RESERVE BANK OF INDIA

ANNUAL REPORT

2019-20

Report of the Central Board of Directors on the working of the Reserve Bank of India for the year ended June 30, 2020 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 2019-20

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

गवर्नर
GOVERNOR

LETTER OF TRANSMITTAL

Ref. No. SYD.177/02.16.001/2020-21

August 21, 2020
Bhadrapada 30, 1942 (Saka)

The Finance Secretary
Government of India
Ministry of Finance
New Delhi - 110 001

Dear Finance Secretary,

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, 2020 certified by the Bank's Auditors and signed by the Chief General Manager-in-Charge, the Deputy Governors and I; and

(ii) Two copies of the Annual Report of the Central Board on the working of the Bank during the year ended June 30, 2020.

Sincerely,

21.8.20

Shaktikanta Das

केन्द्रीय कार्यालय भवन, शहीद भगतसिंह मार्ग, मुम्बई - 400 001, भारत
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CENTRAL BOARD / LOCAL BOARDS

GOVERNOR

Shaktikanta Das

DEPUTY GOVERNORS

B. P. Kanungo

Mahesh Kumar Jain

Michael Debabrata Patra

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

Prasanna Kumar Mohanty

Dilip S. Shanghvi

Revathy Iyer

Sachin Chaturvedi

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

Natarajan Chandrasekaran

Ashok Gulati

Manish Sabharwal

Satish Kashinath Marathe

Swaminathan Gurumurthy

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

Debasish Panda

Tarun Bajaj

MEMBERS OF LOCAL BOARDS

WESTERN AREA

Dilip S. Shanghvi

Vallabh Roopchand Bhanshali

EASTERN AREA

Sachin Chaturvedi

Sunil Mitra

NORTHERN AREA

Revathy Iyer

Raghvendra Narayan Dubey

SOUTHERN AREA

Prasanna Kumar Mohanty

(Position as on August 17, 2020)

PRINCIPAL OFFICERS

(As on August 17, 2020)

EXECUTIVE DIRECTORS	M. Rajeshwar Rao
	Lily Vadera
	Rabi N. Mishra
	Nanda S. Dave
	Anil K. Sharma
	S. C. Murmu
	T. Rabi Sankar
	P. Vijaya Kumar
	Indrani Banerjee
	O. P. Mall
	Mridul K. Saggar
	Sudha Balakrishnan (Chief Financial Officer)
CENTRAL OFFICE	
Central Vigilance Cell	Sadhana Varma, Chief General Manager & CVO
Consumer Education and Protection Department	Ranjana Sahajwala, Chief General Manager
Corporate Strategy and Budget Department	H. N. Panda, Chief General Manager
Department of Communication	Yogesh K. Dayal, Chief General Manager
Department of Currency Management	Ishan Shukla, Chief General Manager
Department of Economic and Policy Research	Deba Prasad Rath, Officer-in-Charge
Department of External Investments and Operations	Usha Janakiraman, Chief General Manager-in-Charge
Department of Government and Bank Accounts	Nirmal Chand, Chief General Manager-in-Charge
Department of Information Technology	Deepak Kumar, Chief General Manager-in-Charge
Department of Payment and Settlement Systems	P. Vasudevan, Chief General Manager
Department of Regulation	Saurav Sinha, Chief General Manager-in-Charge
Department of Statistics and Information Management	A. R. Joshi, Officer-in-Charge
Department of Supervision	J. K. Dash, Chief General Manager-in-Charge
Enforcement Department	R. Subramanian, Chief General Manager-in-Charge
Financial Inclusion and Development Department	G. P. Borah, Chief General Manager-in-Charge
Financial Markets Operations Department	R. S. Ratho, Chief General Manager
Financial Markets Regulation Department	Dimple Bhandia, General Manager-in-Charge
Financial Stability Unit	R. Gurumurthy, Chief General Manager
Foreign Exchange Department	Ajay Kumar Misra, Chief General Manager-in-Charge
Human Resource Management Department	Vivek Deep, Chief General Manager-in-Charge
Inspection Department	R. L. Sharma, Chief General Manager
Internal Debt Management Department	T. K. Rajan, Chief General Manager
International Department	Mohua Roy, Adviser
Legal Department	A. Unnikrishnan, Legal Adviser & Officer-in-Charge
Monetary Policy Department	Rajiv Ranjan, Adviser-in-Charge
Premises Department	Ashok Kumar, Chief General Manager
Rajbhasha Department	Sadhana Varma, Chief General Manager
Risk Monitoring Department	Gunveer Singh, Chief General Manager
Secretary's Department	Aviral Jain, Chief General Manager & Secretary
COLLEGES	**PRINCIPALS**
College of Agricultural Banking, Pune	M. Sarkar Deb
Reserve Bank Staff College, Chennai	R. Kesavan
OFFICES	**REGIONAL DIRECTORS**
Chennai	S. M. Narasimha Swamy
Kolkata	Susobhan Sinha
Mumbai	Ajay Michyari
New Delhi	Ajay Kumar
BRANCHES	
Ahmedabad	S. K. Panigrahy
Bengaluru	Jose J. Kattoor
Bhopal	Vivek Aggarwal
Bhubaneswar	M. K. Mall
Chandigarh	J. K. Pandey
Dehradun	Rajesh Kumar
Guwahati	Manoranjan Dash
Hyderabad	Subrata Das
Jaipur	Arun Kumar Singh
Jammu	Thomas Mathew
Kanpur	Tuli Roy
Lucknow	R. L. K. Rao
Patna	Devesh Lal
Raipur	A. Sivagami
Thiruvananthapuram	Reeny Ajith
	OFFICERS-IN-CHARGE
Agartala	Tamal Biswas, General Manager (O-i-C)
Aizawl	Mary Lianlunkim Deng, General Manager (O-i-C)
Belapur	K. Nikhila, Chief General Manager
Gangtok	R. V. Sangvai, General Manager (O-i-C)
Imphal	Mary Lawm Ngaih Ching Gwite, General Manager (O-i-C)
Kochi	K. P. Patnaik, Chief General Manager
Nagpur	P. S. Venkateswaran, General Manager-in-Charge
Panaji	N. J. Nampoothiri, General Manager (O-i-C)
Ranchi	Sanjiv Dayal, General Manager (O-i-C)
Shillong	Anurag Asthana, General Manager (O-i-C)
Shimla	K. C. Anand, General Manager (O-i-C)
Srinagar	Ashok Kumar, Manager

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APPENDIX TABLES

SELECT ABBREVIATIONS

ADEPT	-	Automated Data Extraction Project
AePS	-	*Aadhar* Enabled Payment System
ALM	-	Asset-Liability Management
AMRMS	-	Audit Management and Risk Monitoring System
AQI	-	Asset Quality Index
ARCs	-	Asset Reconstruction Companies
ARMS	-	Audit and Risk Management Sub-Committee
BBPOUs	-	Bharat Bill Payment Operating Units
BBPS	-	Bharat Bill Payment System
BCBS	-	Basel Committee on Banking Supervision
BCP	-	Business Continuity Plan
BCSBI	-	Banking Codes and Standards Board of India
BFS	-	Board for Financial Supervision
BHIM	-	Bharat Interface for Money
BIS	-	Bank for International Settlements
BNII	-	Bank-NBFC Intermediation Index
BPSS	-	Board for Regulation and Supervision of Payment and Settlement Systems
BRBNMPL	-	Bharatiya Reserve Bank Note Mudran Private Limited
BSBDAs	-	Basic Savings Bank Deposit Accounts
BSC	-	Building Sub-Committee
CA	-	Concurrent Audit
CAD	-	Current Account Deficit
CBDT	-	Central Board of Direct Taxes
CBIC	-	Central Board of Indirect Taxes and Customs
CCB	-	Committee of the Central Board
CCIL	-	Clearing Corporation of India Limited
CCM	-	Committee on Currency Movement
CCO	-	Chief Compliance Officer
CDDP	-	Committee on Deepening of Digital Payments
CDS	-	Credit Default Swaps
CFL	-	Centre for Financial Literacy
CFR	-	Central Fraud Registry
CGFMU	-	Credit Guarantee Fund for Micro Units
CGFS	-	Committee on the Global Financial System
CICs	-	Core Investment Companies
CIMS	-	Centralised Information Management System
CMBs	-	Cash Management Bills
CoCR	-	Charter of Customer Rights
CRAR	-	Capital to Risk Weighted Assets Ratio
CRE	-	Commercial Real Estate
CRILC	-	Central Repository of Information on Large Credits
CSAA	-	Control Self-Assessment Audit
CSF	-	Consolidated Sinking Fund
CSRC	-	China Securities Regulatory Commission
CTS	-	Cheque Truncation System
CVPS	-	Currency Verification and Processing System
CWBN	-	Cylinder Watermarked Bank Note
DFIs	-	Development Finance Institutions
DIAs	-	Deposit Insurance Agencies
DIF	-	Deposit Insurance Fund
DPI	-	Digital Payments Index

SELECT ABBREVIATIONS

ECCS	-	Express Cheque Clearing System
EDPMS	-	Export Data Processing and Monitoring System
ESG	-	Environment, Social and Governance
ESTER	-	Euro Short-Term Rate
ETCD	-	Exchange Traded Currency Derivatives
EWS	-	Early Warning Signals
FAR	-	Fully Accessible Route
FCI	-	Financial Conditions Index
FCP	-	Financial Consumer Protection
FEDAI	-	Foreign Exchange Dealers' Association of India
FEMA	-	Foreign Exchange Management Act
FFMCs	-	Full-Fledged Money Changers
FIAC	-	Financial Inclusion Advisory Committee
FinTech	-	Financial Technology
FLCs	-	Financial Literacy Centres
FLW	-	Financial Literacy Week
FMCBG	-	Finance Ministers and Central Bank Governors
FPC	-	Fair Practices Code
FPI	-	Foreign Portfolio Investment
FPO	-	Farmer Producer Organization
FPOs	-	Follow-on Public Offers
FSB	-	Financial Stability Board
FSDC	-	Financial Stability and Development Council
FSPs	-	Financial Service Providers
GAHs	-	Gilt Account Holders
GDAL	-	Granular Data Access Lab
GEM	-	Government e-Marketplace
GFC	-	Global Financial Crisis
GFCE	-	Government Final Consumption Expenditure
GFD	-	Gross Fiscal Deficit
GFXC	-	Global Foreign Exchange Committee
GNDI	-	Gross National Disposable Income
GRF	-	Guarantee Redemption Fund
GRIHA	-	Green Rating for Integrated Habitat Assessment
GRQ	-	General Review of Quotas
G-sec	-	Government Securities
GVCs	-	Global Value Chains
HFCs	-	Housing Finance Companies
HLCCSM	-	High Level Committee on Currency Storage and Movement
HRM-SC	-	Human Resource Management Sub-Committee
IBA	-	Indian Banks' Association
IBBI	-	Insolvency and Bankruptcy Board of India
IBC	-	Insolvency and Bankruptcy Code
IBORs	-	Inter-Bank Offered Rate
ICCOMS	-	Integrated Computerised Currency Operations and Management System
ICEGATE	-	Indian Customs Electronic Gateway
ICMTS	-	Integrated Compliance Management and Tracking System
ICSDs	-	International Central Securities Depositories
ICT	-	Information and Communication Technology

