banking services, are at the cusp of a revolutionary change driven by technological and digital innovations. Fin Tech is an umbrella term coined to denote new competitors (typically non-financial firms) bringing technological innovations having a bearing on financial services. Digital banking, block chain technology, distributed ledgers, big data and P2P/business-to-business (B2B)/business-to-consumers (B2C) platforms which bring together lenders and borrowers are some of the more recent innovations in Fin Tech. These offer tremendous opportunities and benefits for the financial sector. Convenience and speed of performance, real-time transactions, lower transaction costs, distributed ledger data availability for information and decision making, product tailoring and absence of intermediaries are some of the benefits of Fin Tech.

Fin Tech is of particular relevance in India given the national aspiration for universal financial inclusion, ensuring last mile reach of finance at affordable costs. A combination of cloud computing, hand-held devices and mobile smartphones have aided the expansion of Fin Tech in India. The newly introduced payments banks are expected to be important players in the arena of Fin Tech given the central role of technology in their operations.

However, Fin Tech brings with it several challenges for the regulator given its departure from the traditional process of financial intermediation. The risks entailed therein are not just limited to technology but could, *inter alia,* involve: issues arising from transactions in financial products by unregulated financial and non-financial entities; outsourcing of products/services; and acquisition of software solutions without access to/awareness about source codes.

In view of the 'disruptive' potential of Fin Tech, it is necessary to examine the need for regulation and design an appropriate regulatory framework, if required. Hence, the Reserve Bank has set up an Inter-regulatory Working Group on Fin Tech and Digital Banking (Chairman: Shri S. Sen) in July 2016. The Group, *inter alia*, will assess the opportunities and risks from Fin Tech for customers and other stakeholders. Furthermore, it will examine the implications and challenges of Fin Tech for various financial sector functions, including intermediation, clearing and payments being taken up by non-financial entities, and suggest appropriate regulatory response, if any.

products. The possibilities of licensing other differentiated banks such as custodian banks, and wholesale and long-term financing banks will be explored in a paper to be released for comments by September 2016.

VI.25 It is observed that some sections of the Indian society have remained financially excluded for religious reasons that preclude them from using banking products with an element of interest. Towards mainstreaming these excluded sections, it is proposed to explore the modalities of introducing interest-free banking products in India in consultation with the Government.

### Co-operative Banks: Department of Co-operative Bank Regulation (DCBR)

VI.26 Over the years, the Reserve Bank has played a key role in the revival and strengthening of the co-operative banking sector by instituting an appropriate regulatory and supervisory framework. In 2015-16 as well, DCBR, the department in-charge of prudential regulation of co-operative banks comprising urban co-operative banks (UCBs), state co-operative banks (StCBs) and district central co-operative banks (DCCBs), took several initiatives for strengthening the framework further.

### Agenda for 2015-16: Implementation Status

VI.27 The report of the High Powered Committee on UCBs (HPC) was placed on the Bank's website and comments of the public were obtained. A meeting was held in May 2016 with the stakeholders to elicit their views on the implementation of recommendations of the HPC. Furthermore, workshops were conducted for statutory auditors of UCBs to improve the quality of audit.

*Harmonisation of Regulatory Policies*

VI.28 The Reserve Bank has been in the process of harmonising regulations within the co-operative space, *i.e.*, between urban and rural co-operative banks as well as aligning regulations in a carefully calibrated manner between co-operative and commercial banks. Accordingly, harmonisation of the following regulations was accomplished during the year: (i) valuation of gold jewellery accepted as security/collateral; (ii) provision of internet banking to customers; (iii) issue of ATM-cum-debit cards; (iv) provision of value-added services through ATMs; and (v) investments in market infrastructure companies (MICs).

*Revival and Licensing of Unlicensed DCCBs*

VI.29 In order to ensure that only licensed entities occupy the co-operative banking space in the interest of depositors, the licensing norms for co-operative banks were revised in 2009. The positive fallout of these policy efforts could be seen in the decline in the number of unlicensed StCBs and DCCBs. For the revival and licensing of 23 DCCBs that continued to be unlicensed, a scheme was launched by the central government in 2014, the details and outcome of which are given in Box VI.3.

*Developments relating to Scheduling, Licensing and Mergers*

VI.30 Five non-scheduled co-operative banks, *viz*., Apna Sahakari Bank Ltd., Mumbai; Vasai Vikas Sahakari Bank Ltd., Thane; Jalgaon Peoples Co-operative Bank Ltd., Jalgaon; Rajarambapu Sahakari Bank Ltd., Peth, Sangli; and Uttarakhand State Co-operative Bank Limited, Haldwani were included in the Second Schedule to the RBI Act, 1934 during the year. Following the formation of the state of Telangana, the Telangana State Co-operative Apex Bank Ltd., which commenced its operations on April 2, 2015, was issued a banking licence on April 18, 2016. Five proposals for

**Box VI.3**
**Revival and Licensing of Unlicensed DCCBs**

With the rollout of a revival package by the central government for short-term co-operative credit institutions in 2006 (based on the recommendations of the Task Force on Revival of Rural Co-operative Credit Institutions (Chairman: Professor A. Vaidyanathan)), and the revision in licensing norms by the Reserve Bank in 2009, the number of unlicensed entities in the co-operative banking space has been on a decline. While the number of unlicensed StCBs reduced from 17 to zero, the number of unlicensed DCCBs came down sharply from 296 to 23 by June 2013.

In November 2014, the central government announced another scheme for the revival of 23 unlicensed DCCBs in four states (16 in Uttar Pradesh, three each in Jammu and Kashmir and Maharashtra, and one in West Bengal). Under the scheme, the estimated capital infusion for DCCBs was placed at ₹23.76 billion of which, ₹6.73 billion was to be contributed by the central government, ₹14.65 billion by state governments and ₹2.38 billion by the National Bank for Agriculture and Rural Development (NABARD). As per the scheme, the central government's contribution will be released through NABARD as an interest-free loan and will be converted into a grant on the fulfilment of conditions/deliverables outlined in the scheme. Among the conditions outlined, the DCCBs have been asked to (a) reduce their NPA ratios by at least 50 per cent by March 31, 2017; (b) achieve a growth of 15 per cent in their deposits in the following two years; (c) prepare monthly monitorable action plans; (d) ensure the appointment of competent CEOs fulfilling 'fit and proper' criteria; and (e) put in place appropriate corporate governance systems.

NABARD's contribution will be in the form of loans to respective state governments. Furthermore, state governments are expected to finance the additional fund requirements for meeting the capital to risk-weighted assets ratio (CRAR) of 7 per cent as on March 31, 2015. For implementing the scheme, a tripartite agreement in the form of a memorandum of understanding (MoU), stipulating the conditions/deliverables, was signed between the central government, the concerned state government and NABARD. Subsequent to the release of funds by the central government, the state governments of Maharashtra and Uttar Pradesh, and NABARD, licences were issued in 2015-16 to three DCCBs in Maharashtra and 11 DCCBs in Uttar Pradesh bringing down the number of unlicensed DCCBs to nine as on June 30, 2016.

mergers of UCBs were approved during the year and out of these, three were implemented.

**Agenda for 2016-17**

VI.31 The on-going process of harmonisation of regulations for co-operative banks will be continued in 2016-17. Implementation of the revival scheme of the central government will be pursued with a view to ensuring that the DCCBs covered under the scheme are licensed. Implementation of some recommendations of the HPC will be considered based on the feedback received from stakeholders.

**Non-Banking Financial Companies (NBFCs): Department of Non-Banking Regulation (DNBR)**

VI.32 NBFCs play a critical role in catering to under-served niche sectors. An orderly development of NBFCs has been a priority for the Reserve Bank as shadow banking operations have a bearing on the stability of the financial system. In 2015-16, the focus of DNBR was to take forward the process of harmonisation of regulations across NBFCs and banks and move towards activity-based regulation.

**Agenda for 2015-16: Implementation Status**

*Continued Harmonisation of Prudential Regulations*

VI.33 During the year, harmonisation of the following prudential regulations pertaining to NBFCs was undertaken: early recognition of financial distress; prompt steps for resolution and fair recovery for lenders, including guidelines on the formation of JLF and corrective action plan (CAP); factoring activities by banks and those for NBFC-factors; risk weights assigned to exposures to central/state government/s and claims guaranteed by state governments; risk weights with respect to investments in corporate bonds by standalone primary dealers; and strategic debt restructuring and refinancing of project loans.

*NBFC-Account Aggregator and P2P Lending*

VI.34 Towards a consolidated view of financial assets, a new category of NBFC, *viz*., NBFC-AA was proposed (Box VI.4). In addition, a

**Box VI.4**
**NBFC-Account Aggregator**

At present, financial asset holders such as holders of savings bank deposits, fixed deposits, mutual funds and insurance policies, get a scattered view of their financial asset holdings if the entities with whom these accounts are held fall under the purview of different financial sector regulators. This gap will be filled by account aggregators who will provide information on various accounts held by a customer in a consolidated, organised and retrievable manner. The option to avail the services of an account aggregator by a customer will be purely voluntary.

The draft directions governing NBFC-account aggregator (AA) were issued by the Reserve Bank in March 2016. Accordingly, the activities of NBFC-AA will be regulated by the Reserve Bank to ensure that the nature and terms of its services conform to prescribed standards. As per these guidelines, the business of an account aggregator will be entirely driven by information technology (IT). The account aggregator will not support any transaction in financial assets by its customers. The account aggregator will not undertake any business other than the business of account aggregation. However, deployment of investible surplus by the aggregator in instruments, not for trading, will be permitted. Pricing of services will be as per the board-approved policy of the account aggregator.

The account aggregator will ensure that the provision of services to a customer who has made a specific application for availing such services, will be backed by appropriate agreements/authorisations between the aggregator, customer and financial service provider. The information will be shared by the account aggregator only with the customer to whom it relates or any other person authorised by the customer. The account aggregator will be bound by the terms and conditions of the licence (such as customer protection, grievance redressal, data security, audit control, corporate governance and risk management framework). The account aggregator will have a Citizen Charter that explicitly guarantees the protection of the rights of customers.

**Box VI.5**
**Peer-to-Peer Lending**

Peer-to-peer (P2P) lending is an innovative form of crowd-funding with financial returns. It involves the use of an online platform to bring lenders and borrowers together and help in mobilising unsecured finance. The borrower can either be an individual or a business requiring a loan. The platform enables a preliminary assessment of the borrower's creditworthiness and collection of loan repayments. Accordingly, a fee is paid to the platform by both borrowers and lenders. Interest rates range from a flat interest rate fixed by the platform to dynamic interest rates as agreed upon by borrowers and lenders using a cost-plus model (operational costs plus margin for the platform and returns for lenders).

One of the main advantages of P2P lending for borrowers is that the rates are lower than those offered by money lenders/unorganised sector, while the lenders benefit from higher returns than those obtained from a savings account or from any other investment.

Although there has been significant growth in online lending platforms globally, there is no uniformity in the regulatory stance with regard to this sector across countries. While P2P lending platforms are banned in Japan and Israel, they are regulated as banks in France, Germany and Italy, and are exempt from any regulation in China and South Korea. Differences in regulatory stance emanate ideologically. It is argued that regulation may stifle the growth of this nascent sector. On the other hand, proponents of regulation argue that the unregulated growth of this sector may breed unhealthy practices by market players and may, in the long-run, have systemic concerns given the susceptibility of this sector to attract high risk borrowers and also weaken the monetary policy transmission mechanism.

In India, there are currently many online P2P lending platforms and the sector has been growing at a rapid pace. The Reserve Bank released a consultation paper on P2P lending in April 2016. The paper deliberated the advantages and disadvantages of regulating P2P platforms and underscored the need to develop a balanced regulatory approach that would protect lenders and borrowers without curbing the underlying innovations. Accordingly, P2P platforms are proposed to be regulated as a separate category of NBFCs. The feedback received on the paper from various stakeholders is being examined to finalise the regulatory framework.

consultation paper for designing a suitable regulatory framework for P2P lending was also released (Box VI.5).

*Simplification of the Registration Process*

VI.35 The process of issuing certificates of registration (CoRs) for NBFCs was simplified and rationalised. Accordingly, the number of documents to be submitted for CoR were reduced from 45 to about eight. Furthermore, NBFCs were divided into two categories for the purpose of CoR, *viz.*, Type I and Type II. It was also decided to fast track applications of Type I NBFCs, which do not access public funds and do not have customer interface.

**Agenda for 2016-17**

VI.36 As in the past, the process of regulatory convergence between NBFCs and banks will be carried forward in 2016-17. Furthermore, the year will also witness policy measures towards grouping NBFCs into fewer categories. As part of public consultation process, the feedback from stakeholders and public on the draft directions for NBFC-AA and the consultation paper on P2P lending has been received. The feedback is being examined to finalise the directions and initiate the process of granting in-principle approval for NBFC-AA and also to finalise the contours of regulation of P2P platforms.

## SUPERVISION OF FINANCIAL INTERMEDIARIES

**Commercial Banks: Department of Banking Supervision (DBS)**

VI.37 In India's bank-dominated financial system, DBS – entrusted with the responsibility of supervising scheduled commercial banks (SCBs) – plays a central role in ensuring systemic stability. Apart from SCBs, DBS also renders supervisory oversight of AIFIs and acts as the secretariat to the Inter-Regulatory Forum (IRF) set up under the aegis of the Sub-Committee of the FSDC for coordinated supervision of financial conglomerates (FCs).

**Agenda for 2015-16: Implementation Status**

VI.38 In the backdrop of continuing concerns about asset quality, the Reserve Bank conducted AQR during July-September 2015 of banks' loan assets against applicable norms stipulated by it. This exercise covered 36 major banks. The status of large borrowal accounts across banks was examined in a coordinated manner, extensively analysing off-site data available from the central repository for information on large credits (CRILC) and other data dumps. The exercise revealed significant divergence between the reported levels of impairment and actual positions. Hence, after multiple levels of review, the banks were advised to appropriately adjust the impairments in their books. While the immediate impact of the AQR was seen in the third quarter results, the major impact was expected to be reflected in the last quarter results for 2015-16. Furthermore, based on the experience gained over the past years, an Early Warning System (EWS) was set up and a modified Prompt Corrective Action (PCA) framework for banks is being finalised.

VI.39 During 2015-16, 34 more banks (including 28 small foreign banks with one/two branches) have been brought under the Supervisory Programme for Assessment of Risk and Capital (SPARC) framework. This marked the successful completion of the third cycle of Risk-Based Supervision (RBS) for banks operating in India since its introduction in 2012-13. An integral part of the RBS framework has been the capacity building of bank officials as well as Reserve Bank's supervisory staff. Accordingly, the Reserve Bank provided broad guidance on designing training programmes for internal skill enhancement, including the intended objectives, tentative coverage, methodology and resources for conceptualisation of these programmes. The Reserve Bank also conducted three focused workshops covering nearly its entire staff associated with the RBS. The workshops deployed case studies, quizzes and concept checker methods to achieve the desired skill transmission and assimilation.

VI.40 The Reserve Bank conducted sensitisation sessions for banks already under the RBS on the theme 'Ensuring Accuracy and Integrity of Information Submissions'. For new banks to be brought under the RBS from 2016-17, orientation workshops on SPARC covering the top management coupled with theme-based symposiums were conducted. Furthermore, the Reserve Bank arranged training programmes on analytical tools and information system (IS) audits for bank officials. During the year, the Reserve Bank also rolled out the systems audit and testing of systems in banks for information technology vulnerability/penetration.

VI.41 The Reserve Bank introduced the revised format for CRILC reporting for improved data collection from banks from the quarter ended September 2015. During the year, there were discussions between the Reserve Bank and the Insurance Regulatory and Development Authority (IRDA) for bringing insurance companies into the ambit of the CRILC system. A training programme for five insurance companies was also conducted to familiarise them with the system.

VI.42 The year witnessed successful migration of the off-site monitoring and surveillance system (OSMOS) returns to the eXtensible business reporting language (XBRL) platform. Banks also started reporting through the automated data flow (ADF) process.

VI.43 From the graded panels of 'experienced' and 'new' auditors received from the Comptroller and Auditor General of India, 126 audit firms were approved by the Reserve Bank for working as statutory central auditors in PSBs for 2015-16.

VI.44 On direction from the Board for Financial Supervision (BFS), the format for the biennial financial inspection of AIFIs, *viz*., NABARD, Small Industries' Development Bank of India (SIDBI) and National Housing Bank (NHB) was redesigned and snap audits based on this format were carried out to test and fine-tune it. AIFIs were advised to submit returns under both the existing system of FID_OSMOS as well as XBRL platform from the quarter ended June 30, 2015.

VI.45 A new framework for fraud detection, reporting and monitoring was rolled out in May 2015. A Central Fraud Registry for the use of banks was operationalised on January 20, 2016.

VI.46 During the year, as part of cross-border supervisory co-operation and exchange of supervisory information, the Reserve Bank signed MoUs with seven overseas banking supervisory authorities, *viz*., the Nepal Rastra Bank, Bank of Botswana, Central Bank of the United Arab Emirates (UAE), Bangladesh Bank, Prudential Regulation Authority and Financial Conduct Authority of the UK and the supervisor of banks at the Bank of Israel. The Reserve Bank has so far executed 32 MoUs, one letter of supervisory co-operation and one statement of co-operation with overseas supervisors/regulators.

VI.47 To review group-level and inter-regulatory issues in the operations of FCs, the Reserve Bank, in co-ordination with other domestic regulators, organised a meeting with one bank-led FC and participated in meetings with three insurance company-led FCs and securities company-led FCs each organised by IRDA and Securities and Exchange Board of India (SEBI), respectively.

**Agenda for 2016-17**

VI.48 The Reserve Bank has set up an Expert Panel on IT Examination and Cyber Security (Chairperson: Smt. Meena Hemchandra) drawing experts from the industry as members. The Panel is expected to provide assistance in IT examination/cyber security initiatives of banks, review examination reports and suggest actionable items. Accordingly, a detailed IT examination was initiated in two banks in October and December 2015. It is proposed to roll out the IT examination in 30 major banks during 2016-17. Furthermore, it is proposed to carry out IT examination in all banks by 2017-18. The Reserve Bank also proposes to set up a Cyber Security Lab, which will assist IT examiners in conducting analysis of cyber security of banks.

VI.49 During the supervisory cycle of 2016-17, the remaining 26 banks will be brought under the SPARC framework, thus, bringing all SCBs (excluding regional rural banks (RRBs) and LABs) under the RBS. With the migration of all banks to SPARC in 2016-17, the SPARC framework is proposed to be taken to the next level by: (a) developing risk-based mechanisms for scoring the data quality of banks; (b) improving the off-site risk assessment framework; (c) developing a framework for continuous supervision; (d) developing a menu of supervisory actions based on business risks; (e) benchmarking the control environment in banks; (f) improving the communication of risk profiles to banks; (g) structuring risk mitigation plans to make them more definitive; and (h) finalising the approach for supervising payments banks and SFBs.

VI.50 A back-office support system has been planned to facilitate a focused analysis of data to strengthen the supervision of individual banks. This will also help in an analysis of data dumps obtained from banks in a systematic manner to bring out supervisory concerns, if any. Supervisory returns, other than OSMOS returns, will be taken up for migration to the XBRL platform in Phase III of the XBRL project. All returns relating to frauds will be migrated to the XBRL platform. An audit management system and document management system will be implemented during the year.

VI.51 The Reserve Bank, in coordination with other domestic regulators, has initiated the process of finalising the criteria for identification of FCs in various market segments, *viz*., banking, non-banking finance, insurance business, securities and pension funds. Based on these criteria, FCs will be identified for consolidated supervision and monitoring. A joint working group with representation from all member regulators has been constituted for finalising the format and structure of the draft data template for capturing systemic risks and changes to/rationalisation of FC returns.

VI.52 Changes in the domestic and global financial sector environment necessitate the formalisation of an improved supervisory framework for taking enforcement action against banks for non-compliance with instructions and guidelines issued by the Reserve Bank. Accordingly, the Reserve Bank is in the process of developing a framework, which will delineate its approach to enforcement action and enforcement processes. The framework is intended to meet the principles of natural justice and global standards of transparency, predictability, standardisation, consistency, severity and timeliness of action.

VI.53 In line with the BCBS principles on cross-border supervisory co-operation, the Reserve Bank has set up supervisory colleges for Indian banks with considerable overseas presence, *viz*., State Bank of India (SBI), ICICI Bank, Bank of Baroda, Bank of India, Punjab National Bank and Axis Bank. All these colleges are scheduled to be conducted in 2016-17 as well.

### Co-operative Banks: Department of Co-operative Bank Supervision (DCBS)

VI.54 DCBS is entrusted with the primary responsibility of supervising primary (urban) co-operative banks (UCBs) as well as ensuring the development of a safe and well-managed co-operative banking sector. Towards this objective, the Department undertakes supervision of UCBs through periodic on-site and continuous off-site monitoring.

#### Agenda for 2015-16: Implementation Status

VI.55 In an endeavour to develop a financially sound co-operative banking sector, the number of UCBs with negative net worth, which were not under all-inclusive directions, was reduced from 27 to 18 during the year. All returns received by DCBS were brought on the XBRL platform during the year. In all, 109 programmes were conducted by various Regional Offices of the Reserve Bank to impart training to the management/staff of UCBs and their statutory auditors.

#### Agenda for 2016-17

VI.56 Towards increasing the strength of the co-operative banking sector, select ‘C’ rated UCBs across India will be identified for focused attention, enabling them to improve their functioning. In addition, the initiatives for capacity building of both supervisor and supervised (UCBs) will be carried forward during the year.

### NBFCs: Department of Non-Banking Supervision (DNBS)

VI.57 DNBS – the Reserve Bank’s supervisory department for NBFCs – focuses on ensuring an enabling environment for a healthy NBFC sector. Recent years have witnessed a significant growth of the NBFC sector as also the introduction of newer types of NBFCs imparting a critical role to this Department.

### Agenda for 2015-16: Implementation Status

VI.58 For ensuring better coordination among various regulators and gathering market intelligence, a website, hosted by the Reserve Bank was operationalised during the year for use by state-level coordination committees (chaired by the chief secretaries of state governments). A CRILC platform to furnish information on large borrowers was made active during the year for eligible NBFCs. A consultative approach involving regular interaction with participants from the NBFC sector was formalised and meetings were organised accordingly. During the year, a simplified annual return was prescribed for small NBFCs.

VI.59 During 2015-16, ARCs continued to be active in the takeover of stressed assets from banks (Table VI.1).

### Agenda for 2016-17

VI.60 During the year, it is proposed to review the role of statutory auditors in the certification process so as to have a wider supervisory oversight of a large number of small NBFCs. The process of leveraging IT for processing of necessary approvals by the Reserve Bank, which has been initiated, will be taken forward during the year. Furthermore, compliance of NBFCs with the Fair Practices Code is set to be improved through enhanced supervision. A formal PCA framework will be developed for NBFCs.

**Table VI.1: Key Financial Parameters for the ARC Sector**

(₹ billion)

| Item | 2014-15 | 2015-16 |
|---|---|---|
| 1 | 2 | 3 |
| Owned funds | 33.6 | 36.8 |
| Acquisition cost of assets acquired by SCs/RCs | 226.5 | 142.2 |
| Total SRs issued | 224.3 | 140.9 |
| SRs held by SCs/RCs in own account | 29.8 | 20.5 |
| SRs held by seller banks/FIs | 191.7 | 117.7 |
| Amount of SRs issued to other QIBs | 2.8 | 0.6 |
| SRs held by FIIs | - | 2.1 |
| SRs redeemed | 16.5 | 19.1 |

**Note**: 1. SRs: Security Receipts; QIBs: Qualified Institutional Buyers; FIIs: Foreign Institutional Investors.
2. Figures for owned funds are as at end-March.

**Source:** COSMOS returns (quarterly).

## CONSUMER EDUCATION AND PROTECTION

### Consumer Education and Protection Department (CEPD)

VI.61 As the financial sector grows in size, depth and complexity, ensuring consumer protection assumes a key priority for the financial sector regulator. The Reserve Bank, through its proactive policy measures directly aimed at consumer protection along with its constant vigil of overall financial stability has rendered the financial system a safer place for consumers over the years.

### Agenda for 2015-16: Implementation Status

*Full-fledged Operationalisation of the Charter of Customer Rights*

VI.62 In 2014-15, the Reserve Bank had issued the Charter of Customer Rights. To ensure its full-fledged operationalisation, banks were advised to formulate with the approval of their respective boards, a Customer Rights Policy on the lines of the Model Policy developed by the Indian Banks' Association (IBA) and the Banking Codes and Standards Board of India (BCSBI). In 2015-16, apart from an internal periodic review, banks were advised that aberrations and non-adherence to the Charter would also be monitored during the supervisory process.

*Comprehensive Review of the Banking Ombudsman (BO) Scheme*

VI.63 A comprehensive review of the BO scheme was undertaken in 2015-16 (Box VI.6). Towards expanding the reach of the offices of the Banking Ombudsman (OBOs) in rural and semi-urban areas as also for rationalising the jurisdiction of

**Box VI.6**
**Banking Ombudsman Scheme – A Review**

The BO scheme – a dispute redressal mechanism notified under Section 35(A) of the Banking Regulation Act, 1949 – has been in existence since 1995. Since its inception, the scheme has been reviewed periodically; the last being in 2009. The banking landscape has undergone significant transformation in recent years with the introduction of a large customer base following the adoption of financial inclusion plans as well as the PMJDY. There has also been an increased penetration of technology-based products for financial inclusion during this period. All these developments taken together necessitated a review of the BO scheme. The issues identified for the current review were:

a. Pecuniary jurisdiction of the award passed by the BO;

b. Compensation available under the present scheme for loss of time and money, mental anguish and harassment of the complainant;

c. Inclusion of additional grounds for complaints under the present scheme;

d. Rationalisation of the clauses provided for rejection of complaints by the BO and inclusion of the clauses as appealable under the scheme; and

e. Rationalisation of Clause 11 of the scheme (Settlement of Complaint by Agreement).

It is proposed to notify the revised scheme after concurrence from the Government of India.

some of the existing offices, new OBOs are being opened in Ranchi, Raipur, Jammu and Dehradun, and an additional BO is being posted in New Delhi.

*Field-level Evidence on Consumer Protection and Internal Ombudsman in Banks*

VI.64 The Reserve Bank has been conducting focused studies on various issues relevant for consumer protection. In 2015-16, *incognito* visits to rural and semi-urban areas with regard to mis-selling of third party products by banks were carried out. Similarly, a study on the functioning of ATMs was conducted during February-March 2016. The findings from this study are under examination to ascertain an appropriate supervisory response.

VI.65 With a view to strengthening the internal grievance redressal mechanism of banks as also ensuring limited escalation of complaints to the BO, the Reserve Bank advised all PSBs, select private banks and foreign banks to appoint chief customer service officers (CCSO – internal ombudsman). Accordingly, all concerned banks appointed CCSOs and operationalised their functioning during the year.

*Enhancing Awareness*

VI.66 Against the backdrop of a large number of complaints about fictitious offers of money, a month-long awareness campaign through All-India radio /FM radio was undertaken to sensitise and caution the public not to fall prey to such offers made in the name of the Reserve Bank or any other public authority.

*Standardisation of Forms*

VI.67 As basic application forms vary from bank to bank posing avoidable hindrance to customers, the Reserve Bank in consultation with IBA reviewed the commonly used forms and suggested standardisation of select forms. Banks will be shortly advised through IBA to implement the standardised forms.

**Agenda for 2016-17**

VI.68 The Reserve Bank will monitor the implementation of the Charter of Customer Rights by banks, undertake full-fledged implementation of the amended BO scheme and work towards the operationalisation of new OBOs. More forms commonly used by bank customers will be standardised across banks during the year. Setting up of an appropriate ombudsman scheme for the NBFC sector is also on the agenda. Need-based studies through *incognito* visits to bank branches on various customer service issues will be undertaken to assess the field-level situation. Based on the assessment, an appropriate regulatory or supervisory response will be designed.

**Deposit Insurance and Credit Guarantee Corporation (DICGC)**

VI.69 Deposit insurance is central to the framework for consumer protection in a financial system. In India, DICGC – a wholly-owned subsidiary of the Reserve Bank – insures depositors of all commercial banks, including LABs and RRBs, and co-operative banks. With the present limit of deposit insurance of ₹0.1 million, the total number of fully protected accounts was 1,553 million as on March 31, 2016, which constituted 92.3 per cent of the total number of accounts (1,682 million) as against the international benchmark of 80 per cent. The amount of insured deposits was ₹28,264 billion as at end-March 2016, which worked out to 30 per cent of the assessable deposits (of ₹94,053 billion) well within the international benchmark of 20-30 per cent.

VI.70 The corpus of the deposit insurance fund (DIF) built by DICGC through surplus transfers was ₹602.5 billion as on March 31, 2016. The fund is used for settlement of claims of depositors of banks taken into liquidation/reconstruction/amalgamation. In 2015-16, the claims settled by the Corporation amounted to ₹0.47 billion as compared to ₹3.2 billion in the previous year. In September 2015, the Committee on Differential Premium System for Banks in India (Chairman: Shri Jasbir Singh) submitted its report. In the light of the Committee's report, the modalities for a differential premium system based on risk profiles of banks are being worked out.

VI.71 The key areas of focus in 2016-17 will be enhancing public awareness about deposit insurance and revamping the website of DICGC towards achieving this objective; ensuring intensive co-operation with the International Association of Deposit Insurers (IADI) and making efforts to adhere to Core Principles for Effective Deposit Insurance Systems.

*Integrated Application Software Solution*

VI.72 The integrated application software solution (IASS) was initiated in 2015-16 to have a cross-functional and seamless integration of all existing functions of the Corporation. This system will also enable the processing of claims by reducing manual intervention as well as online submission of deposit insurance returns.

**National Housing Bank (NHB)**

VI.73 NHB – the apex institution for housing finance – registers, regulates and supervises housing finance companies (HFCs). It also extends refinance to HFCs, SCBs and co-operative sector institutions against their housing loans, and project lending to borrowers in the public sector and public-private space. Over the years, NHB's key concern has been to promote innovative market-based solutions for affordable housing finance to low income housing segments. The Reserve Bank contributed ₹10 billion towards the paid-up capital of NHB on January 12, 2016, thereby increasing its shareholding from ₹4.5 billion to ₹14.5 billion.

VI.74 Out of the total refinance of ₹215.9 billion extended by NHB in 2015-16 (July-June), 17.4 per cent (₹37.5 billion) was made under the rural housing fund (RHF) and 6.4 per cent (₹13.8 billion) under the urban housing fund (UHF). The central government has identified NHB as the nodal agency for implementing the credit-linked subsidy scheme (CLSS) under the Pradhan Mantri Awas Yojana (Urban) – Housing for All Mission, and the solar capital subsidy scheme. As part of CLSS, NHB released subsidy claims of ₹1.2 billion pertaining to 7,062 households to 57 primary lending institutions till end-June 2016.

VI.75 NHB also extended refinance to HFCs at reduced rates under the Urban Housing Fund scheme to step up the flow of housing finance to flood-affected districts of Tamil Nadu. As at end-June 2016, ₹440 million was disbursed as part of this scheme. NHB launched RESIDEX in July 2007 for tracking residential property prices across 26 cities in India on a quarterly basis. After a recent review of the index, it was decided to revamp it by bringing out comprehensive housing-related indices.

# VII PUBLIC DEBT MANAGEMENT

*The Reserve Bank successfully managed the large market borrowing requirements of the central government during 2015-16 in an orderly manner and at a lower cost despite multiple challenges such as reduction in Held to Maturity (HTM) category and Statutory Liquidity Ratio (SLR) impacting demand, tight domestic liquidity conditions and volatility in global financial markets. The maturity profile was elongated with a 40-year issuance. State government borrowings were managed at a lower cost, despite increase in supply mainly on account of issuance of UDAY bonds. The Ways and Means Advances (WMA) limits of the state governments were increased following the recommendations of the Advisory Committee on the same. During the year, the Medium Term Debt Management Strategy was formulated in consultation with the central government and placed in public domain. The agenda for 2016-17 includes formulating market making scheme for enhancing g-sec market liquidity, working towards better information sharing and daily cash flow forecasting through the Cash Coordination Committee (CCC), improving the design of Sovereign Gold Bond (SGB) to attract retail investors, imparting liquidity to State Development Loans (SDLs) and better liability management operations.*

VII.1 The Reserve Bank has the obligation and the right to transact central government's business in India and manage its public debt in terms of Sections 20 and 21 of the Reserve Bank of India Act, 1934. As per the bilateral agreement signed under Section 21A, the Reserve Bank manages debt of all the 29 state governments and the Union Territory of Puducherry. It also acts as a banker to States, except Sikkim. Further, the Reserve Bank provides short-term credit to the central and state governments through Ways and Means Advances (WMA) to bridge temporary mismatch in their cash flows, in terms of Section 17(5) of the Reserve Bank of India Act, 1934. The Internal Debt Management Department of the Reserve Bank manages the operations relating to the central and state governments' market borrowings.

**Agenda for 2015-16: Implementation Status**

VII.2 During the year, the Reserve Bank successfully managed the large borrowing programme of the central government and the states in an orderly manner in the face of multiple challenges including reduction in HTM category of banks' investments, reduction in SLR in an environment of tight liquidity, increased issuances by state governments and global uncertainties.

VII.3 The central government in consultation with the Reserve Bank designed a SGB scheme as an alternative to the purchase of metal gold. The Reserve Bank manages the scheme on behalf of the Government and issued three tranches of SGBs during the fiscal year 2015-16 (Box VII.1). Further, the Government of India (Ministry of Power) had formulated the Ujwal DISCOM Assurance Yojana (UDAY) scheme on November 20, 2015 with the objective to improve operational and financial efficiency of the state DISCOMs. The Reserve Bank during 2015-16 issued UDAY bonds for a total amount of ₹990 billion with a fixed spread of 75 bps over the FIMMDA g-sec yield. In 2016-17 so far, the issuance spread ranged between 63-74 bps for ₹495 billion. The response to the UDAY issuances has been robust and appears not to have had any adverse impact on the g-sec yields nor have the Uday issuances crowded out the SDL market. Price discovery for

**Box VII.1**
**Sovereign Gold Bond Scheme**

India is one of the largest consumers of gold in the world, accounting for around one-fourth of the total consumption. Gold imports accounted for 8.4 per cent of total merchandise imports in 2015-16. Thus, efforts to ease the pressure on the current account deficit (CAD) from gold imports have to incorporate a plausible strategy to moderate demand for gold by providing a safe alternative. Accordingly, three gold related schemes – the Gold Monetisation scheme, the Gold Coin Minted in India scheme and the Sovereign Gold Bond (SGB) scheme – were unveiled by the Government of India during 2015-16.

The SGB scheme is managed by the Reserve Bank on behalf of the Government of India. The scheme provides investors an assured nominal return besides savings in terms of storage costs for gold. There is no physical gold involved in the transactions. An investor pays the current price of gold and on maturity receives the price prevalent on that date. A coupon of 2.75 per cent per annum is paid on a half-yearly basis. The bond is denominated in grams of gold with a cap of 500 grams per person per financial year. The tenor of the bond is for eight years, with the option of premature redemption after five years. Collection of SGBs is through banks, FIs, stock exchanges and post offices. SGBs can be used as collateral for loans. KYC norms for SGBs are similar to those for investments in physical gold.

The first tranche of SGBs was launched in November 2015. Subsequently, two tranches were floated in January and March 2016. Overall, subscriptions denominated in units of gold were at 4,904,130 grams amounting to ₹13 billion. Approximately, 0.4 million retail investors were successfully allotted SGBs, both in physical and dematerialised forms through the Reserve Bank's e-Kuber (CBS) platform. The fourth tranche, the first in 2016-17, which was floated in July 2016, witnessed increased investor demand with a total mobilization of ₹9.21 billion.

the UDAY issuances has also been efficient for the state governments.

*Debt Management of the Central Government*

VII.4 Gross market borrowings of ₹6,000 billion were proposed in the Union Budget 2015-16 through dated securities, of which ₹150 billion was allocated for issue of SGBs. The actual gross market borrowings through dated securities were ₹5850 billion and the net borrowings were ₹4406 billion which funded 82 per cent of the gross fiscal deficit (GFD) as against 89 per cent in the previous year. The net market borrowings of the central government, (*i.e.,* through dated securities and T-bills) declined to ₹4,530 billion in 2015-16 from ₹4,778 billion in 2014-15 (Table VII.1).

**Table VII.1: Net Market Borrowings of the Central Government**

(₹ billion)

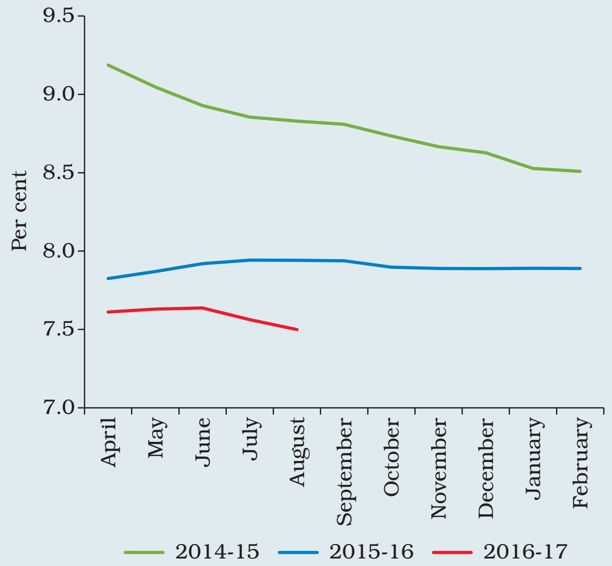
| Item | 2013-14 | 2014-15 | 2015-16 | 2016-17* |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| Net Borrowings | 5,079 | 4,778 | 4,530 | 2,326 |
| (i) Dated Securities | 4,685 | 4,532 | 4,406 | 1,632 |
| (ii) 91-day T-bills | 207 | 114 | 63 | 640 |
| (iii) 182-day T-bills | 122 | 9 | -40 | 48 |
| (iv) 364-day T-bills | 65 | 122 | 101 | 6 |

*: Up to August 16, 2016.

*Debt Management Operations*

VII.5 The weighted average yield of dated securities issued during the year declined to 7.89 per cent from 8.51 per cent in 2014-15 (Chart VII.1). The yields which were stable for most part of the year, however, hardened during the second half. This was mainly on account of large and continuous supply of central and state governments securities, uncertainties over UDAY bonds and concerns over fiscal consolidation, in particular, on the implementation of One-Rank-One-Pension and the seventh pay commission's recommendations. There was, however, an overall softening in yields across tenors from end-February 2016 following the government's budget announcement adhering to the fiscal consolidation path; clarifications on the private

**Chart VII.1: Weighted Average Yield of GoI Securities**




placement of UDAY bonds and their classification under the HTM category; reduction in the small savings rate; net open market purchases; expectations of better monsoon and rate cuts. A further decline in yield was driven by ample liquidity, expectations on passage of the GST Constitutional Amendment Bill and increased FPI activity amid increased global uncertainties, post Brexit.

VII.6 There was devolvement on primary dealers (PDs) in nine instances for an amount of ₹110 billion in 2015-16 as compared to four instances for ₹53 billion in 2014-15. Devolvements were mostly in later half of the year on account of stressed market conditions arising out of concerns over UDAY bonds supply and global volatility. The share of PDs in subscriptions to primary auctions stood at 54.2 per cent in 2015-16 as compared to 51.8 per cent in 2014-15.

VII.7 The Reserve Bank continued with the policy of passive consolidation of g-secs by way of reissuances. Out of 161 securities auctioned in 2015-16, 154 securities were reissues of the existing securities. In order to manage the maturity profile and reduce rollover risks of the government debt in a proactive manner, buybacks and switches were conducted in the fourth quarter of 2015-16 for an amount of ₹749 billion (₹579 billion in the previous year). This has modulated redemption pressures and reduced the quantum of gross borrowing requirement for 2016-17.

VII.8 Reflecting the strategy of maturity elongation, the weighted average maturity of borrowings increased to 16.0 years in 2015-16 from 14.7 years in 2014-15. Consequently, the weighted average maturity of outstanding debt increased to 10.5 years in 2015-16 from 10.2 years in 2014-15 (Table VII.2). The weighted average cost of outstanding market loans remained the

**Table VII.2: Market Loans of Central Government – A Profile**

(Yield in per cent/ Maturity in years)

| Years | Range of YTMs at Primary Issues | | | Issued during the Year | | | Outstanding Stock | |
|---|---|---|---|---|---|---|---|---|
| | Under 5 years | 5-10 years | Over 10 years | Weighted Average Yield | Range of Maturities | Weighted Average Maturity | Weighted Average Maturity | Weighted Average Coupon |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 2011-12 | 8.21-8.49 | 7.80-10.01 | 8.25-9.28 | 8.52 | 5-30 | 12.66 | 9.60 | 7.88 |
| 2012-13 | 8.82-8.21 | 7.86-8.76 | 7.91-8.06 | 8.36 | 5-30 | 13.50 | 9.66 | 7.97 |
| 2013-14* | 7.22-9.00 | 7.16-9.40 | 7.36-9.40 | 8.41 | 6-30 | 14.23 | 10.00 | 7.98 |
| 2014-15* | - | 7.66-9.28 | 7.65-9.42 | 8.51 | 6-30 | 14.66 | 10.23 | 8.08 |
| 2015-16* | - | 7.54-8.10 | 7.59-8.27 | 7.89 | 6-40 | 16.03 | 10.50 | 8.08 |
| 2016-17@ | - | 7.05-7.61 | 7.20-7.87 | 7.52 | 5-40 | 14.37 | 10.53 | 8.05 |

**Note:** YTM: Yield to Maturity; -: No Issues; *: Excluding buyback/ switch in GoI securities. @ Upto August 16, 2016.

**Table VII. 3: Issuance of Government of India Dated Securities - Maturity Pattern**

(Amount in ₹ billion)

| Residual Maturity | 2013-14 | | 2014-15 | | 2015-16 | | 2016-17* | |
|---|---|---|---|---|---|---|---|---|
| | Amount raised | Percentage to total | Amount raised | Percentage to total | Amount raised | Percentage to total | Amount raised | Percentage to total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Less than 5 years | 110 | 2.0 | - | - | - | - | 150 | 5.9 |
| 5 - 9.99 years | 2,305 | 40.9 | 2,350 | 39.7 | 2,000 | 34.2 | 840 | 32.9 |
| 10 - 15.99 years | 1,340 | 23.8 | 1,510 | 25.5 | 1,600 | 27.4 | 870 | 34.1 |
| 16 - 19.99 years | 930 | 16.5 | 960 | 16.2 | 1,120 | 19.1 | 340 | 13.3 |
| 20 years & above | 950 | 16.9 | 1,100 | 18.6 | 1,130 | 19.3 | 350 | 13.7 |
| **Total** | **5,635** | **100.0** | **5,920** | **100.0** | **5,850** | **100.0** | **2,550** | **100.0** |

*: As on August 16, 2016.

same at 8.08 per cent during 2015-16. However, the cost has marginally declined to 8.05 per cent during 2016-17 (up to August 16, 2016).

VII.9 In view of limited space for issuance in maturities less than 10 years, about 66 per cent of the market borrowings were raised through issuance of dated securities with a residual maturity of 10 years and above in 2015-16 as compared to 60 per cent in 2014-15, leading to a decline in the share of maturities less than 10 years by the end of the year (Table VII.3). To cater to the demand from long-term investors like insurance companies and pension funds, a 40-year security was also issued in 2015-16.

VII.10 Commercial banks remained the largest holders of dated securities, accounting for around 40 per cent as at end-June 2016 (43 per cent as at end-March 2015) followed by insurance companies and provident funds. The share of the Reserve Bank's holdings increased to 14.9 per cent as on end-June 2016 as compared with 13.5 per cent as on end-March 2015, mainly on account of net outright OMOs purchases.

*Medium Term Debt Management Strategy*

VII.11 A Medium Term Debt Management Strategy (MTDS) was formulated by the Reserve Bank in consultation with the Government and placed in the public domain on December 31, 2015. The MTDS has been articulated for a period of three years (2015-16 to 2017-18). It is premised on three broad pillars: low costs, risk mitigation and market development in line with the sound international practices while factoring in domestic economic and financial conditions. The low cost objective is pursued through measures such as planned and predictable issuances, suitability of instruments as per investor preferences and improved transparency through timely and appropriate communication to the market. The strategy adopted to contain rollover risks include switches/buybacks, elongation of maturity and placement of limits on issuances and annual maturities. Interest rate risks were dealt with by keeping the floating rate debt low; foreign currency risks were addressed by issuing debt in domestic currency, developing a stable domestic investor base and a calibrated opening of the g-secs market to foreign investors. The Reserve Bank will continue to develop the g-secs market by introducing new instruments, expanding the investor base and strengthening market infrastructure. Stress tests and scenario analyses in relation to costs, maturity and potential risks suggest that the Government of India's debt is stable and sustainable over the medium to long run.

*Treasury Bills*

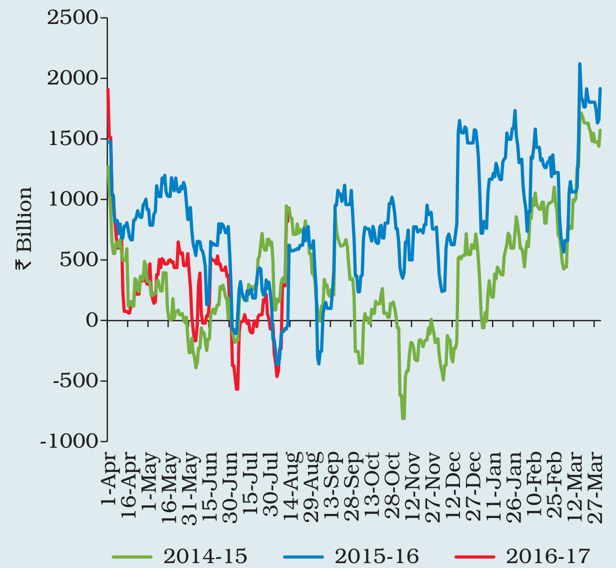
VII.12 T-Bills were issued essentially to smoothen the Government's temporary funding gaps. The net issuance of T-bills was lower during 2015-16 than in the previous year. The yields on T-bills softened during the year reflecting the easing interest rate regime. Primary Dealers (PDs) individually achieved the stipulated minimum success ratio and their aggregate share in T-bill auctions stood at 75.4 per cent in 2015-16, down from 77.2 per cent during 2014-15.

*Cash Management of the Central Government*

VII.13 The Government's WMA limits for the first and second halves of 2015-16 were fixed at ₹450 billion and ₹200 billion, respectively. The Government's cash position was largely comfortable as it started the year with a large cash balance of ₹1,573 billion. Recourse to WMA was limited to 16 days in 2015-16 *vis-à-vis* 61 days in the previous year (including 16 days of overdraft), reflecting relatively fewer gaps between receipts and expenditures. The average utilisation of WMA was lower at ₹187 billion as compared to ₹236 billion in 2014-15. The Government ended the fiscal year 2015-16 with a cash balance of ₹1,917 billion (Chart VII.2). The WMA limit for the first half of 2016-17 has been fixed higher at ₹500 billion.

VII.14 Effective December 16, 2014, the Government's surplus cash balance with the Reserve Bank is being reckoned for auction at variable rate repos.

**Chart VII.2: The Government of India's Cash Balance**




*Debt Management of State Governments*

VII.15 Gross market borrowings of the states increased to ₹2,946 billion during 2015-16 through the issuance of 298 securities as compared to ₹2,408 billion mobilised through 282 securities in the previous year (Table VII.4). Despite increased supply, the weighted average yield of SDLs during 2015-16 was lower at 8.28 per cent as compared with 8.58 per cent in the previous year, reflecting the easing interest rate regime. However, the

**Table VII.4: Market Borrowings of States through SDLs**

(₹ billion)

| Item | 2013-14 | 2014-15 | 2015-16 | 2016-17 (up to August 16, 2016) |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| Maturities during the year | 321 | 334 | 352 | 76 |
| Gross sanctions under Article 293 (3) | 2,174 | 2,435 | 3,060 | 1407 |
| Gross amount raised during the year | 1,967 | 2,408 | 2,946 | 900 |
| Net amount raised during the year | 1,646 | 2,075 | 2,594 | 823 |
| Amount raised during the year to total sanctions (per cent) | 92.0 | 99.0 | 96.0 | 64.0 |
| SDLs outstanding (at the end period) | 10,619 | 12,755 | 16,314 | 17,612 |

weighted average spread over the comparable central government securities increased to 50 bps from 38 bps during the previous year on concerns over increased supply due to UDAY bond issuances.

VII.16 An investors' meet was conducted during the year to increase awareness on SDLs with the objective of diversifying the investor base among market participants. Further, capacity building programmes were conducted in various states including North-Eastern states to sensitise them on better debt and cash management.

VII.17 State governments' borrowings were unevenly distributed during the year with bunching in the second half and more so in the fourth quarter. The Reserve Bank continuously engaged with the states to smoothen borrowings over the year, with the objective to lower costs. As part of this endeavour, state-wise quarterly borrowing calendar was introduced during 2015-16.

*Cash Management of State Governments*

VII.18 Investments by states in Intermediate Treasury Bills (ITBs) of the central government increased during the year. The daily average investments in ITBs increased marginally to ₹749 billion in 2015-16 from ₹731 billion in the previous year. Further, while the outstanding amount in Auction Treasury Bills (ATBs) continued to decline in 2015-16, the declining trend in investments in ITBs reversed over the same period (Table VII.5).

VII.19 During 2015-16, eleven states availed Special Drawing Facility (six states in 2014-15), eleven states availed WMA (10 states in 2014-15) and nine states availed Over Draft facility from the Reserve Bank in 2015-16 (10 states in 2014-15). The monthly average utilisation of WMA and OD by the states was higher during 2015-16 than that during 2014-15.

**Table VII.5: Investments in ITBs and ATBs by State Governments/UT**

(₹ billion)

| Item | Outstanding as on March 31 | | | | | |
|---|---|---|---|---|---|---|
| | 2012 | 2013 | 2014 | 2015 | 2016 | As on August 12, 2016 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14-Day (ITB) | 966 | 1,181 | 862 | 842 | 1,206 | 776 |
| ATBs | 220 | 286 | 463 | 394 | 383 | 814 |
| **Total** | **1,186** | **1,466** | **1,325** | **1,236** | **1,589** | **1,589** |

*Advisory Committee on WMA to State Governments*

VII.20 Pursuant to the recommendations of the Advisory Committee on WMA to state governments (Chairman: Shri Sumit Bose) which submitted its report in January 2016, the WMA scheme for States was revisited. The aggregate WMA limit for 28 States and the Union Territory of Puducherry was revised from ₹154 billion to ₹322 billion, effective February 01, 2016. The other recommendations of the committee are being examined and would be implemented in phases.

*Investments in Consolidated Sinking Fund (CSF)/ Guarantee Redemption Fund (GRF)*

VII.21 Outstanding investments in the CSF and the GRF maintained by state governments with the Reserve Bank stood at ₹781 billion and ₹44 billion, respectively, as at end-March 2016. Total investments in CSF/GRF during the year aggregated to ₹134 billion (₹141 billion in 2014-15).

**Agenda for 2016-17**

VII.22 The Union Budget 2016-17 projected gross market borrowings of ₹6,000 billion through dated securities, higher by 2.6 per cent than the actual amount mobilised during the previous year. Net funding through T-bills for 2016-17 has been budgeted at ₹167 billion, higher by about ₹42 billion as compared to the previous year. Net market borrowings through dated securities have been estimated to fund 79.6 per cent of the budgeted GFD in 2016-17, which is lower than 82 per cent in 2015-16 (RE). Net market borrowings of States for 2016-17 are budgeted to finance 77.8 per cent of the states' consolidated GFD. The borrowing programme of the central and state governments is sought to be smoothly completed, while reducing costs and mitigating risks by adopting the following measures:

i. Continuing the practice of frontloading of market borrowings through dated securities.

ii. Switching of securities for effective liability management keeping in view the evolving market conditions.

iii. Pursuing the objective of elongating the maturity to contain rollover risks.

iv. MTDS articulated for three years will be reviewed and rolled over for the next three years (2016-17 to 2018-19).

v. Cash Coordination Committee (CCC) comprising members from the Government of India and the Reserve Bank will work towards better information sharing, cash flow forecasting and management.

vi. Features of the SGB scheme launched during 2015-16 will be improved upon for greater acceptability and expansion of the retail investor base.

vii. With the objective of enhancing liquidity and giving a retail push to the secondary market for g-secs, a market making scheme will be formulated.

viii. The Reserve Bank will continue to make efforts towards market development, providing greater predictability and ease of access to the g-sec auction process by market participants.

ix. Market borrowings of the state governments will be spread more evenly across the year along with a more robust quarterly calendar.

x. Reissuances of SDLs of different maturities will be continued to impart liquidity and better liability management operations.

xi. The few remaining States which do not have CSF, will be encouraged to constitute it to strengthen their debt management operations.

xii. The remaining issuances of special securities under the UDAY scheme will be completed with minimum market disruptions.

# VIII CURRENCY MANAGEMENT

*During 2015-16, the demand for banknotes and coins remained high notwithstanding the growing shift towards non-cash modes of transactions. The Reserve Bank has, in close coordination with the central government, initiated the process of introducing new series of banknotes with more sophisticated security features having higher levels of resistance to counterfeiting. Sustained efforts were also made towards indigenisation of banknote production.*

## TRENDS IN CURRENCY

*Banknotes in Circulation*

VIII.1 At end-March 2016, the value of banknotes in circulation was ₹16,415 billion showing an increase of 14.9 per cent as against 11.4 per cent in 2014-15. The volume of banknotes increased by 8.0 per cent as against 8.1 per cent in 2014-15. In value terms, ₹500 and ₹1,000 banknotes together accounted for 86.4 per cent of the total value of banknotes in circulation; by volume, ₹10 and ₹100 banknotes constituted 53.0 per cent of the total banknotes in circulation (Table VIII.1).

**Table VIII.1: Banknotes in Circulation**

| Denomination (₹) | Volume (million pieces) | | | Value (₹ billion) | | |
|---|---|---|---|---|---|---|
| | Mar-14 | Mar-15 | Mar-16 | Mar-14 | Mar-15 | Mar-16 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2 and 5 | 11,698 | 11,672 | 11,626 | 46 | 46 | 45 |
| | (15.1) | (13.9) | (12.9) | (0.4) | (0.3) | (0.3) |
| 10 | 26,648 | 30,304 | 32,015 | 266 | 303 | 320 |
| | (34.5) | (36.3) | (35.5) | (2.1) | (2.1) | (1.9) |
| 20 | 4,285 | 4,350 | 4,924 | 86 | 87 | 98 |
| | (5.5) | (5.2) | (5.4) | (0.7) | (0.6) | (0.6) |
| 50 | 3,448 | 3,487 | 3,890 | 172 | 174 | 194 |
| | (4.5) | (4.2) | (4.3) | (1.3) | (1.2) | (1.2) |
| 100 | 14,765 | 15,026 | 15,778 | 1,476 | 1,503 | 1,578 |
| | (19.1) | (18.0) | (17.5) | (11.5) | (10.5) | (9.6) |
| 500 | 11,405 | 13,128 | 15,707 | 5,702 | 6,564 | 7,854 |
| | (14.7) | (15.7) | (17.4) | (44.4) | (46.0) | (47.8) |
| 1,000 | 5,081 | 5,612 | 6,326 | 5,081 | 5,612 | 6,326 |
| | (6.6) | (6.7) | (7.0) | (39.6) | (39.3) | (38.6) |
| **Total** | **77,330** | **83,579** | **90,266** | **12,829** | **14,289** | **16,415** |

**Note:** Figures in parentheses represent the percentage share in total.

*Coins in Circulation*

VIII.2 The total value of coins in circulation increased by 12.4 per cent in 2015-16 as against 12.1 per cent last year; in volume terms, the increase was 8.2 per cent which is marginally higher than that in the previous year (8.0 per cent in 2014-15). In terms of volume, coins of ₹1 and ₹2 together constituted almost 70 per cent of the total coins in circulation. In terms of value, coins of ₹2 and ₹5 together accounted for 59 per cent (Table VIII.2).

**Table VIII.2: Coins in Circulation**

| Denomination (₹) | Volume (Million pieces) | | | Value (₹ billion) | | |
|---|---|---|---|---|---|---|
| | Mar-14 | Mar-15 | Mar-16 | Mar-14 | Mar-15 | Mar-16 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Small coins | 14,788 | 14,788 | 14,788 | 7 | 7 | 7 |
| | (16.1) | (14.9) | (13.8) | (4.1) | (3.6) | (3.2) |
| 1 | 38,424 | 41,627 | 44,876 | 38 | 42 | 45 |
| | (41.9) | (42.1) | (41.9) | (21.9) | (21.7) | (20.6) |
| 2 | 24,823 | 27,038 | 29,632 | 50 | 54 | 59 |
| | (27.1) | (27.3) | (27.7) | (28.9) | (27.8) | (27.1) |
| 5 | 11,577 | 12,761 | 14,089 | 58 | 64 | 70 |
| | (12.7) | (12.9) | (13.2) | (33.5) | (33.0) | (32.1) |
| 10 | 2,017 | 2,750 | 3,703 | 20 | 27 | 37 |
| | (2.2) | (2.8) | (3.4) | (11.6) | (13.9) | (17.0) |
| **Total** | **91,629** | **98,964** | **107,088** | **173** | **194** | **218** |

**Note:** Figures in parentheses represent the percentage share in total.

## CURRENCY MANAGEMENT ARCHITECTURE (CMA)

VIII.3 CMA comprises 19 issue offices, 4,075 currency chests (including sub-treasury offices and a currency chest of the Reserve Bank in Kochi) and 3,746 small coin depots at commercial, cooperative and regional rural banks, across India (Table VIII.3).

**Table VIII.3: Currency Chests and Small Coin Depots as at end-March 2016**

| Category | No. of Currency Chest | No. of Small Coin Depot |
|---|---|---|
| 1 | 2 | 3 |
| State Bank of India (SBI) | 1,965 | 1,859 |
| SBI Associate Banks | 757 | 725 |
| Nationalised Banks | 1,173 | 993 |
| Private Sector Banks | 160 | 156 |
| Co-operative Banks | 3 | 3 |
| Foreign Banks | 4 | 4 |
| Regional Rural Banks | 5 | 5 |
| State Treasury Offices (STOs) | 7 | 0 |
| RBI | 1 | 1 |
| **Total** | **4,075** | **3,746** |

*Strengthening the Currency Management Infrastructure*

VIII.4 To strengthen the distribution of currency by leveraging technology, the Reserve Bank is considering a hub and spoke model of mega-currency chests (MCCs), which will meet the currency needs of a designated area (as a district). MCCs will receive fresh notes directly from the banknote printing press for distribution to bank branches and will be equipped with state of the art facilities for processing of notes.

## CLEAN NOTE POLICY

*Demand Estimation and Supply of Currency*

VIII.5 The Reserve Bank places indent for banknotes with printing presses on the basis of an econometric model factoring in *inter alia*, real GDP growth prospects, rate of inflation and denomination-wise disposal rate of soiled notes. The total number of banknotes supplied was lower at 21.2 billion pieces in 2015-16 as compared to 23.6 billion pieces in 2014-15 – against an indent of 23.9 billion pieces for 2015-16 and 24.2 billion pieces for 2014-15 (Table VIII.4).

VIII.6 The Indian Statistical Institute (ISI) Kolkata was entrusted with a study to refine the demand estimation model being employed at present.

**Table VIII.4: Indent and Supply of Banknotes by BRBNMPL and SPMCIL (April to March)**

(Million pieces)

| Denomination (₹) | 2013-14 | | 2014-15 | | 2015-16 | | 2016-17 |
|---|---|---|---|---|---|---|---|
| | Indent | Supply | Indent | Supply | Indent | Supply | Indent |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10 | 12,164 | 9,467 | 6,000 | 9,417 | 4,000 | 5,857 | 3,000 |
| 20 | 1,203 | 935 | 4,000 | 1,086 | 5,000 | 3,252 | 6,000 |
| 50 | 994 | 1,174 | 2,100 | 1,615 | 2,050 | 1,908 | 2,125 |
| 100 | 5,187 | 5,131 | 5,200 | 5,464 | 5,350 | 4,910 | 5,500 |
| 500 | 4,839 | 3,393 | 5,400 | 5,018 | 5,600 | 4,291 | 5,725 |
| 1,000 | 975 | 818 | 1,500 | 1,052 | 1,900 | 977 | 2,200 |
| **Total@** | **25,362** | **20,918** | **24,200** | **23,652** | **23,900** | **21,195** | **24,550** |

@: Total excludes ₹1.
BRBNMPL: Bharatiya Reserve Bank Note Mudran Private Limited.
SPMCIL: Security Printing and Minting Corporation of India Limited.

**Table VIII.5: Indent and Supply of Coins by Mints (April-March)**

(Million pieces)

| Denomination | 2013-14 | | 2014-15 | | 2015-16 | | 2016-17 |
|---|---|---|---|---|---|---|---|
| | Indent | Supply | Indent | Supply | Indent | Supply | Indent |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 50 Paise | 50 | 40 | 40 | 20 | 40 | 30 | 30 |
| ₹1 | 5,418 | 3,092 | 6,000 | 3,247 | 6,100 | 3,753 | 6,300 |
| ₹2 | 3,546 | 2,424 | 4,000 | 2,367 | 4,000 | 2,899 | 4,200 |
| ₹5 | 1,819 | 1,393 | 2,000 | 1,091 | 2,100 | 1,492 | 2,270 |
| ₹10 | 1,200 | 728 | 1,800 | 1,187 | 2,000 | 1,084 | 2,200 |
| **Total** | **12,033** | **7,677** | **13,840** | **7,912** | **14,240** | **9,258** | **15,000** |

VIII.7 Keeping pace with the increasing demand for coins, the annual indent placed with the mints has been increasing over the years. However, the mints were able to meet approximately 57 per cent and 65 per cent of the annual indents placed with them in 2014-15 and 2015-16, respectively (Table VIII.5). Mints have been urged to step up production so as to meet the increasing demand.

*Disposal of Soiled Notes*

VIII.8 During 2015-16, 16.4 billion pieces of soiled notes were disposed as against a target of 17.1 billion pieces (Table VIII.6).

**Table VIII.6: Disposal of Soiled Banknotes (April-March)**

(Million pieces)

| Denomination (₹) | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 1,000 | 511 | 663 | 625 |
| 500 | 2,405 | 2,847 | 2,800 |
| 100 | 4,972 | 5,173 | 5,169 |
| 50 | 1,398 | 1,271 | 1,349 |
| 20 | 725 | 801 | 849 |
| 10 | 4,128 | 4,338 | 5,530 |
| Up to 5 | 48 | 44 | 46 |
| **Total** | **14,187** | **15,137** | **16,368** |

## COUNTERFEIT NOTES AND SECURITY PRINTING

*Trends as Detected in the Banking System*

VIII.9 During the year, 632,926 pieces of counterfeit notes were detected in the banking system, of which 95 per cent were detected by commercial banks (Table VIII.7). Denomination-wise, detection of counterfeit notes of ₹100 and ₹1,000 increased in 2015-16 (Table VIII.8).

**Table VIII.7: Number of Counterfeit Notes Detected (April to March)**

(No. of pieces)

| Year | Detection at Reserve Bank | Other Banks | Total |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| 2013-14 | 19,827 | 468,446 | 488,273 |
| | (4.1) | (95.9) | (100.0) |
| 2014-15 | 26,128 | 568,318 | 594,446 |
| | (4.4) | (95.6) | (100.0) |
| 2015-16 | 31,765 | 601,161 | 632,926 |
| | (5.0) | (95.0) | (100.0) |

**Note:** 1. Figures in parentheses represent the percentage share in total.
2. Does not include counterfeit notes seized by the police and other enforcement agencies.

**Table VIII.8: Denomination-wise Counterfeit Notes Detected in the Banking System (April to March)**

(No. of pieces)

| Denomination (₹) | 2014-15 | | | 2015-16 | | |
|---|---|---|---|---|---|---|
| | Number of Counterfeit Notes | Notes in Circulation | FICN as a proportion of NIC | Number of Counterfeit Notes | Notes in Circulation | FICN as a proportion of NIC |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2 and 5 | 0 | 11,672,000,000 | 0 | 2 | 11,626,000,000 | 0 |
| 10 | 268 | 30,304,000,000 | 0.00000001 | 134 | 32,015,000,000 | 0 |
| 20 | 106 | 4,350,000,000 | 0.00000002 | 96 | 4,924,000,000 | 0 |
| 50 | 7,160 | 3,487,000,000 | 0.00000205 | 6,453 | 3,890,000,000 | 0.0000017 |
| 100 | 181,799 | 15,026,000,000 | 0.00001210 | 221,447 | 15,778,000,000 | 0.0000140 |
| 500 | 273,923 | 13,128,000,000 | 0.00002087 | 261,695 | 15,707,000,000 | 0.0000167 |
| 1000 | 131,190 | 5,612,000,000 | 0.00002338 | 143,099 | 6,326,000,000 | 0.0000226 |
| **Total** | **594,446** | **83,579,000,000** | **0.00000711** | **632,926** | **90,266,000,000** | **0.0000070** |

FICN: Fake Indian Currency Notes. NIC: Notes in Circulation.
**Note:** Does not include counterfeit notes seized by the police and other enforcement agencies.

*Withdrawal of pre-2005 Series Banknotes and Expenditure on Security Printing*

VIII.10 The process of withdrawal of banknotes of pre-2005 series commenced in May 2013. This was done in phases to preclude any inconvenience to the public. From July 01, 2016 onwards, the facility for exchange of pre-2005 banknotes will be available only at Issue Offices of the Reserve Bank (including Kochi). The legal tender status of pre-2005 banknotes will remain unchanged.

VIII.11 The total expenditure incurred on security printing stood at ₹34.2 billion during 2015-16 (July-June) as against ₹37.6 billion during 2014-15.

## DEPARTMENT OF CURRENCY MANAGEMENT

VIII.12 Currency management is a core central banking function. The Department of Currency Management plays a critical role in meeting the legitimate demands of the public for notes and coins. The core concern of the department relates to increased indigenisation of production and procurement of security features for banknotes while also elongating their life. During 2015-16, the department also endeavoured to facilitate better customer services.

### Agenda for 2015-16: Implementation Status

*Plastic Banknotes*

VIII.13 A billion pieces of banknotes in denomination of ₹10 were to be printed on all available plastic substrates and issued to the public in five cities having different climatic zones, *viz.*, Kochi, Mysuru, Shimla, Jaipur and Bhubaneswar, on a field trial basis. The Bharatiya Reserve Bank Note Mudran Private Limited (BRBNMPL) and the Security Printing and Minting Corporation of India Limited (SPMCIL) have taken up this project.

*Customer Service*

VIII.14 The scheme of incentives and penalties for bank branches including currency chests was introduced in 2008 and expanded in 2014-15 by the Reserve Bank so as to enable bank branches to provide efficient and effective customer service to members of the public for supply and exchange of notes and coins. During 2015-16, the Reserve

**Box VIII.1**
**Banknotes: New Numbering Pattern and Visually Impaired-Friendly**

During 2015-16, the Reserve Bank issued banknotes in the Mahatma Gandhi Series 2005 with a new numbering pattern in all denominations excepting ₹20. The numerals of both the number panels ascend in size from left to right, whereas the first three alphanumeric characters (prefix) remain constant in size. Printing the numerals in ascending size is a visible security feature in the banknotes, which enables the public to distinguish a genuine Indian banknote from a counterfeit one and hence safeguards against counterfeiting.

Additional special features such as bleed lines and enhancement of existing features for the visually impaired have also been introduced in banknotes of denominations of ₹100, ₹500 and ₹1,000. The size of the current identification marks in ₹100, ₹500 and ₹1,000 denomination notes (circle, triangle, diamond) has been increased by 50 per cent for easy identification. Angular bleed lines have been introduced: 4 lines in 2 blocks in ₹100, 5 lines in 3 blocks in ₹500 and 6 lines in 4 blocks in ₹1,000 denominations. The design of banknotes of ₹100, ₹500 and ₹1000 denomination is similar in all other respects to the current design of banknotes of the Mahatma Gandhi Series 2005. The legal tender status of all the banknotes of these denominations issued earlier which do not contain these features will remain unchanged .

Bank reviewed this scheme and revised certain incentives and segregated incentives from penalties. The new scheme, 'Currency Distribution & Exchange Scheme' (CDES) which contains modified incentives for banks will continue to facilitate exchange of banknotes in line with the Clean Note Policy. An internal group of the Reserve Bank is reviewing the Reserve Bank (Note Refund) Rules, 2009. Taking a cue from advanced practices of inventory management in various central banks, the process of vault automation is being initiated on a pilot basis with mechanised vaults at the Reserve Bank's new centres along with the automation of the existing vault at Belapur (Mumbai).

### Agenda for 2016-17

VIII.15 Central banks worldwide adopt a standardised practice of periodic up-gradation of security features of banknotes to stay ahead of counterfeiters. While in India, the last such up-gradation was done in 2005 with a new 2005 series of banknotes, certain new features such as bleed lines and exploding numbers were introduced during 2015-16 (Box VIII.1). Furthermore, the Government of India approved the procurement of new security features for Indian banknotes. The process of procurement of new security features is presently underway while banknotes with new designs are also proposed to be introduced.

## BHARATIYA RESERVE BANK NOTE MUDRAN PRIVATE LIMITED (BRBNMPL)

VIII.16 BRBNMPL is a wholly owned subsidiary of the Reserve Bank which runs two banknote printing presses in Mysuru and Salboni. It is proposed to set up an ink manufacturing unit within BRBNMPL as part of efforts towards the 'Make in India' programme.

VIII.17 During 2015-16, BRBNMPL produced 14,714 million pieces of banknotes of different denominations as against its annual target of 15,700 million pieces. The Bank Note Paper Mill India Private Limited (BNPMIPL) in Mysuru which is a joint Venture between BRBNMPL and SPMCIL, with a production capacity of 12,000 million tonnes has commenced commercial production. This is a significant step towards the indigenisation of production of new banknotes.

# IX PAYMENT AND SETTLEMENT SYSTEMS AND INFORMATION TECHNOLOGY

*The Reserve Bank continued its efforts towards building robust and secure payment and settlement systems for achieving a less-cash society. In this direction, it published Vision 2018 which highlights the need for making regulations more responsive to technological developments and innovations in the payments space. This will be complemented by enhanced supervision of payment system operators, improvement in customer grievance redressal mechanisms and strengthening of the payments infrastructure. Further, the Reserve Bank focused on enhancements in the IT infrastructure for internal users and bringing about improved efficiency and coverage for government transactions.*

## DEPARTMENT OF PAYMENT AND SETTLEMENT SYSTEMS (DPSS)

IX.1 The department continued its focus on migrating to a 'less-cash' society through a process of stakeholder consultation for developing a regulatory framework that is responsive to emerging developments and innovations. Among other things, enhancement of infrastructure with multiple channels and products for payment services has widened the customer base.

### Trend and Progress in Payment Systems

IX.2 Overall, the payment and settlement systems registered robust growth during 2015-16, with volumes and value growing at 49.5 per cent and 9.1 per cent, respectively. The efforts made by the Reserve Bank for migration to electronic payments are reflected in high volumes witnessed under various electronic payment systems during 2015-16 (Table IX.1). In volume terms, the share of electronic transactions in total transactions moved up to 84.4 per cent from 74.6 per cent in the previous year. In value terms, their share moved up to 95.2 per cent from 94.6 per cent.

*Electronic Payments*

IX.3 At end-March 2016, the national electronic funds transfer (NEFT) facility was available through 130,013 branches of 172 banks, in addition to business correspondent (BC) outlets. NEFT handled 1.2 billion transactions valued at around ₹83 trillion, up from 928 million transactions for ₹60 trillion in the previous year. In March 2016, NEFT processed the largest ever monthly volume of 129 million transactions.

IX.4 During 2015-16, 786 million transactions valued at around ₹2.4 trillion were carried out through credit cards, while 1.2 billion transactions valued at ₹1.6 trillion were carried out through debit cards. Prepaid payment instruments (PPIs) recorded 748 million transactions valued at ₹488 billion as compared to 314 million transactions valued at ₹212 billion in the previous year. Mobile banking service growth surged by 126.6 per cent in terms of volume and 290.3 per cent in terms of value handling 389 million transactions valued at ₹4 trillion during the year.

*Authorisation of Payment Systems*

IX.5 The number of authorised payment system operators stood at 71 comprising PPI issuers, cross-border money transfer service providers, white label ATM (WLA) operators, ATM networks, instant money transfer service providers and card payment networks besides the Clearing Corporation of India Limited (CCIL) and the

**Table IX.1: Payment System Indicators – Annual Turnover**

| Item | Volume (million) | | | Value (₹ billion) | | |
|---|---|---|---|---|---|---|
| | 2013-14 | 2014-15 | 2015-16 | 2013-14 | 2014-15 | 2015-16 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **Systemically Important Financial Market infrastructures (SIFMIs)** | | | | | | |
| 1. RTGS | 81.1 | 92.8 | 98.3 | 734,252 | 754,032 | 824,578 |
| **Total Financial Markets Clearing (2+3+4)** | **2.6** | **3.0** | **3.1** | **621,570** | **672,456** | **721,094** |
| 2. CBLO | 0.2 | 0.2 | 0.2 | 175,262 | 167,646 | 178,335 |
| 3. Government Securities Clearing | 0.9 | 1.0 | 1.0 | 161,848 | 179,372 | 183,502 |
| 4. Forex Clearing | 1.5 | 1.8 | 1.9 | 284,460 | 325,438 | 359,257 |
| **Total SIFMIs (1 to 4)** | **83.7** | **95.7** | **101.4** | **1,355,822** | **1,426,488** | **1,545,672** |
| **Retail Payments** | | | | | | |
| **Total Paper Clearing (5+6+7)** | **1,257.3** | **1,195.8** | **1,096.4** | **93,316** | **85,439** | **81,861** |
| 5. CTS | 591.4 | 964.9 | 958.4 | 44,691 | 66,770 | 69,889 |
| 6. MICR Clearing | 440.1 | 22.4 | 0.0 | 30,943 | 1,850 | 0 |
| 7. Non-MICR Clearing | 225.9 | 208.5 | 138.0 | 17,682 | 16,819 | 11,972 |
| **Total Retail Electronic Clearing (8+9+10+11+12)** | **1,108.3** | **1,687.4** | **3,141.6** | **47,856** | **65,366** | **91,408** |
| 8. ECS DR | 192.9 | 226.0 | 224.8 | 1,268 | 1,740 | 1,652 |
| 9. ECS CR | 152.5 | 115.3 | 39.0 | 2,492 | 2,019 | 1,059 |
| 10. NEFT | 661.0 | 927.6 | 1,252.9 | 43,786 | 59,804 | 83,273 |
| 11. Immediate Payment Service (IMPS) | 15.4 | 78.4 | 220.8 | 96 | 582 | 1,622 |
| 12. National Automated Clearing House (NACH) | 86.5 | 340.2 | 1,404.1 | 215 | 1,221 | 3,802 |
| **Total Card Payments (13+14+15)** | **1,261.8** | **1,737.7** | **2,707.2** | **2,575** | **3,325** | **4,484** |
| 13. Credit Cards | 509.1 | 615.1 | 785.7 | 1,540 | 1,899 | 2,407 |
| 14. Debit Cards | 619.1 | 808.1 | 1,173.5 | 955 | 1,213 | 1,589 |
| 15. Prepaid Payment Instruments (PPIs) | 133.6 | 314.5 | 748.0 | 81 | 212 | 488 |
| **Total Retail Payments (5 to 15)** | **3,627.4** | **4,620.9** | **6,945.2** | **143,748** | **154,129** | **177,752** |
| **Grand Total (1 to 15)** | **3,711.1** | **4,716.6** | **7,046.6** | **1,499,570** | **1,580,617** | **1,723,425** |

**Note:** 1. Real time gross settlement (RTGS) system includes customer and inter-bank transactions only.
2. Settlement of collateralised borrowing and lending obligation (CBLO), government securities clearing and forex transactions are through the Clearing Corporation of India Ltd. (CCIL).
3. Consequent to total cheque volume migrating to the cheque truncation system (CTS), there is no magnetic ink character recognition (MICR) cheque processing centre (CPC) location in the country as of now.
4. The figures for cards are for transactions at point of sale (POS) terminals only.
5. The National Automated Clearing House (NACH) system was started by the National Payments Corporation of India (NPCI) on December 29, 2012, to facilitate inter-bank, high volume, electronic transactions which are repetitive and periodic in nature.
6. ECS: Electronic clearing service; DR: Debit; CR: Credit; NEFT: National electronic funds transfer.
7. Figures in the columns might not add up to the total due to rounding off.

National Payments Corporation of India (NPCI). The number of entities authorised for operating PPIs increased to 42 with nine entities authorised during 2015-16. The number of entities authorised to operate WLAs at end-March 2016, stood at eight, out of which seven started the process of installation and operations; these collectively deployed 12,962 WLAs.