SELECT ABBREVIATIONS

IDPMS	-	Import Data Processing and Monitoring System
IFA	-	International Financial Architecture
IFSC	-	International Financial Services Centres
IGBC	-	Indian Green Building Council
IIFCL	-	India Infrastructure Finance Company Limited
IIP	-	Index of Industrial Production
IMFC	-	International Monetary and Financial Committee
IMPS	-	Immediate Payment Service
IMSS	-	Integrated Market Surveillance System
Ind AS	-	Indian Accounting Standards
InvITS	-	Infrastructure Investment Trusts
IOS	-	Industrial Outlook Survey
IPPB	-	India Post Payment Bank
IRRS	-	Integrated Rajbhasha Reporting System
IT-SC	-	Information Technology Sub-Committee
LAF	-	Liquidity Adjustment Facility
LBS	-	Lead Bank Scheme
LDOs	-	Lead District Officers
LEF	-	Large Exposures Framework
LEI	-	Legal Entity Identifier
LIBOR	-	London Inter-Bank Offered Rate
LTROs	-	Long Term Repo Operations
MANI	-	Mobile Aided Note Identifier
MCLR	-	Marginal Cost of Funds-based Lending Rate
MIS	-	Management Information System
MPC	-	Monetary Policy Committee
MSMEs	-	Micro, Small and Medium Enterprises
NACH	-	National Automated Clearing House
NBFC	-	Non-Banking Financial Company
NBFI	-	Non-Bank Financial Intermediation
NDDCs	-	Non-Deliverable Derivative Contracts
NEFT	-	National Electronic Funds Transfer
NETC	-	National Electronic Toll Collection
NGFS	-	Network for Greening the Financial System
NIIF	-	National Investment and Infrastructure Fund
NOC	-	Network Operation Centre
NPCI	-	National Payments Corporation of India
NSFI	-	National Strategy for Financial Inclusion
NSFR	-	Net Stable Funding Ratio
OBO	-	Office of Banking Ombudsmen
OLTAS	-	Online Tax Accounting System
OTC	-	Over The Counter
PADO	-	Public Administration, Defence and Other Services
PDIs	-	Perpetual Debt Instruments
PFCE	-	Private Final Consumption Expenditure
PIDF	-	Payments Infrastructure Development Fund
PoS	-	Point of Sale
PPIs	-	Prepaid Payment Instruments
PSLCs	-	Priority Sector Lending Certificates

SELECT ABBREVIATIONS

PSOs	-	Payment System Operators
QPM	-	Quarterly Projection Model
RAM-OR	-	Risk Assessment Methodology for Operational Risk
RBIA	-	Risk Based Internal Audit
RDBs	-	Rupee Denominated Bonds
ReBIT	-	Reserve Bank Information Technology Private Limited
RegTech	-	Regulatory Technology
ReITS	-	Real Estate Investment Trusts
RIDF	-	Rural Infrastructure Development Fund
RTGS	-	Real Time Gross Settlement
SAs	-	Statutory Auditors
SDLs	-	State Development Loans
SDMX	-	Statistical Data and Metadata eXchange
SEs	-	Supervised Entities
SFBs	-	Small Finance Banks
SFMS	-	Structured Financial Messaging System
SGBs	-	Sovereign Gold Bonds
SNRR	-	Special Non-Resident Rupee
SOFR	-	Secured Overnight Financing Rate
SONIA	-	Sterling Overnight Index Average
SPDs	-	Standalone Primary Dealers
SPMCIL	-	Security Printing and Minting Corporation of India Limited
SRB	-	Self-Regulatory Body
SRO	-	Self-Regulatory Organisation
SupTech	-	Supervisory Technology
SWIFT	-	Society for Worldwide Interbank Financial Telecommunication
TAT	-	Turn Around Time
T-Bills	-	Treasury Bills
TCFD	-	Task Force on Climate-related Financial Disclosures
TIN	-	Tax Information System
TLTROs	-	Targeted Long Term Repo Operations
TOLIC	-	Town Official Language Implementation Committee
TReDS	-	Trade Receivables Discounting System
UPI	-	Unified Payment Interface
V-CIP	-	Video-based Customer Identification Process
VRR	-	Voluntary Retention Route
WACR	-	Weighted Average Call Rate
WALR	-	Weighted Average Lending Rate
WAM	-	Weighted Average Maturity
WAS	-	Weighted Average Spread
WAY	-	Weighted Average Yield
WLA	-	White Label ATM
WMA	-	Ways and Means Advances
XBRL	-	eXtensible Business Reporting Language

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

*For the Year July 1, 2019 to June 30, 2020**

PART ONE: THE ECONOMY - REVIEW AND PROSPECTS

I ASSESSMENT AND PROSPECTS

I.1 Well into the second quarter of 2020-21 (April-March), COVID-19 continues to stalk the earth, imprisoning close to 210 countries in its deadly embrace. In its wake, the pandemic leaves a trail of destruction – at the time of release of this Report, it had claimed 7.90 lakh lives, 73.59 lakh active infections and counting out of 2.25 crore confirmed cases worldwide (as on August 20, 2020), driven human societies into unfamiliar isolation, halted economic activity globally and extinguished jobs and incomes. At the first tentative signs of relief – 'green shoots' being the operative term – people fatigued by asphyxiating social distancing/masks/sanitisers and the 'lockdown syndrome' have unlocked in varying degrees, desperate to regain control over their lives and livelihood. In several countries, a renewed surge of infections and deaths has triggered re-clamping down of containment procedures. It is difficult to distinguish whether the first wave of virus has intensified or if a second wave has hit.

I.2 COVID-19 has also hit India hard. Until recently, six cities – Mumbai; Delhi; Ahmedabad; Chennai; Pune; and Kolkata – accounted for half of all reported cases. Over recent weeks, however, the curve has arched upwards in lower tier cities/towns and the virus is penetrating even further into the interior regions. Unlike peers, India had responded quickly and forcefully, with two months of nation-wide lockdown starting March 25. From the first case reported on January 30 and the first death on March 12, the movement was relatively moderate to a little less than 1000 confirmed cases and 19 deaths three days after the lockdown. By mid-May, the pandemic had taken hold; confirmed cases crossed 85,000 surpassing China. At the end of July when Unlock 3.0 was about to begin, confirmed cases were nudging 16.50 lakh, with 35,747 deaths, which have subsequently increased to 28.36 lakh and 53,866 deaths, respectively (as on August 20, 2020).

I.3 India's experience has also yielded hope and an innate belief in the unconquerable character of humanity and the institutions that serve it. Notwithstanding large gaps in health infrastructure, the death rate in India is one of the lowest in the world (1.9 per cent as against the world average of 3.5 per cent as on August 20, 2020). Testing, clinical management and hospital support are being ramped up. The recovery rate has crossed 70 per cent and is climbing. The challenges that face the country are to flatten the curve, restore employment, especially to displaced migrants, rebuild supply chains, repair and revive the stricken economy and return life to normalcy. There is a widespread recognition that only in close coordination among all stakeholders will the people of India be able to determine the

* 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 2020. 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.

shape of the recovery. While the path ahead is still shrouded with high uncertainty, sifting through the experience of the year gone by could fortify this resolve and marshal the grit and resources to deal with the challenges that confront us in 2020-21 and beyond over the medium-term.

Assessment of the 2019-20 Experience

I.4 Looking back, global developments in 2019 offer several pensive reflections that have implications for the prospects for India, as for all other economies. It is now clear that the global economy recoupled in its downturn in 2019, dispelling the fissiparous movements that seemed to suggest differentiation in growth profiles of constituents in the year before. Notably, the slowdown was more pronounced across emerging market economies (EMEs) relative to advanced economies (AEs). Over the course of the year, the weakening of the growth momentum became increasingly broad-based geographically from which individual countries, including India, had no escape. The global slowdown was marked by a close co-movement in the slumps in industrial production, trade and investment at national levels, given that investment is concentrated in intermediate and capital goods that are heavily traded. In addition, trade tensions dented business sentiment in the manufacturing sector. The weakening of global imports was significantly influenced by the downturn in EMEs. In turn, these forces reduced export growth, which is intensive in imports, and relies heavily on the state of global supply chains. For a while, as manufacturing lost steam, services held firm and helped to support consumer confidence, but eventually the inexorability of the global downturn took over.

I.5 Despite these headwinds, some indications emerged toward the closing months of the year that the slowdown may be bottoming out. With the easing of monetary policy continuing into the second half of 2019, bolstered by fiscal stimulus in some countries, expectations that global activity could recover in early 2020 rose. In fact, high frequency indicators for the fourth quarter (October-December 2019) suggested that momentum was stabilising at a sluggish pace. One-off factors that had impacted global manufacturing - new emission standards for the auto sector; inventory accumulation - appeared to fade. Business sentiment and manufacturing purchasing managers' indices (PMIs) ceased deteriorating, world trade growth seemed to be bottoming out, and service sector PMIs remained in expansionary territory.

I.6 The finance channel was also at work and, intertwined with the confidence channel, amplified global spillovers. Positive impulses, transmitted through real sector channels described in the foregoing, initially boosted financial markets, and diminished fears of trade war and a hard Brexit supported investors' risk appetite. Equity prices appeared to regain poise, sovereign bond yields declined, and portfolio flows returned to EMEs. Currency movements between September 2019 and early January 2020 reflected the general strengthening of risk sentiment. Financial conditions had thus turned broadly accommodative across AEs and EMEs and conducive to a modest recovery before the pandemic broke out.

I.7 The finance and confidence channels abruptly reversed transmission at the end of 2019 with the onset of COVID-19. Financial markets froze, financial institutions started bracing up for a brutal onslaught of balance sheet impairment, extreme risk aversion set in and as incomes stopped flowing, especially to the defenceless, households and businesses alike made a dash for cash. COVID-19 was bringing to bear the dark side of global integration. In the event, global growth at 2.9 per cent in 2019 was the lowest since 2009. The year 2019-20 (April-March) also marked India's lowest gross domestic product (GDP) growth since the global financial crisis (GFC). Amidst the influential global developments referred to earlier, the Indian economy was hit by specific domestic factors from the second quarter of 2019 onwards, including downturn in its automobile and real estate sectors and pangs of distress among micro, small and medium enterprises (MSMEs).

I.8 Turning to domestic developments, the previous year's Annual Report posed an existential question: are we dealing with a soft patch, or a cyclical downswing, or a structural slowdown? Even as data were being awaited to disentangle the nature of the slowdown, a soft patch was ruled out as the loss of pace became entrenched sequentially with each ensuing quarter. Going back in time, the Indian economy had experienced a V-shaped recovery from the GFC, but this stimulus-driven upturn failed to sustain: average GDP growth slumped from 8.2 per cent in 2009-11 to 5.3 per cent in 2011-13. From 2013-14, a cyclical upswing took hold and it turned to be one of the longest in the post-independence period, reaching 8.3 per cent in 2016-17. Ahead of the cyclical global downturn which commenced in 2018, however, India's real GDP growth showed signs of slowdown during 2017. Favourable statistical base effects delayed the onset of the cyclical downturn during the second half of 2017-18 in spite of slowing momentum. Eventually, however, India joined the global slowdown from Q1:2018-19 and lost speed continuously over the next 8 quarters, reaching 3.1 per cent in Q4:2019-20, the lowest in the national accounts series based to 2011-12.

I.9 Thus, until the onset of COVID-19, the moderation in India's growth trajectory reflected cyclical forces, both global and domestic. The global drivers included softer external demand, new automobile emission standards in several parts of the world, weaker macroeconomic conditions because of idiosyncratic factors in a group of systemic EMEs, trade tensions and broader global trade policy uncertainty, the possibility of a no-deal Brexit and the slowdown in China. The domestic factors took the form of inventory overhang in the real estate sector, followed by unfavourable terms of trade sapping rural demand, a slump in gross fixed capital formation from Q4:2018-19 and contraction in merchandise exports from Q1:2019-20 and imports from Q2:2019-20. The deceleration phase (Q4:2018-19 to Q4:2019-20) was accentuated by idiosyncratic events such as auto emission norms/axle norms for commercial vehicles and credit events in the NBFC space.

I.10 Pre-emptively reading the underlying cyclical nature of the growth slowdown, monetary policy committee undertook a series of policy rate reductions, starting as early as February 2019 and cumulating to 135 basis points by February 2020; switched the stance of policy from calibrated tightening to neutral to accommodative; and infused the system with abundant liquidity from Q2:2019-20. Monetary transmission, typically lagged and incomplete in India, improved significantly in the second half of the year under comfortable liquidity conditions and the mandated linking of the interest rates on new floating rate loans to select sectors to external benchmarks in October. Illustratively, the weighted average lending rate (WALR) on fresh bank loans declined by 71 basis points (bps) during February 2019-February 2020, of which 31 bps occurred during October 2019-February 2020. The counter-cyclical shift in the monetary policy stance to support growth was enabled by inflation turning benign in the first half of the year; in spite of a spike in food prices that caused headline inflation to rise beyond 6 per cent during December 2019-February 2020, it averaged 4.8 per cent for the year as a whole, a little above the target of 4 per cent.