## Agenda for 2015-16: Implementation Status

*Payment and Settlement Systems in India, Vision 2018*

IX.6 The Reserve Bank published the vision document for payment and settlement systems on June 23, 2016, laying down the roadmap for payment systems in the country up to December

2018 (Box IX.1). The broad contours of Vision 2018 revolve around 5 Cs: (i) **Coverage** – by enabling wider access to a variety of electronic payment services, (ii) **Convenience** – by enhancing user experience through ease of use and of products and processes, (iii) **Confidence** – by promoting

**Box IX.1**
**Payment and Settlement Systems in India: Vision 2018**

Building best of class payment and settlement systems for a 'less-cash' India through responsive regulation, robust infrastructure, effective supervision and customer centricity

| STRATEGIC INITIATIVES | | | |
|---|---|---|---|
| **RESPONSIVE REGULATION** | **ROBUST INFRASTRUCTURE** | **EFFECTIVE SUPERVISION** | **CUSTOMER CENTRICITY** |
| 1. Orienting policy with emerging developments and innovations<br>• Framing new policy: Policy framework for central counter-parties (CCPs); exit policy for authorised entities; framework for imposition of penalty; regulation of payment gateway service providers and payment aggregators; monitoring framework for new technologies.<br>• Review of existing policies / guidelines: PPIs; mobile banking; WLA; nodal account for intermediaries. | 1. Facilitating faster payment services<br>• NEFT – more frequent settlement cycles and exploring feasibility of adoption of International Organization for Standardization (ISO) messaging format.<br>• Mobile banking – enhancing options for customer registration for mobile banking services; enabling wider access to mobile banking services in multiple languages for non-smartphone users.<br>• Encourage innovative mobile based payment solutions. | 1. Assessment of resilience of payment and settlement infrastructure including financial market infrastructures (FMIs) and System-Wide Important Payment Systems (SWIPS)<br>• Draft framework for testing resilience<br>• Resilience of communication/ messaging infrastructure.<br>• Resilience of IT systems of payment system operators (PSOs).<br>• Building capability to process transactions of one system in another system. | 1. Strengthening customer grievance redressal mechanism<br>• Frame necessary guidelines to ensure enhanced customer grievance redressal mechanism in authorised payment systems.<br>• Require payment systems operators to adequately train front-office staff and agents. |
| 2. Setting up the Payments System Advisory Council (PSAC) of industry and government representatives / experts to strengthen the consultative process. | 2. Improving accessibility<br>• Increasing acceptance infrastructure.<br>• Implementation of the Bharat Bill Payment System.<br>• Implementation of the Trade Receivables Discounting System. | 2. Design an oversight framework<br>• On the basis of proportionality of risk posed by PSOs.<br>• For large-value payment systems, retail payment systems (including IS audit), BBPS and TReDS. | 2. Enhancing customer education and awareness<br>• Electronic Banking Awareness and Training (e-BAAT).<br>• Framework requiring PSOs to disclose fees and terms and conditions of their service. |

*(Contd...)*

| | | | |
|---|---|---|---|
| 3. Amendments to the PSS Act<br>• Improved governance of PSO.<br>• Resolution of CCP/ FMI.<br>• Non-Registration of charge on collateral with CCPs. | 3. Promoting interoperability<br>• Unified payment interface.<br>• Toll collection.<br>• Payments for mass transit systems. | 3. Strengthening the reporting framework including fraud monitoring<br>• Move the reporting of periodic returns by payment systems operators to the XBRL platform.<br>• Draw a framework for collection of data on frauds in payment systems. | 3. Protection of customer interest<br>• Encourage PSOs to develop robust fraud and risk monitoring systems.<br>• Endeavour to build a framework to limit customer liability for unauthorised electronic transactions. |
| 4. Strengthen financial stability<br>• Encouraging adoption of Legal Entity Identifier by financial entities.<br>• Settlement of funds leg of financial transactions in central bank money. | 4. Enhancing safety and security<br>• Migration to EMV chip and PIN cards.<br>• EMV card processing at ATM based on chip data.<br>• Security of ATM transactions by holistically strengthening the safety and security of ATM infrastructure.<br>• Examining feasibility of Aadhaar-based authentication. | 4. Analysing data and publishing reports<br>• Oversight report on select retail and large value systems.<br>• Analysis of payment system related data within the Reserve Bank. | 4. Positive confirmation<br>• Incorporate the feature of sending positive confirmation of payment to the remitter in RTGS system.<br>• Strengthen positive confirmation feature of NEFT. |
| | 5. Cheque clearing systems<br>• Endeavour to eliminate paper-to-follow arrangements for all cheques issued by state governments.<br>• Promoting use of positive pay mechanism, national archive on cheque images.<br>• Encouraging complete migration of cheques to CTS-2010 standards. | | 5. Conducting customer surveys<br>• Engage with various stakeholders/ professionals to conduct user/ customer surveys on specific aspects of payment systems. |

integrity of systems, security of operations and customer protection, (iv) **Convergence** – by ensuring interoperability across service providers and (v) **Cost** – by making services cost effective for users as well as service providers. In pursuit of a 'less-cash' society, Vision 2018 is expected to result in: (i) continued reduction in the share of paper-based clearing instruments, (ii) consistent growth in individual segments of retail electronic payment systems *viz.,* NEFT, IMPS, card transactions and mobile banking, (iii) increase in the registered customer base for mobile banking, (iv) significant growth in acceptance infrastructure and (v) accelerated use of Aadhaar in payment systems.

IX.7 The activities undertaken during the year, including those which were indicated in the agenda for 2015-16, can be broadly classified into actions which have an impact on regulation, infrastructure and supervision of payment systems, and were oriented towards customer interest.

**Responsive Regulation**

*Card Acceptance Infrastructure*

IX.8 In line with the fourth bi-monthly Monetary Policy Statement, 2015-16, a concept paper was prepared on 'Card Acceptance Infrastructure'. The paper outlined a multi-pronged strategy to enhance the growth in acceptance infrastructure and usage of cards including rationalisation of merchant discount rates (MDR) for debit card transactions. The paper was placed on the Reserve Bank's website in early March 2016 to garner comments/ feedback.

*Payment Gateways and Aggregators*

IX.9 Payment gateways and aggregators undertaking bill payments are being covered under the scope of Bharat Bill Payment System (BBPS) and hence, are required to apply for authorisation to the Reserve Bank to remain in the business. With regard to other payment aggregators and gateways which do not undertake bill payments, the feasibility/desirability of formulating a regulatory framework will be examined after complete operationalisation of the BBPS.

*Introduction of PPI-MTS*

IX.10 A new category of semi-closed PPI upto ₹2,000 was introduced for mass transit systems (PPI-MTS) to facilitate small value electronic payments.

*Exit Policy for Authorised Entities*

IX.11 To ensure consumer interest and that other stakeholders are protected, an exit policy specifying the parameters and processes for voluntary exit of a payment system operator (PSO) authorised to operate as a retail payment system, (namely PPI Issuers and Money Transfer Service Scheme (MTSS)-Overseas Principal) has been put in place.

*Payment System Innovation Awards*

IX.12 To encourage innovations in payment and settlement systems, the Reserve Bank announced the 'Payment System Innovation Awards' in December 2015. The contest was organised by the Institute for Development and Research in Banking Technology (IDRBT), a wholly owned subsidiary of the Reserve Bank.

**Robust Infrastructure**

*Authorisation of TReDS and BBPS*

IX.13 The Trade Receivables Discounting System (TReDS) is an institutional mechanism to facilitate the financing of trade receivables of micro, small and medium enterprises (MSMEs) from corporate buyers through multiple financiers. In-principle approval has been given to three entities to set up and operate TReDS under the Payment and Settlement System (PSS) Act, 2007. BBPS is a pan-India interoperable bill payment system.

In-principle authorisation was issued to NPCI to function as a Bharat Bill Payment Central Unit (BBPCU). Applications/requests received from non-banks and banks for authorisation/approval to operate as Bharat Bill Payment Operating Units (BBPOUs) under the BBPS are under process.

*Financial Messaging Services*

IX.14 The Reserve Bank granted approval to the SWIFT India Domestic Services Private Limited (SIDSPL) to provide messaging services for domestic financial transactions. Currently, messaging for inter-bank transactions is transmitted through the Structured Financial Messaging System (SFMS). Messaging operations of SWIFT will strengthen the infrastructure for financial transactions in the country.

*Security of Card Transactions*

IX.15 As part of risk mitigation measures for card transactions, banks were advised to progressively migrate all active cards to EMV chip and PIN cards by December 31, 2018. Further, banks and WLA operators have been advised to ensure that all the ATM infrastructure, both existing and new, installed/operated by them are enabled for processing of EMV chip and PIN cards by September 30, 2017.

*Mobile Banking*

IX.16 In order to encourage mobile banking, the Reserve Bank facilitated customers' registration for mobile banking at ATMs connected to the National Financial Switch (NFS). Thus, a bank customer can register for mobile banking at any ATM obviating the need to visit the bank branch.

*Financial Market Infrastructure – CCIL*

IX.17 In pursuance of the G20/FSB declarations and in line with the 'Recommendations of the Implementation Group on OTC Derivative Market Reforms', CCIL was authorised to put in place central counter-party (CCP) clearing for rupee interest rate swaps (IRS). CCIL has launched Anonymous System for Trading in Rupee OTC Interest-rate Derivatives (ASTROID) in August 2015.

**Effective Supervision**

*Assessment of Real Time Gross Settlement (RTGS) against Financial Market Infrastructure (FMI) Principles*

IX.18 The Committee of Payments and Market Infrastructures (CPMI) published the 'Application of the Principles for Financial Market Infrastructures to the Central Bank's FMIs'. The policy framework for regulation and supervision of FMIs published by the Reserve Bank had identified RTGS as one of the FMIs. The assessment of RTGS against the Principles for FMIs (PFMIs) has been initiated.

*Oversight of Payment Systems – CCIL*

IX.19 As a Qualified Central Counterparty (QCCP), CCIL is assessed on an on-going basis against PFMIs. Accordingly, an assessment of CCIL was carried out during the year. CCIL, as per the 'Disclosure Framework and Assessment Methodology', prescribed in the PFMIs, disclosed its self-assessment on its compliance with PFMIs as a measure of enhanced transparency. CCIL has also started disclosing as per the public disclosure standards for CCPs. Besides, CCIL has introduced a process for computing intra-day MTM margin on multiple occasions in all segments.

*Oversight of Payment Systems – Retail*

IX.20 In addition to onsite inspection of 23 PPIs, self-assessment as per the assessment template for retail payment systems were received and reviewed for another 29 entities operating retail payment systems.

*Assessment against Implementation of PFMIs*

IX.21 CPMI and the International Organisation of Securities Commissions (IOSCO), monitoring the implementation of PFMIs including both Principles and Responsibilities, rated India as '4'[1] for Level 1[2]. Level 2/3[3] assessments are peer reviews of the extent to which the content of the jurisdiction's implementation measures is complete and consistent with the PFMI for Responsibilities and India has been rated as 'Observed'[4] in the Level 2/3 assessments for Responsibilities.

**Customer Centricity**

*Cash Withdrawal at Point of Sale (POS)*

IX.22 The limit for withdrawal of cash at POS through debit cards and open system prepaid cards issued by banks was enhanced from ₹1,000 to ₹2,000 per day for Tier III to VI centres, with customer charges, if levied, not to exceed 1 per cent of the transaction amount for all centres.

*RTGS Service Charges*

IX.23 The recent enhancement of RTGS has enabled expansion in the time window and improved operational efficiency. To ensure that services were appropriately priced for banks, the charges for RTGS were rationalised. However, the maximum fee a member could charge from its customers remained unchanged.

**Agenda for 2016-17**

IX.24 Based on the agenda set out in Vision 2018, the following activities are planned for 2016-17.

*Framework for Imposition of Penalty*

IX.25 Guidelines and standards for various payment and settlement systems are issued under the provisions of PSS Act. Non-adherence to these by participants and operators can attract penal provisions under the PSS Act. A framework for imposition of such penalties under the PSS Act would be put in place.

*Review of PPI Guidelines*

IX.26 The PPI segment of the payment systems has been growing both in terms of number of authorised operators and its usage. Taking into account the advancements in technology, safety and security concerns of PPI transactions, know your customer (KYC) related issues, entry of new players, and new payment mechanisms as well as channels, it is considered necessary to undertake a holistic review of the PPI guidelines.

*Review of WLA Guidelines*

IX.27 These guidelines, which were set out with the objective of ensuring expansion of ATM infrastructure in rural and semi-urban areas, have not resulted in the anticipated growth in ATM infrastructure. Accordingly, the WLA guidelines will be examined holistically and targets re-aligned to meet the current requirements.

[1] Rating 1: Draft implementation measures not published; Rating 2: Draft implementation measures published; Rating 3: Final implementation measures published; Rating 4: Final implementation measures fully in force; Rating NA: No implementation measures needed (that is, not applicable).

[2] To assess whether jurisdictions have completed the process of adopting the legislation, regulations and other policies that will enable them to implement the Principles and Responsibilities.

[3] Level 2 to assess whether the content of legislation, regulations and policies is complete and consistent with the Principles and Responsibilities. Level 3 to assess whether there is consistency in the outcomes of implementation of the Principles and Responsibilities.

[4] Observed: The authorities fulfil the responsibility; Broadly Observed: The authorities are broadly fulfilling the responsibility; Partly Observed: The authorities partly fulfil the responsibility; Not Observed: The authorities are not fulfilling the responsibility; Not Applicable: This responsibility does not pertain because of the particular institutional framework or other conditions faced by the authorities with respect to this responsibility.

*Constitution of PSAC*

IX.28 A Payment System Advisory Council (PSAC) with representation from the fields of technology, telecommunication, Fin Tech, security solutions, academia, *etc.,* will be constituted to assist BPSS in forming new policies and assessing the impact of new technological developments for approving new products and solutions by providing necessary insights.

*Adoption of Legal Entity Identifier (LEI)*

IX.29 The LEI uniquely identifies parties to a financial transactions globally. Need for such identification was felt in the aftermath of the last financial crisis. Use of LEI will facilitate monitoring the exposure of entities across systems. The Reserve Bank will put in place a framework to encourage the adoption of LEI for certain transactions/markets/categories of institutions.

*Policy Framework for CCPs*

IX.30 The CCPs are critical FMIs and their efficient functioning is important. The Reserve Bank has already declared the policy framework for regulation and supervision of FMIs under its regulatory jurisdiction. The PFMIs against which FMIs are assessed lay emphasis on having effective governance framework and management of various risks, including legal, credit and liquidity risks. To begin with, the Reserve Bank will come out with directions on governance of domestic CCPs and their capital/net worth requirement, and recognition of foreign CCPs. At a later date, the Reserve Bank may come out with directions on risk management, if required.

*Operationalisation of BBPS and TReDS*

IX.31 The BBPS will be made operational during 2016-17. The Reserve Bank will pursue with other authorities/government for the speedier implementation of TReDS.

*Promotion of Card Usage*

IX.32 The Reserve Bank, after taking into account the feedback received on the concept paper on 'Card Acceptance Infrastructure', and the findings of the pilot project being undertaken, will initiate a review of the extant policy on MDR to encourage wider adoption of card payments in the country. The review will also be complemented with a separate policy on enhancing card acceptance infrastructure in the country.

*Electronification of Toll Collection*

IX.33 Toll payments, largely done in the form of cash payments, is another segment where efforts to migrate to electronic payments have been sporadic and isolated. Electronification of the toll collection systems on a pan-India basis in an interoperable environment will be encouraged and steps would be initiated to achieve this vision.

*Customer Education and Awareness*

IX.34 The Reserve Bank, in collaboration with the stakeholders, would endeavour to enhance customer awareness through structured campaign and Electronic Banking Awareness and Training (e-BAAT) programme.

*Customer Survey*

IX.35 The Reserve Bank will engage with various stakeholders/ professionals to conduct user/ customer surveys over a period of time on specific aspects of payments systems. The findings of such surveys will not only provide insights into the use of existing payment products and processes by customers for meeting their various payment needs but also generate ideas for reviewing policies.

## DEPARTMENT OF INFORMATION TECHNOLOGY (DIT)

IX.36 Apart from policy formulation on information technology (IT) related aspects for the Reserve Bank, DIT continued to focus on managing and operating the Reserve Bank's critical IT systems including large value payment and settlement systems. A subsidiary was formed during the year, details of which are given in Box IX.2.

### Agenda for 2015-16: Implementation Status

*Extension of e-Receipts and e-Payments*

IX.37 The Reserve Bank, being the banker to central and state governments, has been striving for an efficient, secure and straight-through-processing (STP) based system for government receipts and payments. During the year, five state governments were on-boarded for processing their electronic payments. The reporting of government receipts by agency banks to the Reserve Bank wherein multiple state governments are participants, was also achieved during 2015-16.

*Support for Goods and Services Tax (GST)*

IX.38 The process flow for the proposed GST was designed on the basis of the 'Standardised e-Receipt model of e-Kuber', with the Reserve Bank playing the crucial role of an 'aggregator' and a one-stop source for data reporting to the GST Network (GSTN). The Reserve Bank, in coordination with GSTN has been working to ensure that banks are well prepared for the GST rollout.

*Sovereign Gold Bonds (SGBs) and Priority Sector Lending Certificates (PSLCs)*

IX.39 In an effort to dissuade customers from buying physical gold, the SGB scheme was launched in November 2015. e-Kuber acted as the base system for processing applications under the scheme; it also acted as a registrar and depository for the issues. Distributing agents, that is, banks and post offices, were provided an online medium of transfer of information for their customers through e-Kuber. A system for facilitating transfer of PSLCs across banks was put in place and made operational from April 04, 2016.

*Information Security Operations Centre (iSOC)*

IX.40 Given the increased information security related threats, the Reserve Bank has embarked on setting up an iSOC. The iSOC project will enable centralised real-time supervision, early detection and response to security threats, proactive tracking and mitigation of enterprise-wide attacks in coordination with external agencies such as

**Box IX.2**
**Reserve Bank Information Technology Private Limited (ReBIT)**

The process of operationalising the information technology (IT) subsidiary of the Reserve Bank is nearing completion. The CEO for the subsidiary has been appointed and selection of the vertical heads is underway. ReBIT, incorporated on July 4, 2016, will focus on the IT systems and cyber security (including related research) of the financial sector and assist in the audit and assessment of the entities regulated by the Reserve Bank. The mandate of the ReBIT also includes advising, implementing and managing the IT projects or systems of the Reserve Bank.

As a think-tank for innovation and big data analytics, it is also expected to generate new ideas on IT solutions for the financial sector and participate in deliberations of IT standard setting bodies to achieve robust and inter-operable standards for the Indian financial sector. ReBIT will have advisory committees to provide guidance on cyber security, current and futuristic requirements of the financial sector, particularly banks as also to the Reserve Bank on its IT systems and projects. The subsidiary will report periodically to the Reserve Bank's apex level committees including the Board for Financial Supervision, Board for Payment and Settlement Systems and the IT Sub-committee of the Board.

the Indian Computer Emergency Response Team (CERT-In). The iSOC is expected to be operational by the end of December 2016.

*Upgradation of NEFT and RTGS, and Virtualisation of IT infrastructure*

IX.41 Systemically important and other payment system applications, RTGS and NEFT systems, hosted in the Reserve Bank's data centres were upgraded substantially to take care of increasing volumes during the year, and all time daily high volume of more than 10 million NEFT transactions was processed smoothly.

IX.42 To overcome challenges in terms of cooling, power, space, agility and obsolescence of IT infrastructure, a project for IT infrastructure up-gradation was initiated using virtualisation technology. The project, which also envisages replacement of the aging network and security infrastructure with contemporary state-of-the-art systems is expected to be completed by January 2017.

*Mail Messaging Solution (MMS)*

IX.43 For improved security and ease of usage, the MMS was upgraded to work on the MS Exchange 2013 platform with new features including the enterprise vault (EV) and email archiving systems.

**Agenda for 2016-17**

*Electronic Document Management System (EDMS)*

IX.44 EDMS is being introduced in the Reserve Bank for instituting a less paper-based system. This will entail some changes in the work processes and digitising of physical records. Vendor selection for all the offices of the Reserve Bank has been completed for the project with the aim to roll it out by July 2017.

*e-Kuber for Currency Management and Government Transactions*

IX.45 e-Kuber will be extended to cover the currency management function of the Reserve Bank. This will facilitate holistic and integrated accounting of the cash management function within a single centralised system. Vigorous efforts will be made to on-board more state governments and central government departments in the standardised e-receipt and e-payment model of e-Kuber.

# X GOVERNANCE, HUMAN RESOURCES AND ORGANISATIONAL MANAGEMENT

*In continuation with past efforts, several initiatives in the arena of, inter-alia, human resource development, research and data dissemination, ERM, international relations and promotion of Rajbhasha marked the year 2015-16. As part of the drive to spread knowledge on financial, monetary and economic matters, a national level competition (RBI Policy Challenge) targeted at under/post graduate students was launched during the year. The Bank continued with flagship publications, research articles and conferences; the scope of data dissemination was also expanded considerably during 2015-16. The Reserve Bank's innovative process for preparing the risk registers was adjudged as an international best practice. In the international arena, India took a leadership role which got reflected in the BRICS contingent reserve arrangement (CRA) and SAARCFINANCE Symposium. Several special programmes were organized during 2015-16 as part of the celebration of the Rajbhasha Golden Jubilee Year.*

X.1 This chapter summarises the achievements of a number of departments during 2015-16, and sets priorities/agendas for 2016-17. It takes note of the changes in the organisational structure, governance developments and strengthening of human resources in terms of new recruitments and updating the skills and knowledge of existing staff members using several innovative channels. Further, with a view to disseminating knowledge regarding financial, monetary and economic matters amongst students, the Reserve Bank launched several national-level competitions such as quizzes, essay writing and problem solving in interesting formats.

X.2 In the international arena, the year was marked by India's leadership role among the emerging market economies (EMEs), which was reflected in the work related to BRICS contingent reserve arrangement (CRA); hosting of the SAARCFINANCE Governors' Symposium; being an important voice in the international financial architecture, global financial regulatory issues and green finance; and the structural reform agenda under the Chinese presidency of the G20. In addition, pivotal standards were achieved in statutory publications, policy based research, seminars, data management, surveys and data dissemination standards using state-of-the-art technology in reporting systems. The communication policy also crossed all previous benchmarks, with connectivity to social media sites, Banking Hall events, awareness campaigns and outreach programmes.

X.3 With a view to developing an integrated assessment of risk, a 3-phase Enterprise-wide Risk Management (ERM) framework was pursued during 2015-16. Internal audit exercises were also undertaken in the Reserve Bank for risk assessment and assurance. Two departments focused on achieving cost and operational efficiency during the year, including the initiation of the Darpan (EDMS) project. Besides compliance with statutory provisions of the Official Language Act, the Rajbhasha Department also organised several trainings, conferences and seminars while the Premises Department continued with its endeavours of creating, maintaining and upgrading the Reserve Bank's infrastructure. Several legal landmarks were also achieved during the year.

## GOVERNANCE STRUCTURE

X.4 The Central Board of Directors, with the Governor in the Chair, is the apex body in the governance structure of the Reserve Bank. It comprises of the Governor and Deputy Governors of the Reserve Bank, government nominees and independent directors. There are four Local Boards for the northern, southern, eastern and western areas of the country which take care of local interests. The Government of India (GoI) appoints/nominates directors to the Central Board and Members to the Local Boards in accordance with the Reserve Bank of India Act, 1934. The Central Board is assisted by three committees – the Committee of the Central Board (CCB), the Board for Financial Supervision (BFS) and the Board for Regulation and Supervision of Payment and Settlement Systems (BPSS). These committees are headed by the Governor. In addition, the Central Board also has four sub-committees – the Audit and Risk Management Sub-Committee (ARMS), the Human Resource Management Sub-Committee (HRM-SC), the Building Sub-Committee (BSC) and the Information Technology Sub-Committee (IT-SC). These sub-committees are typically headed by an independent Director.

*Meetings of the Central Board and CCB*

X.5 The Central Board held six meetings during 2015-16 in Chennai, Mumbai (two meetings), Aizawl, Kolkata and New Delhi. The Finance Minister of India addressed the post-Budget meeting held in New Delhi on March 12, 2016. The Governor interacted with the Governor of Mizoram and the Chief Minister of Mizoram in Aizawl on October 15, 2015. The meeting focused on financial inclusion and credit delivery in the state.

X.6 CCB held 47 meetings during the year, 22 of which were held through electronic mode. CCB attended to the current business of the Reserve Bank, including approval of its Weekly Statement of Affairs. External directors were invited to the CCB meetings by rotation.

X.7 The Standing Committee of the Central Board set up in 2014-15 to look into important concerns pertaining to a region where Local Boards are not able to function, held meetings in each of the four regions (four meetings in all) to discuss region-specific issues and concerns.

*Attendance of Directors*

X.8 The details of participation of the directors in the meetings of the Central Board, its committees and sub-committees are annexed.

*Central Board/ Local Boards – Changes*

X.9 Dr. Urjit R. Patel was re-appointed Deputy Governor for a further period of three years with effect from January 11, 2016. Shri Harun R. Khan relinquished charge as Deputy Governor in the forenoon of July 04, 2016 on completion of his tenure. Shri N.S. Vishwanathan was appointed Deputy Governor for a period of three years from July 04, 2016 *vice* Shri Khan.

X.10 Ms Anjuly Chib Duggal, Secretary, Department of Financial Services, Ministry of Finance, GoI and Shri Shaktikanta Das, Secretary, Department of Economic Affairs, Ministry of Finance, GoI were nominated as directors on the Central Board under Section 8(1)(d) of the Reserve Bank of India Act, 1934 with effect from September 03, 2015 and October 30, 2015 *vice* Dr. Hasmukh Adhia and Shri Ajay Tyagi respectively.

X.11 Shri Natarajan Chandrasekaran, Shri Bharat Narotam Doshi and Shri Sudhir

Mankad were nominated as directors on the Central Board of Directors of the Reserve Bank under Section 8(1)(c) of the Reserve Bank of India Act, 1934 for a period of four years with effect from March 04, 2016.

X.12 Shri Dipankar Gupta, Shri G.M. Rao, Smt Ela Bhatt, Professor Indira Rajaraman and Shri Y.H. Malegam, directors on the Central Board nominated under Section 8(1)(c) of the Reserve Bank of India Act, 1934 ceased to be members of the Board on the expiry of their terms.

X.13 Shri Kiran Karnik and Dr. Anil Kakodkar ceased to be members of the western and northern area Local Boards respectively on the expiry of their terms on September 22, 2015. Consequently and concurrently, they also ceased to be members of the Central Board. Smt Anila Kumari and Shri Sharif Uz-zaman Laskar ceased to be members of the eastern area Local Board on the expiry of their terms. Shri A. Naveen Bhandari ceased to be a member of the northern area Local Board on the expiry of his term. Shri K. Selvaraj and Shri Kiran Pandurang ceased to be members of the southern area Local Board on the expiry of their terms.

*Executive Directors - Changes*

X.14 Shri Jasbir Singh and Shri P. Vijaya Bhaskar, Executive Directors retired on October 31, 2015 and February 29, 2016, respectively. Shri Deepak Singhal and Shri B.P. Kanungo were promoted as Executive Directors effective November 01, 2015 and March 01, 2016, respectively. Shri Sudarshan Sen was promoted as Executive Director effective July 04, 2016.

*Obituary*

X.15 Shri S. S. Tarapore, Deputy Governor of the Reserve Bank of India (January 30, 1992 to September 30, 1996) passed away in Mumbai on February 02, 2016.

**Agenda for 2016-17**

X.16 E-meetings for the Committee of the Central Board (CCB) were introduced in 2014. These meetings are held in alternate weeks as an effort to optimise executives' time and cost of governance. As this system stabilises, the frequency of e-meetings from July 2016 will be increased, while having at least one face-to-face meeting every month. Further, as an environment friendly initiative, agenda notes for various meetings of the Central Board and its committees/sub-committees are proposed to be provided to the participants in soft form. Work of art will also be acquired for display in the Reserve Bank's properties with a view to recognising and encouraging budding artists. An art acquisition policy has been framed for this purpose.

## COMMUNICATION PROCESSES

X.17 The Reserve Bank continues to uphold its goal of having a dynamic communication policy to enable swift responses to domestic and international developments. Within this overall goal, the Department of Communication strives to build and nurture a fruitful and beneficial partnership between the Reserve Bank and the public through a two-way communication. It not only disseminates policy and its rationale to various stakeholders in a transparent, timely and credible manner but also strives to obtain continuous feedback on the policy.

**Agenda for 2015-16: Implementation Status**

*The Website*

X.18 The refurbished website of the Reserve Bank was launched in April 2015 strengthening the department's communication tools. With technological up-gradation, the website is now rendered in a more user-friendly manner. The website is also integrated with two social media sites, Twitter and YouTube. While all important releases get tweeted automatically as soon as they are published on the website, YouTube publishes speeches, media interviews and press conferences of the top management. The Governor's post-policy conferences on the bi-monthly statements on monetary policy along with his interviews to television channels were disseminated through YouTube along with live streaming on the Reserve Bank's website. The channel also shows financial education films produced by the Reserve Bank. This process is being taken forward this year to add Facebook and LinkedIn to showcase the Reserve Bank as a more attractive and accessible institution to the youth.

*Review of the Communication Policy*

X.19 A committee was set up to review the Reserve Bank's communication policy under the chairmanship of the Executive Director, Dr. M. D. Patra. The committee held several meetings to deliberate on various issues of relevance and submitted its report to the Deputy Governor in charge of communication.

*Monetary Policy Communication*

X.20 Intensive communication activities were carried out to disseminate each bi-monthly monetary policy announcement. Apart from press conferences and teleconferences with researchers and analysts, interviews of the Governor with media were also conducted in English and Hindi.

*Banking Hall Events*

X.21 During 2015-16, in an attempt to improve internal communication, the department organised Banking Hall events for the Governor to interact with staff members in its various offices. During the year six Banking Hall events were organised (in Chennai, Mumbai, Thiruvananthapuram, Jammu, Bhopal and Bhubaneswar).

**Awareness Campaigns and Advertisements**

*Fictitious Emails*

X.22 A public awareness campaign on fictitious emails offering money titled – 'Don't get cheated by emails/SMSs/calls/fake credit cards promising you money' was released on FM channels including Prasar Bharti, All India Radio and other private channels in November and December 2015.

*Sovereign Gold Bonds*

X.23 Public awareness campaigns on the Sovereign Gold Bond scheme (SGB), 2015 were aired on November 18 and 19, 2015 on FM channels. Two rounds of the public awareness campaign on the SGB scheme, 2015 were released in newspapers in January and March 2016 in English, Hindi and 11 vernacular languages.

*Additional Security Features of Bank Notes*

X.24 To highlight the three additional features of bank notes introduced in 2015-16, the Reserve Bank, jointly with the Department of Consumer Affairs, Ministry of Consumer Affairs conducted an awareness campaign on currency in September 2015 under its 'जागो ग्राहक जागो' campaign. The campaign was undertaken in 13 languages in three different design sets in 1,055 newspapers all over the country.

*Advertisements*

X.25 On behalf of various departments, 127 regular advertisements were published in English, Hindi and vernacular newspapers during July 2015 and June 2016. These advertisements comprised notices for tenders, recruitment, request for proposals and expressions of interest.

*Workshops for the Media*

X.26 Since the media is the main interlocutor for the Reserve Bank, the department endeavours to respond to media queries and suggestions in a time-bound fashion. The Reserve Bank organises informal briefings/workshops for the media to enhance its understanding and also the reach of major policy announcements made by the Reserve Bank as well as its publications, such as, the Annual Report and the Financial Stability Report. As in the past, the department arranged an annual workshop on the Reserve Bank's role and functions for the media. During 2015-16, the department also organised workshop for mediapersons from Nepal on a request from the Nepal Rastra Bank.

### Agenda for 2016-17

X.27 The Department of Communication will continue its engagement with stakeholders by conducting workshops/sessions for the media on important regulatory and banking related issues. New consumer awareness programmes will be carried out in coordination with concerned departments. In addition, the department will also continue educating citizens through advertisements and radio/TV campaigns. This will be undertaken as per the needs of the Reserve Bank's departments. Websites for the common man and financial education will be integrated with the Reserve Bank's main website. Engagements with stakeholders will also be carried out through Facebook and LinkedIn.

## HUMAN RESOURCE INITIATIVES

X.28 The Human Resource Management Department (HRMD) operates on a broad-based framework, facilitating the Reserve Bank's central banking activities by enhancing efficiency, drawing out the best from staff members and creating an atmosphere of trust.

### Regulatory/Other Developments

*Training*

X.29 The Reserve Bank strives to impart necessary knowledge and skill up-gradation for developing the technical and behavioural skills of its human resources. It also helps employees in attaining personal growth and improving their effectiveness at work. The six training establishments of the Reserve Bank – the Reserve Bank Staff College (RBSC), Chennai; College of Agricultural Banking (CAB), Pune; and four Zonal Training Centres (ZTCs) in Mumbai, New Delhi, Kolkata and Chennai – cater to its training requirements (Table X.1).

**Table X.1: Reserve Bank Training Establishments - Programmes Conducted (July-June)**

| Training Establishment | 2013-14 | | 2014-15 | | 2015-16 | |
|---|---|---|---|---|---|---|
| | Number of Programmes | Number of Participants | Number of Programmes | Number of Participants | Number of Programmes | Number of Participants |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| RBSC, Chennai | 105 | 2,560 | 141 | 2,626* | 125 | 2,741* |
| CAB, Pune | 127 | 3,909 | 215 | 7,183* | 198** | 7,580* |
| ZTCs (Class I) | 99 | 2,222 | 105 | 2,241 | 97 | 2,055 |
| ZTCs (Class III) | 70 | 1,510 | 98 | 2,036 | 102 | 2,247 |
| ZTCs (Class IV) | 37 | 725 | 53 | 1,041 | 38 | 807 |

**Note** * : Includes foreign participants.
** : Includes National Mission for Capacity Building of Bankers for Financing MSME Sector (NAMCABS) programmes held offsite.

*Training at External Institutions*

X.30 During 2015-16, 470 officers were deputed by the Reserve Bank to participate in training programmes, seminars and conferences organised by external management/banking institutions in India. The Reserve Bank also deputed 599 officers to attend various training courses, seminars, conferences and workshops conducted by banking and financial institutions and multilateral institutions in more than 55 countries (Table X.2).

*Golden Jubilee Scholarship and Study Leave Schemes*

X.31 The Golden Jubilee Scholarship scheme was reviewed in 2015. The number of officers to be selected for studying abroad was increased from six to eight and the upper age limit increased from 45 to 48 years. In 2015, eight officers were awarded this scholarship. Ten officers of the Reserve Bank availed of different schemes for pursuing higher studies other than the Golden Jubilee scheme during the year. Further, 325 employees pursued select part-time/distance education courses under the Reserve Bank's incentive scheme.

*Grants and Endowments*

X.32 Towards promoting research, training and consultancy in the banking and financial sector, the Reserve Bank provided financial support of ₹260 million to the Indira Gandhi Institute of Development Research (IGIDR), Mumbai; ₹60 million to the Centre for Advanced Financial Research and Learning (CAFRAL), Mumbai; ₹15.4 million to the National Institute of Bank Management (NIBM), Pune; ₹3.7 million to the Indian Institute of Bank Management (IIBM), Guwahati; and ₹9.7 million to the London School of Economics (LSE) India observatory and the I.G. Patel Chair, London.

**Table X.2: Number of Officers Trained in External Training Institutions in India and Abroad**

| Year | Trained in India | Trained abroad |
|---|---|---|
| 1 | 2 | 3 |
| 2013 - 14 | 798 | 530 |
| 2014 - 15 | 906 | 562 |
| 2015 - 16 | 470 | 599 |

*Industrial Relations*

X.33 Industrial relations in the Reserve Bank by and large remained peaceful during the year. The Reserve Bank continued to hold periodic meetings with recognised associations/federations of officers and employees/workmen on various matters related to service conditions and welfare measures for employees. The Reserve Bank also revised its employees pay and allowances during the year.

*Superannuation Benefits*

X.34 A demand from pensioners/retirees relating to improvements in pension conditions remained unresolved and the Reserve Bank is still engaged in discussions with the Government of India for its early resolution.

*Recruitments and Staff Strength*

X.35 During 2015 (January-December), the Reserve Bank recruited 723 employees. Of this, 96 belonged to Scheduled Castes (SCs) and 54 to Scheduled Tribes (STs), constituting 20.75 per cent of the total recruitments (Table X.3).

X.36 The changes introduced in the recruitment process have led to a reduction in the recruitment cycle for Grade 'B' (Direct Recruit) officers from more than 14 months in 2012-13 to about 6 months in 2015-16.

X.37 The total staff strength of the Reserve Bank as on December 31, 2015 was 15,854 as compared to 16,794 a year ago. Of the total staff

**Table X.3: Recruitment by the Reserve Bank in 2015***

| Category of recruitment | Category-wise strength | | | | |
|---|---|---|---|---|---|
| | Total | *of which* | | Per cent of total | |
| | | SC | ST | SC | ST |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Class I | 128 | 10 | 8 | 7.81 | 6.25 |
| Class III | 553 | 83 | 42 | 15.01 | 7.59 |
| Class IV | | | | | |
| (a) Maintenance Attendant | - | - | - | - | - |
| (b) Others | 42 | 3 | 4 | 7.14 | 9.52 |
| **Total** | **723** | **96** | **54** | **13.28** | **7.47** |

* January-December

strength, 19.55 per cent belonged to SCs and 6.63 per cent belonged to STs (Table X.4).

X.38 The number of full-time employees in the Reserve Bank stood at 15,693 as on June 30, 2016. Of these, 6,932 were in Class I, 4,119 in Class III and 4,642 in Class IV categories.

X.39 During 2015 (January-December), four meetings of the management and representatives of the All India Reserve Bank Scheduled Castes/ Scheduled Tribes and the Buddhist Federation were held to discuss issues relating to the implementation of the Reserve Bank's reservation policy. In accordance with the central government's policy, the Reserve Bank is providing reservation to Other Backward Classes (OBCs), effective September 08, 1993. The number of OBCs (recruited after September 1993) in the Reserve Bank as on December 31, 2015 was 1,923. Of these, 560 were in Class I, 729 in Class III and 634 in Class IV categories.

X.40 The total strength of ex-servicemen in the Reserve Bank as on December 31, 2015 stood at 991. Of these, 187 were in Class I, 169 in Class III and 635 in Class IV categories. There were 215, 85 and 91 physically challenged employees in Class I, Class III and Class IV cadres respectively as on December 31, 2015.

*Prevention of Sexual Harassment of Women at the Workplace*

X.41 The formal grievance redressal mechanism for prevention of sexual harassment of women at the workplace, in place since 1998, was further strengthened with the issue of a new set of comprehensive guidelines in 2014-15 in accordance with the Sexual Harassment of Women at the Workplace (Prohibition, Prevention and Redressal) Act and Rules, 2013. No complaint of sexual harassment was received in 2015.

**Table X.4: Staff Strength of the Reserve Bank***

| Category | Category-wise strength | | | | | | Per cent to total strength | |
|---|---|---|---|---|---|---|---|---|
| | Total Strength | | SC | | ST | | SC | ST |
| | 2014 | 2015 | 2014 | 2015 | 2014 | 2015 | 2015 | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Class I | 7,565 | 7,233 | 1,128 | 1,062 | 479 | 434 | 14.7 | 6.0 |
| Class III | 3,573 | 3,756 | 499 | 552 | 193 | 212 | 14.7 | 5.6 |
| Class IV | 5,656 | 4,865 | 1,740 | 1,486 | 446 | 405 | 30.5 | 8.3 |
| **Total** | **16,794** | **15,854** | **3,367** | **3,100** | **1,118** | **1,051** | **19.6** | **6.6** |

*: End December

X.42 During the year, a number of awareness programmes were organised at various Regional Offices on the mechanisms in place in the Reserve Bank. Besides, the Reserve Bank's training college in Chennai also conducted a gender sensitisation programme for members of the Complaints Committee. Further, an all-India seminar on the theme 'Prohibition, prevention and redressal of sexual harassment of women at the workplace – implementation & way forward' was organised during March 03-05, 2016 in which representatives from the Complaints Committees in all the Regional Offices participated.

*Right to Information (RTI)*

X.43 The Reserve Bank received 11,758 requests for information and 1,477 first appeals under the RTI Act during 2015-16, all of which were responded to. Six training programmes on the RTI Act were conducted for employees at the Reserve Bank's training centres.

*Samadhan and Other Initiatives*

X.44 Samadhan, a human resource (HR) transformation project, was taken up by the Reserve Bank in 2014-15 to deliver uniform and rule-based HR services to its employees. The first phase of its implementation is nearing completion. The project has gone live with salary and benefits modules and a few advances. The portal has been made available to all users of the Reserve Bank. Once the first phase is complete, the implementation of the second phase will be initiated.

*Senior Management Retreat*

X.45 The Reserve Bank's Senior Management Retreat for 2015 was held in October 2015 on the broad theme, 'Public oversight and internal governance: The optimal mix and how to achieve it.'

*RBIQ and The RBI Policy Challenge*

X.46 The RBI quiz, which was introduced by the Reserve Bank in 2012, was conducted in 62 locations across the country during 2015. It drew an enthusiastic response from school students. Zonal and national finals were conducted in Mumbai and telecast on Doordarshan's National Channel.

X.47 To spread knowledge on financial monetary and economic matters among students, the Bank launched a national level competition, 'The RBI Policy Challenge', in January, 2016 (Box X.1).

**Box X.1**
**The RBI Policy Challenge: A National Level Competition for Students**

Building on the success of RBIQ which covers school students and with a view to further spreading knowledge on financial, monetary and economic matters amongst the student community, the Reserve Bank launched a national level competition titled, 'The RBI Policy Challenge' in January 2016. Targeted at under-graduate and post-graduate students, it tested essay writing, problem solving and presentation skills of the participants.

The competition had three rounds: regional, zonal and national. More than 260 reputed institutions from across the country participated in the competition and four teams eventually made it to the final which was conducted at the Reserve Bank's Central Office in Mumbai on April 05, 2016. A monetary policy related topic was assigned to the teams in the forenoon and each team made a 15-minute presentation in the afternoon before a select panel headed by the Governor. This was followed by a 'question & answer' session in which the participants responded to queries posed by the panellists, members of the press and the audience.

Teams from the Indian Institute of Foreign Trade (IIFT), Delhi and the Indian Institute of Management (IIM), Raipur emerged as the joint winners of the inaugural edition of this annual event. Besides a trophy and a cash prize of ₹1 lakh per team, members of both teams also won an offer to intern with the Reserve Bank for up to three months in a department of their choice.

**Agenda for 2015-16: Implementation Status**

*RBI Academy*

X.48 The RBI Academy is visualised as an apex institution for central banking studies in the Southeast Asian region. This institution is based in Mumbai and fully funded by the Reserve Bank. The Academy will address knowledge gaps and training needs of officers of the Reserve Bank. Eventually, the training programmes, especially programmes like MBA in Central Banking, will be offered and opened up to officers of central banks of other countries. Initially the Academy is expected to cover courses on risk management, macroeconomics, monetary economics and strategic and human resource management. It is expected that subject experts from renowned academic institutions will form a part of the faculty administering the courses. It is also envisaged that over a period of time, the Academy will cater to the training needs of bankers, government officials and other financial institutions.

*Competency based HR Framework*

X.49 A competency framework comprising the required core behavioural, operational and leadership competencies for various roles in the Reserve Bank was envisaged to integrate and align all its major HR policies including placement, performance management/development, skill gap analyses and training. Competency mapping exercise for two departments (the Department of External Investments & Operations and the Department of Banking Regulation) is being taken up on a pilot basis through empanelled consultants. Based on the experience gained, the exercise will be extended to the entire Reserve Bank in due course. A Steering Committee has been formed to monitor the pilot project.

*HR Units*

X.50 HR units have been set up in the Reserve Bank's Central Office departments and Regional Offices to strengthen the HR developmental functions of the Reserve Bank.

*Structured e-learning*

X.51 The Reserve Bank will introduce structured e-learning with courses targeted at larger groups of staff members. The development of the first few modules is expected to commence shortly. This will be an on-going process with newer modules being prepared and hosted on Samadhan's Learning Management System module.

*Common Cadre Recruitment*

X.52 The Reserve Bank has introduced the concept of common cadre recruitments. Under the revised recruitment process, the officers recruited will have common seniority instead of separate cadre seniority for economists, statisticians and the general cadre.

**Agenda for 2016-17**

X.53 A manpower planning exercise has been undertaken to evaluate and firm up the Reserve Bank's manpower requirements in the next five years. This will form the cornerstone for the Reserve Bank's HR policies during this period.

## ENTERPRISE-WIDE RISK MANAGEMENT IN THE RESERVE BANK

X.54 With a view to developing an integrated assessment and management of the risks faced by the Reserve Bank in conformity with its articulated risk policies, an enterprise-wide risk management (ERM) framework was adopted in February 2012, marking a move from a 'silo-based' approach to a 'whole-of-business' perspective to risk management in the Reserve Bank. During 2015-16, this process was taken forward by the Risk Monitoring Department.

*Three-phase Rollout Plan*

X.55 The first phase of the 3-phase ERM rollout plan was completed with the creation of a Risk Governance Structure[1] (RGS) and a 3-tier Risk Management Structure[2], laying down ERM policies, methodologies for risk ratings, framework for risk reporting by Business Areas (BAs) and preparation of risk registers (RRs) to create a risk profile of each BA. The second phase envisages articulation of the Reserve Bank's risk appetite and tolerance limits by RGS while also attempting a quantification of operational risks. In the final stage of ERM implementation, the need and scope for shifting the Middle Office functions in the Reserve Bank to its Risk Monitoring Department (RMD) and greater involvement of the department in evaluating policy risks will be considered.

**Agenda for 2015-16: Implementation Status**

X.56 During 2015-16, RRs of 13 BAs were completed and approved by RGS, while for the remaining 19 departments, RRs are in advanced stages of completion. Further, a mechanism for a periodic review of risk events (based on incident reports submitted by BAs) has been put in place and monitoring of high-risk events up to their eventual closure from the risk perspective has started.

X.57 A risk awareness campaign for strengthening the risk culture in the Reserve Bank, initiated in 2014-15, was continued during 2015-16 through risk seminars for senior officers, classroom discussions in the Reserve Bank's Training Establishments (TEs) and through developing case studies based on actual/unique incidents which offered scope for learning and enhancing risk awareness. Besides, risk awareness programmes were conducted for Regional Directors/Chief General Managers/Officers-in-Charge as part of a top-down approach for strengthening a risk culture. Risk surveys of the Reserve Bank's senior officers were conducted to identify emerging risks for the Reserve Bank. RGS reviewed the survey responses and directed initiation of appropriate risk mitigation measures. Risk conferences were also conducted in 2015-16 for the Senior Risk Officers and Risk Officers identified in each BA.

X.58 Being a relatively new function in central banks the world over, ERM offers considerable scope for peer-to-peer learning with regard to evolving ERM practices and processes. In this direction, having joined the International Operational Risk Working Group[3] (IORWG) in 2014, the Reserve Bank has been regularly participating in its endeavours. In order to assess and improve its Incident Reporting System, the Reserve Bank surveyed practices in other member central banks. The survey findings provided valuable inputs for strengthening the Reserve Bank's incident reporting framework. Besides,

[1] The Reserve Bank's RGS is a 3-tier structure comprising of the Risk Monitoring Committee (RMC), the Audit and Risk Management Sub-Committee of the Board (ARMS) and the Central Board. RMC is a top executive level committee that supports ARMS in monitoring the risk management oversight in the Reserve Bank under the over arching guidance of the Central Board.

[2] The Risk Management Structure is a 3-layer arrangement with the Business Area (BA), the risk monitoring function and the Reserve Bank's internal audit system forming the three lines of defence against risks. As the first line of defence, the BAs identify and manage their own risks, the risk monitoring function as the second line of defence provides policies and methodologies for identifying and rating risks and aggregates and reports the risks to RGS. The internal audit as the final line of defence operates through its on-site audit which provides assurances to RGS about the implementation and status of risk management in the Reserve Bank.

[3] IORWG is a group of over 69 central banks and the Bank for International Settlements, which undertakes research, identifies and shares best practices and acts as a centre of competence in operational risk management. It is co-chaired by the Central Bank of Spain and the Federal Reserve Bank of Philadelphia.

**Box X.2**
**IORWG Survey: RBI's Process Adjudged as an International Best Practice**

The International Operational Risk Working Group (IORWG) acts as a centre of competence in operational risk management (ORM) for central banks (CBs) with a view to ensuring that their current risk management approaches are commensurate with the level and nature of their operational risk exposures. In pursuance of its objectives, the group shares best practices for addressing various aspects in the current risk management framework, methods used, implementation challenges and the lessons learnt from past operational failures with its members. IORWG and its members conduct surveys of member CBs, analyse the data and share the final outcomes of the surveys, which are useful for self-assessing the CBs' standing in operational risk monitoring.

In 2016, the IORWG, *inter alia*, conducted a survey to identify the best practices adopted by CBs in ORM. As part of the survey, IORWG studied the methodology used by the Reserve Bank for preparing its RRs. The use of domain experts in this process was adjudged as an international best practice, fit for emulation by other member central banks. IORWG's compilation of best practices noted: *'In the Reserve Bank Risk Unit adopted an innovative approach by including Domain Experts for vetting the RRs. These Domain Experts are officers of the Central Bank who have worked as resource person/s in the BA in the recent past but are presently not posted in the concerned BA. This approach has helped in imparting objectivity and granularity in the process of finalising of the RR and enhanced its quality. The identified Domain Experts were provided exposure by the Risk Unit (through workshop/training programme/interactions) on the risk management concepts and methodology for vetting the RR. Thus, the Domain Experts acted as extensions of the Central Risk Unit and helped in ensuring that the coverage in the RRs was exhaustive and the risk ratings were objective and in consonance with the approved risk assessment methodology.'*

the Reserve Bank has also been responding to surveys conducted by other central banks and by the IORWG. Based on its responses to such surveys, one of the elements of the process for preparing RRs adopted in the Reserve Bank has been adjudged as an international best practice for emulation by other central banks. Details of IORWG's process of compiling best practices are given in Box X.2.

*Financial Risk Management*

X.59 In line with international best practices, the Reserve Bank prepared a draft economic capital/provisioning framework to assess its risk-buffer requirements in a structured and systematic manner. It is envisaged that this framework will also be used for determining the surplus transferable each year by the Reserve Bank to the Government of India. Based on this framework, a risk-reporting mechanism has been implemented for the Reserve Bank to periodically report on the balance sheet and other risks faced by it to RGS.

**Agenda for 2016-17**

X.60 The remaining 19 RRs will be finalised during 2016-17. Risk profiles and heat maps for each BA and of the Reserve Bank as a whole will be generated to facilitate an enterprise-wide review of risks by the RGS. Measures to enhance reporting of incidents, including expanding the universe of eligible reporters of incidents and strengthening the risk culture in the Reserve Bank will also be pursued. The patterns and causes of risk events as reflected in incident reports will continue to be analysed on an on-going basis with a view to preventing their recurrence. Risk surveys will be conducted to monitor emerging risks and also for reviewing the top risks faced by the Reserve Bank. Vigorous efforts for fostering risk awareness at all levels and across all locations in the Reserve Bank will be persevered with a view to deepening its risk culture. The risk reporting software, developed in-house in 2014-15, will be revamped and made web-enabled to facilitate closer oversight as well as management of risks in the Reserve Bank.

X.61 During the year, the focus will also be on the rollout of a Risk Appetite Framework (RAF) in the Reserve Bank. On the finalisation of the Risk Tolerance Statement (RTS), the next step will entail a comprehensive review of the extant Risk Tolerance Limits (RTLs) in various BAs.

X.62 The Reserve Bank is slated to host the 12th edition of the Central Bank Risk Managers' Conference (CBRMC)[4] in November 2016, with 'Economic Capital Frameworks of Central Banks' as its theme.

## INTERNAL AUDIT/INSPECTION IN THE RESERVE BANK

X.63 Internal audit exercises undertaken by the Inspection Department provide risk assurance to the top management. The inspections are conducted under the Risk Based Internal Audit (RBIA) framework and include an information system audit carried out by specialist empanelled officers.

### Agenda for 2015-16: Implementation Status

X.64 The focus of inspection is shifting from a transaction-based approach to a risk-based methodology. The departments of the Central Office are in the process of preparing risk registers (RRs) in consonance with RMD and getting them approved by the Risk Monitoring Committee. The scope of the Audit Management System (AMS) has been enlarged to incorporate risk monitoring functions; it has also been rechristened as the Audit Management and Risk Monitoring System (AMRMS). The work for system requirement specifications is under process. With regard to Vulnerability Assessment and Penetration Testing (VA-PT), the empanelment process for external audit firms in terms of the Technical Advisory Group's (TAG) recommendations has been completed and the VA-PT of certain critical applications has been undertaken. In December 2015, the department issued detailed guidelines on the revised methodology for appointing concurrent auditors, delineating a 2-stage process of technical and financial biddings. Draft guidelines for project audit are under finalisation.

### Agenda for 2016-17

X.65 An information security (IS) audit as part of the RBIA is undertaken with reference to the IS policy of the Reserve Bank. In this context, the Inspection Department will put in place a standard operating procedure or checklist for IS auditors. During the year, the focus will be on implementing AMRMS by providing end-to-end solutions for automating the process from inspection planning to final closure of inspection reports. The process of preparing RFP/scope of VA-PT for select critical IT applications is underway. The modalities for conducting a technology audit/VA-PT of select critical IT applications will also be worked out.

## INTERNATIONAL RELATIONS

X.66 Given its mandate to act as a nodal unit for international financial diplomacy to further national interests, the International Department continued its efforts towards promoting international macroeconomic policy coordination, driving global policy agenda and contributing to global regulatory standard-setting.

[4] CBRMC is a forum launched by BIS in 2004 and events have been organised by various central banks around the world. The forum is attended by senior officials from leading central banks who are responsible for developing and implementing risk management policies or processes linked to foreign exchange reserves and balance sheet exposures.

**Agenda 2015-16: Implementation Status**

X.67 India was the leading voice from EMEs in finalising common international standards on the Total Loss Absorbing Capacity (TLAC) for global systemically important banks (G-SIBs). In collaboration with other concerned departments, the International Department made detailed presentations to help articulate India's position on key regulatory issues of TLAC, Liquidity Coverage Ratio (LCR), capital requirements for sovereign assets, leverage ratio and reforms in the OTC derivatives market as per G20 commitments. Central bank liquidity to central counterparties and recovery and resolution regime were the other aspects covered by the department.

X.68 Work relating to the BRICS Contingent Reserve Arrangement (CRA) was completed, consequent to which BRICS central banks opened local currency denominated swap accounts in their books in favour of one another, making CRA operational.

X.69 The International Department hosted a 2-day SAARCFINANCE Governors' Symposium on the 'Impact of Chinese Slowdown on SAARC Region and Policy Options' during May 26-27, 2016 in Mumbai. The symposium was attended by governors/deputy governors of central banks, senior officials from the ministries of finance of SAARC countries, experts from IMF, BIS and several other dignitaries. The SAARCFINANCE database, which is one of the major areas of cooperation among the SAARCFINANCE Group, has been developed by the Reserve Bank in collaboration with other SAARC central banks. This was launched for the general public to promote research activities in the SAARC region.

X.70 India holding the co-chair of the G20 Framework Working Group (FWG), the International Department worked in close collaboration with the Government of India for shaping India's growth strategy for the G20 Antalya Action Plan in 2015. During 2016, the International Department also played a key role in deciding the nine priority areas of structural reforms, a set of principles guiding them and a set of indicators to help monitor and assess the progress of structural reforms in G20 jurisdictions.

X.71 India was peer reviewed by the Financial Stability Board (FSB) in two major areas - the macro-prudential policy framework and regulation and supervision of non-banking financial companies (NBFCs). The department has been contributing to and coordinating various thematic reviews undertaken by FSB such as shadow banking, OTC market reforms and resolution regimes. The department also played an effective role in furthering country position on a range of international financial architecture issues in the G20 Working Group. Some of the important regulatory issues currently under discussion included fin tech and credit intermediation, the CCP work plan and PFMI implementation, and resolution framework. The department also coordinated the IMF's Article IV consultations in coordination with the Government of India.

X.72 The department joined hands with the International Monetary Fund's Institute for Capacity Development (ICD) and the College of Agricultural Banking (CAB), Pune to organise an intensive one-week course on 'Early Warning Exercise' in February 2016 at CAB, Pune. Given the importance of a comprehensive and comparable database, a seminar on the SAARCFINANCE database was organised for the officials of SAARC member countries for making available time series data on select macroeconomic indicators during December 8-9, 2015 at the Reserve Bank, Mumbai. During 2015-16, the department also organised 40 exposure visits by leading global universities, officials from central banks and international standard setting bodies.

### Agenda for 2016-17

X.73 The International Department will continue to be active in driving the global agenda from the Indian perspective at the G20, BIS, FSB and IMF. The department will continue to work along with the Government to shape the national growth strategy for the G20 Hangzhou Action Plan and provide analytical inputs on issues currently under discussion at various international fora. The department will also play an active role in discussions on green finance (Box X.3). The department will work closely with the Government of India towards 15th IMF's General Review of Quotas, including a new quota formula. Besides, the department will continue to work on a host of global financial/regulatory issues.

X.74 During 2016, India assumed the Chair of BRICS. The department will continue to work with the Government of India in driving BRICS agenda in her capacity as the Chair.

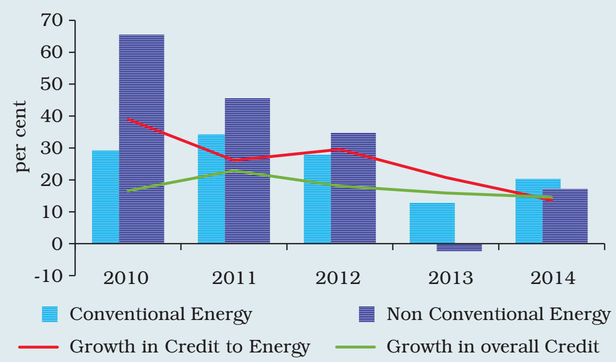
X.75 The department will continue to play a key role in spearheading the SAARCFINANCE roadmap including the database initiative, capacity building and a Joint Technical Coordination Committee with Nepal. India will undergo the Financial Stability Assessment Programme (FSAP) by the Fund-Bank during 2017, which will be coordinated by the department.

**Box X.3**
**Green Finance: An Analysis**

With the objective of exploring ways and sharing knowledge on the modalities for mobilising more private capital for green investments, either directly or via financial intermediaries, a Green Finance Study Group (GFSG) was set up post G20 Finance and Central Bank Deputies meeting at Sanya in China in December 2015. GFSG submitted its report, 'G20 Green Finance Synthesis Report' in July 2016. The report outlines voluntary options for enhancing the ability of the financial system to mobilise private capital for green investments. In particular, the report highlights the need for supporting the development of local green bond markets, facilitating cross-border investments in green bonds, facilitating knowledge sharing on environmental risks, and improving the measurement of green finance activities. To effectively manage environmental risks, banks can reduce lending to polluting sectors and enhance their preference for green lending and help improve the resilience of the financial system. Notwithstanding a growing interest in green finance, many banks have yet to fully incorporate environmental and social factors in their business models, governance frameworks and cultures.

The BSR data show that bank lending to renewable energy has been uneven. It grew at a rate higher than the overall credit growth during 2009 to 2014, leading to an increase in its share in overall credit (Chart 1). However, the share remains low, with a bulk of it being accounted for by nationalised banks (Table 1). In line with the empirical literature available in the Indian context (Rajput 2013), the relationship between

**Chart 1: Credit Growth**



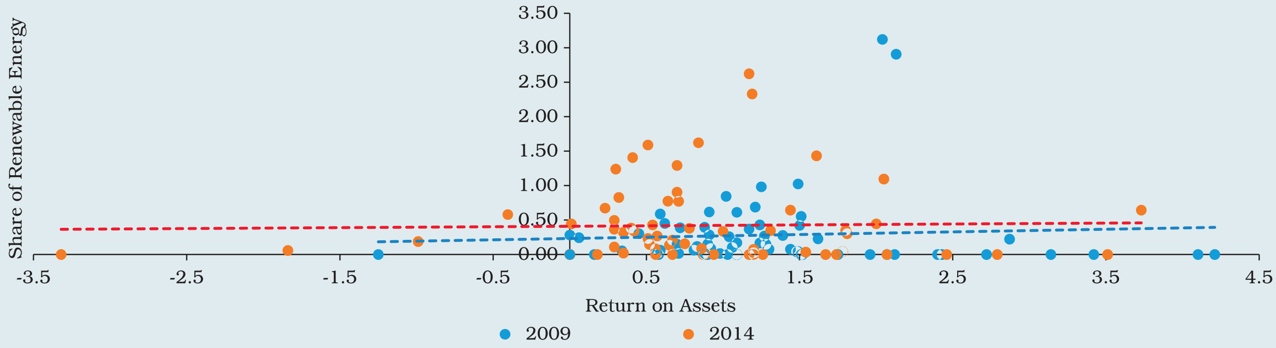

renewable energy credit and return on assets (RoA) for India seems inconclusive (Chart 2). Adoption of green policies by banks during 2007-09 and inclusion of renewable energy in the priority sector lending in 2012 have been instrumental

**Table 1: Share of Bank Groups in Renewable Energy Lending (per cent)**

| | 2009 | 2011 | 2013 | 2014 |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| Foreign Banks | 8.5 | 1.1 | 3.7 | 2.3 |
| Nationalised Banks | 54.1 | 72.7 | 62.7 | 70.4 |
| Private Sector Banks | 9.9 | 7.9 | 15.9 | 15.3 |
| SBI and its associates | 27.4 | 18.4 | 17.7 | 11.9 |

*(Contd....)*

**Chart 2: Share of Renewable Energy of all SCBs in Total Credit vs RoA (per cent)**




in giving a push to green bank lending. The priority sector reporting system was revised in June 2015 to enable reporting on credit under this sector as a separate head. This shows an average growth of about 21.8 per cent in bank credit to renewable energy during 2015-16, though its share in overall credit remains miniscule.

In 2015, SEBI brought out a concept paper for issuance of green bonds. After considering the feedback received, it is in the process of finalising the guidelines for issuing such bonds. India has already entered the green bond market with bonds issued by a handful of pioneer issuers. The guidelines for such bonds are expected to facilitate investment decisions by investors who have a mandate to focus on green investments, and to provide uniformity in disclosure standards.

In the Indian context, while the Government and the regulators have been addressing the impact of climate change, there are broader issues that may need careful consideration. They include definition of green activities, areas of green financing, aspects of intellectual property rights (IPRs) in development and transfer of green technology from developed countries, and modalities for environmental risk assessment by banks.

References:

*Rajput. N, S. Arora, A. Khanna* (2013), "An Empirical Study of Impact of Environmental Performance on Financial Performance in Indian Banking Sector", *International Journal of Business and Management Invention, Volume 2 Issue 9, September.*

## GOVERNMENT AND BANK ACCOUNTS

X.76 The Department of Government and Bank Accounts (DGBA) formulates internal accounting policies and policies pertaining to conduct of government business by agency banks. It oversees activities undertaken by the Regional Offices as a banker to banks and central and state governments. In the area of accounts and their presentation, the Reserve Bank has been constantly moving towards greater transparency through improved presentation of its financial statements and disclosures. In the area of 'banker to banks' and 'banker to government', the Reserve Bank has been leveraging IT solutions to provide better and more efficient services.

### Agenda for 2015-16: Implementation Status

X.77 Based on the recommendations of the Technical Committee formed to review the presentation of the balance sheet and profit and loss account of the Reserve Bank, rupee securities are being carried at fair value and appreciation or depreciation on re-valuation is being transferred to 'Investment Revaluation Account-Rupee Securities' with effect from July 2015. In addition, rupee securities are being amortised on a daily basis from July 2015.

X.78 A Working Group constituted in February 2015 to review the system of inspecting government business in agency banks, submitted its report in December 2015. Recommendations of the group relating to onsite inspections of agency banks have been implemented. The Reserve Bank is in the process of putting in place a system of offsite monitoring of government business. A Working Group on Business Process Reengineering (BPR) of government business, which was set up in March 2015, comprising of members from the Reserve Bank, various government agencies and a few select agency banks, is expected to submit its report shortly.

### Agenda for 2016-17

X.79 Once the Working Group on BPR submits its report, it will be examined for implementation. Efforts will be directed at further integrating electronic receipts and payments of more state and central government systems with the Reserve Bank's CBS (e-Kuber) for better efficiency and customer service. Other items on the agenda for implementation include standardising the process of imposing penalties on agency banks and rationalisation of agency commission rates.

X.80 DGBA was involved in finalising the recommendations of the technical group that examined the banking arrangements for implementing GST. The Reserve Bank will be actively involved in the process of implementation as an aggregator with the transactions being integrated with the Reserve Bank's CBS.

## MANAGING FOREIGN EXCHANGE RESERVES

X.81 The Department of External Investments and Operations (DEIO) manages the country's foreign exchange reserves. The increasing volume of foreign exchange reserves warrants strengthening the reserves management structure in terms of valuation methods, risk management practices, accounting framework and IT infrastructure including disaster management.

### Agenda for 2015-16: Implementation Status

X.82 Diversification of India's foreign currency assets (FCA) continued during 2015-16 by way of investments in new markets and asset classes within the framework of safety, liquidity and returns. A hotstandby set-up was operationalised at a different location to mitigate the impact of disaster induced disruptions. The computation of value at risk (VaR) was extended to all the FCA and gold. Credit stress testing of FCA also commenced during the year.

### Agenda for 2016-17

X.83 Further diversification of FCA, active management of the gold portfolio, strengthening of the risk management framework relating to portfolio management and IT systems and a further build-up of staff capacities are on the agenda for 2016-17.

## ECONOMIC AND POLICY RESEARCH

X.84 Research activity has significant importance for policymaking in central banks. In the Reserve Bank, the Department of Economic and Policy Research (DEPR) is entrusted with the task of providing research inputs and management information system (MIS) services on economic and policy related issues. The department is envisaged to establish itself as a premier knowledge centre in policy-oriented research on macroeconomic and monetary policy issues. DEPR contributes in several ways including regular publication of reports, data dissemination and policy oriented research.

### Agenda for 2015-16: Implementation Status

*Publications*

X.85 As in the past, the department brought out the flagship publications of the Reserve Bank during 2015-16 – the Annual Report, Study on State Finances and the Reserve Bank of India Monthly Bulletin. Three outreach seminars were held in coordination with the Department of Communication at various centres, mostly universities, during the year to disseminate the main messages of the Reserve Bank's Annual

Report 2014-15 among students and researchers. This exercise was well received. The department also compiled and disseminated primary statistics on monetary aggregates, balance of payments, external debt, household financial savings and flow of funds during the year. The department unveiled the Handbook of Statistics on Indian States, the first of its kind, providing state-wise statistical tables on a wide range of variables including social and demographic indicators, state domestic product, agriculture, industry, infrastructure, banking and fiscal indicators.

*Research*

X.86 During 2015-16, 32 research papers were completed, of which 10 were published in domestic and foreign journals. Eleven working papers were brought out during the year. The research papers covered multiple areas of interest: monetary policy transmission and challenges, effectiveness of forex interventions, global spillovers, SME financing, issues relating to private placements and financing of NBFCs. Several initiatives were undertaken in collaboration with external experts to promote research. One DRG study and a DRG project were completed during 2015-16.

*Other Activities*

X.87 The department organised various events during the year including a seminar on 'Understanding inflation in India' by Professor Laurence M. Ball, a talk by Professor V.V. Chari on 'Lessons from economic theory for monetary policy in India' and a talk by Mr José Viñals, Financial Counsellor, IMF on 'Global financial stability - where do we stand?'. DEPR in collaboration with the Centre for Advanced Financial Research and Learning (CAFRAL) organised an international conference titled, 'Monetary policy challenges in open emerging economies' in which international and national researchers participated. The Annual Research Conference of the department was organised in Goa in June 2016. It included special sessions by eminent economists and external experts. The DEPR Study Circle, an in-house forum of researchers organised 12 presentations on diverse themes by internal researchers. Six seminars were also organised under the same banner with presentations by external experts. A professor of repute from abroad visited the department for two weeks and guided research and forecasting exercises undertaken by the DEPR and the Monetary Policy Department (MPD).

**Agenda for 2016-17**

X.88 Going forward, the research areas envisaged to be covered during 2016-17 include the equilibrium exchange rate, exchange rate pass-through to domestic inflation, credit and production linkages in agriculture, availability of clean notes, the impact of MGNREGA and credit potential in special category states. The department proposes to organise a number of seminars/lectures during 2016-17 and a Southeast Asian Central Banks (SEACEN) course on 'financial cycles and crises' in December 2016. The drafting of Volume V of the 'History of the Reserve Bank' covering the period from 1997 to 2008 is underway in the History Cell of the department. The department has formed a group on Food Inflation Research and Measurement (FIRM) in coordination with MPD and the Department of Statistics and Information Management (DSIM), which will bring out a comprehensive report decoding food inflation in India.

## STATISTICS AND INFORMATION MANAGEMENT

X.89 The Department of Statistics and Information Management (DSIM) disseminates macro-financial statistics to the public and provides statistical support and analytical inputs for meeting the policy and operational needs of the Reserve Bank. DSIM maintains comprehensive statistical systems related to banks, corporate and external sectors; undertakes structured surveys, manages the Reserve Bank's data warehouse and provides statistical analyses and forecasts.

**Agenda for 2015-16: Implementation Status**

*Data Management, Dissemination and Publications*

X.90 During 2015-16, DSIM released statistics related to banks, corporate and external sector as per schedule and with reduced time-lags wherever possible. Banks started submitting International Banking Statistics (IBS) data in the revised reporting system for implementation of Stage-2 enhancements as per the recommendations of the Committee on the Global Financial System (CGFS). The department has developed a methodology for compiling the Index of Service Production for the Banking (ISPB) sector in India, which will be finalised in consultation with the Government. Classification of bank branches in various population groups is being updated based on the 2011 population Census. The scope of banking data dissemination has been expanded by releasing new statistics on types of deposits at a quarterly frequency and the number of branches opened during a quarter/year. Further, the department is actively involved in the validation of market risk models, in addition to developing a rating model for banks.

X.91 During the year, the performance of the corporate sector was analysed, using a much larger dataset of the Ministry of Corporate Affairs (MCA). Further, gross value added of the private corporate sector was compiled in line with the revised National Accounts Statistics. The quarterly international investment position was disseminated as per the SDDS time schedule coupled with a reduced time-lag for all the surveys on the external sector.

X.92 A secure web-portal based reporting framework was implemented under the Foreign Exchange Transactions Electronic Reporting System (FETERS) forming the core of the balance of payments (BoP) compilation. The Central Fraud Registry Portal has been developed based on XBRL system in consultation with the Department of Banking Supervision (DBS) as a centralised database displaying information on frauds involving an amount of ₹0.1 million and above, reported by banks/FIs with search facility, user management and audit trail.

X.93 Phase-II of the XBRL based reporting system was completed during 2015-16 and 97 returns were brought under XBRL. Phase-III of the XBRL project has been initiated with 95 returns covering different areas. During the year, XBRL International, the global custodian of XBRL standards, presented the 'XBRL International Award for Excellence' to the Reserve Bank in recognition of its efforts in 'Innovation and Continuous Pursuit of Improvement in Regulatory Reporting'. An inter-departmental Return Governance Group (RGG) has been formed to vet the process of introducing new returns/ modifications to existing returns in the Reserve Bank.

X.94 The department developed the SAARCFINANCE database (SFDB). The dedicated SFDB website was opened to the public during the SAARCFINANCE Governors' Symposium in May 2016.

X.95 Under the integrated database and the National Factsheet of the Indian Economy, an automated interface mechanism has been developed to meet the regular requirements of the Ministry of Communications and Information Technology.

*Surveys and Research*

X.96 During the year, issues relating to statistical surveys required for monetary policy were referred to the Technical Advisory Committee on Surveys (TACS), which functions under the chairmanship of the Deputy Governor in charge of the department, drawing members from reputed institutions in the field. Research collaboration with the Indian Statistical Institute, Kolkata to improve technical aspects of various surveys undertaken has been extended for one more year. Several research studies were contributed to the Reserve Bank's Working Paper Series/other publications/ academic conferences.

**Agenda for 2016-17**

X.97 The department will continue pursuing work related to the harmonisation of data with the aim of providing definitions of all major items which can then be used by banks to report data. Further, under the aegis of the RGG, banks will be persuaded to streamline their automated data flow (ADF) systems. The process of taking 95 returns under the XBRL Phase-III will be taken forward. During the year, the department will also augment the SAARCFINANCE database coverage in consultation with partner countries. The existing system of collecting and storing information on banking entities will be upgraded in order to enhance the scope and efficiency of the system. The department will also consider rationalisation of certain banking returns in order to reduce the reporting burden on banks.

X.98 Corporate finance studies in areas of risk and vulnerability, capital structure and investment behaviour will also be taken up during 2016-17. In addition, short-term forecasting of corporate sales and profitability using nowcasting techniques will be attempted. The department will also take up rationalisation of existing surveys under the guidance of the TACS.

## LEGAL ISSUES

X.99 The Legal Department is an advisory department established for examining and advising on legal issues and for facilitating the management of litigation on behalf of the Reserve Bank. It vets the circulars, directions, regulations and agreements for various departments of the Reserve Bank with a view to ensuring that the decisions of the Reserve Bank are legally sound. Legal Department is also extending its support and advice to DICGC and other RBI owned institutions on legal issues, litigation and court matters.

**Agenda for 2015-16: Implementation Status**

X.100 The provisions of the Negotiable Instruments Act, 1881 were amended in December 2015. Accordingly, a complaint for bouncing of cheques can only be filed before the court having jurisdiction over (i) the place where the payee delivers the cheque for payment through his account *viz.* the bank branch of the payee or (ii) the place where he presents the cheque for payment *viz.* the branch of the drawee bank, is situated.

X.101 The Supreme Court *vide* its judgment dated July 01, 2015 passed in the case of DICGC *vs* Raghupati Raghavan & Others settled the question of law on the priority of DICGC's claims in cases of liquidation of insured banks.

X.102 The Reserve Bank filed petitions against certain orders of the Central Information Commission under the Right to Information Act, 2005 directing it to provide copies of inspection reports and related information. The Supreme Court declined to interfere with the orders passed by the Commission.

**Agenda for 2016-17**

X.103 In 2016-17, the department will continue to advise various departments on legal matters and furnish specific legal opinions whenever sought. It will also continue its efforts at managing litigation on behalf of the Reserve Bank and function as a secretariat to the Appellate Authority under the Right to Information Act. Amendments to various Acts administered by the Reserve Bank will be pursued during the year in order to meet international commitments and standards and for clarifying relevant provisions.

## CORPORATE STRATEGY AND BUDGET MANAGEMENT

X.104 The Corporate Strategy and Budget Department (CSBD) formulates the budget of the Reserve Bank by allocating resources optimally towards strategic priorities of the Bank.

### Agenda for 2015-16: Implementation Status

X.105 The department prepared a medium-term strategy and action plan framework for the Reserve Bank during the year. Granular action plans of all the Central Office departments (CODs) were aggregated into broad strategies and linked to the Reserve Bank's core purpose, values and vision statement. The department apprises the top management on a quarterly basis on the status of implementation of the agendas that different departments of the Reserve Bank have set for themselves. Their plans for the following quarters in terms of clear timelines, milestones, impediments and corrective measures were taken on board with the intention of plugging the gap between the goals envisaged and their achievement.

X.106 The department also prepared a draft Business Continuity Management (BCM) policy. A BCM diagnostic was conducted to review the status of BCM in the Reserve Bank and to identify existing gaps. This was followed by appointing a consultant to help implement a robust integrated BCM across the entire Reserve Bank. A business impact analysis (BIA) is being carried out at all CODs and select Regional Offices (ROs)/training establishments (TEs) to identify time-sensitive critical business processes in a scientific manner.

X.107 The Reserve Bank's budget was formulated by the department based on action plans finalised by each unit (RO/COD/TE) and its utilisation was monitored on a quarterly basis.

X.108 The department is also responsible for the management of various superannuation funds and provision of budgetary support to training/research institutions such as NIBM, IGIDR, CAFRAL and IIBM.

X.109 Tier III offices at Aizawl and Imphal were opened on October 15 and 17, 2015 respectively. In this regard, the department has prepared a list containing aspects and issues to be kept in mind for newly opened offices, facilitating the functioning of such offices and the personnel posted there.

### Agenda for 2016-17

X.110 The department's agenda for the coming year includes implementing BCM in an integrated manner throughout the Reserve Bank by framing a robust BCM policy, issuing guidelines, conducting a business impact analysis (BIA), putting in place a crisis management framework, creating awareness amongst all stakeholders and reviewing the business continuity plans (BCP) of each unit. Monitoring the implementation of the strategic plan of the Reserve Bank is an important on-going agenda. The department will further fine-tune the process of budget formulation and its review so as to rationalise expenditure. The department also plans to establish state government (SG) cells, DNBS/DCBS cells and/or other departments in select Tier III offices based on emerging requirements.

## CORPORATE SERVICES

X.111 The Department of Corporate Services (DCS) was established as part of the institutional re-organisation undertaken in November 2014 with the objective of coordinating and facilitating delivery of internal corporate services catering to the needs of the various departments of the Reserve Bank.

### Agenda for 2015-16: Implementation Status

X.112 The department focused on providing efficient corporate support services by way of management/providing services related to events/meetings/hospitality/protocol services to the top management and promoted receipt of payments for sales of the Reserve Bank's publications through e-mode. The department also delineated guidelines for award of rate contracts and event management. The department made arrangements for centralised procurement of stationery, printing of Reserve Bank publications at a centralised place, empanelling printers and providing centralised courier services.

### Agenda for 2016-17

X.113 During 2016-17, the department envisages to initiate actions on policy formulations for records management and workflow processes. Awareness programmes on the Electronic Documents Management System (EDMS) will be conducted with enhanced focus and coverage (Box X.4). Handbooks/manuals on functions related to procurements/rate contracts and protocol and event management will be prepared. An impact analysis will be carried out to assess the benefits of the common/centralised rate contracts of various stationery items.

## RAJBHASHA

X.114 During 2015-16, the Reserve Bank continued its efforts to ensure compliance with the statutory provisions of the Official Language Act with a view to promoting use of Hindi in its working. The Rajbhasha Department of the Reserve Bank is entrusted with this responsibility.

**Box X.4**
**Electronic Documents Management System (EDMS)-Darpan**

The Reserve Bank has initiated a project to implement the Electronic Document Management System (EDMS). Using a collection of technologies, this system will enable users in the Reserve Bank to initiate and manage documents and records throughout the document's life-cycle, from its creation to disposition.

The objectives of the project are creating a platform for initiating workflows; automating the Reserve Bank's business processes; establishing a channel for collaboration and communication; building a centralised repository of records for the organisation; and aiding the Reserve Bank in its pursuit of becoming a knowledge organisation by enabling sharing of documents. One of the major benefits of EDMS is that it will provide an integrated content repository for most of the records with intelligent library services enabling users to sieve through millions of documents to get to the right content at the right time. For an organisation spread over multiple locations, the workflow management module of this system will allow instant access to documents that normally requires time to be transferred from one location to the other either *via* mail, fax or post. Unlike paper-based processes, the status of a document within an electronic workflow can be easily queried and determined giving pan-organisational control over documents. This will provide opportunities for reviewing the workflow processes and facilitate business process improvements. Substantial time spent on retrieving a paper file, performing an action with it and then re-archiving the file and expenditure on paper, ink, file folders, filing cabinets, filing staff and other requirements can be saved, thus reducing substantial time and costs for the Reserve Bank. Also, with efficient scanning and indexing capabilities, EDMS will almost guarantee that files will be current and up-to-date and will have document and record version control. The security in EDMS will be much more flexible than that associated with paper-based environments. It will provide access to groups and individuals based on the access control policy of the Reserve Bank and maintain audit trails that will show who accessed and updated documents. The electronic repository can be replicated at several locations and complete recovery from a major disaster such as a fire, can be a matter of days with proper disaster recovery infrastructure and procedures in place. Logging records of the system can be used for auditing purposes. Further, the system can be configured and business practices adjusted to ensure regulatory compliances regarding storage, access and retention of documents.

### Agenda for 2015-16: Implementation Status

X.115 The Reserve Bank celebrated 2015-16 as the Rajbhasha Golden Jubilee Year. In order to sensitise regional directors and heads of Central Office departments on the requirements of the Official Language Policy, a workshop was conducted at Lonavala on July 10, 2015. Subsequently, four zonal seminars on different aspects of the Rajbhasha policy were organised at Hyderabad, Patna, Nagpur and Jammu. Four programmes, *viz.,* Hindi Diwas, Anuwad Diwas, Vishwa Hindi Diwas and Matribhasha Diwas were organised in the offices/departments of the Reserve Bank; these were followed by an all-India seminar in Lucknow in February 2016. The closing ceremony of the Rajbhasha Golden Jubilee Year was organised on May 24, 2016 in which, in addition to a souvenir, eight other publications were released. Besides statutory publications, other publications were also brought out in bi-lingual form during the year.

*Visit of Parliamentary Committee*

X.116 The Committee of Parliament on Official Language visited the Reserve Bank's offices in Delhi, Kolkata and Ahmedabad and reviewed the status of implementation of the Rajbhasha policy. The Drafting and Evidence Sub-Committee of the Committee visited the Bhubaneswar, Bengaluru and Kolkata offices. The sub-committee has suggested various corrective actions for promoting the use of Hindi in the Reserve Bank.