I.11 Fiscal policy had also turned counter-cyclical from Q4: 2016-17, with government final consumption expenditure in the form of the 7th pay commission award and one rank one pension providing steady support to GDP. From Q2:2019-20, the fiscal policy stance became expansionary, with a momentous corporate tax regime change that made India comparable with Asian peers. This fiscal impulse, together with the cyclically induced shortfall in revenues, eventually produced a sizeable deviation in the central government's gross fiscal deficit (GFD) from the target for the year – 4.6 per cent of GDP as against 3.3 per cent budgeted – warranting the usage of the escape clause under the revised Fiscal Responsibility and Budget Management (FRBM) Act. Subnational fiscal policy remained within the Fiscal Responsibility Legislation (FRL) thresholds, primarily *via* expenditure cuts in the face of large scale revenue shortfalls, a feature observed in previous years as well. Automatic stabilisers, particularly on the tax front, however, would have played a counter-cyclical role. On the whole, both the centre and states had much less fiscal space to deal with COVID-19 than during the GFC.

I.12 Circling back to the formation of domestic demand during 2019-20, consumption turned out to be relatively resilient. Government consumption put a floor underneath the downturn as discussed earlier - without it, real GDP growth would have fallen from the headline of 4.2 per cent to barely 3.3 per cent in 2019-20. Private consumption, which is the bedrock of domestic demand with a share of 57 per cent of GDP, withstood the overall loss of pace and started decelerating only from Q4:2019-20. The main drivers of the slowdown in 2019-20 were investment and exports.

I.13 A slowdown in fixed investment set in from 2011-12 and became entrenched from Q4:2018-19, slumping into contraction from Q2:2019-20. A combination of stress in balance sheets of corporates and banks, defaults in the NBFC sector, slowing income growth of households leading to a large inventory overhang of unsold homes, and the global slowdown weighed heavily on animal spirits.

I.14 Underlying the contraction of 5.1 per cent in exports in US dollar terms during the year was a drop in export prices by 4.7 per cent. Sectoral analysis throws up valuable insights. For instance, a group of exports – electronic goods; drugs and pharmaceuticals; iron ore – held firm in the face of a combination of weakening external demand and country-specific impediments. Each of these sectors has considerable export potential, especially in the fast-changing dynamics of the international environment.

I.15 As regards the evolution of aggregate supply conditions in 2019-20, agriculture and allied activities provided a silver lining, with record foodgrains and horticulture production and favourable terms of trade for the farm economy. The challenge of managing supply gluts in cereals exposed the shortcomings of policy interventions in the form of price support and buffer stocking. Paradoxically, disruptions in agricultural supply chains and restrictions affecting transportation of agri-produce from farms to markets produced demand-supply mismatches that fuelled price flares in the second half of the year. The recent spate of reforms to agricultural marketing and infrastructure could open up new opportunities for agriculture if they could be complemented by trade policies that are predictable, expose the farm sector to international terms of trade and shift emphasis to processing and value addition.

I.16 A perceptible slowdown in the industrial sector has set in after 2015-16, with its epicentre in manufacturing. Structural rigidities in labour, land, and product markets have made Indian manufacturing uncompetitive in global markets and unable to reap the demographic dividend embodied in a young but under-skilled labour force. Large gaps in the physical infrastructure have also impacted productivity and overall efficiency. More recently, high leverage and solvency concerns have produced stressed balance sheets, which appear to have overwhelmed bankruptcy processes. In addition, some of the past issues remain formidable drags such as delay in land acquisition, environmental concerns and various impediments in MSMEs sector.

I.17 The services sector has remained the prime mover of the Indian economy over the last three decades. Until 2019-20, it had exhibited resilience and productivity; however, idiosyncratic developments, both domestic and global - grounding of an airline; financial sector stress; stalled construction projects; revenue-related issues in telecom; port activity impeded by muted foreign trade; coal production losses impacting railway freight traffic - operated in conjunction with the slowdown in aggregate demand to pull the sector's output to its lowest growth in two decades. The performance of the services sector in the year gone by reflects the emergence of structural impediments specific to each sub-sector. Services exports have, however, outperformed goods exports and maintained global share in 2019-20, with software providing the cutting edge. Indian IT majors could benefit from re-prioritising investments towards automation and efficiency gains from cloud computing and digitalisation, as well as new alliances with global companies.

I.18 During the year, several initiatives were undertaken to develop various segments of the financial market spectrum that are under the jurisdiction of the Reserve Bank. In the foreign exchange market, the focus turned to incentivising access, bridging the segmentation between on shore and off shore activity, simplifying the hedging regime within an overall rationalisation of regulations, and enhancing the ease of doing business in a principles-based regulatory framework. In the debt market, specified securities issued by the Government of India were opened to non-residents under the fully accessible route (FAR), among other initiatives to liberalise foreign portfolio investments. The market borrowing programmes of the central and state governments were conducted in alignment with the objectives of minimising cost and mitigation of risks. The development of the debt market was carried forward through liquidity enhancement, expanding the investor base and improving debt management strategies. In the money market, a revised liquidity management framework was put in place to empower the Reserve Bank to actively manage liquidity conditions with the use of conventional and unconventional instruments. Notably, longer term repo operations and special open market operations (OMOs), on top of currency swaps that were launched in 2018-19, were added to the Reserve Bank's arsenal of liquidity management tools.

I.19 In the regulatory and supervisory domain, several steps were taken during the year to strengthen financial intermediaries and preserve financial stability. These initiatives were presented in the Bi-annual Financial Stability Report which monitors the financial system by assessing risks to financial stability through systemic stress tests, financial network analysis and appraisal of the overall regulatory framework. With regard to the banking system, the ongoing efforts to align the prudential regulatory framework with global standards were carried forward. Alongside improvements in corporate governance, risk management and credit delivery, cyber security was strengthened while leveraging on technology. Past efforts for resolution of stressed assets seemed to start showing results: after reaching a peak of 11.5 per cent at end-March 2018, a decline in the gross non-performing assets (GNPA) ratio of scheduled commercial banks (SCBs) set in, taking it down to 8.5 per cent by end-March 2020. The provision coverage ratio of SCBs improved significantly for the third consecutive year to reach 65.4 per cent in March 2020.

I.20 The capital to risk-weighted assets ratio (CRAR) of SCBs improved to 14.8 per cent in March 2020 (14.3 per cent a year ago). Initiatives were taken to strengthen the regulatory and supervisory framework of the cooperative banking sector through review of trigger-based supervisory action, constitution of boards of management for urban cooperative banks (UCBs) with deposits of ₹100 crore or above, rationalisation of exposure norms for single and group borrowers of UCBs and amalgamation of district central cooperative banks in Kerala and development of Central Fraud Registry (CFR) for UCBs. Further, the regulatory powers of the Reserve Bank were strengthened by the amendments in certain sections of the Banking Regulation Act 1949, thereby bringing additional areas of functioning of cooperative banks under its regulatory purview.

I.21 The asset-liability management framework for non-banking financial companies (NBFCs) was strengthened, including revisions in liquidity risk management to align it with that of the banking sector. Regulation of housing finance companies (HFCs) and wider supervisory powers over NBFCs were vested with the Reserve Bank. Technology-enabled customer services, customer protection and strengthening of fraud detection were concurrent pursuits.

I.22 Financial inclusion was taken forward with the release of the National Strategy for Financial Inclusion, 2019-24 and measures were undertaken for deepening the digital payment ecosystem. Further, efforts towards enhancing financial literacy were also intensified. Under the roadmap for providing banking services in villages, as on September 30, 2019, 99.2 per cent of the identified villages across the country with population less than 2,000 had been provided with banking services, while 94.4 per cent of the identified villages with population more than 5,000 were provided access to banking services.

I.23 Driven by the Payment and Settlement Systems Vision 2019-21, efforts were made towards developing efficient and secure payment and settlement systems with focus on the availability of user-friendly platforms at affordable costs. The Reserve Bank worked towards expanding the reach of Unified Payments Interface (UPI) and *RuPay* cards globally. Incentives were designed to promote digital payment usage. Improvements in customer service included availability of National Electronic Funds Transfer (NEFT) on 24x7x365 basis, increase in operating hours of Real Time Gross Settlement (RTGS), e-mandates on cards, Prepaid Payment Instruments (PPIs) and UPI, expansion of biller categories under the *Bharat* Bill Payment System (BBPS) and enhancing the usage of National Electronic Toll Collection (NETC) system. The share of digital transactions in the total volume of non-cash retail payments increased to 97.0 per cent during 2019-20, up from 95.4 per cent in the previous year. Currency management was strengthened by replacement of currency verification and processing systems and integration of currency management functions with the core banking solution of the Reserve Bank.

I.24 Turning the page back to the existential question, the available evidence did seem to converge on detecting a cyclical downturn in India – synchronised globally – through 2018-19 and 2019-20, following one of the longest expansions in recent history. Just as the decelerating phase of the cycle appeared to be troughing towards the close of 2019-20, COVID-19 arrived and wrenched the narrative asunder. Today, the jury is out on a wide array of possibilities that can characterise the future. They span from a V-shaped rebound due to a volcanic eruption of pent-up, unlocked demand that sets the stage for a rising trajectory of renewed expansion, through a diversity of intermediate iterations; to a structural stagnation brought about by behavioural and demographic changes. On this sombre note, it is appropriate to gaze at what lies ahead in 2020-21 and beyond.

Prospects for 2020-21

I.25 After plunging off a precipice in March and undergoing a contraction in the first half of 2020 that is widely regarded as deeper and more destructive than the Great Depression and the GFC, the global economy is starting to break out of the free fall. Activity is beginning to bottom out in Q3:2020 as unlocking of economies begins in varying degrees and pent-up demand is released. The easing of containment and social distancing has, however, been hesitant, and has stalled in various countries due to fresh waves of infections and mortality. All around, supply chains and production structures are in disarray and commodity prices, especially those of metals, are reflecting the supply shock. The bigger impact of the pandemic has been on demand. The prices of non-discretionary essential items have surged even as many discretionary items have gone out of transactions. Precautionary saving instincts have gripped businesses and households amidst heightened risk aversion, while the appetite for investment has evaporated. The pandemic has also exposed new inequities - white collar employees can work from home while essential workers have to work on site, exposed to the risk of getting infected. In some areas of work such as hospitality, hotels and restaurants, airlines and tourism, employment losses are more severe than in other areas. The poorest have been hit the hardest.

I.26 A defining feature of the COVID-19 experience has been the unprecedented policy response. According to the IMF, the total stimulus package (liquidity and fiscal measures) for G20 countries averaged 12.1 per cent of GDP (5.1 per cent of GDP for EMEs and 19.8 per cent of GDP for AEs). The policy fight back has calmed financial markets and even produced asset price inflation out of sync with the underlying state of economic activity, prevented financial institutions and corporations from collapsing, and provided some protection to household incomes. Fiscal rules have been set aside. The unparalleled expansion of central bank balance sheets, unbridled by conscience-keeping inflation, has implied that they may be tacitly financing the stimulus, including by keeping interest rates unusually low while debt, both public and private, swells in the virtual absence of servicing constraints. The outcome is that governments and central banks are increasingly taking on the role of resource allocation that has traditionally been performed by markets. This can inevitably bring in political consequences unless these authorities fashion timely and credible exits after the virus has been overcome and the vaccine found. In the rain shadow of these developments, the role of banks and non-banking financial entities as primal financial intermediaries has waned while capital and bond markets have taken over. In all this, the usual risks are relegated to the background where they may be sinisterly mutating – fiscal dominance; inflation; leverage; market failure. Meanwhile, the crisis presents opportunities and the shape of the future will depend on how well they are exploited.

I.27 Global economic activity is well below pre-COVID levels. In Q1:2020, GDP contracted in the range of 1.2-13.6 per cent among AEs; among EMEs, growth varied between 4.5 per cent and (-) 6.8 per cent. Early GDP releases and high frequency indicators suggest that contractions have been severe in Q2, while for Q3 the near-term outlook remains clouded with available high-frequency indicators presenting a mixed picture. The global manufacturing PMI emerged out of a 5-month contraction and rose to 50.3 in July. The global services PMI also posted a rise into expansion at 50.5 in July. According to the World Trade Organisation (WTO), the volume of merchandise trade shrank by 3.0 per cent year-on-year in Q1, but early estimates suggest a fall of 18.5 per cent in Q2. Global primary commodity prices (released by the IMF) contracted in the first half of the year, going down by 13.4 per cent in July 2020 over December 2019. Crude oil prices have recovered after sharp falls in March and April on continuing supply cuts by OPEC plus countries and improved demand prospects on gradual easing of lockdown restrictions - Brent crude oil prices averaged at $42.8 per barrel in July 2020, up from a low of $23.3 per barrel in April 2020. Gold prices had a remarkable performance, increasing by 25 per cent in July 2020 over December 2019, with the ultra-high level of uncertainty spurring flights to safety. Apart from metals, food prices have surged since May, reflecting supply disruptions. These factors have also moved inflation outcomes. In AEs, sizeable slack in demand has kept inflation muted, whereas in several EMEs, spikes in food prices have shown up in headline inflation firming up relative to recent history.

I.28 In its latest update (June 2020), the IMF has projected global growth at (-) 4.9 per cent for 2020, with a steeply negative impact on economic activity in H1 and more gradual recovery than expected earlier. India's growth is projected at (-) 4.5 per cent for 2020-21. The projections set out by the OECD on June 10, 2020 present two scenarios – single hit and double hit[1] - the latter being one in which a second wave of rapid contagion erupts later in 2020. Global growth is projected at (-) 6.0 per cent in the single hit scenario and (-) 7.6 per cent in the double hit scenario [India's growth is projected at (-) 3.7 per cent and (-) 7.3 per cent, respectively, in 2020-21]. In the Global Economic Prospects, the World Bank has projected the deepest global recession in eight decades in 2020, almost three times as steep as the global recession of 2009, despite unprecedented policy support. Some developments suggest that the shrinkage of world trade may be bottoming out in the third quarter of 2020. Global commercial flights, which carry a substantial amount of international air cargo, had slumped by (-) 74.0 per cent between January and April, but they rose

[1] Under a single hit scenario, the current containment measures are assumed to be sufficient to overcome the outbreak. In the double-hit scenario, a second wave of virus outbreak hits before the year end (October/November) requiring return to another general lockdown.

58.0 per cent through mid-June. Container port throughput also appears to have staged a partial recovery in June, along with new export orders in PMIs. In April 2020, the WTO set out a relatively optimistic scenario in which the volume of world merchandise trade in 2020 would contract by 13.0 per cent in 2020 and a pessimistic scenario in which trade would fall by 32.0 per cent. Given the contractions in global trade in Q1 and Q2, meeting the optimistic projection for the year would require 2.5 per cent growth per quarter for the rest of the year.

I.29 Turning to India, the NSO's estimates of GDP for Q1:2020-21 are slated to be released on August 31. Meanwhile, high frequency indicators that have arrived so far point to a retrenchment in activity that is unprecedented in history. Moreover, the upticks that became visible in May and June after the lockdown was eased in several parts of the country, appear to have lost strength in July and August, mainly due to reimposition or stricter imposition of lockdowns, suggesting that contraction in economic activity will likely prolong into Q2. The total e-way bills issuance, an indicator of domestic trading activity, increased by 70.3 per cent in June 2020 on a month-on-month (m-o-m) basis; in July, however, it increased by only 11.4 per cent m-o-m and remained 7.3 per cent lower than a year ago. During June 2020, inter-state e-way bills had increased by 91.3 per cent, but in July they rose only by 15.3 per cent. Similarly, intra-state e-way bills, which had risen by 60.1 per cent (m-o-m) in June, increased only by 9.1 per cent in July. The Google mobility trend, which tracks movement of people as a reflection of underlying economic activity, picked up in June 2020 from its levels in April and May. Mobility around groceries and pharmacies reached pre-COVID-19 levels, while mobility relating to retail and recreation was around 60.0 per cent and transit activity was 40.0 per cent lower than that of February 2020 levels. In July, however, moderation set in, with retail and recreation mobility stagnant, and some slide in people's movement around groceries and pharmacies.

I.30 Going forward, government consumption is expected to continue pandemic-proofing of demand, and private consumption is expected to lead the recovery when it takes hold, with non-discretionary spending leading the way until a durable increase in disposable incomes enables discretionary spending to catch up. An assessment of aggregate demand during the year so far suggests that the shock to consumption is severe, and it will take quite some time to mend and regain the pre-COVID-19 momentum. Private consumption has lost its discretionary elements across the board, particularly transport services, hospitality, recreation and cultural activities. Behavioural restraints may prevent the normalisation of demand for these activities. The Reserve Bank's survey for the month of July indicates that consumer confidence fell to an all-time low, with a majority of respondents reporting pessimism relating to the general economic situation, employment, inflation and income; however, respondents indicated expectations of recovery for the year ahead. Urban consumption demand has suffered a bigger blow - passenger vehicle sales and supply of consumer durables in Q1: 2020-21 have dropped to a fifth and one third, respectively, of their level a year ago; air passenger traffic has ground to a halt. Rural demand, by contrast, has fared better. Among underlying indicators, tractor sales picked up by 38.5 per cent in July, spurred by the robust pace of *kharif* sowing, while the contraction in motorcycle sales eased in July (from 35.2 per cent in June to 4.9 per cent in

July). The decline in production of consumer non-durables turned positive in June. A fuller recovery in rural demand is, however, being held back by muted wage growth which is still hostage to the migrant crisis and associated employment losses. Initiative under the *Pradhan Mantri Garib Kalyan Rojgar Abhiyaan* is likely to generate employment in rural areas. Along with increased wages under the *Mahatma Gandhi National Rural Employment Guarantee Act* (MGNREGA), they should provide a fillip to rural incomes.

I.31 Government consumption spending has provided a measure of relief, with central government's revenue expenditure, net of interest payments and major subsidies, having risen by 33.7 per cent in the first quarter of the year. Public finances have, however, been stretched by the imperative to mitigate the impact of COVID-19 and headroom for continuing support to aggregate demand may be severely diminished. In the case of state finances, space is likely to be squeezed so much that cuts in growth-giving capital expenditure seem quite probable. The future path of fiscal policy is likely to be heavily conditioned by the large overhang of debt and contingent liabilities incurred during the pandemic. A credible consolidation plan, specifying actionables for reduction of debt and deficit levels, will earn confidence and acceptability, rather than just extending the path of touch-down. As the wind-down begins and consolidation resumes, it is prudent to expect lower contributions of GFCE to overall demand. In order to boost fiscal revenues and mitigate the pains of this transition, big data and technology can be leveraged to track and identify tax defaulters, increase the tax payer base by tracking their income and wealth parameters, and by addressing the challenges confronting the GST regime through rationalisation, simplification of returns and procedures, including automatic invoice matching, intelligence, enforcement, inspection and audit. It is worthwhile to consider an evaluation of the experience with GST by an independent committee which can draw on the lessons gained so far to recommend the way forward. Fiscal incentives for industry can be re-aligned in favour of productive labour-intensive companies so as to generate employment.

I.32 Indicators of investment demand – the production of capital goods contracted by 36.9 per cent in June 2020 (-64.4 per cent in April-June 2020) and import of capital goods contracted by 24.7 per cent in July 2020 (-46.7 per cent in April-June 2020). The construction sector exhibited a sharp downturn, as reflected in consumption of steel in July 2020 (-29.1 per cent and -57.9 per cent in April-June 2020) and production of cement which contracted by 6.9 per cent in June 2020 (-38.8 per cent in April-June 2020). Declining capacity utilisation, the weakening of consumption demand and the overhang of stressed balance sheets are restraining new investment. The corporate tax cut of September 2019 has been utilised in debt servicing, build-up of cash balances and other current assets rather than restarting the capex cycle. These underlying developments suggest that the appetite for investment is anaemic and in need of more reforms.

I.33 Targeted public investment funded by monetisation of assets in steel, coal, power, land, railways and privatisation of major ports by central and state governments under an independent regulator can be the way forward to revive and crowd in private investment. In fact, goods and services tax (GST) Council type of apex authorities can be set up in respect of land, labour and power to drive structural reforms. They could include speedier implementation of the national infrastructure pipeline, a north-south and east-west road corridor together with a high-speed rail project that build on the successes of the golden quadrilateral, alongside steps to improve business sentiment and the environment for investment. States can be encouraged to publicise the availability of litigation-free land in their jurisdictions with access to modern infrastructure. In the power sector, the opportunity has arrived to leapfrog India into becoming the world leader in renewable energy by incentivising the domestic production of solar panels and connecting dispersed transmission links with remote areas. For the sector as a whole, elimination of cross-subsidisation through the tariff structure and provision of subsidy, if any, through direct benefit transfer (DBT) should be a priority, along with due consideration to the privatisation of electricity distribution companies (DISCOMS). With regard to railways, there is a strong case for manufacturing units to be corporatised. The growth potential of land banks can be exploited, particularly in metropolitan areas, by long-term leasing to the private sector, including for development of commercial real estate. FDI into railways can be encouraged by removing bottlenecks in the access to infrastructure - land; procurement rules; project risk-sharing mechanisms. A comprehensive policy is needed with regard to building adequate reserves of strategic materials, including the initiatives undertaken for crude oil.

I.34 There is clearly a need for diversifying financing options. Alternatives to bank finance have to be assiduously cultivated - capital markets and FDI offer opportunities to bring in investors with a relatively longer-term view that is conducive to attracting durable capital as well as embedded technology. The setting up of the National Investment and Infrastructure Fund (NIIF) in 2015 is a major strategic policy response in this direction. Promotion of the corporate bond market, securitisation to enhance market-based solutions to the problem of stressed assets, and appropriate pricing and collection of user charges should continue to receive priority in policy attention. There is also a need for expanded footprints for specialised NBFCs classified as Infrastructure Finance Companies.

I.35 The progress made on building a modern physical infrastructure in the country over the last five years has been noteworthy in the areas of roads, civil aviation and airport connectivity, telecommunication (including internet and broadband penetration), and ports. India has also recorded an impressive growth in metro rail projects for urban mass transportation. Nonetheless, the infrastructure gap remains large, needing around US $4.5 trillion of investment by 2040, as per the Economic Survey 2017-18, with emphasis on upgrading the poor quality of infrastructure. India is currently ranked 70 out of 140 countries for infrastructure quality in the Global Competitiveness Index and logistics performance. India's ranking in the World Bank's Logistics Performance Index (LPI) is also low at 44 among 160 countries. Non-performing assets (NPAs) relating to infrastructure lending by banks has also remained at elevated levels. In the context of COVID-19, a big push to certain targeted mega infrastructure projects can reignite the economy.

I.36 It is also time to turn to the unlocking of entrepreneurial energies and risk appetite by improving the business environment. Faster enforcement of contracts, including through expansion of judicial and insolvency capacities, would be a game changer. Property registrations can be speeded up from the current 58 days, and a centralised website can provide real time information on all regulatory compliance requirements. In general, the compliance burden can be streamlined substantially. The COVID-19 crisis can be converted into an opportunity by using online provision of education and training to implement reforms in the social infrastructure by skill development and reskilling so as to prepare a labour force equipped to keep pace with a big thrust on infrastructure.

I.37 Information and communication technology (ICT) has been an engine of India's economic progress for more than two decades now. Leveraging on ICT has to be a key element of the future development strategy by reducing transaction and communication costs and by improving the quality of capital. This could generate productivity gains all around, with competent, reliable, and low-cost supply of knowledge-based solutions in India and overseas. Indian IT firms are at the forefront of developing applications using artificial intelligence (AI), machine learning (ML), robotics, and blockchain technology. This niche advantage needs to be leveraged to strengthen India's position as an innovation hub, coupled with India's 'Start-up India' campaign which recognises the potential of young entrepreneurs of the country and aims at providing them a conducive ecosystem. While HealthTech and FinTech are the leading segments, Indian entrepreneurs can capitalise on opportunities across other sectors and markets, and increase the depth and breadth of this ecosystem, especially in serving small and medium businesses, and low and middle-income groups. Even before COVID-19, a global technological churn was underway, with rapid advances in digital technologies and state-of-the-art computing/analytical capabilities. While non-tariff barriers and issues relating to data privacy and data security may pose challenges, creative destruction is an integral feature of a robust dynamic economy. The IT sector is best placed to drive this process and also manage its consequences. Promoting young firms and start-ups and ensuring their survival will be critical for greater employment generation and higher productivity-led economic growth in India. It will be essential to reorient resources and policy focus in this direction. Dynamic entrepreneurship, innovation and the ability to nurture ideas to actualisation embodied in start-ups are the hallmarks of success in ICT.