### Agenda for 2016-17

X.117 An annual work plan for 2016-17 has been prepared keeping in view the requirements of the annual programme published by the Government and the concerns expressed by the Committee of Parliament on Official Language. In addition to a one-day programme on the official language for senior officers, conducting a seminar on use of technology for progressive use of Rajbhasha is the agenda for 2016-17.

## PREMISES DEPARTMENT

X.118 The remit of the Premises Department covers creating, maintaining and upgrading the Reserve Bank's physical infrastructure. In 2015-16, significant progress was made in this direction. Land for office building in Imphal was acquired. Construction of hostel buildings for RBSC, Chennai and IGIDR, Mumbai, as also senior officers' flats along with four executive visiting officers' flats (VOFs) and an amenities block at Ameerpet, Hyderabad was completed during the year. Construction of officers' flats at Anna Nagar, Chennai and Dadar-Parel in Mumbai is in advanced stages of completion. Construction of infrastructural facilities for CAFRAL in Mumbai is set to commence shortly. Efforts were also made to consolidate and optimally utilise office space in Mumbai with the vacation of Garment House, leading to huge cost efficiency and substantial annual savings.

X.119 For upgrading the security infrastructure, an internet protocol based CCTV (IPCCTV) system was operationalised in 19 offices during 2015-16. Installation of an Integrated Security System for the Central Office Building of the Reserve Bank has commenced for ensuring greater and integrated security.

X.120 The Reserve Bank has taken steps to harness solar energy through grid interactive solar installations with a cumulative capacity of 336 Kilowatt peak (kWp) in various premises. Installation of energy efficient and eco-friendly AC plants was completed in all the offices. Organic waste converters were installed in residential colonies at eight locations. Rain water harvesting has been put in place in many office and residential premises.

**Agenda for 2016-17**

X.121 Construction of office buildings at Naya Raipur and Dehradun will commence during 2016-17. Land acquisition formalities for office buildings are presently underway at Shillong, Agartala and Ranchi. Construction of residential colonies in Jammu and Dehradun is in advanced stages of planning. Residential colonies in Delhi (Hauz Khas), Mumbai (Chembur, Andheri and Malad), Jaipur (Malviya Nagar), Chandigarh and Ahmedabad (Vasna) are also being planned. Steps are also being initiated for constructing a holiday home in Lonavala.

X.122 As part of its green initiatives, a cumulative target of 800 kWp grid interactive solar power is set for 2016-17. Concrete steps for water and electricity conservation across all the premises of the Reserve Bank are also envisaged to be taken up.

X.123 With a view to further enhancing transparency in procurement, e-tendering is being implemented for procurement beyond the threshold limit of ₹1 million and sale of goods/ scrap, etc. beyond ₹0.5 million. All offices have been advised to pay attention to the upkeep and maintenance of their premises.

## Annex

### Table 1: Attendance in the Meeting of the Central Board of Directors during July 01, 2015-June 30, 2016

| Name of the Member | Appointed/Nominated under RBI Act, 1934 | No. of Meetings Held | No. of Meetings Attended |
|---|---|---|---|
| 1 | 2 | 3 | 4 |
| Raghuram G. Rajan | 8 (1) (a) | 6 | 6 |
| Harun R. Khan | 8 (1) (a) | 6 | 6 |
| Urjit R. Patel | 8 (1) (a) | 6 | 6 |
| R. Gandhi | 8 (1) (a) | 6 | 6 |
| S. S. Mundra | 8 (1) (a) | 6 | 6 |
| Nachiket M. Mor | 8 (1) (b) | 6 | 6 |
| Y. C. Deveshwar | 8 (1) (c) | 6 | 4 |
| Damodar Acharya | 8 (1) (c) | 6 | 5 |
| Natarajan Chandrasekaran | 8 (1) (c) | 2 | 2 |
| Bharat N. Doshi | 8 (1) (c) | 2 | 2 |
| Sudhir Mankad | 8 (1) (c) | 2 | 1 |
| Anil Kakodkar | 8 (1) (c) | 2 | 2 |
| Kiran S. Karnik | 8 (1) (c) | 2 | 2 |
| Y. H. Malegam | 8 (1) (c) | 2 | 2 |
| Dipankar Gupta | 8 (1) (c) | 2 | 1 |
| G. M. Rao | 8 (1) (c) | 2 | 1 |
| Ela Bhatt | 8 (1) (c) | 2 | 1 |
| Indira Rajaraman | 8 (1) (c) | 2 | 2 |
| Hasmukh Adhia | 8 (1) (d) | 2 | 1 |
| Ajay Tyagi | 8 (1) (d) | 3 | 3 |
| Anjuly Chib Duggal | 8 (1) (d) | 4 | 1 |
| Shaktikanta Das | 8 (1) (d) | 3 | 2 |

## Table 2: Committees of the Central Board

| Name of the Member | Appointed/Nominated under RBI Act, 1934 | No. of Meetings Held | No. of Meetings Attended |
|---|---|---|---|
| **I. Committee of the Central Board (CCB)** | | | |
| Raghuram G. Rajan | 8 (1) (a) | 47 | 31 |
| Harun R. Khan | 8 (1) (a) | 47 | 35 |
| Urjit R. Patel | 8 (1) (a) | 47 | 20 |
| R. Gandhi | 8 (1) (a) | 47 | 29 |
| S. S. Mundra | 8 (1) (a) | 47 | 20 |
| Anil Kakodkar | 8 (1) (b) | 10 | 02 |
| Kiran S. Karnik | 8 (1) (b) | 06 | 06 |
| Nachiket M. Mor | 8 (1) (b) | 38 | 27 |
| Y. H. Malegam | 8 (1) (c) | 11 | 11 |
| Dipankar Gupta | 8 (1) (c) | 05 | 04 |
| G. M. Rao | 8 (1) (c) | 04 | 04 |
| Ela Bhatt | 8 (1) (c) | 03 | 02 |
| Indira Rajaraman | 8 (1) (c) | 04 | 04 |
| Y. C. Deveshwar | 8 (1) (c) | 38 | 00 |
| Damodar Acharya | 8 (1) (c) | 39 | 36 |
| N. Chandrasekaran | 8 (1) (c) | 04 | 03 |
| Bharat N. Doshi | 8 (1) (c) | 07 | 06 |
| Sudhir Mankad | 8 (1) (c) | 06 | 03 |
| **II. Board for Financial Supervision (BFS)** | | | |
| Raghuram G. Rajan | Chairman | 10 | 9 |
| Harun R. Khan | Member | 10 | 8 |
| Urjit R. Patel | Member | 10 | 8 |
| R. Gandhi | Member | 10 | 8 |
| S. S. Mundra | Vice-Chairman | 10 | 9 |
| Nachiket M. Mor | Member | 10 | 10 |
| Y. H. Malegam | Member | 3 | 3 |
| Ela Bhatt | Member | 2 | 1 |
| Bharat N. Doshi | Member | 3 | 3 |
| Sudhir Mankad | Member | 3 | 1 |
| **III. Board for Regulation and Supervision of Payment and Settlement Systems (BPSS)** | | | |
| Raghuram G. Rajan | Chairman | 4 | 4 |
| Harun R. Khan | Vice-Chairman | 4 | 3 |
| Urjit R. Patel | Member | 4 | 3 |
| R. Gandhi | Member | 4 | 2 |
| S. S. Mundra | Member | 4 | 4 |
| Anil Kakodkar | Member | 1 | 1 |
| Kiran S. Karnik | Member | 1 | 1 |
| Damodar Acharya | Member | 3 | 3 |
| N. Chandrasekaran | Member | 1 | 0 |
| Bharat N. Doshi | Member | 1 | 1 |

**Table 3: Sub-Committees of the Board**

| Name of the Member | Appointed/Nominated under RBI Act, 1934 | No. of Meetings Held | No. of Meetings Attended |
|---|---|---|---|
| **I. Audit & Risk Management Sub-Committee (ARMS)** | | | |
| Y. H. Malegam# | Chairman | 2 | 2 |
| Dipankar Gupta | Member | 2 | 2 |
| Indira Rajaraman | Member | 2 | 2 |
| Y. C. Deveshwar | Member | 2 | 0 |
| Harun R. Khan | Invitee | 5 | 4 |
| Urjit R. Patel | Invitee | 5 | 2 |
| R. Gandhi | Member | 5 | 5 |
| S. S. Mundra | Invitee | 5 | 2 |
| Nachiket M. Mor | Member | 3 | 2 |
| Bharat N. Doshi | Chairman | 3 | 3 |
| Sudhir Mankad | Member | 3 | 1 |
| #: Up to October 6, 2015 | | | |
| **II. Building Sub-Committee (BSC)** | | | |
| G. M. Rao@ | Chairman | 1 | 1 |
| Sudhir Mankad | Chairman | 1 | 1 |
| Y. C. Deveshwar | Member | 1 | 0 |
| Anil Kakodkar | Member | 1 | 0 |
| Harun R. Khan | Member | 2 | 2 |
| @: Up to September 22, 2015 | | | |
| **III. Human Resource Management Sub-Committee (HRM-SC)** | | | |
| Damodar Acharya | Chairman | 4 | 4 |
| Kiran S. Karnik | Member | 2 | 2 |
| S. S. Mundra | Member | 4 | 4 |
| **IV. Information Technology Sub-Committee (IT-SC)** | | | |
| Kiran S. Karnik | Chairman | 1 | 1 |
| Damodar Acharya | Member | 1 | 1 |
| Harun R. Khan | Member | 1 | 1 |

# XI THE RESERVE BANK'S ACCOUNTS FOR 2015-16

*The balance sheet size of the Reserve Bank increased by 12.25 per cent for the year ended June 30, 2016. While income for the year 2015-16 increased marginally by 2.04 per cent, the expenditure increased by 12.23 per cent primarily due to provision made for reimbursing service tax on agency commission paid to agency banks. The year ended with an overall surplus of ₹658.76 billion as against ₹658.96 billion in the previous year, representing a marginal decline of 0.03 per cent.*

XI.1 The balance sheet of the Reserve Bank is largely a reflection of the activities carried out in pursuance of its currency issue function as well as monetary policy and reserve management objectives. The key financial results of the Reserve Bank's operations during the year 2015-16 (July-June) are set out in the following paragraphs (Table XI.1).

XI.2 The year 2015-16 witnessed an overall increase in the size of the balance sheet by ₹3,538.52 billion, *i.e.*, 12.25 per cent from ₹28,891.59 billion as on June 30, 2015 to ₹32,430.11 billion as on June 30, 2016. The increase on the asset side was due to increase in foreign investments and domestic investments by 7.98 per cent and 35.64 per cent, respectively, and on the liability side due to increase in notes in circulation and other liabilities and provisions by 15.92 per cent and 14.77 per cent, respectively. As on June 30, 2016 domestic assets constituted 24.59 per cent while the foreign currency assets and gold (including gold held in India) constituted 75.41 per cent of total assets as against 21.86 per cent and 78.14 per cent, respectively, as on June 30, 2015.

XI.3 No transfers were made to Contingency Fund (CF). A provision of ₹10 billion was made for additional capital contribution in Bharatiya

**Table XI.1: Trends in Income, Expenditure and Net Disposable Income**

(₹ billion)

| Item | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| a) Income | 531.76 | 743.58 | 646.17 | 792.56 | 808.70 |
| b) Transfers to CF and ADF (i+ii) | 270.25 | 287.94 | 0.00 | 0.00 | 0.00 |
| (i) Contingency Fund (CF) | 246.77 | 262.47 | 0.00 | 0.00 | 0.00 |
| (ii) Asset Development Fund (ADF)# | 23.48 | 25.47 | 0.00 | 0.00 | 0.00 |
| c) Net Income (a-b) | 261.51 | 455.63 | 646.17 | 792.56 | 808.70 |
| d) Total Expenditure@ | 101.37 | 125.49 | 119.34 | 133.56 | 149.90 |
| e) Net Disposable Income (c-d) | 160.14 | 330.14 | 526.83 | 659.00 | 658.80 |
| f) Transfer to funds* | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| g) Surplus transferred to the Government (e-f) | 160.10 | 330.10 | 526.79 | 658.96 | 658.76 |
| Transfer of Surplus to Government as per cent of Gross Income less Total Expenditure | 37.20 | 53.40 | 99.99 | 99.99 | 99.99 |

# : Since June 30, 2015, transfers to CF and ADF are not reduced from income. Instead provisions are made, if considered necessary, and then transferred to CF/ADF.

@ : Includes a provision of ₹10 billion each towards additional capital contribution in NHB in 2014-15 and in BRBNMPL in 2015-16.

* : An amount of ₹10 million each has been transferred to the National Industrial Credit (Long Term Operations) Fund, the National Rural Credit (Long Term Operations) Fund, the National Rural Credit (Stabilisation) Fund and the National Housing Credit (Long Term Operations) Fund during each of the five years.

Reserve Bank Note Mudran Pvt. Ltd. (BRBNMPL) and transferred to Asset Development Fund (ADF) and the entire surplus of ₹658.76 billion was transferred to the central government.

XI.4 The Technical Committee [Chairman: Shri Y.H. Malegam (Technical Committee II)] constituted during 2013-14 to review the level and adequacy of internal reserves and surplus distribution policy of the Reserve Bank, had recommended, *inter alia*, that domestic securities should be carried at fair value. Accordingly, domestic securities, with certain exceptions, are being carried at fair value with effect from July 31, 2015 and are also subjected to daily amortisation.

XI.5 The Balance Sheet and the Income Statement prepared for 2015-16 along with the schedules, statement of significant accounting policies and supporting notes to the accounts are furnished below:

# RESERVE BANK OF INDIA
# BALANCE SHEET AS ON JUNE 30, 2016

(Amount in ₹ billion)

| Liabilities | Schedule | 2014-15 | 2015-16 | Assets | Schedule | 2014-15 | 2015-16 |
|---|---|---|---|---|---|---|---|
| Capital | | 0.05 | 0.05 | **Assets of Banking Department (BD)** | | | |
| Reserve Fund | | 65.00 | 65.00 | Notes, rupee coin, small coin | 5 | 0.11 | 0.14 |
| Other Reserves | 1 | 2.22 | 2.24 | Gold Coin and Bullion | 6 | 578.84 | 662.23 |
| Deposits | 2 | 5,186.86 | 5,065.28 | Investments-Foreign-BD | 7 | 7,276.29 | 6,727.84 |
| Other Liabilities and Provisions | 3 | 8,905.03 | 10,220.38 | Investments-Domestic-BD | 8 | 5,174.97 | 7,022.85 |
| | | | | Bills Purchased and Discounted | | 0.00 | 0.00 |
| | | | | Loans and Advances | 9 | 802.32 | 520.41 |
| | | | | Investment in subsidiaries | 10 | 13.20 | 23.20 |
| | | | | Other Assets | 11 | 313.43 | 396.28 |
| **Liabilities of Issue Department** | | | | **Assets of Issue Department (ID)** | | | |
| Notes issued | 4 | 14,732.43 | 17,077.16 | Gold Coin and Bullion (as backing for Note issue) | 6 | 637.23 | 729.07 |
| | | | | Rupee coin | | 1.99 | 1.71 |
| | | | | Investment-Foreign-ID | 7 | 14,082.75 | 16,335.92 |
| | | | | Investment-Domestic-ID | 8 | 10.46 | 10.46 |
| | | | | Domestic Bills of Exchange and other Commercial Papers | | 0.00 | 0.00 |
| **Total Liabilities** | | **28,891.59** | **32,430.11** | **Total Assets** | | **28,891.59** | **32,430.11** |

## RESERVE BANK OF INDIA
## INCOME STATEMENT FOR THE YEAR ENDED JUNE 2016

(Amount in ₹ billion)

| INCOME | Schedule | 2014-15 | 2015-16 |
|---|---|---|---|
| Interest | 12 | 744.82 | 749.24 |
| Others | 13 | 47.74 | 59.46 |
| **Total** | | **792.56** | **808.70** |
| **EXPENDITURE** | | | |
| Printing of Notes | | 37.62 | 34.21 |
| Expense on Remittance of Currency | | 0.98 | 1.09 |
| Agency Charges | 14 | 30.45 | 47.56 |
| Interest | | 0.01 | 0.01 |
| Employee Cost | | 40.58 | 44.77 |
| Postage and Telecommunication Charges | | 0.91 | 0.78 |
| Printing and Stationery | | 0.34 | 0.33 |
| Rent, Taxes, Insurance, Lighting, etc. | | 1.14 | 1.40 |
| Repairs and Maintenance | | 1.04 | 1.01 |
| Directors' and Local Board Members' Fees and Expenses | | 0.03 | 0.02 |
| Auditors' Fees and Expenses | | 0.03 | 0.03 |
| Law Charges | | 0.04 | 0.07 |
| Miscellaneous Expenses | | 7.97 | 6.42 |
| Depreciation | | 2.42 | 2.20 |
| Provisions | | 10.00 | 10.00 |
| **Total** | | **133.56** | **149.90** |
| **Available Balance** | | **659.00** | **658.80** |
| Less: | | | |
| a) Contribution to: | | | |
| i) National Industrial Credit (Long Term Operations) Fund | | 0.01 | 0.01 |
| ii) National Housing Credit (Long Term Operations) Fund | | 0.01 | 0.01 |
| b) Transferable to NABARD: | | | |
| i) National Rural Credit (Long Term Operations) Fund [1] | | 0.01 | 0.01 |
| ii) National Rural Credit (Stabilisation) Fund[1] | | 0.01 | 0.01 |
| **Surplus payable to the Central Government** | | **658.96** | **658.76** |

1. *These funds are maintained by the National Bank for Agriculture and Rural Development (NABARD).*

| S. Ramaswamy | N. S. Vishwanathan | S. S. Mundra | R. Gandhi | Urjit R. Patel | Raghuram G. Rajan |
|---|---|---|---|---|---|
| Principal Chief General Manager | Deputy Governor | Deputy Governor | Deputy Governor | Deputy Governor | Governor |

## SCHEDULES FORMING PART OF BALANCE SHEET AND INCOME STATEMENT

(Amount in ₹ billion)

| | | 2014-15 | 2015-16 |
|---|---|---|---|
| **Schedule 1:** | **Other Reserves** | | |
| | (i) National Industrial Credit (Long Term Operations) Fund | 0.24 | 0.25 |
| | (ii) National Housing Credit (Long Term Operations) Fund | 1.98 | 1.99 |
| | **Total** | **2.22** | **2.24** |
| **Schedule 2:** | **Deposits** | | |
| | **(a) Government** | | |
| | (i) Central Government | 1.01 | 1.00 |
| | (ii) State Governments | 0.43 | 0.42 |
| | ***Sub total*** | **1.44** | **1.42** |
| | **(b) Banks** | | |
| | (i) Scheduled Commercial Banks | 3,711.94 | 4,031.02 |
| | (ii) Scheduled State Co-operative Banks | 32.22 | 33.85 |
| | (iii) Other Scheduled Co-operative Banks | 69.97 | 75.97 |
| | (iv) Non-Scheduled State Co-operative Banks | 10.71 | 13.20 |
| | (v) Other Banks | 122.01 | 140.00 |
| | ***Sub total*** | ***3,946.85*** | ***4,294.04*** |
| | **(c) Others** | | |
| | (i) Administrators of RBI Employee PF A/c | 40.75 | 43.80 |
| | (ii) Depositor Education and Awareness (DEA) Fund | 78.75 | 105.85 |
| | (iii) Balances of Foreign Central Banks | 14.71 | 15.21 |
| | (iv) Balances of Indian Financial Institutions | 4.33 | 11.43 |
| | (v) Balances of International Financial Institutions | 1.45 | 3.20 |
| | (vi) Mutual Fund | 0.01 | 0.01 |
| | (vii) Others | 1,098.57 | 590.32 |
| | ***Sub total*** | ***1,238.57*** | ***769.82*** |
| | **Total** | **5,186.86** | **5,065.28** |
| **Schedule 3:** | **Other Liabilities and Provisions** | | |
| | (i) Contingency Fund (CF) | 2,216.14 | 2,201.83 |
| | (ii) Asset Development Fund (ADF) | 217.61 | 227.61 |
| | (iii) Currency and Gold Revaluation Account (CGRA) | 5,591.93 | 6,374.78 |
| | (iv) Investment Revaluation Account (IRA)-Foreign Securities | 32.14 | 132.66 |
| | (v) Investment Revaluation Account (IRA)-Rupee Securities | 0.00 | 391.46 |
| | (vi) Foreign Exchange Forward Contracts Valuation Account (FCVA) | 0.00 | 0.00 |
| | (vii) Provision for Forward Contracts Valuation Account (PFCVA) | 0.39 | 14.69 |
| | (viii) Provision for payables | 16.81 | 32.33 |
| | (ix) Gratuity and Superannuation Fund | 140.05 | 157.66 |
| | (x) Surplus Transferable to the Government of India | 658.96 | 658.76 |
| | (xi) Bills Payable | 0.17 | 0.20 |
| | (xii) Miscellaneous | 30.83 | 28.40 |
| | **Total** | **8,905.03** | **10,220.38** |
| **Schedule 4:** | **Notes Issued** | | |
| | (i) Notes held in the Banking Department | 0.11 | 0.14 |
| | (ii) Notes in Circulation | 14,732.32 | 17,077.02 |
| | **Total** | **14,732.43** | **17,077.16** |

| | | 2014-15 | 2015-16 |
|---|---|---|---|
| **Schedule 5:** | **Notes, Rupee Coin, Small Coin (with RBI)** | | |
| | (i) Notes | 0.11 | 0.14 |
| | (ii) Rupee coin | 0.00 | 0.00 |
| | (iii) Small coin | 0.00 | 0.00 |
| | **Total** | **0.11** | **0.14** |
| **Schedule 6:** | **Gold Coin and Bullion** | | |
| | (i) Banking Department | 578.84 | 662.23 |
| | (ii) Issue Department as backing for Note issue | 637.23 | 729.07 |
| | **Total** | **1,216.07** | **1,391.30** |
| **Schedule 7:** | **Investments - Foreign** | | |
| | (i) Investments - Foreign - BD | 7,276.29 | 6,727.84 |
| | (ii) Investments - Foreign - ID | 14,082.75 | 16,335.92 |
| | **Total** | **21,359.04** | **23,063.76** |
| **Schedule 8:** | **Investments-Domestic** | | |
| | (i) Investments - Domestic -BD | 5,174.97 | 7,022.85 |
| | (ii) Investments - Domestic - ID | 10.46 | 10.46 |
| | **Total** | **5,185.43** | **7,033.31** |
| **Schedule 9:** | **Loans and Advances** | | |
| | **(a) Loans and Advances to** : | | |
| | (i) Central Government | 0.00 | 0.00 |
| | (ii) State Governments | 25.77 | 19.86 |
| | ***Sub total*** | ***25.77*** | ***19.86*** |
| | **(b) Loans and Advances to:** | | |
| | (i) Scheduled Commercial Banks | 732.03 | 450.92 |
| | (ii) Scheduled State Co-operative Banks | 0.00 | 0.00 |
| | (iii) Other Scheduled Co-operative Banks | 0.45 | 0.00 |
| | (iv) Non-Scheduled State Co-operative Banks | 0.00 | 0.00 |
| | (v) NABARD | 0.00 | 0.00 |
| | (vi) Others | 44.07 | 49.63 |
| | ***Sub total*** | ***776.55*** | ***500.55*** |
| | **Total** | **802.32** | **520.41** |
| **Schedule 10:** | **Investment in Subsidiaries/Associates** | | |
| | (i) Deposit Insurance and Credit Guarantee Corporation | 0.50 | 0.50 |
| | (ii) National Housing Bank | 4.50 | 14.50 |
| | (iii) National Bank for Agriculture and Rural Development | 0.20 | 0.20 |
| | (iv) Bhartiya Reserve Bank Note Mudran (P) Ltd. | 8.00 | 8.00 |
| | **Total** | **13.20** | **23.20** |
| **Schedule 11:** | **Other Assets** | | |
| | (i) Fixed Assets (net of accumulated depreciation) | 3.92 | 3.49 |
| | (ii) Accrued income (a + b) | 206.26 | 228.91 |
| | a. on loans to employees | 3.16 | 3.15 |
| | b. on other items | 203.10 | 225.76 |
| | (iii) Swap Amortisation Account | 94.33 | 154.97 |
| | (iv) Revaluation of Forward Contracts Account (RFCA) | 0.00 | 0.00 |
| | (v) Miscellaneous | 8.92 | 8.91 |
| | **Total** | **313.43** | **396.28** |

| | | 2014-15 | 2015-16 |
|---|---|---|---|
| **Schedule 12:** | **Interest** | | |
| | **(a) Domestic Sources** | | |
| | (i) Interest on holding of Domestic Securities | 436.30 | 430.79 |
| | (ii) Net Interest on LAF Operations | 28.29 | 5.06 |
| | (iii) Interest on MSF Operations | 1.88 | 1.32 |
| | (iv) Profit on Sale of Domestic Securities | 139.15 | 21.68 |
| | (v) Depreciation | -98.28 | 0.00 |
| | (vi) Interest on Loans and Advances | 14.06 | 3.98 |
| | (vii) Premium /Discount on Amortisation of Domestic Securities | 0.00 | 42.58 |
| | **(b) Foreign Sources** | | |
| | (i) Interest on holding of Foreign Securities | 223.42 | 243.83 |
| | **Total** | **744.82** | **749.24** |
| **Schedule 13:** | **Income-Others** | | |
| | (i) Discount from Foreign Assets | 4.40 | 4.94 |
| | (ii) Exchange from Foreign Exchange Transactions | 29.62 | 38.36 |
| | (iii) Commission | 13.38 | 15.31 |
| | (iv) Rent Realised | 0.05 | 0.05 |
| | (v) Profit/loss on sale of Bank's property | 0.02 | 0.02 |
| | (vi) Provision no longer required and miscellaneous income | 0.27 | 0.78 |
| | **Total** | **47.74** | **59.46** |
| **Schedule 14:** | **Agency Charges** | | |
| | (i) Agency Commission on Government Transactions | 29.63 | 46.93 |
| | (ii) Underwriting Commission paid to the Primary Dealers | 0.33 | 0.35 |
| | (iii) Sundries (Handling charges paid to banks for Relief/Savings Bonds subscriptions) | 0.00 | 0.01 |
| | (iv) Fees paid to the Custodians | 0.49 | 0.27 |
| | **Total** | **30.45** | **47.56** |

# INDEPENDENT AUDITORS' REPORT

**TO THE PRESIDENT OF INDIA**

*Report on the Financial Statements*

We, the undersigned Auditors of the Reserve Bank of India (hereinafter referred to as the "Bank"), do hereby report to the Central Government upon the Balance Sheet of the Bank as at June 30, 2016 and the Income Statement for the year ended on that date (hereinafter referred to as "financial statements"), which have been audited by us.

*Management's Responsibility for the Financial Statements*

Management is responsible for the preparation of these financial statements that give a true and correct view of the state of affairs and results of operations of the Bank in accordance with the requirements of the provisions of the Reserve Bank of India Act, 1934 and Regulations framed thereunder and the accounting policies and practices followed by the Bank. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the financial statements that give a true and correct view and are free from material misstatement, whether due to fraud or error.

*Auditors' Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditors consider internal control relevant to the Bank's preparation and correct presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Bank's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

*Opinion*

In our opinion and to the best of our information and according to explanations given to us and as shown by the books of account of the Bank, the Balance Sheet read with Significant Accounting Policies is a full and fair Balance Sheet containing all necessary particulars and is properly drawn up in accordance with the requirements of the provisions of the RBI Act, 1934 and Regulations framed there under so as to exhibit true and correct view of the state of affairs of the Bank.

*Other Matters*

We report that we have called for information and explanation from the Bank which was necessary for the purpose of our audit and such information and explanation have been given to our satisfaction.

We also report that the financial statements include the accounts of eighteen accounting units of the Bank which have been audited by Statutory Branch Auditors and we have relied on their report in this regard.

For CNK & Associates, LLP
Chartered Accountants
(ICAI Firm Registration No. 101961W)

Manish Sampat
Partner
Membership No. 101684

For Borkar and Muzumdar
Chartered Accountants
(ICAI Firm Registration No. 101569W)

Brijmohan Agarwal
Partner
Membership No. 33254

Place: Mumbai
Date: August 11, 2016

## STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES FOR THE YEAR ENDED JUNE 30, 2016

### (a) General

1.1 The Reserve Bank of India was established under the RBI Act, 1934 (the Act) “to regulate the issue of Bank notes and the keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage”.

1.2 The main functions of the Bank are:-

a) Issue of Bank notes.

b) Management of the monetary system.

c) Regulation and supervision of banks and Non–Banking Financial Companies (NBFCs).

d) Acting as the lender of last resort.

e) Regulation and supervision of the Payment and Settlement Systems.

f) Maintaining and managing the country’s foreign exchange reserves.

g) Acting as the banker to banks and the Governments.

h) Acting as the debt manager of the Governments.

i) Regulation and development of foreign exchange market.

j) Developmental functions including in the areas of rural credit and financial inclusion.

1.3 The Act requires that the issue of Bank notes should be conducted by the Bank in an Issue Department which shall be separate and kept wholly distinct from the Banking Department and the assets of the Issue Department shall not be subject to any liability other than the liabilities of the Issue Department. The Act requires that the assets of the Issue Department shall consist of gold coins, gold bullion, foreign securities, rupee coins and rupee securities to such aggregate amount as is not less than the total of the liabilities of the Issue Department. The Act requires that the liabilities of the Issue Department shall be an amount equal to the total of the amount of the currency notes of the Government of India and Bank notes for the time being in circulation.

### (b) Significant Accounting Policies

#### 2.1 Convention

The financial statements are prepared in accordance with the RBI Act, 1934 and the notifications issued thereunder and in the form prescribed by the Reserve Bank of India General Regulations, 1949. These are based on historical cost except where it is modified to reflect revaluation. The accounting policies followed in preparing the financial statements are consistent with those followed in the previous year unless otherwise stated.

#### 2.2 Revenue Recognition

(a) Income and expenditure are recognised on accrual basis except penal interest which is accounted for only when there is certainty of realisation. Dividend income on shares is recognised on accrual basis when the right to receive the same is established.

(b) Balances unclaimed and outstanding for more than three clear consecutive years in certain transit accounts including Drafts Payable Account, Payment Orders Account, Sundry Deposits Account, Remittance Clearance Account and Earnest Money Deposit Account are reviewed and written back to income. Claims, if any, are considered and charged against income in the year of payment.

(c) Income and expenditure in foreign currency are recorded at the exchange rates prevailing on the last business day of the week/month/year as applicable.

**2.3 Gold & Foreign Currency Assets and Liabilities**

Transactions in gold and foreign currency assets and liabilities are accounted for on settlement date basis.

**(a) Gold**

Gold is revalued on the last business day of the month at 90 per cent of the daily average price quoted by London Bullion Market Association for the month. The rupee equivalent is determined on the basis of the exchange rate prevailing on the last business day of the month. Unrealised gains/losses are credited/debited respectively to the Currency and Gold Revaluation Account (CGRA).

**(b) Foreign Currency Assets and Liabilities**

All foreign currency assets and liabilities (excluding foreign currency received under the swaps that are in the nature of repos and contracts where the rates are fixed contractually) are translated at the exchange rates prevailing on the last business day of the week/month/year as applicable. Gains and losses arising from such translation of foreign currency assets and liabilities are accounted for in CGRA.

Foreign securities, other than Treasury Bills, Commercial Papers and certain "held to maturity" securities (such as investments in notes issued by the International Monetary Fund and bonds issued by India Infrastructure Finance Company (IIFC), UK, which are valued at cost) are marked to market (MTM) as on the last business day of the month. Appreciation or depreciation is recorded in the Investment Revaluation Account (IRA)-foreign securities. Credit balance in IRA is carried forward to the subsequent year. Debit balance, if any, at the end of the year in IRA is charged to the Contingency Fund and the same is reversed on the first working day of the following financial year.

Foreign treasury bills and commercial papers are carried at cost as adjusted by amortisation of discount. Premium or discount on foreign securities is amortised daily. Profit/loss on sale of foreign currency assets is recognised with respect to the book value. On sale/redemption of foreign dated securities, valuation gain/loss in relation to the securities sold, lying in IRA, is transferred to Income Account.

**(c) Forward/Swap Contracts**

Forward contracts entered into by the Bank as part of its intervention operations are revalued on a yearly basis on June 30. While mark to market gain is credited to the 'Foreign Exchange Forward Contracts Valuation Account' (FCVA) with contra debit to the Revaluation of Forward Contracts Account (RFCA), mark to market loss is debited to FCVA with contra credit to the Provision for Forward Contracts Valuation Account (PFCVA). Debit balance in FCVA, if any, on June 30, is required to be charged to the Contingency Fund and reversed on the first working day of the following year. On maturity of the contract, the actual gain or loss is required to be recognised in the Income Account and the unrealised gains/losses previously recorded in the FCVA, RFCA and PFCVA would be reversed. The balance in the RFCA and PFCVA represent the net unrealised gains and losses respectively on valuation of such forward contracts.

In the case of swaps at off-market rates that are in the nature of repo, the difference between the future contract rate and the rate at which the contract is entered into is amortised over the period of the contract and recorded in the Income Account with contra in Swap Amortisation Account (SAA). The amounts recorded in the SAA are reversed on maturity of the underlying contracts. Further, the amounts received under these swaps are not subject to periodic revaluation.

While FCVA and PFCVA form part of 'Other Liabilities and Provisions', RFCA forms part of 'Other Assets'.

**2.4 Transactions in Exchange Traded Currency Derivatives (ETCD)**

The ETCD transactions undertaken by the Bank as part of its intervention operations from 2015-16 are marked to market on a daily basis and the resultant gain/loss is booked in Income Account.

**2.5 Domestic Investments**

**(a) Rupee securities:**

Rupee securities except those mentioned below in (d) and (e) are marked to market as on the last business day of the month with effect from 2015-16. The revaluation gain/ loss is booked in 'IRA-Rupee Securities'. Credit balance in IRA is carried forward to the following financial year. Debit balance, if any, at the end of the year in IRA is charged to the Contingency Fund and the same is reversed on the first working day of the following financial year. On sale/redemption of rupee securities, valuation gain/ loss in respect of securities sold/redeemed, lying in IRA, is transferred to Income Account. Rupee securities, except those held as assets of Issue Department are subjected to daily amortisation.

**(b)** Treasury Bills are valued at cost.

**(c)** Investments in shares of subsidiaries are valued at cost.

**(d)** Oil bonds and rupee securities earmarked for various staff funds like Gratuity and Superannuation Fund, Provident Fund, Leave Encashment (Retired Employees) Fund, Medical Assistance Fund, Depositor Education and Awareness (DEA) Fund are treated as 'Held to Maturity' and are held at amortised cost.

**(e)** Non-interest bearing rupee securities held as assets of Issue Department are held at cost.

**2.6 Liquidity Adjustment Facility (LAF) Repo/ Reverse Repo and Marginal Standing Facility (MSF)**

From 2014-15, repo transactions under LAF and marginal standing facility (MSF) are treated as lending and accordingly being shown under 'Loans and Advances' whereas 'reverse repo' transactions are treated as deposits and shown under 'Deposit-Others'.

**2.7 Fixed Assets**

(a) Fixed Assets are stated at cost less depreciation.

(b) Depreciation on computers, microprocessors, software (costing ₹100,000 and above), motor vehicles, furniture, *etc.* is provided on straight-line basis at the following rates.

| Asset Category | Rate of Depreciation |
|---|---|
| Motor vehicles, furniture, *etc.* | 20.00 per cent |
| Computers, Microprocessors, Software, *etc.* | 33.33 per cent |

(c) Fixed Assets, costing less than ₹100,000 (except easily portable electronic assets) are charged to income in the year of acquisition.

Easily portable electronic assets, such as, laptops, etc. costing more than ₹10,000 are capitalised and depreciation is calculated at the applicable rate.

(d) Individual items of computer software costing ₹100,000 and above are capitalised and depreciation is calculated at the applicable rates.

(e) Depreciation is provided on year-end balances of the Fixed Assets.

(f) Depreciation on subsequent expenditure:

i. Subsequent expenditure incurred on existing asset which has not been fully depreciated in the books of accounts, is depreciated over the remaining useful life of the principal asset;

ii. Subsequent expenditure incurred on modernisation/addition/overhauling of the existing asset, which has already been fully depreciated in the books of accounts, is first capitalised and thereafter depreciated fully in the year in which the expenditure is incurred.

(g) Land and building: The significant accounting policy in respect of depreciation on land and building was revised with effect from July 2015 as follows:

*Land*

i. Land acquired for lease periods of more than 99 years are treated as if they are on perpetual lease basis. Such leases are considered as freehold properties and accordingly not subjected to amortisation.

ii. Land acquired on short-term lease (i.e. up to 99 years) is amortised over the period of the lease.

*Buildings*

i. The life of all buildings is assumed as thirty years and depreciation is charged on a straight-line basis over a period of thirty years. In respect of buildings constructed on lease hold land (where the lease period is less than 30 years) depreciation is charged on a Straight-line basis over the lease period of the land.

ii. In the case of existing buildings, where only the Written Down Value (WDV) is available and original cost and accumulated depreciation are not available separately, it is assumed that such buildings have completed half their useful life (i.e. 15 years) and there is a residual life of 15 years. The WDV as on June 30, 2015 will be considered as cost of such existing buildings and will be amortised on a straight-line basis over the residual life of the building.

iii. If the completed life of the building is known and if it was less than 30 years as on June 30, 2015, then the WDV of the building as on June 30, 2015 will be amortised over the remaining useful life of the building i.e. 30 years less number of years completed as on June 30, 2015.

iv. If the completed life of the building was more than 30 years as on June 30, 2015, then the WDV of the building may be fully amortised in the current year 2015-16.

(h) Impairment of buildings: For assessment of impairment, buildings are required to be classified into two categories, as under:

i. *Buildings which are in use but have been identified for demolition in future/ will be discarded in future:* The value in use of such buildings is the aggregate of depreciation for the future period up to the date it is expected to be discarded/ demolished. The difference between the book value and aggregate of depreciation so arrived at is required to be charged as depreciation.

ii. *Buildings which have been discarded/ vacated:* These buildings are to be shown at realisable value (net selling price, if the asset is likely to be sold in future)/scrap value less demolition cost (if it is to be demolished). If the amount is negative, then the carrying value of such buildings have to be shown at ₹1. The difference between the book value and realisable value (net selling price)/scrap value less demolition cost is required to be charged as depreciation. The asset is required to be shown under the head 'Other assets' – 'Miscellaneous'.

**2.8 Employee Benefits**

The liability on account of long term employee benefits is provided based on an actuarial valuation under the projected unit credit method.

## NOTES TO THE ACCOUNTS

## XI.6 LIABILITIES AND ASSETS OF THE BANK

### XI.6.1 LIABILITIES OF BANKING DEPARTMENT

**(i) Capital**

The Reserve Bank was constituted as a private shareholders' bank in 1935 with an initial paid-up capital of ₹0.05 billion. The bank was nationalised with effect from January 1, 1949 and its entire ownership remains vested in the GoI. The paid-up capital continues to be ₹0.05 billion as per section 4 of the RBI Act, 1934.

**(ii) Reserve Fund**

The original Reserve Fund of ₹0.05 billion was created in terms of section 46 of the RBI Act, 1934 as contribution from the Central Government for the currency liability of the then sovereign government taken over by the Reserve Bank. Thereafter, an amount of ₹64.95 billion was credited to this Fund from out of gains on periodic revaluation of gold up to October 1990, taking it to ₹65 billion. The fund has been static since then and gain/loss on account of valuation of gold and foreign currency is booked in the Currency and Gold Revaluation Account (CGRA) which appears under 'Other Liabilities and Provisions'.