I.38 Exports hold the key to a viable balance of payments and a dynamic manufacturing sector. The pandemic has transformed the international environment for global value chains, with implications for the choice of product-destination mix underlying a dynamic export strategy. Rather than spreading resources thinly and widely, it is time to identify sunrise export categories that are reaping productivity gains and have dynamic linkages, both horizontal and vertical, that strengthen footholds in emerging global value chains. For electronic goods for instance, the ongoing diversification of production bases presents opportunities, provided India is able to leverage on FDI into high-end segments in order to compete with currently preferred destinations for companies on the look out for new locations for their manufacturing facilities. India has always enjoyed a comparative advantage in generic drugs and pharmaceuticals exports, being the largest supplier in the world. India needs to regain its market share in active pharmaceutical ingredients (APIs) by developing cost-effective and high-quality manufacturing processes compliant with global standards. Another group of exports in which India's competitive edge is progressively being lost to new competition

- readymade garments; gems and jewellery - is traditionally labour-intensive; regaining competitiveness hinges around labour reforms that unfetter scale economies.

I.39 Foreign trade policy should increasingly focus on leveraging exports *via* free/preferential trade arrangements. In this context, completion of the India-EU free trade agreement and a post-Brexit free trade agreement/ preferential arrangement with the UK may confer early mover advantages. India also needs to tie up special trade arrangements with countries supplying rare materials that are essential to new export products which are gaining ascendency in the competitiveness ladder. Designing a robust framework for promoting already identified sectors - auto parts; drugs and pharmaceuticals; electronics; textiles; food processing - to enhance their productivity should be a central feature of the export strategy, alongside exploitation of productivity gains from sectors such as ICT, finance and business services. The strategy will also require more efficient logistics through achievement of the targets set under the National Trade Facilitation Plan, which aims to transform the trade ecosystem by reducing the time and cost of doing business. For many of India's traditional exports, especially agricultural and allied products, stability in trade policy is critical, alongside a better alignment with the goal of doubling farm incomes. In the context of exports of manufactures, a renewed focus on special economic zone (SEZ) type cluster-based manufacturing export launching pads may be apposite to establish centres of manufacturing excellence which also leverage on the natural link between exports and FDI.

I.40 Turning to production activity, Indian agriculture is undergoing a distinct transformation, notwithstanding headwinds. The total production of foodgrains reached a record 2,966.5 lakh tonnes in 2019-20, while total horticulture production - accounting for about 40 per cent of GVA in the farm sector - also reached an all-time high of 3,204.8 lakh tonnes. India is now among the leading producers of milk, cereals, pulses, vegetables, fruits, cotton, sugarcane, fish, poultry and livestock in the world. These achievements stand out in the overcast of gloom on the outlook. They have provided the confidence to enact and continue with the historic National Food Security Act (NFSA) which converts food security programmes into legal entitlements of subsidised foodgrains to two-thirds of the population. Moreover, in the wake of the nationwide lockdown, the Government of India announced the world's largest food security scheme, the *Pradhan Mantri Garib Kalyan Anna Yojana*, for 80 crore ration card holders. For non-ration card holders - particularly migrant labourers, stranded and the needy families - a provision of 8 lakh tonnes of foodgrains has been made under the *Atmanirbhar Bharat Abhiyan* package.

I.41 Going forward, shifting the terms of trade in favour of agriculture is the key to sustaining this dynamic change and generating positive supply responses in agricultural production. Experience shows that in periods when the terms of trade remained favourable to agriculture, annual average growth in agricultural gross value added (GVA) exceeded 3 per cent. Hitherto, the main instrument of incentive has been minimum support prices, but the experience has been that price incentives have been costly, inefficient and even distortive. India has now reached a stage in which surplus management has become a major challenge. The priority is to move to policy strategies that ensure a sustained increase in farmers' income alongside reasonable food prices for consumers. An efficient domestic supply chain becomes critical here. Accordingly, the focus must now turn to the major reforms that are underway to facilitate free trade in agriculture. First, the amendment of the Essential Commodities Act (ECA) is intended to encourage private investment in supply chain infrastructure, including warehouses, cold storages and marketplaces. Second, the Farmers' Produce Trade and Commerce (Promotion and Facilitation) Ordinance, 2020 is aimed at facilitating barrier-free trade in agriculture produce. Third, the Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance, 2020 will empower farmers to engage with processors, aggregators, wholesalers, large retailers, and exporters in an effective and transparent manner. With this enabling legislative framework, the focus must turn to (a) crop diversification, de-emphasising water guzzlers, however politically difficult it may be; (b) food processing that enhances shelf life of farm produce and minimises post-harvest wastes; (c) agricultural exports which expose the Indian farmer to international terms of trade and technology; and (d) public and private capital formation in the farm sector.

I.42 Indian manufacturing has been locked in a structural slowdown for quite some time. Reversing this decline warrants a complete rethink. The quality and efficiency of the physical infrastructure, which still significantly lags behind the global median, has to be enhanced to help manufacturing take off. Benchmarking systems and procedures with the best in the world could galvanise growth in the sector, aided by cleaning up of stressed balance sheets of corporates by raising the efficiency of bankruptcy and solvency procedures. Large Indian firms need to diversify their financing needs and reduce their excessive dependence on bank-based system, particularly for infrastructure financing. The need for a workable public-private partnership model specific to India cannot be over emphasised. Legacy issues of the Indian economy, *viz.,* lengthy processes of land acquisition and payment of compensation, environmental clearances, and time and cost overruns due to delays in project implementation, need to be resolved with urgency. Reforming labour regulations and increasing female participation in the work force through affirmative actions will bring down cost of production and improve productivity.

I.43 The MSME sector has the potential to become the engine of growth, but it has been underperforming for too long owing to various structural reasons. This sector has been constrained by high cost of credit due to lack of adequate information, lack of modern technology, no research and innovations, insufficient training and skill development, and complex labour laws. Key reforms relating to MSMEs, *viz.,* removal of definitional difference between manufacturing and service-based MSMEs, increased threshold limit to define an enterprise as an MSME, and adding turnover as another criteria to define MSMEs, besides investment scale, could turn out to be harbingers of far reaching changes that can transform manufacturing in India.

I.44 Over the last two decades, the Indian economy has been driven by the services sector, which comprises a heterogenous group of economic activities with varying degree of skill and organisational requirements across banking and finance, education, healthcare, information technology, tourism, transport, telecom, trade including e-commerce and space. After a peak

[2] Services sector inclusive of construction.

in 2014-15, however, the services sector has undergone a sustained moderation. Apart from generating productivity gains that boost output, the role of services in India assumes importance from the point of view of employment generation as it is the biggest employer with a share of 44.4 per cent[2] in measured employment.

I.45 During the last three decades, the successes achieved in ICT need to be expanded in other sectors, particularly in healthcare and tourism, where India has an inherent advantage. There is also an urgent need to nurture talent which can exploit emerging opportunities in space technology, internet of things (IoT) and cyber security as well. It would be essential to reorient resources and policy focus in this direction. Innovation and the ability to nurture ideas into reality would be the key challenge. In this context, private enterprise and investment have the major role.

I.46 Under the flexible inflation targeting framework adopted in 2016, headline CPI inflation has averaged 3.9 per cent up to 2019-20, closely aligned with the target of 4 per cent. This has imparted credibility to the conduct of monetary policy, instilled investor confidence and anchored inflation expectations. It has also enabled the re-orientation of monetary policy to support growth which has been decelerating continuously for eight consecutive quarters. Accordingly, the repo rate has been reduced by a cumulative 250 basis points since February 2019, supported by liquidity injections of close to 5.0 per cent of GDP. The level of the repo rate is at its lowest ever. This coordinated strategy has kept financial markets and financial institutions functioning normally, alleviated liquidity stress due to the outbreak of COVID-19, provided households and businesses with confidence by substantially easing financial conditions, and has kept the lifeblood of finance flowing.

I.47 In its early August 2020 meeting, the MPC noted the heightened uncertainty surrounding the macroeconomic outlook on account of supply chain disruptions and cost push pressures. It expected headline inflation to remain elevated in Q2:2020-21, but likely to ease in H2:2020-21, aided by favourable base effects. As regards the outlook for growth, the MPC expected real GDP growth for the year 2020-21 as a whole to be negative. The MPC was of the view that an early containment of the COVID-19 pandemic may impart an upside to the outlook. A more protracted spread of the pandemic, deviations of the monsoon from the forecast of a normal and global financial market volatility are the key downside risks. In this environment, the MPC observed that supporting recovery of the economy assumes primacy in the conduct of monetary policy. While space for further monetary policy action is available, it is important to use it judiciously to maximise the beneficial effects for underlying economic activity.

I.48 At the same time, the MPC was conscious of the upside risks to its medium-term inflation target. With headline inflation ruling above the upper tolerance band around the target, but with economic activity and the outlook remaining weak and uncertain, the MPC noted that the cumulative reduction of 250 basis points was working its way through the economy, lowering interest rates in money, bond and credit markets, and narrowing down spreads. Accordingly, the MPC decided to stay on hold, while awaiting a durable reduction in inflation to use available space to support the revival of the economy.

I.49 Turning to the financial sector, Indian banking has to be liberated from the risk aversion that is impeding the flow of credit to the productive sectors of the economy and undermining the role of banks as the principal financial intermediaries in the economy. The deterioration in the macroeconomic and financial environment is impinging on asset quality, capital adequacy and profitability of banks. Regulatory dispensations that the pandemic has necessitated in terms of the moratorium on loan instalments, deferment of interest payments and restructuring may also have implications for the financial health of banks, unless they are closely monitored and judiciously used. Although gross and net non-performing asset ratios had come down in March 2020 along with receding slippage ratios, the economic fallout of the pandemic is likely to test this resilience, especially since the regulatory accommodations announced in the wake of the outbreak have masked the consequent build-up of stress. Macro stress tests reported in the July 2020 Financial Stability Report suggest that non-performing assets may surge 1.5 times above their March 2020 levels under the baseline scenario and by 1.7 times in a very severely stressed scenario. The system level CRAR can drop to 13.3 per cent in March 2021 from its March 2020 level under the baseline scenario and to 11.8 per cent under the very severe stress scenario.

I.50 Against this backdrop, a recapitalisation plan for public and private sector banks assumes critical importance. The minimum capital requirements, which are calibrated on the basis of historical loss events, may no longer suffice to absorb post-pandemic losses. The Reserve Bank has already advised banks and NBFCs to carry out COVID-19 stress tests and take necessary remedial measures proactively. The ability to raise capital as well as build resilience to ensure financial stability in anticipation of more frequent, varied and bigger risk events than in the past shall be contingent on the governance standards in banks, particularly on strength of risk governance framework. In this regard, the Reserve Bank has released a discussion paper on "Governance in Commercial Banks in India" with the objective of aligning the regulatory framework with global best practices while being mindful of the context of the domestic financial system. The main emphasis of the discussion paper is to empower the Board of Directors. The Board, on its part, should set the culture and values of the organisation; recognise and manage conflicts of interest; set the appetite for risk and manage risks within that appetite; exercise oversight of senior management; and empower the oversight and assurance functions through various interventions. In tandem with the evolving regulations, the supervisory approach of the Reserve Bank will have to be two-pronged - first, strengthening the internal defences of regulated entities; and second, greater focus on identifying the early warning signals and initiating corrective action. Greater emphasis will need to be placed on the assessment of business models, governance and assurance functions (compliance, risk management, internal audit and vigilance functions). It is important to reiterate that post-containment of COVID-19, a very careful trajectory has to be followed in orderly unwinding of regulatory measures and the financial sector should return to normal functioning without relying on the regulatory relaxations as the new norm.

I.51 Coming to the NBFC sector, non-traditional and digital players are entering this space to deliver financial services by way of innovative methods involving digital platforms. The goal of the Reserve Bank is to strengthen the sector, maintain stability and reduce the scope for regulatory arbitrage. An optimal level of regulation and supervision is sought to be achieved so that the NBFC sector is financially resilient and robust, catering to financial needs of a wide variety of customers and niche sectors, and providing complementarity and competition to banks. The NBFC sector largely depends on market and bank borrowings, thereby creating a web of inter-linkages with banks and financial markets. As Housing Finance Companies (HFCs) now fall under the regulatory purview of the Reserve Bank, the process of harmonising regulations for HFCs with those applicable for NBFCs assumes priority. A robust liquidity risk management framework is in place for NBFCs and should, in time, apply to HFCs as well, with the objective of ensuring proper governance and risk management structures, including functionally independent chief risk officer (CRO) with clearly specified role and responsibilities. Due recognition of the systemic importance of NBFCs/HFCs and their inter-linkages with the financial system and ensuring higher credit flow by appropriately modulating exposure limits, enabling commercial bank lending to NBFCs and co-financing, and fostering active engagement with stakeholders are the hallmarks of the evolving engagement with the sector.

I.52 In the wake of COVID-19, lockdowns and the requirement of social distancing are providing an impetus to the wider adoption of digital payments. The operationalisation of the Payments Infrastructure Development Fund (PIDF) is expected to provide the impetus to deployment of acceptance infrastructure across the country, more so in underserved areas, and facilitate digitisation of payment transactions. The Reserve Bank will promote development of offline payment solutions to further deepen the digital payments across the country. The recently released framework for authorisation of new pan-India Umbrella Entity for retail payment systems will provide a fillip to innovation and competition in the payments landscape and minimise concentration risk in retail payment systems.The establishment of self-regulatory organisation(s) will be encouraged to increase industry participation in the regulatory and supervisory process. Other initiatives include encouraging authorised payment system operators to put in place Online Dispute Resolution (ODR) system for failed transactions.

I.53 Several initiatives are underway to transform the payments landscape in the country. Centralised payment systems, *viz.*, the RTGS system is available for customer transactions from 7 am to 6 pm; and since December 2019, the NEFT system operates round the clock - 24x7x365. Another objective has been to drive down the cost of digital transactions. Accordingly, processing charges for NEFT/RTGS applicable to member banks have been waived and they, in turn, have been advised to extend this benefit to their customers. The path ahead will involve establishing an Innovation Hub for the financial sector for innovative idea generation, licensing of National Payments Corporation of India (NPCI)-like umbrella organisation(s) to foster competition and the development of payment systems.

I.54 Under '*Utkarsh* 2022', which sets out the medium-term strategy of the Reserve Bank consistent with its core purpose, mission and vision, the major deliverables adopted for the year ahead in various functional areas cover a wide canvas. A dashboard will be developed for monitoring strategy execution. In the area of regulation and supervision, a specialised cadre will be developed with the requisite skills and expertise, and it will be backed up by a comprehensive supervisory database by linking up existing databases. Guidelines on securitisation and operational risk will be set out in conformity with Basel III standards. Financial inclusion will be taken forward by developing online financial literacy modules targeting specific sections of society. Consumer protection will be bolstered by the financial education framework for creating awareness among members of public and by implementing the recommendations of the in-house Committee for integrating three existing Ombudsman Schemes[3] into one Scheme. Financial market development will include developing a credit derivative market, introduction of separate trading of registered interest and principal of securities (STRIPS) in State Development Loans (SDLs) and the rationalisation of FEMA regulations for overseas direct investment. These initiatives would be supported by technological developments in the form of upgrading Structured Financial Messaging Solution (SFMS), improving penetration of acceptance infrastructure and the facilitation of point of sale (PoS) in smaller centres. Training policies to upgrade the skill set of the Reserve Bank's personnel will focus on issues related to supply (courses offered for training), delivery (who delivers which courses, where and how) and assessment (of institutions, trainers and trainees). In the context of developing the physical infrastructure, the goal will be to obtain relevant ratings from Indian Green Building Council (IGBC)/ Green Rating for Integrated Habitat Assessment (GRIHA) for at least one existing office and five existing residential buildings.

I.55 These future strategies will also require the Reserve Bank to be logistically empowered. The Reserve Bank is in the process of revamping its data warehouse system into a new state-of-the-art Centralised Information Management System (CIMS) covering data acquisition to dissemination and analytics spread across most business areas of the Reserve Bank. A separate testing environment (sandbox) has been set up for simulating new technologies in a secure manner. It will be used for testing system-to-system integration of banks' Management Information System (MIS) servers with the CIMS. The Central Information System for Banking Infrastructure (CISBI), which supports banking network and financial inclusion policies, will be expanded by including co-operative banks, ATMs and fixed-location business correspondents (BCs). The Central Fraud Registry (CFR) portal of SCBs, augmented with new features is at an advanced stage of development. The Reserve Bank's Data Science Lab (DSL) will work towards improving data quality, forecasting, surveillance, early warning detection abilities, and employing big data analytics to provide inputs for policy formulation and monitoring. The DSL will be expanded to consist of an interdisciplinary team of experts comprising data scientists, statisticians, economists and IT personnel, who would use various techniques encompassing programming, statistical methods, text and data mining and machine learning in various areas of interest to the Reserve Bank. A Granular Data Access Lab (GDAL) has been planned in the CIMS environment in which techniques of data masking and other access restrictions are envisaged to protect confidentiality of granular data.

I.56 The pandemic will inflict deep disfigurations on the world economy. The shape of the future is heavily contingent upon the evolving intensity, spread and duration of COVID-19 and the

[3] Includes Banking Ombudsman Scheme, 2006; Ombudsman Scheme for NBFCs, 2018; and Ombudsman Scheme for Digital Transactions, 2019.

discovery of the elusive vaccine. Post-COVID-19, the overwhelming sense is that the world will not be the same again and a new normal could emerge. As in the rest of the world, India's potential output can undergo a structural downshift as the recovery driven by stimulus and regulatory easing gets unwound in a post-pandemic scenario. Moreover, this recovery is likely to be different – the GFC occurred after years of robust growth with macroeconomic stability; by contrast, COVID-19 has hit the economy after consecutive quarters of slowdown. Furthermore, the GFC was essentially a financial meltdown whereas the pandemic is a health crisis, which have deleterious ramifications across real and financial sectors. So far, policy authorities have responded with an unprecedented defence, involving conventional and unconventional measures in order to mitigate the unconscionable human and economic casualties. As stimulus is unwound in a calibrated and non-disruptive manner in a post-pandemic scenario, deep-seated and wide-ranging structural reforms in factor and product markets, the financial sector, legal architecture, and in international competitiveness would be needed to regain potential output losses and return the economy to a path of strong and sustainable growth with macroeconomic and financial stability.

II ECONOMIC REVIEW

Economic activity in India slowed down in 2019-20 as a synchronised global downturn amplified by drags on aggregate demand took a costly toll. After remaining benign in the first half, headline inflation picked up subsequently on spikes in food price inflation. Monetary and credit conditions reflected deceleration in underlying activity in the economy. Financial markets turned volatile in the later part of the year in sync with global markets, reflecting the impact of the pandemic. Public finances recorded deviations from budgetary targets due to shortfalls in tax revenue and disinvestment collections. On the external front, the current account deficit narrowed with net capital flows remaining robust; foreign exchange reserves rose during the year.

II.1 THE REAL ECONOMY

II.1.1 Amidst a loss of momentum across geographies, escalation of trade tensions between China and the US, uncertainty over Brexit, and heightened geo-political risks, the global economy grew at its slowest pace in 2019 post global financial crisis. Just as these retarding forces appeared to be easing their grip towards the close of the year, the novel coronavirus (COVID-19) broke out and rapidly exploded into a pandemic, darkening global economic prospects and imparting extreme uncertainty about the outlook.

II.1.2 As contagion was spreading to over 200 economies across the world, claiming over 59 lakh infections and 3,67,166 deaths worldwide by May 2020, the release of provisional estimates (PE) of national income by the National Statistical Office (NSO) at the end of the month revealed that the growth of India's real gross domestic product (GDP) had slumped to 4.2 per cent in 2019-20 (6.1 per cent a year ago), the lowest since 2009-10. A downturn that set in during the last quarter of 2016-17, abstracting from ephemeral base effects in the second half of 2017-18, caused economic activity to lose speed over eight consecutive quarters to touch a low in Q4:2019-20 that has not been seen in the history of the 2011-12 base series. All components of domestic demand were driven down, except government final consumption expenditure (GFCE), which provided sustained support to aggregate demand. On the supply side, activity in manufacturing, construction and transportation was pulled down by sector-specific impediments[1]. Agriculture and allied activities provided a silver lining, on the back of record foodgrains and horticulture production, coupled with resilient allied activities and an outlook brightened by expectations of a normal south west monsoon (SWM) in 2020.

II.1.3 Against this backdrop, this *chapeau* is followed by component-wise analysis of aggregate demand. Developments in aggregate supply conditions are analysed in sub-section 3. The last sub-section covers analysis of employment based on high frequency indicators and includes an assessment of the impact of the COVID-19 pandemic and major policy responses. Policy perspectives are set out in the concluding paragraph.

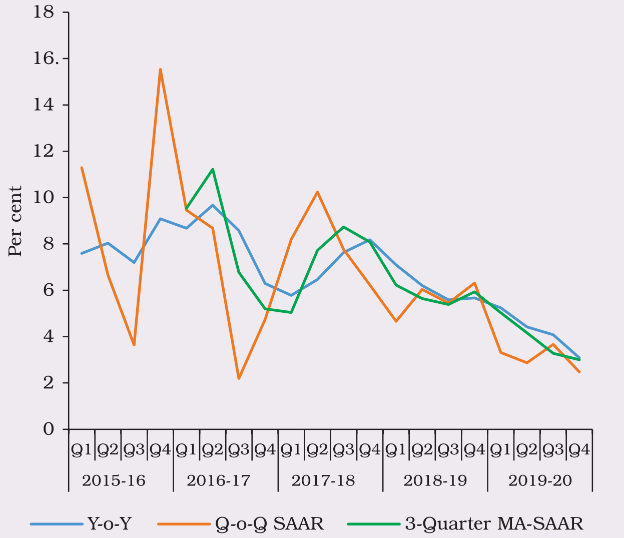
[1] BS VI or Bharat Stage VI, which impacted automobiles and transportation sector, denotes the new emission standard that needs to be complied by all light and heavy vehicles, including two and three wheelers, manufactured on or after April 1, 2020.

2. *Unravelling the Demand Slowdown*

II.1.4 The May 2020 release of PE for 2019-20 offered a first glimpse at how the economy fared in Q4:2019-20 and, therefore, in the year as a whole; it also brought to bear revisions to estimates for the preceding quarters. The new release confirmed a 2.8 percentage points reduction in the growth of aggregate demand below its decennial trend rate of 7.0 per cent, and a sequential deceleration from a recent peak of 7.9 per cent in H2:2017-18. Real GDP growth in H2:2019-20 at 3.6 per cent was also the lowest registered in the 2011-12 base series (Appendix Table 1). The disruption caused by the imposed lockdown brought economic activity to a near standstill during the last week of Q4:2019-20 (Table II.1.1).

II.1.5 The three-quarter moving average of seasonally adjusted annualised growth rates (MA-SAAR) corroborated the weakening of the momentum of demand (Chart II.1.1).

Chart II.1.1: GDP Growth: Y-o-Y and 3-Quarter MA-SAAR



MA-SAAR: Moving Average of Seasonally Adjusted Annualised Growth Rates
Source: NSO and RBI staff calculations.

Consequently, the negative output gap (*i.e.*, deviation of actual output from its potential level) widened in 2019-20, pointing to the substantial slack in resource utilisation.