**(iii) Other Reserves**

This includes National Industrial Credit (Long Term Operations) Fund and National Housing Credit (Long Term Operations) Fund.

a. *National Industrial Credit (Long Term Operations) Fund*

This fund was created in July 1964, under section 46C of the RBI Act, 1934 with an initial corpus of ₹100 million. The fund witnessed annual contributions from the Reserve Bank for financial assistance to eligible financial institutions. Since 1992-93, a token amount of ₹10 million is being contributed each year to the Fund from the Bank's income. The balance in the fund stood at ₹0.25 billion as on June 30, 2016.

b. *National Housing Credit (Long Term Operations) Fund*

This fund was set up in January 1989 under section 46D of the RBI Act, 1934 for extending financial accommodation to the National Housing Bank. The initial corpus of ₹500 million has been enhanced by annual contributions from the Reserve Bank thereafter. From the year 1992-93, only a token amount of ₹10 million is being contributed each year from the Bank's income. The balance in the fund stood at ₹1.99 billion as on June 30, 2016.

*Note: Contribution to other Funds*

There are two other Funds constituted under section 46A of the RBI Act, 1934 *viz*., National Rural Credit (Long Term Operations) Fund and National Rural Credit (Stabilisation) Fund which are maintained by National Bank for Agriculture and Rural Development (NABARD) for which a token amount of ₹10 million each is set aside and transferred to NABARD every year.

**(iv) Deposits**

These represent the balances maintained with the Reserve Bank, by banks, the central and state governments, All India Financial Institutions, such as, Export Import Bank (EXIM Bank), NABARD *etc*., Foreign Central Banks, International Financial Institutions, balances in Employees' Provident Fund, DEA Fund and amount outstanding against reverse repo.

Total deposits declined by 2.34 per cent from ₹5,186.86 billion as on June 30, 2015, to ₹5,065.28 billion as on June 30, 2016.

a. *Deposits-Government*

The Reserve Bank acts as banker to the Central Government in terms of sections 20 and 21 and as banker to the State Governments by mutual agreement in terms of section 21(A) of the RBI Act, 1934. Accordingly, the Central and the State Governments maintain deposits with the Reserve Bank. The balances held by the Central and State Governments was ₹1.00 billion and ₹0.42 billion, respectively, as on June 30, 2016, totalling ₹1.42 billion.

b. *Deposits-Banks*

Banks maintain balances in their current accounts with the Reserve Bank to provide for the Cash Reserve Ratio (CRR) requirements and for working funds to meet payment and settlement obligations. The deposits held by banks stood at ₹4,294.04 billion as on June 30, 2016.

c. *Deposits-Others*

'Deposits-Others' consists of balances of Administrator of Reserve Bank's Employees Provident Fund, balance in DEA Fund, balances in accounts of Foreign Central Banks, Indian and International Financial Institutions and amount outstanding under Reverse Repo. DEA Fund was created in the year 2013-14 for promotion of depositors' interest and for such other related purposes. The balance in the DEA Fund was ₹105.85 billion as on June 30, 2016. The amount under Deposits-Others decreased by 37.85 per cent from ₹1,238.57 billion as on June 30, 2015 to ₹769.82 billion as on June 30, 2016 primarily due to reduction in amount outstanding under reverse repo transactions.

**(v) Other Liabilities and Provisions**

The major components of 'Other Liabilities and Provisions' consist of CF, ADF, Gratuity and Superannuation Funds, Balances in Revaluation Accounts viz; CGRA, IRA-

Foreign Securities, IRA-Rupee Securities, FCVA and PFCVA. While CF and ADF represent provisions made for unforeseen contingencies and to meet internal capital expenditure and make investments in Subsidiaries and associate institutions respectively, the remaining components of 'Other Liabilities and Provisions', such as, CGRA, IRA- Foreign Securities, IRA-Rupee Securities, FCVA and PFCVA, represent unrealised MTM gains/losses. 'Other Liabilities and Provisions' increased by 14.77 per cent from ₹8,905.03 billion as on June 30, 2015 to ₹10,220.38 billion as on June 30, 2016, primarily due to increase in CGRA, IRA-Foreign Securities and addition of a new head of account called IRA-Rupee Securities.

a. *Contingency Fund*

Contingency Fund represents the amount set aside on a year-to-year basis for meeting unexpected and unforeseen contingencies, including depreciation in the value of securities, risks arising out of monetary/exchange rate policy operations, systemic risks and any risk arising on account of the special responsibilities enjoined upon the Bank. The balance in Contingency Fund decreased from ₹2,216.14 billion as on June 30, 2015 to ₹2,201.83 billion as on June 30, 2016 due to MTM loss of ₹14.30 billion on valuation of forward contracts, which was charged to the Contingency Fund as on June 30, 2016 but reversed on the first working day of the following year.

b. *Asset Development Fund*

The Asset Development Fund created in 1997-98, represents the amounts set aside each year to meet internal capital expenditure and make investments in subsidiaries and associate institutions. The balance in ADF increased from ₹217.61 billion in 2014-15 to ₹227.61 billion as provision of ₹10 billion made for additional capital contribution in BRBNMPL was transferred to ADF as on June 30, 2016 (Table XI.2).

**Table XI.2: Balances in Contingency Fund and Asset Development Fund**

(₹ billion)

| As on June 30 | Balance in CF | Balance in ADF | Total | CF and ADF as per centage to total assets |
|---|---|---|---|---|
| 1 | 2 | 3 | 4=(2+3) | 5 |
| 2012 | 1954.05 | 182.14 | 2136.19 | 9.7 |
| 2013 | 2216.52 | 207.61 | 2424.13 | 10.1 |
| 2014 | 2216.52 | 207.61 | 2424.13 | 9.2 |
| 2015 | 2216.14* | 217.61 | 2433.75 | 8.4 |
| 2016 | 2201.83* | 227.61 | 2429.44 | 7.5 |

* The decline in the CF was due to charging of the debit balance in the Forward Contract Valuation Account (FCVA) on account of MTM loss on forward contract as on June 30, 2015 and 2016.

c. *Currency and Gold Revaluation Account*

Unrealised gains/losses on valuation of Foreign Currency Assets (FCA) and Gold are not taken to the Income Account but recorded in the Currency and Gold Revaluation Account (CGRA). CGRA represents accumulated net balance of unrealised gains arising out of valuation of FCA and Gold and, therefore, its balance varies with the size of the asset base, movement in the exchange rate and price of gold. During 2015-16, the balance in CGRA increased by 14.0 per cent from ₹5,591.93 billion as on June 30, 2015 to ₹6,374.78 billion as on June 30, 2016 mainly due to depreciation of rupee against US dollar (appreciation of USD against other major currencies has been off-set by depreciation of INR) and rise in the price of gold.

d. *Investment Revaluation Account (IRA)-Foreign Securities*

The foreign dated securities are marked to market on the last business day of each month and the unrealised gains/ losses arising therefrom are transferred to the IRA-Foreign Securities. The balance in IRA-Foreign Securities increased from ₹32.14 billion as on June 30, 2015 to ₹132.66 billion as on June 30, 2016 as yields on securities held by the Bank declined.

e. *Investment Revaluation Account (IRA)-Rupee Securities*

From July 2015, the Rupee securities (with exceptions as mentioned under significant accounting policy) held as assets of Banking Department are marked to market on the last business day of the month and the unrealised gains/losses arising therefrom are booked in the IRA-Rupee Securities. The balance in this account as on June 30, 2016 was ₹391.46 billion.

f. *Foreign Exchange Forward Contracts Valuation Account & Provision for Forward Contracts Valuation Account*

Marking to market of outstanding forward contracts as on June 30, 2016 resulted in a net loss of ₹14.69 billion, which was debited to the FCVA with contra credit to the PFCVA. As per the extant policy, the debit balance of ₹14.69 billion in FCVA was adjusted against the Contingency Fund on June 30, 2016 and reversed on July 1, 2016. Accordingly, the balance in FCVA became nil and the balance in PFCVA as on June 30, 2016 was ₹14.69 billion, as against a balance of ₹0.39 billion in PFCVA as on June 30, 2015.

The balances in CGRA, IRA-Foreign Securities, FCVA and PFCVA for the last five years is given in Table XI.3.

g. *Provision for payables*

This represents the year-end provisions made for expenditure incurred but not defrayed and income received in advance/payable, if any. Provision for payables increased from ₹16.81 billion in 2014-15 to ₹32.33 billion in 2015-16 primarily due to the provision made for reimbursing service tax on agency commission paid to agency banks.

h. *Surplus transferable to the Government of India*

Under Section 47 of the RBI Act, 1934, after making provisions for bad and doubtful debts, depreciation in assets, contribution to Staff and Superannuation

**Table XI.3: Balances in Currency and Gold Revaluation Account (CGRA), Foreign Exchange Forward Contracts Valuation Account (FCVA), Provision for Forward Contracts Valuation Account (PFCVA) and Investment Revaluation Account (IRA)-Foreign Securities**

(₹ billion)

| As on June 30 | CGRA | FCVA | PFCVA* | IRA-Foreign Securities |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| 2012 | 4,731.72 | 24.05 | -- | 122.22 |
| 2013 | 5,201.13 | 16.99 | -- | 24.85 |
| 2014 | 5,721.63 | 42.98 | 0.00 | 37.91 |
| 2015 | 5,591.93 | 0.00 | 0.39 | 32.14 |
| 2016 | 6,374.78 | 0.00 | 14.69 | 132.66 |

*: Opened during 2013-14.

Fund and for all matters for which provisions are to be made by or under the Act or that are usually provided by bankers, the balance of the profits of the Bank is required to be paid to the Central Government. Under Section 48 of the RBI Act, 1934, the Bank is not liable to pay income tax or super tax or any other tax on any of its income, profits or gains and is also exempt from payment of wealth tax. Accordingly, after adjusting the expenditure and provision of ₹10 billion for additional capital contribution in BRBNMPL and contribution of ₹0.04 billion to the statutory funds, the surplus transferable to the GoI for the year 2015-16 amounted to ₹658.76 billion, (including ₹10.35 billion as against ₹11.46 billion in the previous year payable towards the difference in interest expenditure borne by the Government consequent on conversion of special securities into marketable securities).

i. *Bills payable*

The Reserve Bank provides remittance facilities for its constituents through issue of Demand Drafts (DDs) and Payment Orders (POs) (besides electronic payment mechanism). The balance under this head represents the unclaimed DDs/ POs. The amount outstanding under this head increased from ₹0.17 billion as on June 30, 2015 to ₹0.20 billion as on June 30, 2016.

j. *Miscellaneous*

This is a residual head representing items such as interest earned on earmarked securities, amounts payable on leave encashment, medical provisions for employees, etc. The balance under this head decreased from ₹30.83 billion as on June 30, 2015 to ₹28.40 billion as on June 30, 2016.

### XI.6.2 LIABILITIES OF ISSUE DEPARTMENT

**Notes Issued**

The liabilities of Issue Department reflect the quantum of currency notes in circulation. Section 34 (1) of the RBI Act, 1934 requires that all bank notes issued by the Reserve Bank since April 1, 1935 and the currency notes issued by the Government of India before the commencement of operations of the Reserve Bank, be part of the liabilities of the Issue Department. The currency notes in circulation increased by 15.92 per cent from ₹14,732.43 billion as on June 30, 2015 to ₹17,077.16 billion as on June 30, 2016.

## XI.7 ASSETS

### XI.7.1 ASSETS OF BANKING DEPARTMENT

**i) Notes, Rupee coin and small coin**

This head represents the balances of Bank notes, one rupee notes, rupee coins of ₹1, 2, 5 and 10 and small coins kept in the vaults of the Banking Department to meet the day to day requirements of the banking functions conducted by the Reserve Bank. The balance as on June 30, 2016 was ₹0.14 billion as against ₹0.11 billion as on June 30, 2015.

**ii) Gold coin and bullion**

The Bank holds 557.77 metric tonnes of gold, of which 292.28 metric tonnes is held as backing for notes issued and shown separately as an asset of Issue Department. The balance 265.49 metric tonnes is treated as an asset of Banking Department. The value of gold held as asset of Banking Department increased by 14.41 per cent from ₹578.84 billion as on June 30, 2015 to ₹662.23 billion as on June 30, 2016 primarily on account of rise in international gold prices and depreciation of INR *vis-a-vis* USD.

**iii) Bills purchased and discounted**

Though the Reserve Bank can undertake purchase and discounting of commercial bills under the RBI Act, 1934, no such activity was undertaken in 2015-16; consequently, there was no such asset in the books of the Reserve Bank as on June 30, 2016.

**iv) Investments Foreign-Banking Department**

The Foreign Currency Assets (FCA) of the Reserve Bank are reflected under two heads in the Balance Sheet: (a) 'Investments-Foreign-BD' shown as asset of Banking Department and (b) 'Investments-Foreign-ID' shown as asset of Issue Department.

Investments-Foreign-BD include: (i) deposits with other central banks, (ii) deposits with the Bank for International Settlements (BIS), (iii) balances with foreign branches of commercial banks, (iv) investments in foreign treasury bills and securities, and (v) Special Drawing Rights (SDR) acquired from the Government of India.

Investments-Foreign-ID comprises Deposits, T-bills and dated securities.

The position of FCA for the last two years is given in Table XI.4.

**Table XI.4: Details of Foreign Currency Assets**

(₹ billion)

| | Particulars | As on June 30 | |
|---|---|---|---|
| | | 2015 | 2016 |
| | 1 | 2 | 3 |
| I | Investment Foreign –ID | 14,082.75 | 16,335.92 |
| II | Investment Foreign –BD* | 7,276.29 | 6,727.84 |
| | **Total** | **21,359.04** | **23,063.76** |

* : includes Shares in BIS and SWIFT and SDRs valued at ₹100.58 billion.

**Notes:**

1. RBI has agreed to make resources available under the IMF's New Arrangements to Borrow (NAB) [which subsumes the earlier commitment of US$ 10 billion (₹676.17 billion) under the Note Purchase Agreement]. Consequent to the payment of quota increase to IMF under the Fourteenth General Review of Quotas in February 2016, India's commitment under NAB has been reduced to SDR 4,440.91 million (₹419.15 billion /US$ 6.20 billion) in February 2016 as against SDR 8,740.82 million (₹824.99 billion /US$12.20 billion) previously. As on June 30, 2016, investments amounting to SDR 783.99 million (₹73.99 billion/US$ 1.09 billion) have been made under the NAB.
2. RBI has agreed to invest up to an amount, the aggregate of which shall not exceed US$ 5 billion (₹338.08 billion), in the bonds issued by India Infrastructure Finance Company (UK) Limited. As on June 30, 2016, the Reserve Bank has invested US$ 2.10 billion (₹141.99 billion) in such bonds.
3. In terms of the Note Purchase Agreement 2012 entered into by RBI with IMF, RBI would purchase SDR denominated Notes of IMF for an amount up to the equivalent of US$ 10 billion (₹676.17 billion).
4. During the year 2013-14, the Reserve Bank and Government of India (GoI) entered into a MoU for transfer of SDR holdings from GoI to RBI in a phased manner. As on June 30, 2016, SDR 1.07 billion (₹100.58 billion; US$ 1.49 billion) were held by the Bank.
5. With a view to strengthening regional financial and economic cooperation, the Reserve Bank of India has agreed to offer an amount of US$ 2 billion both in foreign currency and Indian rupee under the SAARC Swap Arrangement to SAARC member countries. As on June 30, 2016, Sri Lanka (Central Bank of Sri Lanka) has availed US$ 400 million (₹27.05 billion) and Bhutan has availed ₹6.72 billion (US $ 99.34 million).

**v) Investments - Domestic-Banking Department**

Investments comprise dated government rupee securities, treasury bills and special oil bonds. However, as on June 30, 2016 the Reserve Bank did not hold any domestic treasury bills. The Reserve Bank's holding of domestic securities increased by 35.71 per cent, from ₹5,174.97 billion as on June 30, 2015 to ₹7,022.85 billion as on June 30, 2016. The increase was on account of (a) liquidity management operations conducted by way of net Open Market Operation (OMO) purchases of government securities amounting to ₹1,384.38 billion and (b) valuation gains on account of lower level of G-sec yields on June 30, 2016 compared to last year.

**vi) Loans and Advances**

a. *Central and State Governments*

These loans are extended in the form of Ways and Means Advances (WMA) in terms of Section 17(5) of the RBI Act, 1934 and the limit in case of Central Government is fixed from time to time in consultation with the GoI and in case of State Governments, the limits are fixed based on the recommendations of Advisory Committee/Group constituted for this purpose. No loans and advances to the Central Government were outstanding as on June 30, 2016 and June 30, 2015. Loans and advances to the State Governments as on June 30, 2016 stood at ₹19.86 billion as compared with ₹25.77 billion as on June 30, 2015.

b. *Loans and advances to Commercial, Co-operative Banks, NABARD and others*

*Loans and advances to Commercial and Co-operative Banks* mainly include amounts outstanding against repo under LAF and MSF. The amount outstanding decreased by 38.44 per cent from ₹732.48 billion as on June 30, 2015 to ₹450.92 billion as on June 30, 2016 primarily due to reduction in amount outstanding against repo.

*Loans and Advances to NABARD:* The Reserve Bank can extend loans to NABARD under section 17 (4E) of the RBI Act, 1934. As on June 30, 2016 no loans were outstanding.

*Loans and advances to others:* The balance under this head represents loans and advances to National Housing Bank (NHB), liquidity support provided to Primary Dealers (PDs) and outstanding repo/term repo conducted with the PDs. The balance under this head increased by 12.62 per cent from ₹44.07 billion as on June 30, 2015 to ₹49.63 billion as on June 30, 2016 primarily due to increase in amount outstanding against repo.

**vii) Investment in Subsidiaries/Associates**

The details of investment in subsidiaries/ associate institutions as on June 30, 2016 are given in table XI.5. The total holding increased

**Table XI.5: Holdings in Subsidiaries/ Associates as on June 30, 2016**

(Amount in ₹ billion)

| Particulars | Amount | Per cent holding |
|---|---|---|
| 1 | 2 | 3 |
| a) Deposit Insurance and Credit Guarantee Corporation (DICGC) | 0.50 | 100 |
| b) National Bank for Agriculture and Rural Development (NABARD) | 0.20 | 0.40 |
| c) National Housing Bank (NHB) | 14.50 | 100 |
| d) Bharatiya Reserve Bank Note Mudran Pvt. Ltd. (BRBNMPL) | 8.00 | 100 |
| **Total** | **23.20** | |

from ₹13.20 billion as on June 30, 2015 to ₹23.20 billion on account of additional capital subscription in NHB.

**viii) Other Assets**

'Other Assets' comprise fixed assets (net of depreciation), accrued income on loans to employees and domestic and foreign investments, balances held in (i) Swap Amortisation Account (SAA), (ii) Revaluation of Forward Contracts Account (RFCA), and miscellaneous assets. Miscellaneous assets comprise mainly loans and advances to staff, amount spent on projects pending completion, security deposit paid *etc*. The amount outstanding under 'Other Assets' increased by 26.43 per cent from ₹313.43 billion as on June 30, 2015 to ₹396.28 billion as on June 30, 2016 primarily on account of increase in swap amortisation.

a. *Swap Amortisation Account (SAA)*

In the case of swaps that are in the nature of repo at off-market rates, the difference between the future contract rate and the rate at which the contract is entered into is amortised over the period of the contract and held in the SAA. The amount outstanding in SAA rose by 64.28 per cent from ₹94.33 billion as on June 30, 2015 to ₹154.97 billion as on June 30, 2016 as no Swaps matured during 2015-16. The amount held in this account will be reversed on maturity of the underlying contracts.

b. *Revaluation of Forward Contracts Account (RFCA)*

Forward contracts that are entered into as part of intervention operations are marked to market on June 30. The net gain, if any, is recorded in FCVA with contra entry in the RFCA. There was no balance in RFCA as on June 30, 2016 as there was marked to market loss on forward contracts.

### XI.7.2 ASSETS OF ISSUE DEPARTMENT

The eligible assets of the Issue Department held as backing for notes issued consist of gold coin and bullion, rupee coin, Investment-Foreign ID, GoI non-interest bearing rupee securities and domestic bills of exchange and other commercial papers. The Reserve Bank holds 557.77 metric tonnes of gold, of which 292.28 metric tonnes is held as backing for notes issued (Table XI.6). The value of gold held as backing for notes issued increased by 14.41 per cent from ₹637.23 billion as on June 30, 2015 to ₹729.07 billion as on June 30, 2016, on account of rise in international gold prices and depreciation of INR *vis-a-vis* USD. Consequent upon an increase in notes issued, foreign currency assets held as backing for notes issued (Investment-Foreign-ID) increased by 16.0 per cent from ₹14,082.75 billion as on June 30, 2015 to ₹16,335.92 billion as on June 30, 2016. The balance of Rupee coins held by the Issue

**Table XI 6: Physical Holding of Gold**

| Category | As on June 30, 2015 | As on June 30, 2016 |
|---|---|---|
| | Volume in metric tonnes | Volume in metric tonnes |
| 1 | 2 | 3 |
| Gold held for backing note issue (held in India) | 292.26 | 292.28* |
| Gold held as asset of Banking Department (held abroad) | 265.49 | 265.49 |
| **Total** | **557.75** | **557.77** |

* The gold held as part of Issue Department Assets increased by 0.02 metric tonnes (18688.131 fine grams), due to the transfer of excess RBI Platinum Jubilee gold coins to the gold reserves.

Department decreased by 14.07 per cent from ₹1.99 billion as on June 30, 2015 to ₹1.71 billion as on June 30, 2016. Investment-domestic-ID consisting of non-interest bearing rupee securities remained unchanged at ₹10.46 billion.

## XI.8 FOREIGN EXCHANGE RESERVE

The Foreign Exchange Reserves (FER) predominantly comprise FCA, besides Gold, Special Drawing Rights (SDRs) and Reserve Tranche Position (RTP). The Special Drawing Rights, (other than the amount acquired from GoI and included under Foreign Investment–BD) does not form part of Reserve Bank's balance sheet. Similarly, the RTP, which represents India's quota contribution to IMF in foreign currency is not part of Reserve Bank's balance sheet. The position of Foreign Exchange Reserves as on June 30, 2015 and June 30, 2016 in Indian Rupees and the US dollar, which is the numeraire currency for our foreign exchange reserves, are furnished in Tables XI.7 (a) and (b).

**Table XI.7(a): Foreign Exchange Reserves in Rupee**

(₹ billion)

| Components | As on June 30 | | Variation | |
|---|---|---|---|---|
| | 2015 | 2016 | Absolute | Per Cent |
| 1 | 2 | 3 | 4 | 5 |
| Foreign Currency Assets (FCA) | 21,100.57^ | 22,787.43# | 1,686.86 | 7.99 |
| Gold | 1,216.07* | 1,391.30@ | 175.23 | 14.41 |
| Special Drawing Rights (SDR) | 259.03 | 100.58 | (-) 158.45 | (-) 61.17 |
| Reserve Position in the IMF | 83.96 | 162.27 | 78.31 | 93.27 |
| Foreign Exchange Reserves (FER) | 22,659.63 | 24,441.58 | 1,781.95 | 7.86 |

^ : Excludes (a) SDR Holdings of the Reserve Bank acquired from GOI, amounting to ₹99.08 billion, which is included under the SDR holdings, (b) Investment of ₹133.89 billion in bonds issued by IIFC (UK) and (c) ₹25.50 billion lent to Sri Lanka under a Currency Swap arrangement made available for SAARC countries.

# : Excludes (a) SDR Holdings of the Reserve Bank amounting to ₹100.58 billion, which is included under the SDR holdings, (b) Investment of ₹141.99 billion in bonds issued by IIFC (UK), (c) ₹27.04 billion lent to Sri Lanka and ₹6.72 billion lent to Bhutan under a Currency Swap arrangement made available for SAARC countries.

* : Of this, gold valued at ₹637.23 billion is held as asset of Issue Department as backing for notes issued and gold valued at ₹578.84 billion is held as asset of Banking Department.

@ : Of this, gold valued at ₹729.07 billion is held as asset of Issue Department as backing for notes issued and gold valued at ₹662.23 billion is held as asset of Banking Department.

**Table XI.7(b): Foreign Exchange Reserves**

(US$ billion)

| Components | As on June 30 | | Variation | |
|---|---|---|---|---|
| | 2015 | 2016 | Absolute | Per Cent |
| 1 | 2 | 3 | 4 | 5 |
| Foreign Currency Assets (FCA) | 331.55* | 339.04** | 7.49 | 2.26 |
| Gold | 19.07 | 20.58 | 1.51 | 7.92 |
| Special Drawing Rights (SDR) | 4.06 | 1.49 | (-) 2.57 | (-) 63.30 |
| Reserve Position in the IMF | 1.32 | 2.40 | 1.08 | 81.82 |
| Foreign Exchange Reserves (FER) | 356.00 | 363.51 | 7.51 | 2.11 |

* : Excludes (a) SDRs equivalent to US$ 1.55 billion acquired by the Reserve Bank from GOI, which is included under the SDR holdings, (b) Investment of US$ 2.1 billion in bonds issued by IIFC (UK) and (c) LKR equivalent to US$ 0.4 billion received from Sri Lanka under a Currency Swap arrangement made available for SAARC countries.

** : Excludes (a) SDR Holdings of the Reserve Bank amounting to US$ 1.49 billion, which is included under the SDR holdings, (b) US$ 2.1 billion invested in bonds of IIFC (UK), and (c) LKR equivalent of US$ 0.4 million lent to Sri Lanka & BTN equivalent to US$ 0.1 billion equivalent of INR currency lent to Bhutan under a Currency Swap arrangement made available for SAARC countries.

## ANALYSIS OF INCOME AND EXPENDITURE

### INCOME

XI.9 The main components of Reserve Bank's income are Interest Receipts and 'Others'. 'Others' includes (i) Discount, (ii) Exchange, (iii) Commission, (iv) Rent Realised, (v) Profit or loss on sale of Bank's property, and (vi) Provisions no longer required and miscellaneous. Interest receipts forms the major portion, supplemented by relatively small amounts of income from other sources, viz., discount, exchange, commission

**Table XI.8: Earnings from Foreign Sources**

(₹ billion)

| Item | June 30 | | Variation | |
|---|---|---|---|---|
| | 2014-15 | 2015-16 | Absolute | Per Cent |
| 1 | 2 | 3 | 4 | 5 |
| Foreign Currency Assets | 21,359.04 | 23,063.76 | 1,704.72 | 7.98 |
| Average FCA | 18,909.29 | 22,229.65 | 3,320.36 | 17.56 |
| Earnings from FCA (interest, discount, exchange gain/loss, capital gain/loss on securities) | 257.44 | 287.13 | 29.69 | 11.53 |
| Earnings from FCA as per cent of average FCA | 1.36 | 1.29 | (-)0.07 | (-) 5.14 |

and others. Certain items of income such as interest on LAF repo, exchange gain are reported on net basis.

### Earnings from Foreign Sources

XI.10 The income from foreign sources, increased by 11.53 per cent from ₹257.44 billion in 2014-15 to ₹287.13 billion in 2015-16 mainly on account of increase in the size of foreign currency assets which increased from ₹21,359.04 billion as on June 30, 2015 to ₹23,063.76 billion as on June 30, 2016. The rate of earnings on foreign currency assets was lower at 1.29 per cent in 2015-16 as compared with 1.36 per cent in 2014-15 due to decline in interest rates in global financial markets. (Table XI. 8).

### Earnings from Domestic Sources

XI.11 The net income from domestic sources decreased by 2.53 per cent from ₹535.12 billion in 2014-15 to ₹521.57 billion in 2015-16, mainly on account of decline in (i) profit on sale of rupee securities, (ii) net interest on LAF operations and (iii) interest on loans and advances (Table XI.9).

XI.12 Interest on holding of rupee securities was marginally lower at ₹430.79 billion in 2015-16 as compared to ₹436.30 billion in the previous year. This was because of lower daily average balance of rupee securities in 2015-16 compared to 2014-15, and consequently lower coupon income. From July to November 2015, the holding of rupee securities went down progressively on account of regular open market operations (OMO) sales. The holding of rupee securities increased towards the later part of the year on account of OMO purchases.

XI.13 The net interest income from Liquidity Adjustment Facility (LAF)/Marginal Standing Facility (MSF) operations (interest on repo under LAF and MSF less interest paid by the Reserve Bank on Reverse Repo) decreased by 78.85 per cent from ₹30.17 billion in 2014-15 to ₹6.38 billion in 2015-16. The decrease in net interest income on LAF/MSF operations was on account of higher expenditure on interest payment under reverse repo in 2015-16 as compared to 2014-15.

XI.14 Profit on sale of securities decreased by 84.42 per cent to ₹21.68 billion in 2015-16 from ₹139.15 billion in 2014-15. This was largely on account of change in the method of management of surplus cash balance of GoI since December 2014.

XI.15 As mentioned in para 5.2.6 of the Report of Technical Committee to review the form of presentation of the Balance Sheet and Profit & Loss Account, when the Government of India had surplus cash balances, part of these balances were utilised to purchase securities from RBI's portfolio and when these surplus funds were needed to be used by the Government, the securities so sold to the Government were purchased back by RBI.

These transactions were made at the face value of the securities, irrespective of their market value on that date, and profit or loss on sale arising on account of difference between face value and book value was accounted for as profit/loss. However, since December 2014, these transactions are treated as reverse repo transactions, and therefore no profit is booked.

XI.16 As mentioned in the significant accounting policy, the rupee securities are amortised on daily basis during the period of residual maturity and the premium/discount is credited to 'Amortisation of Premium /Discount on Rupee Securities' account. The income booked under 'Amortisation of Premium /Discount on Amortisation of Rupee Securities' was ₹42.58 billion for 2015-16.

**XI.17 Interest on loans and advances**

a. *Central and State Government*

Interest income on Ways and Means Advances (WMA)/Overdraft (OD) received from the Centre and States decreased by 57.93 per cent from ₹4.73 billion as on June 30, 2015 to ₹1.99 billion as on June 30, 2016. Interest income received on account of WMA/ OD from the Centre during 2015-16 period was lower at ₹0.81 billion as compared to ₹3.57 billion during 2014-15. This decrease in interest income was due to lower average utilisation of WMA in 2015-16 as compared to OD for 19 days in the previous year. As regards the States, the interest on WMA/ OD/ special drawing facility (SDF) received during 2015-16 was ₹1.18 billion marginally higher than ₹1.16 billion in 2014-15. This is attributable to marginal increase in daily average utilisation of WMA/OD/SDF by the States in 2015-16.

b. *Banks & Financial institutions*

Interest received on loans and advances from banks and financial institutions decreased from ₹8.87 billion in 2014-15 to ₹1.58 billion in 2015-16 mainly on account of discontinuance of Export Credit Refinance Scheme.

c. *Employees*

Interest received on loans and advances from employees decreased marginally from ₹0.46 billion in 2014-15 to ₹0.41 billion in 2015-16.

**Other earnings**

XI.18 Other income from domestic sources increased by 17.78 per cent from ₹13.72 billion in 2014-15 to ₹16.16 billion in 2015-16 mainly on account of increase in commission income due to (i) increase in floatation charges on account of increased market borrowing of states during 2015-16; and (ii) increase in management commission received on outstanding amount of Central and State Government loans.

**EXPENDITURE**

XI.19 The Reserve Bank incurs expenditure in the course of performing its statutory functions by way of agency charges/commission, printing of notes, expenses on remittance of treasure besides staff related and other expenses. The total expenditure of the Reserve Bank increased by 12.23 per cent from ₹133.56 billion in 2014-15 to ₹149.90 billion in 2015-16 primarily due to provision made for reimbursing service tax on agency commission paid to agency banks (Table XI.10).

**(i) Interest**

During 2015-16 an amount of ₹0.01 billion was credited as interest to Dr. B.R. Ambedkar Fund (set up for giving scholarship to wards of staff) and Employees Benevolent Fund.

## Table XI.9: Earnings from Domestic Sources

(Amount in ₹ billion)

| Item | 2014-15 | 2015-16 | Variation | |
|---|---|---|---|---|
| | | | Absolute | Per cent |
| 1 | 2 | 3 | 4 | 5 |
| **Earnings (I + II+III)** | **535.12** | **521.57** | **-13.55** | **-2.53** |
| **I. Earnings from domestic securities** | | | | |
| i) Interest on holding of domestic securities | 436.30 | 430.79 | -5.51 | -1.26 |
| ii) Depreciation # | (-)98.28 | 0.00 | 98.28 | 100.00 |
| iii) Profit on Sale of Securities | 139.15 | 21.68 | -117.47 | -84.42 |
| iv) Premium /discount on amortisation of domestic securities | 0.00 | 42.58 | 42.58 | - |
| v) Net Interest on LAF Operations | 28.29 | 5.06 | -23.23 | -82.11 |
| vi) Interest on MSF operations | 1.88 | 1.32 | -0.56 | -29.79 |
| ***Sub total (i+ii+iii+iv+v+vi)*** | ***507.34*** | ***501.43*** | ***-5.91*** | ***-1.16*** |
| **II. Interest on Loans and Advances** | | | | |
| i) Government (Central & States) | 4.73 | 1.99 | -2.74 | -57.93 |
| ii) Banks & Financial Institutions | 8.87 | 1.58 | -7.29 | -82.19 |
| iii) Employees | 0.46 | 0.41 | -0.05 | -10.87 |
| ***Sub total (i+ii+iii)*** | ***14.06*** | ***3.98*** | ***-10.08*** | ***-71.69*** |
| **III. Other Earnings** | | | | |
| i) Discount | 0.00 | 0.00 | 0.00 | 0.00 |
| ii) Exchange | 0.00 | 0.00 | 0.00 | 0.00 |
| iii) Commission | 13.38 | 15.31 | 1.93 | 14.42 |
| iv) Rent realised, Profit or Loss on sale of Bank's Property, Provisions no longer required and miscellaneous | 0.34 | 0.85 | 0.51 | 150.00 |
| ***Sub total (i+ii+iii+iv)*** | ***13.72*** | ***16.16*** | ***2.44*** | ***17.78*** |

# Till 2014-15, revaluation of rupee securities was done based on Lower of Book Value or Market Value (LOBOM) and depreciation was adjusted against Income. However from 2015-16, based on recommendation of Technical Committee I and II, rupee securities are carried at fair value and marked to market (MTM) gain or loss is booked in the Investment Revaluation Account (IRA) - Rupee Securities.

## Table XI.10: Expenditure

(₹ in billion)

| Item | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| i. Interest Payment | 0.59 | 0.03 | 0.04 | 0.01 | 0.01 |
| ii. Employees Cost | 29.93 | 58.59 | 43.24 | 40.58 | 44.77 |
| iii. Agency charges/ commission | 33.51 | 28.07 | 33.25 | 30.45 | 47.56 |
| iv. Printing of notes | 27.04 | 28.72 | 32.14 | 37.62 | 34.21 |
| v. Provisions* | 0.00 | 0.00 | 0.00 | 10.00 | 10.00 |
| vi. Others | 10.30 | 10.08 | 10.67 | 14.90 | 13.35 |
| **Total (i+ii+iii+iv+v+vi)** | **101.37** | **125.49** | **119.34** | **133.56** | **149.90** |

* New head added in 2014-15 based on recommendation of Technical committee formed to review the form of balance sheet and profit and loss account of the Bank.

### (ii) Employee cost

The employee cost increased by 10.33 per cent from ₹40.58 billion in 2014-15 to ₹44.77 billion in 2015-16 due to revision in pay and allowances.

### (iii) Agency Charges

a. *Agency Commission on Government Transactions*

The Reserve Bank discharges the function of banker to the government through a large network of agency bank branches that serve as retail outlets for government transactions. It pays commission to these agency banks at prescribed rates which were last revised with effect from July 01, 2012. The agency commission paid to these banks on account of government business increased by 58.39 per cent from ₹29.63 billion for 2014-15 to ₹46.93 billion for 2015-16, due to increase in government expenditure, including pension arrears and growth in the economy resulting in higher levels of government tax and non-tax receipts and provision made for reimbursing service tax on agency commission paid to agency banks.

b. *Underwriting Commission paid to Primary Dealers*

The Reserve Bank paid total underwriting commission of ₹0.35 billion during 2015-16 as compared to ₹0.33 billion during 2014-15. The underwriting commission was marginally on higher side on account of higher borrowing during 2015-16 (₹5,850 billion as compared to ₹5,740 billion in 2014-15). Further in the quarter Jan-Mar 2016, the hardening of yields on account of concerns over UDAY bonds issuance, large SDL issuance, fiscal impact of One Rank One Pension (OROP) and 7th Pay Commission, also contributed to higher underwriting commission.

c. *Fees paid to the custodians etc.*

Fees paid for overseas custodial services during 2015-16 amounted to ₹0.27 billion as compared to ₹0.49 billion in 2014-15.

**iv) Printing of notes**

The expenditure incurred on printing of notes decreased by 9.06 per cent from ₹37.62 billion in 2014-15 to ₹34.21 billion in 2015-16 mainly on account of decrease in the overall supply of bank notes, particularly of higher denomination notes and downward revision of rates by BRBNMPL during 2015-16.

**v) Others**

Other expenses consisting of expenditure on remittance of treasure, printing and stationery, audit fees and related expenses, miscellaneous expenses, *etc*. decreased by 10.41 per cent from ₹14.90 billion in 2014-15 to ₹13.35 billion in 2015-16. This was primarily on account of decrease in expenditure on Banking Development Scheme from ₹3.03 billion in 2014-15 to ₹0.89 billion in 2015-16.

**vi) Provisions**

A provision of ₹10 billion was made on June 30, 2016 and transferred to the Asset Development Fund (ADF) for contribution towards additional share capital of BRBNMPL.

**CONTINGENT LIABILITIES**

XI. 20 Based on the suggestions made by Statutory Auditors of Reserve Bank, beginning 2015-16, the contingent liabilities of Reserve Bank are being disclosed. For the purpose of disclosure, contingent liabilities of ₹1,00,000 and above only have been considered. The contingent liabilities as on June 30, 2016 stood at ₹1.30 billion. A large part of the contingent liability is on account of partly paid shares of Bank of International Settlements (BIS). The Bank holds partly paid shares, denominated in SDR, of BIS. The uncalled liability on partly paid shares of the BIS as on June 30, 2016 was ₹1.14 billion as compared to ₹1.08 billion in the previous year. The balances are callable at three months' notice by a decision of the BIS Board of Directors. The remaining amount of ₹0.16 billion is on account of payments due to staff vendors and other entities which are under dispute.

## PRIOR PERIOD TRANSACTIONS

XI.21 Based on the suggestions made by Statutory Auditors of Reserve Bank, beginning 2015-16, the prior period transactions are being disclosed. For the purpose of disclosure, prior period transactions of ₹1,00,000 and above only have been considered. The prior period transactions under expenditure and income amounted to ₹11.47 billion and ₹0.03 billion, respectively. Out of ₹11.47 billion, an amount of ₹10.64 billion is on account of provision made for reimbursing service tax on agency commission paid to banks for 2012-13, 2013-14 and 2014-15.

## PREVIOUS YEAR'S FIGURES

XI.22 Figures for the previous year have been rearranged, wherever necessary, to make them comparable with the current year.

## AUDITORS

XI.23 The statutory auditors of the Bank are appointed by the Central Government in terms of section 50 of the RBI Act, 1934. The accounts of the Reserve Bank for the year 2015-16 were audited by M/s CNK & Associates, LLP, Mumbai and M/s Borkar and Muzumdar, Mumbai as the Statutory Central Auditors and M/s M Choudhury & Co., M/s Brahmayya & Co. and M/s V K Verma & Co. as Statutory Branch Auditors.