Table II.1.1: Underlying Drivers of Growth

Components	Growth (per cent)					Contribution to Growth (per cent)				
	2008-09	2009-11	2011-14	2014-18	2018-20	2008-09	2009-11	2011-14	2014-18	2018-20
1	2	3	4	5	6	7	8	9	10	11
I. Total Consumption Expenditure	**5.5**	**6.5**	**6.1**	**7.5**	**7.0**	**118.2**	**53.5**	**71.5**	**64.6**	**91.8**
Private	4.5	5.9	6.7	7.4	6.2	81.9	40.4	66.2	53.8	68.5
Government	11.4	9.7	2.6	8.2	10.9	36.3	13.1	5.3	10.8	23.3
II. Gross Capital Formation	**-2.6**	**14.5**	**2.0**	**6.5**	**3.7**	**-31.3**	**64.1**	**16.6**	**30.1**	**17.9**
Fixed investment	3.2	9.4	6.2	6.2	3.5	32.6	35.9	37.9	25.0	13.9
Change in stocks	-51.4	56.2	-27.4	31.5	12.2	-75.4	17.9	-16.7	3.5	3.4
Valuables	26.9	45.0	-11.1	8.5	0.8	11.4	10.3	-4.6	1.6	0.5
III. Net exports						**-72.4**	**-4.1**	**8.9**	**-8.5**	**14.0**
Exports	14.8	7.3	10.0	1.4	4.4	99.0	16.2	42.3	3.7	10.9
Imports	22.4	6.9	6.1	4.2	0.9	171.4	20.3	33.4	12.3	-3.0
IV. GDP	**3.1**	**8.2**	**5.7**	**7.7**	**5.2**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

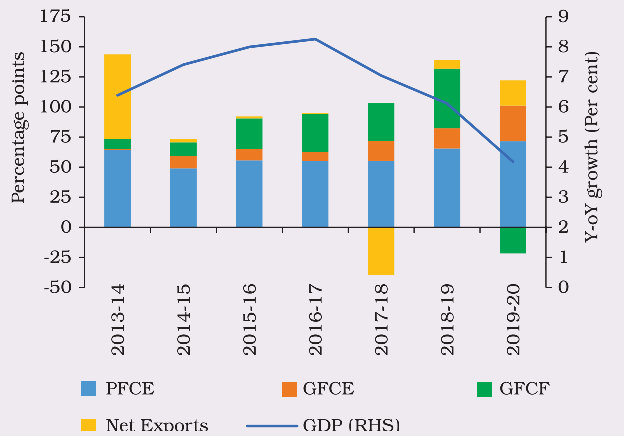
Source: NSO and RBI staff calculations.

II.1.6 Compositional shifts in demand conditions reflect the anatomy of the persistent slowdown extending into 2019-20 (Chart II.1.2 and Appendix Table 2).

Consumption

II.1.7 Private final consumption expenditure (PFCE), constituting 57.2 per cent of aggregate demand, recorded its lowest growth in a decade. Nonetheless, at 5.3 per cent in 2019-20, PFCE growth exhibited resilience in the face of the prolonged weakening of income and financial conditions. High frequency indicators of consumption demand either contracted or grew at a rate far below their long-run averages. Petroleum consumption remained flat, while non-oil non-gold imports remained in contraction all through the year. Among indicators of urban demand, passenger car sales contracted throughout 2019-20, exacerbated by idiosyncratic factors such as rising insurance costs and tighter emission norms. Other indicators of urban demand, *viz*., consumer durables and air passenger traffic also remained depressed during the year, with the latter bearing the brunt of an exogenous shock due to the grounding of a major airline.

Chart II.1.2: Contribution to GDP Growth by Components



PFCE: Private Final Consumption Expenditure; GFCE: Government Final Consumption Expenditure; GFCF: Gross Fixed Capital Formation; GDP: Gross Domestic Product.

Note: Component-wise contributions do not add up to 100 as change in stocks, valuables and statistical discrepancies are not included.

Source: NSO.

II.1.8 Among indicators of rural demand, tractor sales had contracted until the beginning of the *rabi* sowing season, but record sowing along with improvement in terms of trade for the farm sector revived demand and catalysed a spurt in tractor sales between December 2019 and February 2020 and stayed robust even during the pandemic period. Motorcycle sales, however, have remained in the contraction zone starting from January 2019. The weakness in rural demand was also aggravated by moderation in rural wages and dwindling employment avenues, and the slowdown in alternative sources of livelihood such as manufacturing and construction. GFCE compensated for the slowdown in private consumption, registering double-digit growth for the third consecutive year in 2019-20. Excluding GFCE growth of 11.8 per cent, GDP growth for 2019-20 would have decelerated by 0.9 percentage points from the headline GDP growth estimated by the NSO. The COVID-19 pandemic delivered an unprecedented shock to the economy. It remains to be seen whether the recovery from the pandemic will be V-shaped or U-shaped (Box II.1.1).

Investment and Saving

II.1.9 The rate of gross domestic investment in the Indian economy, measured by the ratio of gross capital formation (GCF) to GDP at current prices, had declined to 32.2 per cent in 2018-19. Although data on GCF are not yet available for 2019-20, underlying indicators point to investment having weakened further. The ratio of real gross fixed capital formation (GFCF) to GDP declined to 29.8 per cent in 2019-20 from 31.9 per cent in 2018-19 on account of waning business confidence. The corporate tax regime reform of September 2019 has not yet gained traction in boosting capital expenditure.

Box II.1.1
Macroeconomic Impact of COVID-19

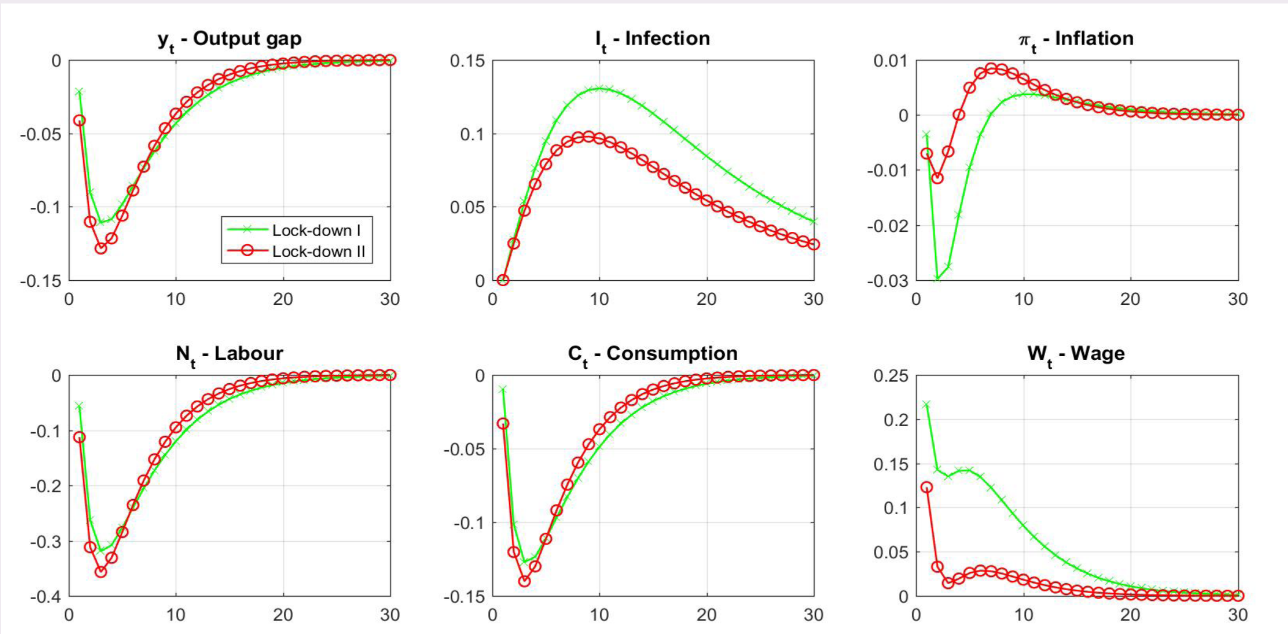
COVID-19's epidemiological dynamics are still rapidly evolving in India, rendering difficult an accurate assessment of its full macroeconomic effects. In this scenario, an approach employing a dynamic stochastic general equilibrium (DSGE) model built on New Keynesian foundations provides a tentative and proximate assessment of the likely impact of COVID-19 and the subsequent lockdown on the Indian economy.

The model has three main economic agents, *viz*., households, firms and the government. COVID-19 and the lockdown can impact the economy through multiple channels (Eichenbaum *et al*., 2020; Faria-e-Castro, 2020; Yang *et al*., 2020). Because of lockdown, households have to stay at home and therefore, reduce labour supply to firms; consumption falls due to non-availability of non-essential items and fall in income; and restricted people-to-people contact stalls the momentum of the pandemic.

The model is calibrated[2] so that infections peak around the second half of August 2020 [based on the predictions of a generalised Susceptible-Exposed-Infectious-Recovered (SEIR) model for India] and the output gap widens to about (-) 12 per cent of potential output when the economy is worst hit. Two scenarios are envisaged: the first, *i.e.,* lockdown I, impacts the supply side of the economy by decreasing the labour supply and its productivity. The second scenario, *i.e.,* lockdown II, additionally considers the increase in marginal cost.

Inflation falls under both scenarios mainly because of a fall in demand; under lockdown II, however, the decline in inflation is less steep and short-lived. Firms respond to the squeeze in profits, due to higher marginal costs, by curtailing production and labour demand. Wages see a lower rise and economy goes through a large contraction. However, the recovery from the pandemic is faster in this scenario on account of fewer opportunities for people-to-people interactions. Under scenario I by contrast, production retrenchment is less severe, but demand contraction is more pronounced due to a rise in infections. Thus, the economy undergoes a deeper contraction under lockdown II, but recovery from the pandemic is faster (Chart 1).

Chart 1: Combined Macroeconomic Impact of COVID-19 and Lockdown Scenarios



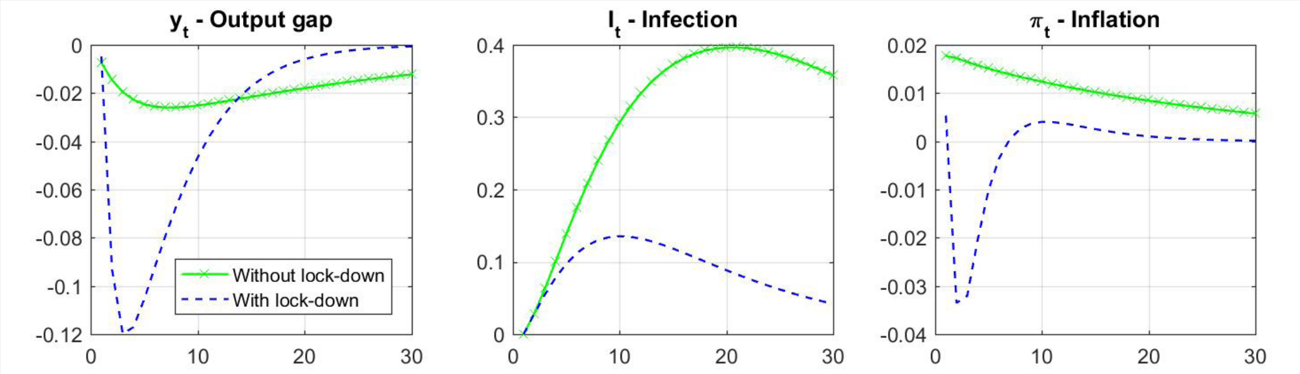
Note: Each time period in the above chart denotes a fortnight. Period 1 corresponds to the first half of April 2020. The green line depicts the lockdown I while the red line depicts the lockdown II scenario.
Source: RBI staff estimates.

[2] The model is based on both qualitative and quantitative assumptions. The qualitative assumptions are: (a) Households derive utility from consumption and health, and supply labour to the firms and their health deteriorates in proportion to the spread of the pandemic; (b) The spread of pandemic depends on consumption and labour supply decisions of the households; (c) Government declares a lockdown in response to the pandemic that restricts people-to-people contact and hence affects labour supply and consumption demand adversely, but stalls the momentum of pandemic. The main quantitative assumptions used to calibrate the model are: (a) The economy is categorised into contact intensive and non-contact intensive sectors, based on factor shares data of KLEMS – [Capital (K); Labour (L); Energy (E); Materials (M); and Services (S)]; (b) Economic activity is worst hit in the month of April 2020, as suggested by various high frequency economic indicators; (c) The output gap drops to (-) 12 per cent of the potential for this period, based on semi-structural time series analysis; (d) Infections peak in second-half of August 2020, as indicated by the generalised SEIR epidemiological model (updated in June); and (e) The employment during lockdown drops to around (-) 32 per cent of its pre-lockdown level, based on the combined insight from Centre for Monitoring Indian Economy (CMIE) and KLEMS employment estimates. A general equilibrium model which is consistent internally as well with these inputs is then used to generate dynamic scenarios.

In order to evaluate the macroeconomic implications of scenarios I and II, it is worthwhile to simulate a third scenario in which the government does not impose a lockdown (Chart 2).