# ANNEX

# CHRONOLOGY OF MAJOR POLICY ANNOUNCEMENTS: JULY 2015 TO JUNE 2016*

| Date of Announcement | Policy Initiative |
|---|---|
| **Monetary Policy Department** | |
| June 2, 2015 | The policy repo rate was reduced by 25 bps from 7.50 per cent to 7.25 per cent. |
| September 29 | The policy repo rate was reduced by 50 bps from 7.25 per cent to 6.75 per cent. |
| March 3, 2016 | Marginal Cost of Funds based Lending Rate (MCLR) system introduced effective April 1, 2016. |
| April 5 | The policy repo rate was reduced by 25 bps from 6.75 per cent to 6.5 per cent. |
| | The minimum daily maintenance of CRR reduced from 95 per cent of the requirement to 90 per cent effective April 16, 2016. |
| | The average *ex ante* liquidity deficit in the banking system will be progressively reduced from 1 per cent of NDTL to a position closer to neutrality. |
| | The policy rate corridor was narrowed from +/-100 bps to +/- 50 bps by reducing the MSF rate by 75 bps to 7.0 per cent and increasing the reverse repo rate by 25 bps to 6.0 per cent for finer alignment of the weighted average call rate (WACR) with the policy repo rate. |
| | The supply of durable liquidity will be smoothened over the year using asset purchases and sales as needed. |
| **Financial Inclusion and Development Department** | |
| July 16, 2015 | The overall direct lending by banks to non-corporate farmers should not fall below the system-wide average of the last three years' achievement. |
| August 13 | Banks were advised about the central government's interest subvention scheme during 2015-16 for providing short term crop loans up to ₹3 lakhs. |
| August 21 | Banks were advised to provide relief measures (provisioning of input subsidy as compensation to farmers) in areas affected by natural calamities following reduction in the government criteria for crop loss from 50 per cent to 33 per cent. |
| August 27 | Banks were advised to streamline the credit flow to Micro and Small Enterprises (MSEs) facilitating timely and adequate credit during their life cycle. |
| November 19 | The applicable system-wide average figure for computing achievements under priority sector lending by banks (overall direct lending to non-corporate farmers) for FY 2015-16 is 11.57 per cent. |
| December 3 | Priority sector lending guidelines for RRBs were revised by setting for them an overall target of 75 per cent of the total outstanding loans. |
| December 31 | SLBC convenor banks were advised to identify villages (population above 5000) without a bank branch of an SCB and allot the identified villages among SCBs (including RRBs) for opening of branches by March 31, 2017. |
| January 14, 2016 | Guidelines for the conduct of camps by FLCs and rural branches were revised with the objective of targeting different groups as well as to ensure adequate synchronization between various stake holders. |
| | Use of Aadhaar card and linking of bank accounts with Aadhaar card is purely voluntary and not mandatory. |

*: Indicative in nature and details available on the Reserve Bank's website.

| Date of Announcement | Policy Initiative |
|---|---|
| January 21 | PSBs were advised that all women SHGs would be eligible for interest subvention on credit upto ₹3 lakhs at 7 per cent per annum under the National Rural Livelihood Mission (NRLM). |
| March 17 | Guidelines on 'Framework for Revival and Rehabilitation of Micro, Small and Medium Enterprises (MSMEs)' were issued to all SCBs (excluding RRBs) advising them to put in place a board approved policy to operationalise the framework not later than June 30, 2016. |
| | Banks were instructed to ensure strict compliance with the guidelines on the Pradhan Mantri Fasal Bima Yojana (PMFBY). As the scheme is compulsory for loanee farmers availing Seasonal Agricultural Operational (SAO) Loans/ Kisan Credit Card (KCC) holders, banks were advised to ensure 100 per cent coverage of loanee farmers in notified areas growing notified crops. |
| April 7 | The scheme of Priority Sector Lending Certificates (PSLC) was introduced to enable the banks to achieve the priority sector lending target and sub-targets. |
| | Scope of the National Urban Livelihood Mission (NULM) was enhanced by the Government with the mission renamed as 'Deendayal Antyodaya Yojana (DAY)-National Urban Livelihoods Mission'. |
| May 5 | Banks were advised to discontinue submission of the half yearly statements on Special Agriculture Credit Plans (SACP) from April 2016 onwards. |
| June 2 | Banks were advised to ensure implementation of the guidelines on relief measures by banks in areas affected by natural calamities contained in master circular dated July 1, 2015. |
| June 30 | Banks were advised to act with empathy and consider restructuring and granting fresh loans to farmers in areas affected by natural calamities without waiting for the receipt of the insurance claims, in cases where there is reasonable certainty of receipt of the claim. |
| | Banks were advised to facilitate access to their records pertaining to crop insurance schemes to the audit teams deputed by the offices of the Principal Accountant General/Accountant General (Audit) in respective states. |
| **Financial Market Regulation Department** | |
| July 2, 2015 | An independent benchmark administrator, 'Financial Benchmarks India Pvt. Ltd.' (FBIL), jointly floated by FIMMDA, FEDAI and IBA was incorporated. |
| July 16 | The restriction on investment with less than three year residual maturity shall not apply to investment by FPIs in SRs issued by ARCs. |
| July 22 | FBIL took over the administration of the benchmark for the overnight inter-bank rate based on the actual traded rate replacing the existing 'FIMMDA-NSE Overnight MIBID/MIBOR'. |
| September 23 | FBIL started publishing the polled term Mumbai interbank offer rate (MIBOR) for three tenors, *viz.,*14 days, one month and three months. |
| October 6 | A Medium Term Framework (MTF) for FPI limits in g-sec was announced. |
| October 8 | The limit for hedging forex exposure of all resident, individuals, firms and companies through forex forward and FCY-INR options contracts was increased to US$ 1,000,000 on the basis of a simple declaration. |
| October 29 | Short sale transaction in g-sec by a custodian with its guilt account holder was allowed within the permissible short sale limit. |

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| November 5 | Residents were permitted to enter into FCY-INR swaps with multilateral or international financial institutions in which central government is a shareholder. |
| November 26 | FPIs were permitted to acquire NCDs/bonds, which defaulted, fully or partly, in the repayment of principal or principal instalment for amortising bond. |
| December 10 | SCBs were permitted to take short positions in “When Issued” market while other eligible entities, *e.g.*, UCBs were permitted to take long position. |
| | Recognised stock exchanges were permitted to offer cross-currency futures and exchange traded options in EUR-USD, GBP-USD and USD-JPY, and exchange traded options in EUR-INR, GBP-INR and JPY-INR in addition to the existing USD-INR options. |
| March 17, 2016 | Stand-alone PDs were permitted to deal in currency futures on their own account. |
| March 29 | The FPI investment limit in central g-sec for the next half year was increased in two tranches. The limit for SDL was also increased in two tranches. |
| April 28 | Entities reporting trades on Financial Market Trade Reporting and Confirmation Platform (F-TRAC) of the Clearcorp Dealing System India Ltd. were allowed to enter into multilateral agreement for waiving physical exchange of confirmation for deals in CPs, CDs, NCDs of original maturity up to one year and repo in corporate debt securities, CPs and CDs. |
| May 5 | CCIL was specified as an approved counterparty for IRS on electronic trading platforms where CCIL was the central counterparty to enable participation of regulated institutional entities. |
| | FBIL started publishing the FBIL FC-Rupee Options Volatility Matrix rates. |
| June 23 | Eligible Indian exporters and importers were permitted to sell covered options against their contracted exposures. |
| **Financial Markets Operations Department** | |
| July 27, 2015 | Straight through processing (STP) for fixed rate repo and reverse repo including MSF was introduced, effective August 03, 2015. |
| August 28 | Call/notice/term money, market repo and CBLO would remain open on all working Saturdays, effective September 01, 2015. |
| November 24 | The timing of fixed rate repo was revised as 9 a.m. to 3 p.m. and that of fixed rate reverse repo and MSF set at 5:30 p.m. to 7:30 p.m., effective November 30, 2015. The option of physical bid was discontinued. |
| December 9 | The Reserve Bank would intervene in the exchange traded currency derivatives segment, if required, to manage excessive volatility and to maintain orderly conditions in the market. |
| February 17, 2016 | For aligning liquidity operations with payment systems, reverse repo and MSF operations will be conducted between 5:30 p.m. and 7:30 p.m. on all Mumbai holidays when the RTGS would be open, effective February 19, 2016. |
| April 21 | USD/INR reference rate would be published based on volume weighted average of actual market transactions instead of polling, effective May 2, 2016. |
| **Foreign Exchange Department** | |
| July 2, 2015 | Unsold rough diamonds imported on free of cost basis at special notified zone (SNZ), when re-exported from SNZ without entering the Domestic Tariff Area (DTA) would not require the formality of Export Declaration Form. |

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| July 3 | FDI is prohibited only for 'manufacturing of cigars, cheroots, cigarillos and cigarettes, of tobacco or of tobacco substitutes' and not for other activities relating to these products including wholesale cash and carry, and retail trading. |
| July 16 | The ESOP regulations were reframed in sync with those of SEBI for listed companies and of Ministry of Corporate Affairs for unlisted companies. |
| | AD banks were permitted to factor export receivables on a non-recourse basis. |
| August 21 | The online filing of form FCTRS with the Reserve Bank was enabled through the e-biz platform from August 24, 2015. |
| September 10 | The filing of return on trade related loans and advances by exporters to overseas importers from their Exchange Earners' Foreign Currency (EEFC) accounts was dispensed with. |
| | The submission of documents by full-fledged money changers (FFMC)/AD category II while opening additional branches was relaxed. |
| | Resident importers were allowed to raise trade credit in Rupees (INR). |
| September 24 | The instructions, *e.g.*, eligible credits and debits on opening of foreign currency accounts in India by ship-manning/crew-management agencies were reiterated in a more simplified manner. |
| | AD category-I banks were permitted to offer facility of payment for imports by entering into standing arrangements with the Online Payment Gateway Service Providers for goods and software. |
| September 29 | A framework for issuance of Rupee denominated bonds overseas was set within the overarching ECB policy, and the various parameters, *e.g.*, eligible borrowers, recognised investors, maturity and all-in-cost were defined. |
| September 30 | No proceedings under FEMA will lie against a person resident in India who has acquired any asset outside India in respect of which a declaration has been made under the Black Money Act, and for which taxes and penalties have been paid by the declarant. |
| October 8 | The use of Nostro accounts of commercial banks of ACU countries, *i.e.*, the ACU Dollar and ACU Euro accounts, for settling the payments of exports and imports among the ACU countries, was permitted. |
| October 29 | The National Pension System (NPS) was enabled as an investment option for NRIs under FEMA, provided such subscriptions were through normal banking channels and the person was eligible to invest under the PFRDA Act. |
| November 5 | The settlement mode at the Indo-Myanmar border was switched from barter to normal trade. |
| | All software exporters can file single/bulk SOFTEX form in excel format for certification. |
| November 26 | Bill of entry issued by Customs and courier bill of entry as declared by courier companies to the Customs may be accepted as evidence by AD banks for physical import of goods and import through courier, respectively. |
| November 30 | ECB framework was revised with– (i) fewer restrictions on end uses and higher all-in-cost ceiling for long term foreign currency borrowings; (ii) a more liberal regime for rupee denominated ECBs; (iii) expansion of the list of overseas lenders to include long term lenders; (iv) alignment of the list of eligible infrastructure entities with the harmonized list of the Government of India; and (v) limiting the restrictions on end uses to a small negative list. |
| February 1, 2016 | Physical filing of three FDI related returns: ARF, FC-GPR and FC-TRS was discontinued and online filing of forms on Government's e-Biz portal was introduced. |
| February 4 | Banks were advised to settle export/import transactions in the currency of beneficiary where invoices were in freely convertible currencies and direct exchange rate might not be available. |
| | Nine regulations under FEMA were revised, repealing the original nine notifications and subsequent 51 amendments. Circulars were issued for seven out of nine revised regulations. |

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| February 11 | The online submission of Form A2 for outward remittances was enabled and certain issues were clarified: issue of shares without cash payment through sweat equity/against legitimate payment owed by a company remittance of which does not require permission under FEMA, collection of payments by startups on behalf of their subsidiaries abroad. |
| March 3 | The AD category I banks were advised to consider requests from status holder exporters for grant of Export Declaration Form (EDF) waiver, for export of goods free of cost based on the revised norm of ₹10 lakh or 2 per cent of average annual export realisation during preceding three licensing years, whichever was lower. |
| March 23 | The reporting by AD banks to the Reserve Bank under the Diamond Dollar Account Scheme was dispensed with. |
| March 30 | Companies in infrastructure sector, NBFC-IFCs, NBFC-AFCs, holding companies and CICs were made eligible to raise ECB under Track I of the framework with minimum average maturity of 5 years, subject to 100 per cent hedging; 'exploration, mining and refinery' sectors would be deemed as 'infrastructure' for the purpose of ECB; and refinancing of ECBs raised under the old regime was allowed. |
| March 31 | AD banks were permitted to extend clean credit for import of rough, cut and polished diamonds up to a maximum 180 days beyond 180 days from the date of shipment. |
| | FDI limit for insurance was increased from 26 per cent to 49 per cent under automatic route. |
| April 13 | Keeping of deposits with an Indian Company by persons resident outside India under Section 160 of the Companies Act, 2013 was clarified to be a current account transaction which would not require any approval from RBI. |
| | FPI limit in corporate debt is to be fixed in rupee terms. The issuance of rupee denominated bonds will be within such limit notified from time to time. |
| | Online reporting requirements for Overseas Direct Investment (ODI) were rationalised. |
| April 21 | A person resident outside India including Registered Foreign Portfolio Investors and NRIs will be allowed to invest in the units issued by Real Estate Investment Trusts, Infrastructure Investment Trusts and Alternate Investment Funds on repatriation basis. |
| April 28 | The notification relating to Remittance of Assets (FEMA 13) and its subsequent amendments were repealed and revised notification FEMA 13(R) was gazetted on April 1, 2016. |
| | The main features of the proposed Import Data Processing and Monitoring System (IDPMS) to be operationalised soon were outlined. |
| | Under the speed remittance procedure, the mandated requirement of maintenance of collateral or cash deposits by the exchange houses with whom banks entered into Rupee drawing arrangement was done away with, AD banks may, however, determine the collateral requirement. |
| May 26 | The compounding orders issued on or after June 01, 2016 will be placed on the Reserve Bank website. The guidance note on the methodology used for calculation of the amount imposed under the compounding process was released. |
| June 23 | A startup having an overseas subsidiary was permitted to open a foreign currency account outside India for crediting forex earnings out of its exports/sales and/or the receivables arising out of exports/sales of its overseas subsidiary. |
| | Indian companies registered under IRDA that are into insurance/reinsurance business are being permitted to open a foreign currency account with a bank outside India. |
| June 30 | The ECB proposals received in the Reserve Bank above a certain threshold (refixed from time to time) will be placed before an empowered committee. |

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| **Department of Banking Regulation** | |
| July 2, 2015 | Banks were advised to make use of the CRILC information and not limit their due diligence to seeking NOC from the customer's lending banks as per his/her declaration. |
| | Banks were permitted to slot their excess SLR securities and MSF eligible securities under day-1 bucket. |
| | The actual interest rate charged before restructuring could be used to discount the future cash flows for determining the diminution in fair value of loans on restructuring/flexible structuring of existing project loans. In case of differential interest rates for a borrower, the weighted average interest rate might be used as a discount rate. |
| July 9 | While reporting information to CICs, a new status value: "restructured due to natural calamity" has to be introduced for the fields "written off and settled status" in the consumer bureau and "major reasons for restructuring" in the commercial bureau while reporting restructured/rescheduled agricultural loans on account of declared natural calamities, effective September 30, 2015. |
| July 16 | 'Past due' status of a credit card account will be reckoned from the payment due date mentioned in the monthly credit card statement. |
| | Banks were advised to present details of deposits with NABARD/SIDBI/NHB for meeting shortfall in priority sector lending in schedule 11 of the balance sheet. |
| July 30 | Banks were permitted to undertake factoring business departmentally with recourse, without recourse or on limited recourse basis under the Factoring Regulation Act, 2011. |
| August 6 | The prescription of additional interest of 1.28 per cent by PSBs on deposits of defence group insurance stands withdrawn. |
| | Domestic SCBs were made free to shift, part shift, merge or close all branches without the prior approval of the Reserve Bank. However, banking needs of a centre where a sole rural/semi-urban branch has been closed need to be met through either satellite offices/mobile vans or BCs. |
| August 28 | Rules and subsequently guidance notes, including the amendments to income tax rules for operationalisation of inter-governmental agreement, and common reporting standards under the Foreign Account Tax Compliance Act were released. |
| September 16 | Prior approval of the Reserve Bank is no longer required for non-strategic investments by profit making banks with CRAR of 10 per cent and more. |
| | Banks were given general permission to grant loans and advances to their CEOs/ Whole Time Directors for personal use, without seeking prior approval of the Reserve Bank, provided such loans form part of the bank's compensation/ remuneration policy approved by the Board of Directors. |
| September 24 | A JLF-empowered group consisting of ED-level representatives from SBI, ICICI Bank and three other banks having exposure to the concerned borrower and two more banks not having exposure would be tasked to approve the rectification/restructuring packages under the corrective action plans. JLF would decide on the restructuring of an account classified as 'doubtful' if the account is viable and the JLF-EG would approve the proposal. The dissenting lenders would have an option to exit their exposure fully. If restructuring fails, JLF would have the option to initiate strategic debt restructuring bringing about change in management. |
| | Banks were allowed to extend partial credit enhancement to corporate bonds as an irrevocable contingent line of credit to be drawn to fund a shortfall in servicing of bonds, if any. |
| | Banks were permitted to upgrade the credit facilities to 'standard' category extended to borrowing entities whose ownership was changed outside the SDR mechanism. |
| September 29 | Bank Rate was cut by 50 bps from 8.25 per cent to 7.75 per cent, effective September 29, 2015. |

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| October 8 | Claims on foreign central banks would attract risk weights as per the rating to those by international rating agencies. |
| | LTV ratio and risk weight on individual housing loans were revised for 'housing for all'. |
| October 22 | SCBs (excluding RRBs) were issued direction on the implementation of the Gold Monetisation Scheme, 2015 of the Government. |
| October 30 | Banks were advised to accept marriage certificate or Gazette notification indicating change in name together with the 'officially valid document' in the existing name while establishing an account based relationship or its updation. |
| November 3 | Minimum deposit under the Gold Monetisation Scheme, 2015 was amended as 30 grams of raw gold instead of 30 grams of gold of 995 fineness. |
| | Banks were advised that the rates of interest on medium-term and long-term government deposits as fixed by the government would be 2.25 per cent and 2.5 per cent, respectively. |
| November 6 | Banks were asked to provide their comments on the proposed "harmonised" definitions of major balance sheet/ profit and loss/ off-balance sheet items covered in the banking/ regulatory returns received across various departments of the Bank by November 30, 2015. |
| November 19 | Prior approval for acquisition of shares or voting rights in private banks was made necessary. |
| | Consolidated (group) level capital adequacy would apply to non-operative financial holding company (NOFHC) for new private banks. |
| | While offering factoring services, banks could decide the percentage of invoice to be paid upfront based on their own assessment of the creditworthiness of the assignor/buyer. |
| | RRBs were allowed to extend internet banking facility to their customers. |
| November 26 | Banks were advised to be in readiness to share the KYC data with the Central KYC Records Registry once it is notified by the Government. |
| | A foreign bank can deploy a maximum of four expatriates for each branch opened in India and not more than six expatriates for their head office functions. |
| | The criterion regarding assets and income of factoring companies eligible for bank finance was revised to 50 per cent from 75 per cent. |
| December 4 | Banks were advised on the operational procedure for claiming the reimbursement under the interest equalisation scheme on pre- and post-shipment rupee export credit. |
| December 10 | SLR would be reduced progressively by 0.25 per cent every quarter till March 31, 2017 as also the ceiling on SLR holding under HTM category. |
| December 17 | Guidelines were issued on computing interest rates on advances based on marginal cost of funds. |
| December 31 | Banks were allowed to extend credit facilities to overseas step down subsidiaries of Indian corporates beyond the first level with the requirement of an additional provision of 2 per cent (over and above the country risk provision that is applicable to all overseas exposures). |
| January 7, 2016 | IBUs were permitted to open foreign currency current accounts of units operating in IFSCs and of non-resident institutional investors. No limit was prescribed for raising short-term liabilities from banks. However, the IBUs must maintain LCR as applicable to Indian banks and follow the liquidity risk management guidelines. |
| | Banks were allowed to grant non-fund based facilities including partial credit enhancement to those customers, who did not avail any fund-based facility from any bank in India. |

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| January 7, 2016 | If any credit facility availed by the issuer is classified as NPA by an AIFI, investment in any security including preference shares of the same issuer would also be treated as NPI and vice versa. If the preference share is classified as NPI, investment in any other performing securities of the same issuer or performing credit facilities may not be classified as NPI/NPA. |
| January 14 | In relation to Basel III capital regulations, coupons on perpetual debt instruments must be paid out of current year's profits. However, if current year's profits are not sufficient, the balance amount of coupon needs to be paid out of revenue reserves and/or credit balance in profit and loss account, if any. |
| | Banks were permitted to offer all their products and services through ATM channels. |
| | SCBs including RRBs and CICs were advised to capture member-level data relating to SHGs in phases. |
| February 11 | SCBs (excluding RRBs) were advised to follow the Ind AS as notified under the Companies (Indian Accounting Standards) Rules, 2015 from 2018-19. |
| | Banks should seek appointment of a guardian only when the concerned person is mentally ill and is not able to enter into a valid and legally binding contract. |
| | Banks have been permitted to reckon government securities held by them by an additional 3 per cent of their NDTL under FALLCR within the mandatory SLR requirement as Level 1 HQLA for the purpose of computing their LCR. Hence the total carved-out from SLR available to banks would be 10 per cent of their NDTL. |
| February 24 | KYC Direction, 2016 was issued consolidating all relevant instructions issued by different departments of the Reserve Bank. |
| February 25 | Prudential guidelines pertaining to SDR, framework to revitalise the distressed assets in the economy, restructuring of advances and sale of financial assets to securitisation/reconstruction company were partly modified and clarified. |
| March 1 | Treatment of certain balance sheet items was amended for determining banks' regulatory capital in line with the Basel III capital standards. |
| March 13 | Master Directions on interest rate on deposits and advances were issued. |
| March 23 | The existing guidelines on LCR were clarified and were added up with instructions making them more compatible with Basel III liquidity risk framework. |
| March 31 | As per the Gold Monetisation Scheme, 2015, redemption of principal at maturity would, at the option of depositor, be in either equivalent Indian Rupee or gold. For redemption in gold, an administrative charge of 0.2 per cent would be collected. Interest accrued on medium and long-term gold deposit would be based on value of gold in Indian Rupees at the time of deposit and would be paid only in cash. |
| April 5 | Bank Rate was reduced by 75 bps to 7.0 per cent, effective April 05, 2016. |
| | The minimum daily maintenance of Cash Reserve Ratio has been reduced from 95 per cent to 90 per cent effective from fortnight beginning April 16, 2016. |
| April 21 | Banks were advised to display suitable posters/notices in their branches cautioning public against placing deposits in dubious schemes. |
| | Banks could undertake the business of investment advisory services only through a separate subsidiary or one of its existing subsidiaries, with the prior approval of the Reserve Bank. |
| | General permission was extended to private banks to issue shares through available routes subject to compliance with the extant provisions and reporting to the Reserve Bank. |
| | Private banks and registered NBFCs need to submit information/documents along with the application for amalgamation to the Reserve Bank for consideration. |

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| May 11 | Guidelines on ownership in private banks were revised in view of licensing of new banks in the private sector and the need for additional capital under Basel III. |
| May 18 | FDI up to 100 per cent under automatic route was allowed for CICs provided the entities had a track record of running a credit information bureau in a well-regulated environment. |
| May 26 | Banks were provided with a framework of regulations for conduct of certain businesses permitted under Section 6(1) of the BR Act, 1949, apart from the prudential limits for banks' investment in financial and non-financial services companies as also the requirement for approval and procedure for application to the Reserve Bank. |
| June 13 | Banks were allowed to spread out any shortfall over a period of two years for NPAs sold up to March 31, 2016 subject to necessary disclosures. The said dispensation was extended for assets sold up to March 31, 2017. For assets sold during 2016-17, banks were allowed to amortize the shortfall over a period of four quarters. |
| | For reworking the financial structure of entities facing genuine difficulties, the Reserve Bank put in place a 'Scheme for Sustainable Structuring of Stressed Assets' (S4A). |
| June 16 | Banks were advised to begin collection of the relevant information from SHG members and reporting to CICs. |
| June 23 | Banks were advised to submit the Proforma Ind AS Financial Statements for the half year ended on September 30, latest by November 30, 2016. |
| | Banks were advised to report information on CPs and unhedged foreign currency exposures on a monthly and quarterly basis respectively, to the CICs from July 1, 2016. |
| | Directions on financial statements presentation, disclosure and reporting will be applicable to AIFIs effective the quarter ended December 2016. |
| **Department of Co-operative Bank Regulation** | |
| July 16, 2015 | CBS-enabled co-operative banks were permitted to issue ATM-cum-debit cards in tie-up with a sponsor bank. |
| October 15 | Co-operative banks were permitted to use spot gold price data of the preceding 30 days, publicly disseminated by a commodity exchange regulated by SEBI for advance against pledge of gold ornaments/jewellery. |
| October 21 | StCBs/DCCBs were permitted to invest in shares of market infrastructure companies as part of their non-SLR investments. |
| November 5 | Co-operative banks which implemented CBS and migrated to Internet Protocol Version (IPv) 6 were permitted to offer internet banking (view only). If the prescribed criteria besides the above were fulfilled, internet banking with transactional facility was allowed. |
| November 19 | Guidelines for acceptance of deposits by scheduled UCBs from other scheduled/non-scheduled UCBs were issued. |
| January 21, 2016 | Co-operative banks were advised to accept cheques bearing a date as per the national calendar (SakaSamvat) for payment, if otherwise found in order. |
| February 11 | Instructions were issued to AD category-I scheduled UCBs for claiming reimbursement under the interest equalisation scheme on pre- and post-shipment rupee export credit. |
| March 10 | StCBs/DCCBs were permitted to include under Tier I capital, contributions received from associate/ nominal members and the outstanding special reserve if created as deferred tax liability under Section 36(1) (viii) of the Income Tax Act, 1961. |

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| March 23 | UCBs and StCBs eligible for setting up on-site/off-site/mobile ATMs were permitted to offer their products and services through ATM. |
| April 13 | Financial assistance to UCBs for implementation of CBS through IDRBT/IFTAS was introduced. UCBs which were not operating under directions u/s 35 A of the Banking Regulation Act, 1949 and had not implemented/partially implemented CBS were eligible for assistance. |
| April 21 | UCBs which fulfilled the prescribed criteria and whose priority sector loans were not less than 90 per cent of gross loans were permitted to grant unsecured advances to the extent of 35 per cent of their total assets. |
| June 30 | Licensed UCBs which had implemented CBS and fulfilled the prescribed criteria were allowed to open one controlling office for a cluster of not less than 40 branches without prior approval of the Reserve Bank. |
| **Department of Non-Banking Regulation** | |
| July 2, 2015 | For determination of concentration of credit/ investment, investments of NBFC in the shares of its subsidiaries and companies in the same group should be excluded to the extent they have been reduced from owned funds for calculation of NOF. |
| July 9 | NBFCs would require prior approval of the Reserve Bank in cases of acquisition/ transfer of control of NBFCs. |
| July 23 | Guidelines on early recognition of financial distress, prompt steps for resolution and fair recovery for lenders: framework for revitalising distressed assets, review of the guidelines on JLF and corrective action plans as applicable to banks were made, *mutatis mutandis,* applicable to NBFCs. |
| July 30 | Guidelines on restructuring of advances as applicable to banks were made, *mutatis mutandis*, applicable to NBFCs. |
| August 6 | The investment ceiling in AAA-rated corporate bonds by standalone PDs was raised from 25 per cent to 50 per cent of the latest audited net owned fund for a single borrower/counterparty and from 40 per cent to 65 per cent for a group borrower. |
| October 01 | The condition relating to the maximum variance permitted would not apply to loans extended by NBFC-MFIs against the funding by National Scheduled Castes Finance and Development Corporation. |
| October 29 | Modifications in the guidelines on early recognition of financial distress, prompt steps for resolution and fair recovery for lenders: framework for revitalising distressed assets in the economy, review of the guidelines on JLF and corrective action plans as applicable to banks were made, *mutatis mutandis*, applicable to NBFCs. |
| November 26 | The limit of loan issued by NBFC-MFIs with a tenure of not less than 24 months was raised to ₹30,000 from ₹15,000. |
| January 28, 2016 | NBFCs should disclose that the safe deposit locker facility is not regulated by the Reserve Bank. It would be a fee-based service and should not be counted as part of the financial business carried out by NBFCs. |
| February 18 | NBFCs were prohibited from acting as Point of Presence (PoP) under the PFRDA's National Pension System. |
| | Clarifications/instructions were issued to NBFC-Factors to discourage regulatory arbitrage between NBFC-Factors and banks. |
| | Threshold for fraud reporting by NBFCs to the Central Fraud Monitoring Cell was increased to ₹10 million from ₹2.5 million. |
| March 3 | Draft directions for NBFC-Account Aggregator were placed in public domain for comments. |

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| March 10 | Risk weights assigned to exposures of NBFCs to domestic sovereigns or claims guaranteed by them were reviewed. |
| April 7 | Concentration of credit/ investment norms would not apply to an NBFC-NDSI not accessing public funds, either directly or indirectly, and not issuing guarantees. |
| April 13 | NBFC-MFIs were granted general permission to act as channelising agents for distribution of loans under special schemes of central/state government agencies exempting such loans from the qualifying assets criteria. |
| April 21 | IDF-NBFCs were granted general permission to raise funds through shorter tenor bonds and CPs from the domestic market to the extent of up to 10 per cent of their total outstanding borrowing. |
| April 28 | Standalone PDs were advised to link the risk weights assigned to their investments in corporate bonds to the rating of bonds. |
| | P2P consultation paper was released on the RBI website for public comments. |
| May 26 | Guidelines on SDR mechanism, framework to revitalise distressed assets and revisions to the guidelines on restructuring as applicable to banks were made, *mutatis mutandis*, applicable to NBFCs. |
| June 2 | Guidelines on refinancing of loans applicable to banks were extended to NBFCs. |
| June 17 | The process of registration of NBFCs was simplified. |
| **Department of Banking Supervision** | |
| July 1, 2015 | The classification and reporting system for frauds was prescribed, consolidating and updating earlier instructions. |
| July 15 | Guidelines on the concurrent audit system in commercial banks were revised setting out its scope and coverage. |
| September 24 | ED-in-charge of internal inspection and audit should be a member of the Audit Committee of the Board of Directors (ACB) in a PSB. Other EDs can be invited if the agenda includes any item for discussion from their domain. |
| November 23 | Select banks were advised to conduct an audit (internal or external) of all the export transactions for KYC/AML/FEMA compliance. |
| January 20, 2016 | Banks were advised to review the internal audit system and fine-tune the scope of the mechanism by strengthening the role of internal auditor. |
| January 21 | Banks having overseas branches/representative offices/subsidiaries and joint ventures were advised to report on overseas operations as per the prescribed format in their quarterly DO letters. |
| | Banks were advised of the revised limits for reporting of fraud cases. |
| | Banks were advised about the operationalisation of the Central Fund Registry effective January 20, 2016 and revision of limits in reporting of fraud cases. |
| February 18 | Banks were advised to examine the deficiencies in lending practices adopted by them for KCC accounts in their banks. |
| March 17 | Banks were advised to examine the deficiencies in lending practices followed for the facilities extended to the brokers of NSEL. |
| March 31 | Banks were advised that they were not required to submit the single quarterly report on the 'progress in implementation of Risk Management System/ALM, Risk-Based Supervision and Risk-Based Internal Audit', to the Reserve Bank on a quarterly basis effective the quarter ending March 2016 in view of the switch to Risk-Based Supervision from April 1, 2016. |

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| April 28 | Compliance to the recommendations of Jilani Committee on the classification and reporting of frauds need not be reported to the ACB. Banks should ensure that the compliance was complete and sustained. |
| June 30 | Banks were advised to discontinue the submission of quarterly report on foreign branches/subsidiaries/joint ventures/ associates effective June 30, 2016. |
| **Consumer Education and Protection Department** | |
| July 15, 2015 | The procedural instructions for redressal of grievances by the Chief Customer Service Officer (Internal Ombudsman) of banks were issued. |
| **Internal Debt Management Department** | |
| October 19, 2015 | Sovereign yield curve was extended to forty years by issuance of Government of India security of 40 year maturity for the first time. |
| October 30 | Sovereign Gold Bond scheme was introduced, providing an attractive alternate investment opportunity to purchase of gold. |
| December 31 | The Medium-Term Debt Management Strategy (MTDS) formulated by the Reserve Bank in consultation with the Government was placed in public domain. |
| January 29, 2016 | The WMA limit for all states was enhanced to ₹322.25 billion from ₹153.60 billion. |
| **Department of Currency Management** | |
| August 27, 2015 | In consultation with the Government, the procedure for detection of counterfeit notes has been reviewed. |
| September 24 | The Reserve Bank decided to issue banknotes in Mahatma Gandhi Series 2005 with a new numbering pattern in all denominations and special features for the visually impaired in ₹100, 500 and 1000 denominations. |
| December 23 | The deadline for exchange of banknotes printed before 2005 was extended from December 31, 2015 to June 30, 2016. |
| January 21, 2016 | Approval has been given by the Reserve Bank to allow the currency chest holding banks to enhance the service charge to be levied on cash deposited by non-chest bank branches to be effective from February 1, 2016. |
| April 13 | Banks having currency chests should ensure conducting of fire audits bi-annually (once in two years) by the officials from the District Fire Department. |
| May 5 | CDES – A revised scheme of incentives for bank branches based on performance in rendering customer service has been formulated by segregating the scheme of incentives from penalties. |
| June 30 | From July 01, 2016 onwards, the facility for the members of public to exchange the pre-2005 banknotes is available only at issue offices of the Reserve Bank (including Kochi). |
| **Department of Payment and Settlement Systems** | |
| July 9, 2015 | A new category of semi-closed Prepaid Payment Instruments (PPI) up to ₹2000 was introduced for Mass Transit Systems (PPI-MTS) to facilitate small value electronic payments. |
| August 27 | The limit for cash withdrawal at Point of Sale (POS) was enhanced from ₹1000 to ₹2000 per day in Tier III to VI centres. |
| August 27 | Guidelines were released for issuance of EMV Chip and Pin based cards. |

| Date of Announcement | Policy Initiative |
|---|---|
| September 1 | RTGS time window was modified to be operational for full day on working Saturdays. |
| December 17 | Operative guidelines for banks to carry out changes in their ATM switch to facilitate Customer Registration for Mobile Banking at ATMs connected to National Financial Switch. |
| February 4, 2016 | RTGS service charges were rationalised for members while the maximum fee a member could charge from its customer remained unchanged. |
| May 12 | Guidelines for Voluntary surrender of Certificate of Authorisation (COA) were issued laying out the process for surrendering and consequent cancellation of the COA on voluntary basis. |
| May 26 | To encourage and expand card acceptance infrastructure to a wider segment of merchants across all geographical locations; the banks were advised to put in place their own Board approved policy on merchant acquisition. |
| | The banks/ White Label ATM operators were advised to ensure that all the existing ATMs installed/operated by them are enabled for processing of EMV Chip and PIN cards. |

## APPENDIX TABLE 1: MACROECONOMIC AND FINANCIAL INDICATORS

| Item | Average 2003-04 to 2007-08 (5 years) | Average 2009-10 to 2013-14 (5 years) | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| **I. Real Economy*** | | | | | |
| I.1 Real GDP at market prices (% change) | 8.8 | 7.0 | 6.6 | 7.2 | 7.6 |
| I.2 Real GVA at basic prices (% change)** | 8.7 | 6.7 | 6.3 | 7.1 | 7.2 |
| I.3 Foodgrains Production (Million tonnes) | 213.6 | 248.8 | 265.0 | 252.0 | 252.2 |
| I.4 a) Food Stocks (Million tonnes at end-March) | 18.6 | 50.1 | 49.5 | 41.3 | 43.6 |
| b) Procurement*** | 39.3 | 61.3 | 56.9 | 60.1 | 62.2 |
| c) Off-take | 41.5 | 57.0 | 59.8 | 56.0 | 63.7 |
| I.5 Index of Industrial Production (% change) | 11.2 | 3.5 | -0.1 | 2.8 | 2.4 |
| I.6 Index of Eight Core Industries (% change) | 5.9 | 5.8 | 4.2 | 4.5 | 2.7 |
| I.7 Gross Domestic Saving Rate (% of GNDI at current prices) | 32.4 | 31.4 | 32.3 | 32.3 | … |
| I.8 Gross Domestic Investment Rate (% of GDP at current prices) | 33.6 | 35.8 | 34.7 | 34.2 | … |
| **II. Prices** | | | | | |
| II.1 Consumer Price Index (CPI) Combined (average % change) | ... | ... | 9.4 | 5.8 | 4.9 |
| II.2 CPI- Industrial Workers (average % change) | 5.0 | 10.3 | 9.7 | 6.3 | 5.6 |
| II.3 Wholesale Price Index (average % change) | 5.5 | 7.1 | 6.0 | 2.0 | -2.5 |
| **III. Money and Credit** | | | | | |
| III.1 Reserve Money (% change) | 20.4 | 12.1 | 14.4 | 11.3 | 13.1 |
| III.2 Broad Money ($M_3$) (% change) | 18.6 | 14.7 | 13.4 | 10.9 | 10.1 |
| III.3 a) Aggregate Deposits of Scheduled Commercial Banks (% change) | 20.2 | 15.0 | 14.1 | 10.7 | 9.3 |
| b) Bank Credit of Scheduled Commercial Banks (% change) | 26.7 | 16.7 | 13.9 | 9.0 | 10.9 |
| **IV. Financial Markets** | | | | | |
| IV.1 Interest rates (%) | | | | | |
| a) Call / Notice Money rate | 5.6 | 7.2 | 8.3 | 8.0 | 7.0 |
| b) 10 year G-Sec yield | 7.0 | 8.0 | 8.4 | 8.3 | 7.8 |
| c) 91-Days T-bill yield | … | … | 8.9 | 8.5 | 7.4 |
| d) Weighted Average cost of Central Government Borrowings | … | … | 8.4 | 8.5 | 7.9 |
| e) Commercial Paper | 7.7 | 8.4 | 9.3 | 8.8 | 8.1 |
| f) Certificate of Deposits# | 8.9 | 8.2 | 9.2 | 8.7 | 7.8 |
| IV.2 Liquidity (₹ billion) | | | | | |
| a) LAF Outstanding~ | … | … | -2,179.9 | -1,938.8 | -2,995.2 |
| b) MSS Outstanding~~ | … | … | 0.0 | 0.0 | 0.0 |
| c) Average Daily Call Money Market Turnover | 184.9 | 255.3 | 302.3 | 255.7 | 269.5 |
| d) Average Daily G-Sec Market Turnover## | 77.1 | 241.4 | 429.0 | 501.2 | 474.9 |
| e) Variable Rate Repo$ | … | … | 1,200.2 | 1,628.7 | 2,635.7 |
| f) MSF$ | … | … | 737.4 | 416.4 | 600.5 |
| **V. Government Finances** | | | | | |
| V.1 Central Government Finances (% of GDP)@ | | | | | |
| a) Revenue Receipts | 9.8 | 9.1 | 9.0 | 8.8 | 8.8 |
| b) Capital Outlay | 1.2 | 1.5 | 1.5 | 1.3 | 1.5 |
| c) Total Expenditure | 14.4 | 14.8 | 13.8 | 13.3 | 13.1 |
| d) Gross Fiscal Deficit | 3.6 | 5.3 | 4.5 | 4.1 | 3.9 |
| V.2 State Government Finances@@ | | | | | |
| a) Revenue Deficit (% of GDP)$$ | 0.4 | 0.0 | 0.1 | 0.3 | 0.1 |
| b) Gross Fiscal Deficit (% of GDP)$$ | 2.7 | 2.2 | 2.2 | 2.4 | 3.3 |
| c) Primary Deficit (% of GDP)$$ | 0.3 | 0.6 | 0.7 | 1.0 | 1.8 |

## APPENDIX TABLE 1: MACROECONOMIC AND FINANCIAL INDICATORS *(Concld.)*

| Item | Average 2003-04 to 2007-08 (5 years) | Average 2009-10 to 2013-14 (5 years) | 2013-14 | 2014-15 | 2015-16 |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| **VI. External Sector** | | | | | |
| VI.1 Balance of Payments | | | | | |
| a) Merchandise Exports (% change) | 25.3 | 12.2 | 3.9 | -0.6 | -15.9 |
| b) Merchandise Imports (% change) | 32.3 | 9.7 | -7.2 | -1.0 | -14.1 |
| c) Trade Balance/GDP (%) | -5.4 | -9.0 | -7.9 | -7.1 | -6.3 |
| d) Invisible Balance/GDP (%) | 5.1 | 5.7 | 6.2 | 5.8 | 5.2 |
| e) Current Account Balance/GDP (%) | -0.3 | -3.3 | -1.7 | -1.3 | -1.1 |
| f) Net Capital Flows/GDP (%) | 4.6 | 3.7 | 2.6 | 4.4 | 2.0 |
| g) Reserve Changes (BoP basis) (US $ billion) [Increase (-)/Decrease (+)] | -40.3 | -6.6 | -15.5 | -61.4 | -17.9 |
| VI.2 External Debt Indicators | | | | | |
| a) External Debt Stock (US$ billion) | 156.5 | 359.0 | 446.2 | 475.0 | 485.6 |
| b) Debt-GDP Ratio (%) | 17.7 | 20.7 | 23.8 | 23.8 | 23.7 |
| c) Import cover of Reserves (in Months) | 14.0 | 8.5 | 7.8 | 8.9 | 10.9 |
| d) Short-term Debt to Total Debt (%) | 13.6 | 21.3 | 20.5 | 18.0 | 17.2 |
| e) Debt Service Ratio (%) | 8.3 | 5.6 | 5.9 | 7.6 | 8.8 |
| f) Reserves to Debt (%) | 113.7 | 84.8 | 68.2 | 71.9 | 74.2 |
| VI.3 Openness Indicators (%) | | | | | |
| a) Export plus Imports of Goods/GDP | 30.4 | 40.7 | 42.1 | 38.1 | 32.0 |
| b) Export plus Imports of Goods & Services/GDP | 40.8 | 52.8 | 54.5 | 49.8 | 43.5 |
| c) Current Receipts plus Current Payments/GDP | 46.6 | 58.9 | 61.0 | 56.0 | 49.4 |
| d) Gross Capital Inflows plus Outflows/GDP | 36.8 | 50.0 | 52.3 | 49.6 | 47.2 |
| e) Current Receipts & Payments plus Capital Receipts & Payments/GDP | 83.5 | 108.9 | 113.3 | 105.5 | 96.6 |
| VI.4 Exchange Rate Indicators | | | | | |
| a) Exchange Rate (Rupee/US Dollar) | | | | | |
| End of Period | 43.1 | 51.1 | 60.1 | 62.6 | 66.3 |
| Average | 44.1 | 51.2 | 60.5 | 61.1 | 65.5 |
| b) 36 - Currency REER (% change) | 3.1^ | 0.8 | -2.2 | 5.5 | 2.9 |
| c) 36 - Currency NEER (% change) | 1.7^ | -4.9 | -7.7 | 2.4 | 0.9 |
| d) 6 - Currency REER (% change) | 4.4^^ | 1.9 | -3.7 | 6.3 | 3.0 |
| e) 6 - Currency NEER (% change) | 1.6^^ | -5.4 | -10.4 | 1.2 | -1.1 |

… : Not Available
* : I.1, I.2, I.7 and I.8 in column 2 and 3 pertains to base 2004-05; also, I.7 and I.8 in column 3 pertains to average of 2009-10 to 2012-13.
** : I.2 in column 2 and 3 pertain to real GVA at factor cost.
*** : Procurement of rice and wheat relates to respective marketing seasons.
# : Data for column 2 pertains to April 13, 2007 to March 28, 2008.
## : Outright trading turnover in central government dated securities (based on calendar days).
~ : LAF outstanding as on March 31 (negative means injection).
~~ : Outstanding as on last Friday of the financial year.
$ : Outstanding as on March 31.
@ : Central Government figures for 2014-15 are actuals and for 2015-16 are provisional accounts.
@@ : State Government figures for 2015-16 pertains to the revised estimates for 26 states.
$$ : Data for 2014-15 onwards are provisional and pertains to budgets of 26 states out of which 3 are Vote on Account.
^ : Average of period 2005-06 to 2007-08.
^^ : Pertains to end-March 2008.

**Note :** 1. In columns 4, 5 and 6 GDP and GVA data is based on new base: 2011-12.
2. Real Effective Exchange Rate (REER) are based on CPI (combined).

## APPENDIX TABLE 2 : GROWTH RATES AND COMPOSITION OF REAL GROSS DOMESTIC PRODUCT

(At 2011-12 Prices)

(Per cent)

| Sector | Growth Rate | | | | Share | | |
|---|---|---|---|---|---|---|---|
| | Average 2012-13 to 2015-16 | 2013-14 | 2014-15 | 2015-16 | 2013-14 | 2014-15 | 2015-16 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| **Expenditure Side GDP** | | | | | | | |
| 1. Private Final Consumption Expenditure | 6.4 | 6.8 | 6.2 | 7.4 | 56.1 | 55.6 | 55.5 |
| 2. Government Final Consumption Expenditure | 4.0 | 0.4 | 12.8 | 2.2 | 9.9 | 10.4 | 9.9 |
| 3. Gross Fixed Capital Formation | 4.3 | 3.4 | 4.9 | 3.9 | 33.0 | 32.3 | 31.2 |
| 4. Change in Stocks | 0.9 | -18.6 | 20.3 | 5.5 | 1.6 | 1.8 | 1.8 |
| 5. Valuables | -6.0 | -42.2 | 15.4 | 0.3 | 1.5 | 1.6 | 1.5 |
| 6. Net Exports | 10.5 | 70.0 | 11.7 | -36.6 | -1.8 | -1.5 | -1.9 |
| a) Exports | 2.8 | 7.8 | 1.7 | -5.2 | 25.1 | 23.8 | 20.9 |
| b) Less Imports | -1.0 | -8.2 | 0.8 | -2.8 | 26.9 | 25.2 | 22.8 |
| 7. Discrepancies | -309.4 | -162.5 | -20.0 | -708.9 | -0.4 | -0.3 | 1.9 |
| **8. GDP** | **6.8** | **6.6** | **7.2** | **7.6** | **100.0** | **100.0** | **100.0** |
| **GVA at Basic Prices (Supply Side)** | | | | | | | |
| **1. Agriculture, forestry and fishing** | **1.7** | **4.2** | **-0.2** | **1.2** | **17.5** | **16.3** | **15.4** |
| **2. Industry** | **6.3** | **5.2** | **6.5** | **8.8** | **22.5** | **22.4** | **22.7** |
| *of which :* | | | | | | | |
| a) Mining and quarrying | 5.2 | 3.0 | 10.8 | 7.4 | 2.9 | 3.0 | 3.1 |
| b) Manufacturing | 6.6 | 5.6 | 5.5 | 9.3 | 17.4 | 17.1 | 17.5 |
| c) Electricity, gas, water supply & other utility services | 5.5 | 4.7 | 8.0 | 6.6 | 2.2 | 2.2 | 2.2 |
| **3. Services** | **8.0** | **7.3** | **9.4** | **8.2** | **60.0** | **61.3** | **61.9** |
| *of which :* | | | | | | | |
| a) Construction | 3.4 | 4.6 | 4.4 | 3.9 | 9.0 | 8.8 | 8.5 |
| b) Trade, hotels, transport, communication and services related to broadcasting | 9.1 | 7.8 | 9.8 | 9.0 | 18.4 | 18.9 | 19.2 |
| c) Financial, real estate & professional services | 10.1 | 10.1 | 10.6 | 10.3 | 20.3 | 21.0 | 21.6 |
| d) Public administration, defence and other services | 6.5 | 4.5 | 10.7 | 6.6 | 12.3 | 12.7 | 12.6 |
| **4. GVA at basic prices** | **6.5** | **6.3** | **7.1** | **7.2** | **100.0** | **100.0** | **100.0** |

**Source:** Central Statistics Office (CSO).

## APPENDIX TABLE 3: GROSS SAVINGS

(Per cent of GNDI)

| Item | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| **I. Gross Savings** | **33.8** | **33.0** | **32.3** | **32.3** |
| **1.1 Non-financial corporations** | **9.5** | **9.7** | **10.6** | **12.0** |
| 1.1.1 Public non-financial corporations | 1.4 | 1.2 | 1.1 | 0.9 |
| 1.1.2 Private non-financial corporations | 8.1 | 8.5 | 9.4 | 11.1 |
| **1.2 Financial corporations** | **3.0** | **3.0** | **2.6** | **2.6** |
| 1.2.1 Public financial corporations | 1.9 | 1.7 | 1.4 | 1.3 |
| 1.2.2 Private financial corporations | 1.2 | 1.2 | 1.1 | 1.3 |
| **1.3 General Government** | **-1.8** | **-1.6** | **-1.3** | **-1.0** |
| **1.4 Household sector** | **23.0** | **21.9** | **20.5** | **18.7** |
| 1.4.1 Net financial saving | 7.2 | 7.2 | 7.5* | 7.5* |
| *Memo: Gross financial saving* | *10.4* | *10.4* | *10.1** | *9.8** |
| 1.4.2 Saving in physical assets | 15.5 | 14.4 | 12.7 | 10.8 |
| 1.4.3 Saving in the form of valuables | 0.4 | 0.4 | 0.3 | 0.3 |

*: As per the latest estimates of the Reserve Bank, household financial saving for 2013-14 and 2014-15 are 7.4 per cent and 7.5 per cent of gross national disposable income (GNDI) and gross financial saving for the same period are 10.4 per cent and 10.0 per cent, respectively.

**Note:** Net financial saving of the household sector is obtained as the difference between gross financial savings and financial liabilities during the year.

**Source:** CSO.

## APPENDIX TABLE 4: INFLATION, MONEY AND CREDIT

(Per cent)

| Inflation | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Consumer Price Index (All India)* | Rural | | | Urban | | | Combined | | |
| | 2013-14 | 2014-15 | 2015-16 | 2013-14 | 2014-15 | 2015-16 | 2013-14 | 2014-15 | 2015-16 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| **General Index (All Groups)** | **9.6** | **6.2** | **5.6** | **9.1** | **5.5** | **4.1** | **9.4** | **5.8** | **4.9** |
| Food and beverages | 11.5 | 6.6 | 5.4 | 12.6 | 6.4 | 4.6 | 11.9 | 6.5 | 5.1 |
| Housing | ... | ... | ... | 7.0 | 5.9 | 4.9 | 7.0 | 5.9 | 4.9 |
| Fuel and light | 8.2 | 5.1 | 6.8 | 6.9 | 2.7 | 2.7 | 7.7 | 4.2 | 5.3 |
| Miscellaneous | 6.3 | 4.9 | 4.7 | 6.6 | 4.2 | 2.8 | 6.5 | 4.6 | 3.7 |
| Excluding Food and Fuel | 7.2 | 5.8 | 5.5 | 7.1 | 5.1 | 3.9 | 7.2 | 5.4 | 4.6 |
| ***Other Price Indices*** | **2007-08** | **2008-09** | **2009-10** | **2010-11** | **2011-12** | **2012-13** | **2013-14** | **2014-15** | **2015-16** |
| **1. Wholesale Price Index (2004-05=100)** | | | | | | | | | |
| **All Commodities** | **4.7** | **8.1** | **3.8** | **9.6** | **8.9** | **7.4** | **6.0** | **2.0** | **-2.5** |
| Primary Articles | 8.3 | 11.0 | 12.7 | 17.7 | 9.8 | 9.8 | 9.8 | 3.0 | 0.3 |
| *of which :* Food Articles | 7.0 | 9.1 | 15.3 | 15.6 | 7.3 | 9.9 | 12.8 | 6.1 | 3.4 |
| Fuel and Power | 0.0 | 11.6 | -2.1 | 12.3 | 14.0 | 10.3 | 10.2 | -0.9 | -11.7 |
| Manufactured Products | 4.8 | 6.2 | 2.2 | 5.7 | 7.3 | 5.4 | 3.0 | 2.4 | -1.1 |
| Non-Food Manufactured Products | 5.0 | 5.7 | 0.2 | 6.1 | 7.3 | 4.9 | 2.9 | 2.4 | -1.5 |
| **2. CPI- Industrial Workers (IW) (2001=100)** | **6.2** | **9.1** | **12.4** | **10.4** | **8.4** | **10.4** | **9.7** | **6.3** | **5.6** |
| *of which :* CPI- IW Food | 8.4 | 12.3 | 15.2 | 9.9 | 6.3 | 11.9 | 12.3 | 6.5 | 6.1 |
| **3. CPI- Agricultural Labourers (1986-87=100)** | **7.5** | **10.2** | **13.9** | **10.0** | **8.2** | **10.0** | **11.6** | **6.6** | **4.4** |
| **4. CPI- Rural Labourers (1986-87=100)** | **7.2** | **10.2** | **13.8** | **10.0** | **8.3** | **10.2** | **11.5** | **6.9** | **4.6** |
| **Money and Credit** | | | | | | | | | |
| | **2007-08** | **2008-09** | **2009-10** | **2010-11** | **2011-12** | **2012-13** | **2013-14** | **2014-15** | **2015-16** |
| **Reserve Money** | **31.0** | **6.4** | **17.0** | **19.1** | **3.6** | **6.2** | **14.4** | **11.3** | **13.1** |
| Currency in Circulation | 17.2 | 17.0 | 15.7 | 18.8 | 12.4 | 11.6 | 9.2 | 11.3 | 14.9 |
| Bankers' Deposits with RBI | 66.5 | -11.3 | 21.0 | 20.2 | -15.9 | -10.0 | 34.0 | 8.3 | 7.8 |
| **Narrow Money ($M_1$)** | **19.4** | **9.0** | **18.2** | **10.0** | **6.0** | **9.2** | **8.5** | **11.3** | **13.5** |
| **Broad Money ($M_3$)** | **21.4** | **19.3** | **16.9** | **16.1** | **13.5** | **13.6** | **13.4** | **10.9** | **10.1** |
| Currency-Deposit Ratio | 16.5 | 16.1 | 15.9 | 16.3 | 16.1 | 15.7 | 15.1 | 15.2 | 16.0 |
| Money Multiplier** | 4.3 | 4.9 | 4.8 | 4.7 | 5.2 | 5.5 | 5.5 | 5.5 | 5.3 |
| GDP/M3**$ | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 |
| **Scheduled Commercial Banks** | | | | | | | | | |
| Aggregate Deposits | 22.4 | 19.9 | 17.2 | 15.9 | 13.5 | 14.2 | 14.1 | 10.7 | 9.3 |
| Bank Credit | 22.3 | 17.5 | 16.9 | 21.5 | 17.0 | 14.1 | 13.9 | 9.0 | 10.9 |
| Non-food Credit | 23.0 | 17.8 | 17.1 | 21.3 | 16.8 | 14.0 | 14.2 | 9.3 | 10.9 |
| Credit-Deposit Ratio | 73.9 | 72.4 | 72.2 | 75.7 | 78.0 | 77.9 | 77.8 | 76.6 | 77.7 |
| Credit-GDP Ratio | 47.4 | 49.3 | 50.1 | 50.6 | 52.8 | 52.9 | 53.2 | 52.3 | 53.4 |

…: CPI Rural for Housing is not compiled.
*: Base 2012=100 **: Ratio. $: GDP data from 2011-12 onwards are based on new series *i.e.,* base: 2011-12.
**Note:** Data refer to y-o-y change in per cent unless specified otherwise.

## APPENDIX TABLE 5: CAPITAL MARKET - PRIMARY AND SECONDARY

(Amount in ₹ billion)

| Item | 2014-15 | | 2015-16 | |
|---|---|---|---|---|
| | No of Issues | Amount | No of Issues | Amount |
| 1 | 2 | 3 | 4 | 5 |
| **I. PRIMARY MARKET** | | | | |
| **A. Prospectus and Rights Issues** | | | | |
| **1. Private Sector (a+b)** | **86** | **170.6** | **96** | **267.2** |
| a) Financial | 29 | 83.6 | 12 | 29.4 |
| b) Non-Financial | 57 | 87.0 | 84 | 237.8 |
| **2. Public Sector (a+b+c)** | **3** | **24.5** | **11** | **311.0** |
| a) Public Sector Undertakings | … | … | 1 | 7.0 |
| b) Government Companies | … | … | 2 | 133.0 |
| c) Banks/Financial Institutions | 3 | 24.5 | 8 | 171.0 |
| **3. Total (1+2, i+ii, a+b)** | **89** | **195.1** | **107** | **578.2** |
| *Instrument Type* | | | | |
| (i) Equity | 64 | 97.9 | 87 | 240.0 |
| (ii) Debt | 25 | 97.1 | 20 | 338.2 |
| *Issuer Type* | | | | |
| (a) IPOs | 46 | 30.4 | 73 | 142.6 |
| (b) Listed | 43 | 164.6 | 34 | 435.7 |
| **B. Euro Issues (ADRs and GDRs)** | **2** | **95.9** | **…** | **…** |
| **C. Private Placement&** | | | | |
| **1. Private Sector (a+b)** | **2,436** | **2,770.2** | **2,488** | **2,578.1** |
| a) Financial | 1,901 | 1,838.4 | 1,991 | 1,842.1 |
| b) Non-Financial | 535 | 931.8 | 497 | 736.0 |
| **2. Public Sector (a+b)** | **220** | **1,694.7** | **185** | **1,505.9** |
| a) Financial | 135 | 1,349.8 | 111 | 1,146.7 |
| b) Non-Financial | 85 | 344.8 | 74 | 359.2 |
| **3. Total (1+2, i+ii)** | **2,656** | **4,464.8** | **2,673** | **4,084.0** |
| (i) Equity | 44 | 287.5 | 21 | 194.2 |
| (ii) Debt | 2,612 | 4,177.4 | 2,652 | 3,889.8 |
| **D. Qualified Institutional Placement$** | **51** | **291.0** | **24** | **145.9** |
| **E. Mutual Funds Mobilisation (Net)#** | | **1,032.9** | | **1,341.8** |
| 1. Private Sector | | 1,037.0 | | 913.9 |
| 2. Public Sector | | (4.1) | | 427.9 |
| **II. SECONDARY MARKET** | | | | |
| **BSE** | | | | |
| BSE Sensex: End-Period | | 27,957.5 | | 25,341.9 |
| Period Average | | 26,556.5 | | 26,322.1 |
| Price Earning Ratio@ | | 19.1 | | 19.3 |
| Market Capitalisation to GDP ratio (%) | | 81.3 | | 69.8 |
| Turnover Cash Segment | | 8,548.4 | | 7,400.9 |
| Turnover Derivatives Segment | | 203,627.4 | | 44,750.1 |
| **NSE** | | | | |
| S&P CNX Nifty: End-Period | | 8,491.0 | | 7,738.4 |
| Period Average | | 7,967.3 | | 7,983.8 |
| Price Earning Ratio@ | | 22.7 | | 20.9 |
| Market Capitalisation to GDP ratio (%) | | 79.5 | | 68.6 |
| Turnover Cash Segment | | 43,296.6 | | 42,369.8 |
| Turnover Derivatives Segment | | 556,064.5 | | 648,258.3 |

…: Nil &: Provisional (for 2015-16). $: Includes resource mobilisation from Institutional Placement Programme also.
#: Net of redemptions. @: As at end of the period. Figures in parentheses imply negative value.
**Source:** SEBI, NSE, BSE, CSO and various merchant bankers.

## APPENDIX TABLE 6: KEY FISCAL INDICATORS

(As per cent to GDP)

| Year | Primary Deficit | Revenue Deficit | Primary Revenue Deficit | Gross Fiscal Deficit | Outstanding Liabilities@ | Outstanding Liabilities$ |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **Centre** | | | | | | |
| 1990-91 | 3.9 | 3.2 | -0.5 | 7.6 | 53.7 | 59.6 |
| 1995-96 | 0.8 | 2.4 | -1.7 | 4.9 | 49.4 | 57.3 |
| 2000-01 | 0.9 | 3.9 | -0.6 | 5.5 | 53.9 | 59.6 |
| 2007-08 | -0.9 | 1.1 | -2.4 | 2.5 | 56.9 | 58.9 |
| 2008-09 | 2.6 | 4.5 | 1.1 | 6.0 | 56.1 | 58.6 |
| 2009-10 | 3.2 | 5.2 | 1.9 | 6.5 | 54.5 | 56.3 |
| 2010-11 | 1.8 | 3.2 | 0.2 | 4.8 | 50.6 | 52.1 |
| 2011-12 | 2.8 | 4.5 | 1.4 | 5.9 | 51.7 | 53.5 |
| 2012-13 | 1.8 | 3.7 | 0.5 | 4.9 | 51.0 | 52.5 |
| 2013-14 | 1.1 | 3.2 | -0.2 | 4.5 | 50.3 | 52.0 |
| 2014-15 | 0.9 | 2.9 | -0.3 | 4.1 | 50.0 | 51.3 |
| 2015-16 (RE) | 0.7 | 2.5 | -0.7 | 3.9 | 50.8 | 52.1 |
| 2015-16 (PA) | 0.7 | 2.5 | -0.7 | 3.9 | … | … |
| 2016-17 (BE) | 0.3 | 2.3 | -0.9 | 3.5 | 49.4 | 50.6 |
| **States*** | | | | | | |
| 1990-91 | 1.7 | 0.9 | -0.6 | 3.2 | 21.9 | 21.9 |
| 1995-96 | 0.7 | 0.7 | -1.1 | 2.5 | 20.3 | 20.3 |
| 2000-01 | 1.7 | 2.5 | 0.2 | 4.0 | 27.3 | 27.3 |
| 2007-08 | -0.5 | -0.9 | -2.9 | 1.5 | 26.6 | 26.6 |
| 2008-09 | 0.6 | -0.2 | -2.1 | 2.4 | 26.1 | 26.1 |
| 2009-10 | 1.2 | 0.5 | -1.3 | 2.9 | 25.5 | 25.5 |
| 2010-11 | 0.5 | 0.0 | -1.6 | 2.1 | 23.5 | 23.5 |
| 2011-12 | 0.4 | -0.3 | -1.8 | 1.9 | 22.8 | 22.8 |
| 2012-13 | 0.5 | -0.2 | -1.7 | 2.0 | 22.2 | 22.2 |
| 2013-14 | 0.7 | 0.1 | -1.4 | 2.2 | 21.9 | 21.9 |
| 2014-15 | 1.0 | 0.3 | -1.2 | 2.4 | 23.6 | 23.6 |
| 2015-16 (RE) | 1.8 | 0.1 | -1.4 | 3.3 | 24.8 | 24.8 |
| 2016-17 (BE) | 1.2 | -0.1 | -1.7 | 2.8 | 25.1 | 25.1 |
| **Combined*** | | | | | | |
| 1990-91 | 4.9 | 4.1 | -0.2 | 9.1 | 62.9 | 68.9 |
| 1995-96 | 1.5 | 3.1 | -1.7 | 6.3 | 59.4 | 67.3 |
| 2000-01 | 3.5 | 6.4 | 0.6 | 9.2 | 68.2 | 73.9 |
| 2007-08 | -1.2 | 0.2 | -5.0 | 4.0 | 69.5 | 71.4 |
| 2008-09 | 3.3 | 4.3 | -0.8 | 8.3 | 69.7 | 72.2 |
| 2009-10 | 4.5 | 5.7 | 2.4 | 9.3 | 68.8 | 70.6 |
| 2010-11 | 2.4 | 3.2 | -1.3 | 6.9 | 64.0 | 65.6 |
| 2011-12 | 3.3 | 4.2 | -1.2 | 7.8 | 65.6 | 67.4 |
| 2012-13 | 2.3 | 3.5 | -1.1 | 6.9 | 65.0 | 66.6 |
| 2013-14 | 1.9 | 3.3 | -1.5 | 6.7 | 65.1 | 66.8 |
| 2014-15 | 1.9 | 3.2 | -1.4 | 6.5 | 67.1 | 68.4 |
| 2015-16 (RE) | 2.5 | 2.6 | -2.1 | 7.2 | 69.1 | 70.4 |
| 2016-17 (BE) | 1.5 | 2.2 | -2.6 | 6.3 | 68.5 | 69.7 |

... : Not Available    RE: Revised Estimates    PA: Provisional Accounts    BE: Budget Estimates

@ : Includes external liabilities of the Centre calculated at historical exchange rates.

$ : Includes external liabilities of the Centre calculated at current exchange rates.

* : Data from 2014-15 onwards are provisional and pertain to budgets of 26 States out of which 3 are Vote on Account.

**Note :** 1. Data on combined deficit/liabilities indicators are net of inter-governmental transactions between the Centre and the State governments *viz.*, (a) NSSF investment in State governments special securities (b) Loans and advance by the Centre to States and (c) State governments' investment in Centre's treasury bills.

2. Negative sign (-) indicates surplus in deficit indicators.
3. GDP data from 2011-12 onwards are based on new base 2011-12.

**Source :** Budget documents of the central and state governments.

## APPENDIX TABLE 7: COMBINED RECEIPTS AND DISBURSEMENTS OF THE CENTRAL AND STATE GOVERNMENTS

(Amount in ₹ billion)

| Item | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 (RE) | 2016-17 (BE) |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **1 Total Disbursements** | **24,217.7** | **26,949.3** | **30,003.0** | **31,400.4** | **38,228.9** | **42,701.2** |
| 1.1 Developmental | 14,209.4 | 15,741.6 | 17,142.2 | 17,713.7 | 22,768.2 | 24,798.7 |
| 1.1.1 Revenue | 11,394.6 | 12,807.1 | 13,944.3 | 14,012.4 | 17,308.0 | 19,276.2 |
| 1.1.2 Capital | 2,163.4 | 2,446.1 | 2,785.1 | 3,147.1 | 4,272.1 | 4,859.1 |
| 1.1.3 Loans | 651.3 | 488.4 | 412.9 | 554.2 | 1,188.0 | 663.4 |
| 1.2 Non-Developmental | 9,695.9 | 10,850.5 | 12,427.8 | 13,240.1 | 14,943.4 | 17,319.5 |
| 1.2.1 Revenue | 8,923.6 | 9,991.4 | 11,413.7 | 12,280.5 | 13,742.6 | 15,947.5 |
| 1.2.1.1 Interest Payments | 4,000.0 | 4,543.1 | 5,342.3 | 5,741.8 | 6,424.4 | 7,274.6 |
| 1.2.2 Capital | 754.8 | 837.1 | 990.4 | 933.8 | 1,159.1 | 1,339.5 |
| 1.2.3 Loans | 17.5 | 21.9 | 23.8 | 25.8 | 41.7 | 32.5 |
| 1.3 Others | 312.4 | 357.2 | 432.9 | 446.6 | 517.3 | 583.1 |
| **2 Total Receipts** | **24,540.6** | **27,690.3** | **30,013.7** | **30,900.6** | **38,262.6** | **42,648.7** |
| 2.1 Revenue Receipts | 16,926.8 | 19,716.2 | 22,114.8 | 22,753.5 | 28,000.3 | 32,475.9 |
| 2.1.1 Tax Receipts | 14,427.5 | 16,879.6 | 18,465.5 | 19,594.4 | 22,968.0 | 25,844.3 |
| 2.1.1.1 Taxes on commodities and services | 8,745.6 | 10,385.9 | 11,257.8 | 11,685.0 | 14,250.5 | 16,096.8 |
| 2.1.1.2 Taxes on Income and Property | 5,654.1 | 6,462.7 | 7,176.3 | 7,877.3 | 8,678.0 | 9,706.3 |
| 2.1.1.3 Taxes of Union Territories (Without Legislature) | 27.9 | 30.9 | 31.3 | 32.0 | 39.5 | 41.2 |
| 2.1.2 Non-Tax Receipts | 2,499.3 | 2,836.6 | 3,649.3 | 3,159.1 | 5,032.3 | 6,631.6 |
| 2.1.2.1 Interest Receipts | 288.7 | 355.4 | 401.6 | 389.9 | 327.5 | 379.2 |
| 2.2 Non-debt Capital Receipts | 441.2 | 389.2 | 391.1 | 559.9 | 435.4 | 737.8 |
| 2.2.1 Recovery of Loans & Advances | 253.7 | 129.3 | 93.8 | 172.5 | 171.8 | 171.3 |
| 2.2.2 Disinvestment proceeds | 187.5 | 259.9 | 297.3 | 387.5 | 263.6 | 566.5 |
| **3 Gross Fiscal Deficit [ 1 - ( 2.1 + 2.2 ) ]** | **6,849.7** | **6,844.0** | **7,497.1** | **8,087.0** | **9,793.1** | **9,487.4** |
| **3A Sources of Financing: Institution-wise** | | | | | | |
| 3A.1 Domestic Financing | 6,725.2 | 6,771.9 | 7,424.2 | 7,957.7 | 9,678.2 | 9,296.5 |
| 3A.1.1 Net Bank Credit to Government | 3,898.3 | 3,352.8 | 3,358.6 | -374.8 | 2,310.9 | ... |
| 3A.1.1.1 Net RBI Credit to Government | 1,391.8 | 548.4 | 1,081.3 | -3,341.9 | 604.7 | ... |
| 3A.1.2 Non-Bank Credit to Government | 2,826.9 | 3,419.1 | 4,065.6 | 8,332.4 | 7,367.4 | ... |
| 3A.2 External Financing | 124.5 | 72.0 | 72.9 | 129.3 | 114.8 | 190.9 |
| **3B Sources of Financing: Instrument-wise** | | | | | | |
| 3B.1 Domestic Financing | 6,725.2 | 6,771.9 | 7,424.2 | 7,957.7 | 9,678.2 | 9,296.5 |
| 3B.1.1 Market Borrowings (net) | 6,195.1 | 6,536.9 | 6,392.0 | 6,383.9 | 7,286.3 | 7,506.4 |
| 3B.1.2 Small Savings (net) | 190.9 | -85.7 | -142.8 | -565.8 | -809.6 | -140.8 |
| 3B.1.3 State Provident Funds (net) | 334.3 | 329.9 | 312.9 | 304.3 | 334.8 | 362.1 |
| 3B.1.4 Reserve Funds | 178.5 | -4.1 | 34.6 | 51.1 | -5.0 | -80.0 |
| 3B.1.5 Deposits and Advances | 122.1 | 27.2 | 255.4 | 275.5 | 304.5 | 239.9 |
| 3B.1.6 Cash Balances | -322.9 | -741.0 | -10.7 | 499.8 | -33.7 | 52.5 |
| 3B.1.7 Others | 27.2 | 708.6 | 582.8 | 1,008.9 | 2,601.1 | 1,356.4 |
| 3B.2 External Financing | 124.5 | 72.0 | 72.9 | 129.3 | 114.8 | 190.9 |
| *4 Total Disbursements as per cent of GDP* | *27.7* | *27.1* | *26.6* | *25.1* | *28.2* | *28.3* |
| *5 Total Receipts as per cent of GDP* | *28.1* | *27.8* | *26.6* | *24.7* | *28.2* | *28.3* |
| *6 Revenue Receipts as per cent of GDP* | *19.4* | *19.8* | *19.6* | *18.2* | *20.6* | *21.6* |
| *7 Tax Receipts as per cent of GDP* | *16.5* | *17.0* | *16.4* | *15.7* | *16.9* | *17.2* |
| *8 Gross Fiscal Deficit as per cent of GDP* | *7.8* | *6.9* | *6.7* | *6.5* | *7.2* | *6.3* |

...: Not Available. RE: Revised Estimates. BE: Budget Estimates.

**Note:** 1. Data from 2014-15 onwards are provisional and pertain to budgets of 26 states out of which 3 are Vote on Account.
2. GDP data from 2011-12 onwards are based on new base 2011-12.

**Source:** Budget documents of central and state governments.

## APPENDIX TABLE 8: INDIA'S OVERALL BALANCE OF PAYMENTS

(US $ million)

| | 2011-12 | 2012-13 | 2013-14 PR | 2014-15 PR | 2015-16 P |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| **A. CURRENT ACCOUNT** | | | | | |
| 1 Exports, f.o.b. | 309,774 | 306,581 | 318,607 | 316,545 | 266,365 |
| 2 Imports, c.i.f. | 499,533 | 502,237 | 466,216 | 461,484 | 396,444 |
| 3 Trade Balance | -189,759 | -195,656 | -147,609 | -144,940 | -130,079 |
| 4 Invisibles, Net | 111,604 | 107,493 | 115,313 | 118,081 | 107,928 |
| a) 'Non-Factor' Services of which : | 64,098 | 64,915 | 73,066 | 76,529 | 69,676 |
| Software Services | 60,957 | 63,504 | 67,002 | 70,400 | 71,454 |
| b) Income | -15,988 | -21,455 | -23,028 | -24,140 | -24,375 |
| c) Private Transfers | 63,469 | 64,342 | 65,481 | 66,264 | 63,139 |
| 5 Current Account Balance | -78,155 | -88,163 | -32,296 | -26,859 | -22,151 |
| **B. CAPITAL ACCOUNT** | | | | | |
| 1 Foreign Investment, Net (a+b) | 39,231 | 46,711 | 26,386 | 73,456 | 31,891 |
| a) Direct Investment | 22,061 | 19,819 | 21,564 | 31,251 | 36,021 |
| b) Portfolio Investment | 17,170 | 26,891 | 4,822 | 42,205 | -4,130 |
| 2 External Assistance, Net | 2,296 | 982 | 1,032 | 1,725 | 1,505 |
| 3 Commercial Borrowings, Net | 10,344 | 8,485 | 11,777 | 1,570 | -4,529 |
| 4 Short Term Credit, Net | 6,668 | 21,657 | -5,044 | -111 | -1,610 |
| 5 Banking Capital of which : | 16,226 | 16,570 | 25,449 | 11,618 | 10,630 |
| NRI Deposits, Net | 11,918 | 14,842 | 38,892 | 14,057 | 16,052 |
| 6 Rupee Debt Service | -79 | -58 | -52 | -81 | -73 |
| 7 Other Capital, Net* | -6,929 | -5,047 | -10,761 | 1,109 | 3,315 |
| 8 Total Capital Account | 67,755 | 89,300 | 48,787 | 89,286 | 41,128 |
| **C. Errors & Omissions** | **-2,432** | **2,689** | **-983** | **-1,021** | **-1,073** |
| **D. Overall Balance [A(5)+B(8)+C]** | **-12,831** | **3,826** | **15,508** | **61,406** | **17,905** |
| **E. Monetary Movements (F+G)** | **12,831** | **-3,826** | **-15,508** | **-61,406** | **-17,905** |
| **F. IMF, Net** | | | | | |
| **G. Reserves and Monetary Gold (Increase -, Decrease +) of which : SDR allocation** | **12,831** | **-3,826** | **-15,508** | **-61,406** | **-17,905** |
| Memo: As a ratio to GDP | | | | | |
| 1 Trade Balance | -10.4 | -10.7 | -7.9 | -7.1 | -6.3 |
| 2 Net Services | 3.5 | 3.5 | 3.9 | 3.7 | 3.4 |
| 3 Net Income | -0.9 | -1.2 | -1.2 | -1.2 | -1.2 |
| 4 Current Account Balance | -4.2 | -4.8 | -1.7 | -1.3 | -1.1 |
| 5 Capital Net (Excld. changes in reserves) | 3.7 | 4.9 | 2.6 | 4.4 | 2.0 |
| 6 Foreign Investment, Net | 2.2 | 2.6 | 1.4 | 3.6 | 1.5 |

PR: Partially Revised. P: Provisional.

* : Includes delayed export receipts, advance payments against imports, net funds held abroad and advances received pending issue of shares under FDI.

**Note**: 1. Gold and silver brought by returning Indians have been included under imports, with a contra entry in private transfer receipts.
2. Data on exports and imports differ from those given by DGCI&S on account of differences in coverage, valuation and timing.

## APPENDIX TABLE 9: FOREIGN DIRECT INVESTMENT FLOWS TO INDIA: COUNTRY-WISE AND INDUSTRY-WISE

(US $ million)

| Source/Industry | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 P |
|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 |
| **Total FDI** | **23,473** | **18,286** | **16,054** | **24,748** | **36,068** |
| **Country-wise Inflows** | | | | | |
| Singapore | 3,306 | 1,605 | 4,415 | 5,137 | 12,479 |
| Mauritius | 8,142 | 8,059 | 3,695 | 5,878 | 7,452 |
| U.S.A. | 994 | 478 | 617 | 1,981 | 4,124 |
| Netherlands | 1,289 | 1,700 | 1,157 | 2,154 | 2,330 |
| Japan | 2,089 | 1,340 | 1,795 | 2,019 | 1,818 |
| UAE | 346 | 173 | 239 | 327 | 961 |
| Germany | 368 | 467 | 650 | 942 | 927 |
| United Kingdom | 2,760 | 1,022 | 111 | 1,891 | 842 |
| Luxembourg | 89 | 34 | 539 | 204 | 784 |
| Cyprus | 1,568 | 415 | 546 | 737 | 488 |
| China | 73 | 148 | 121 | 505 | 461 |
| France | 589 | 547 | 229 | 347 | 392 |
| Hongkong | 262 | 66 | 85 | 325 | 344 |
| South Korea | 226 | 224 | 189 | 138 | 241 |
| Switzerland | 211 | 268 | 356 | 292 | 195 |
| Spain | 251 | 348 | 181 | 401 | 141 |
| Malaysia | 18 | 238 | 113 | 219 | 73 |
| Others | 890 | 1,156 | 1,015 | 1,251 | 2,016 |
| **Sector-wise Inflows** | | | | | |
| Manufacturing | 9,337 | 6,528 | 6,381 | 9,613 | 8,439 |
| Computer Services | 736 | 247 | 934 | 2,154 | 4,319 |
| Construction | 2,634 | 1,319 | 1,276 | 1,640 | 4,141 |
| Retail & Wholesale Trade | 567 | 551 | 1,139 | 2,551 | 3,998 |
| Financial Services | 2,603 | 2,760 | 1,026 | 3,075 | 3,547 |
| Business Services | 1,590 | 643 | 521 | 680 | 3,031 |
| Communication Services | 1,458 | 92 | 1,256 | 1,075 | 2,638 |
| Electricity and other Energy Generation, Distribution & Transmission | 1,395 | 1,653 | 1,284 | 1,284 | 1,364 |
| Transportation | 410 | 213 | 311 | 482 | 1,363 |
| Miscellaneous Services | 801 | 552 | 941 | 586 | 1,022 |
| Restaurants and Hotels | 870 | 3,129 | 361 | 686 | 889 |
| Mining | 204 | 69 | 24 | 129 | 596 |
| Education, Research & Development | 103 | 150 | 107 | 131 | 394 |
| Real Estate Activities | 340 | 197 | 201 | 202 | 112 |
| Trading | 6 | 140 | 0 | 228 | 0 |
| Others | 419 | 43 | 292 | 232 | 215 |

P: Provisional.
**Note :** Includes FDI through SIA/FIPB and RBI routes only.