This results in a more widespread pandemic, which peaks in the second half of January 2021 with a very slow recovery. This causes a persistent labour shortage and the supply shock produces a lasting impact on inflation and the output gap, which corresponds to a permanent upward shift in inflation and a downward shift in potential output, respectively.

Chart 2: Combined Macroeconomic Impact of COVID-19 and Lockdown Scenarios

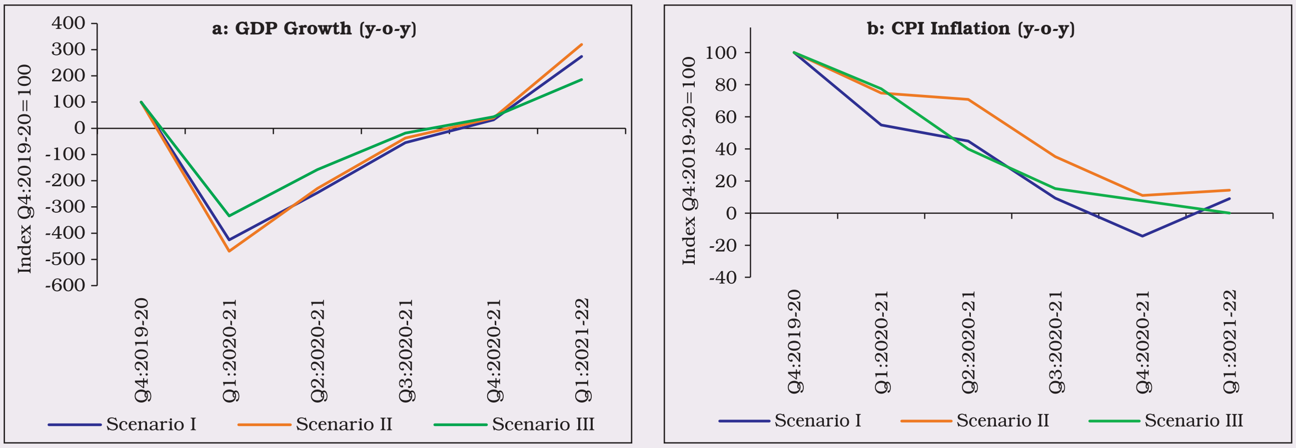


Note: Each time period in the above chart denotes a fortnight. Period 1 corresponds to the first half of April 2020. The green line depicts the scenario without lockdown while the blue dashed line depicts the scenario with lockdown.

Source: RBI staff estimates.

In scenario II, which envisages a second lockdown, the decline in economic activity is expected to reach its trough in Q1:2020-21 and growth turns positive from Q4:2020-21[3] (Chart 3a). Inflation, which was high at 6.7 per cent in Q4:2019-20, is projected to ease till Q4:2020-21(Chart 3b).

Chart 3: Growth and Inflation Projections under Different Scenarios



Source: RBI staff estimates.

In sum, COVID-19 without the associated lockdown acts like a supply shock which causes a persistent rise in inflation and a permanent loss of output. As per Scenario II, which looks closer to the reality, the decline in economic activity reaches its trough in Q1:2020-21 and recovers thereafter, *albeit* at a gradual pace, with growth turning positive from Q4:2020-21.

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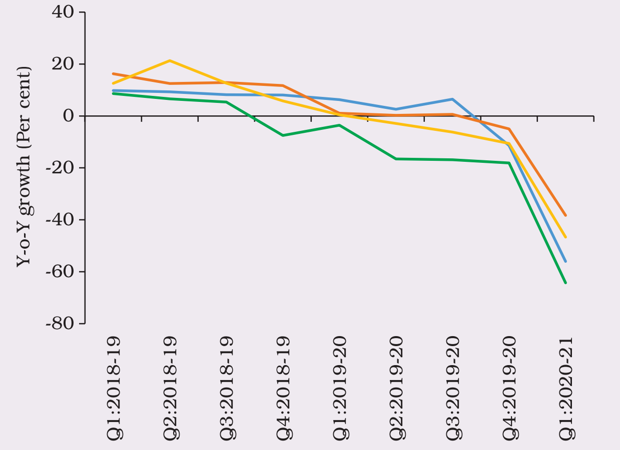
2. Faria-e-Castro, M. (2020), ‘Fiscal Policy during a Pandemic’, *Federal Reserve Bank of St. Louis,* Working Paper Series No. 06.
3. Yang, Y., H. Zhang, and X. Chen (2020), ‘Coronavirus Pandemic and Tourism: Dynamic Stochastic General Equilibrium Modeling of Infectious Disease Outbreak’, *Annals of Tourism Research*.

[3] The scenario analysis does not include the effect of various stimulus packages announced by the Reserve Bank and the government, which may lead to a relatively smoother recovery.

II.1.10 Another constituent of GFCF, *viz.,* construction activity remained subdued in 2019-20 as a large inventory overhang coupled with stressed liquidity conditions restrained new launches. This was also reflected in growth of steel consumption, which plunged to a decadal low of 0.9 per cent in 2019-20 and cement production which registered a contraction of 0.9 per cent (Chart II.1.3). Driving the contraction in GFCF during 2019-20 was the collapse in investment in machinery and equipment, as evident in both imports and production of capital goods.

Chart II.1.3: Indicators of Investment Demand



Source: Joint Plant Committee, Office of Economic Adviser, NSO and DGCI&S.

II.1.11 As per the Order Books, Inventories and Capacity Utilisation Survey (OBICUS) of the Reserve Bank, capacity utilisation (CU) in manufacturing sector picked up from 68.6 per cent in Q3:2019-20 to 69.9 per cent in Q4:2019-20. On a seasonally adjusted basis, CU remained stable at 68.3 per cent in Q4:2019-20 as against 68.4 per cent in Q3:2019-20.

II.1.12 The rate of gross domestic saving, measured as a ratio of gross domestic saving to gross national disposable income (GNDI), which had moderated to 29.7 per cent in 2018-19, is expected to gather pace during 2019-20 on the back of an uptick in household financial savings (Appendix Table 3). As per the preliminary estimates, household financial saving has improved to 7.6 per cent of GNDI in 2019-20, after touching the 2011-12 series low of 6.4 per cent in 2018-19 (Table II.1.2). This improvement has

Table II.1.2: Financial Saving of the Household Sector

(Per cent of GNDI)

Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20#
1	2	3	4	5	6	7	8	9	10
A. Gross financial saving	**10.4**	**10.5**	**10.4**	**9.9**	**10.7**	**10.4**	**11.9**	**10.4**	**10.5**
of which:									
1. Currency	1.2	1.1	0.9	1.0	1.4	-2.1	2.8	1.5	1.4
2. Deposits	6.0	6.0	5.8	4.8	4.6	6.3	3.1	4.1	3.6
3. Shares and Debentures	0.2	0.2	0.2	0.2	0.2	1.1	1.0	0.4	0.4
4. Claims on Government	-0.2	-0.1	0.2	0.0	0.5	0.7	0.9	1.0	0.0
5. Insurance Funds	2.2	1.8	1.8	2.4	1.9	2.3	2.0	1.3	1.7
6. Provident and Pension funds	1.1	1.5	1.5	1.5	2.1	2.1	2.1	2.1	2.1
B. Financial Liabilities	**3.2**	**3.2**	**3.1**	**3.0**	**2.7**	**3.0**	**4.3**	**4.0**	**2.9**
C. Net Financial Saving (A-B)	**7.2**	**7.2**	**7.2**	**6.9**	**7.9**	**7.3**	**7.6**	**6.4**	**7.6**

GNDI: Gross National Disposable Income.
#: As per the preliminary estimate of the Reserve Bank. The NSO will release the financial saving of the household sector on January 29, 2021 based on the latest information, as part of the 'First Revised Estimate of National Income, Consumption Expenditure, Saving and Capital Formation for 2019-20'.
Note: Figures may not add up to total due to rounding off.
Source: NSO.

occurred on account of sharper moderation in household financial liabilities than that in financial assets. COVID-19 related economic disruptions, however, caused a sharper decline in household financial assets in Q4:2019-20.

3. Aggregate Supply

II.1.13 Aggregate supply, measured by gross value added (GVA) at basic prices, slowed to 3.9 per cent in 2019-20, 2.1 percentage points lower than a year ago and 2.8 percentage points below its decennial rate of 6.7 per cent. GVA's momentum measured by three quarter moving average (MA) of quarter-on-quarter (q-o-q) seasonally adjusted annualised growth rates (SAAR) appears to have troughed in Q3:2019-20 and a modest uptick seems to have commenced in Q4:2019-20 (Chart II.1.4).

II.1.14 On the supply side, the main locomotive of growth – the services sector – has been severely affected by the lockdown, while industrial GVA went into an accentuated contraction in 2019-20 (Table II.1.3). These negative tendencies were cushioned by the agriculture sector, as discussed below.

Chart II.1.4: GVA Growth: Y-o-Y and 3-Quarter MA-SAAR

Source: NSO and RBI staff calculations.

Table II.1.3: Real GVA Growth

Sectors	Growth (per cent)					Contribution to Growth (per cent)				
	2008-09	2009-11	2011-14	2014-18	2018-20	2008-09	2009-11	2011-14	2014-18	2018-20
1	2	3	4	5	6	7	8	9	10	11
I. Agriculture, Forestry and Fishing	**-0.2**	**4.0**	**4.5**	**3.3**	**3.2**	**-1.2**	**8.7**	**14.6**	**6.9**	**10.6**
II. Industry	**3.4**	**9.1**	**2.9**	**8.8**	**2.6**	**18.6**	**29.2**	**11.8**	**26.8**	**11.1**
2. Mining and Quarrying	-2.5	9.7	-5.6	8.7	-1.4	-2.4	5.0	-4.4	3.4	-0.4
3. Manufacturing	4.7	9.3	4.5	8.9	2.9	18.5	22.2	14.1	20.9	8.7
4. Electricity, Gas, Water Supply and Other Utility Services	4.9	6.5	5.1	8.3	6.2	2.5	2.0	2.1	2.5	2.8
III. Services	**6.4**	**8.0**	**7.0**	**8.1**	**6.3**	**82.6**	**62.1**	**73.6**	**66.3**	**78.3**
5. Construction	5.6	6.4	5.4	4.7	3.7	11.6	7.9	9.0	5.3	5.3
6. Trade, Hotels, Transport, Communication and Services related to Broadcasting	2.4	9.0	7.5	8.7	5.7	9.6	19.8	24.0	22.0	21.3
7. Financial, Real Estate and Professional Services	5.2	5.6	8.5	8.7	5.7	23.5	15.0	28.8	24.9	25.1
8. Public Administration, Defence and Other Services	15.8	11.8	5.1	8.4	9.7	37.8	19.4	11.7	14.1	26.6
IV. GVA at basic prices	**4.3**	**7.4**	**5.6**	**7.4**	**5.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: NSO and RBI staff calculations.

II.1.15 Agriculture and allied activities, with a real GVA growth of 4.0 per cent in 2019-20 (PE), benefitted from record production of foodgrains as well as commercial and horticultural crops. The contribution of agriculture to overall economic growth (15.2 per cent) surpassed that of the industrial sector (4.7 per cent) for the first time since 2013-14. Although agriculture accounts for only 14.6 per cent share in overall GVA, the increased contribution in overall growth is expected to have positive impact on 48.3 per cent of total households who are employed in agriculture.

II.1.16 The SWM started off on a sluggish note on June 8, 2019 with a delay of about one week from its normal onset. After a rainfall deficit of 33 per cent in June, the SWM gathered momentum from mid-July and cumulative rainfall at the end of the season (September 30, 2019) turned out to be 10 per cent above the long period average (LPA) [9 per cent below LPA during previous year]. *Kharif* sowing also gained momentum and ended the season with marginally higher acreage than in the previous year. Accordingly, *kharif* foodgrains production in 2019-20 is placed 1.3 per cent higher than the final estimates (FE) for 2018-19 (Table II.1.4).

II.1.17 The incidence of cyclonic storms (mainly *Vayu* and *Bulbul*) and spells of unseasonal rains in October and mid-November (Chart II.1.5) resulted in damage to standing crops in many states. The maximum loss was in respect of *urad*, and production estimates were revised downward by 29.2 per cent (2nd AE over 1st AE) due to crop losses.

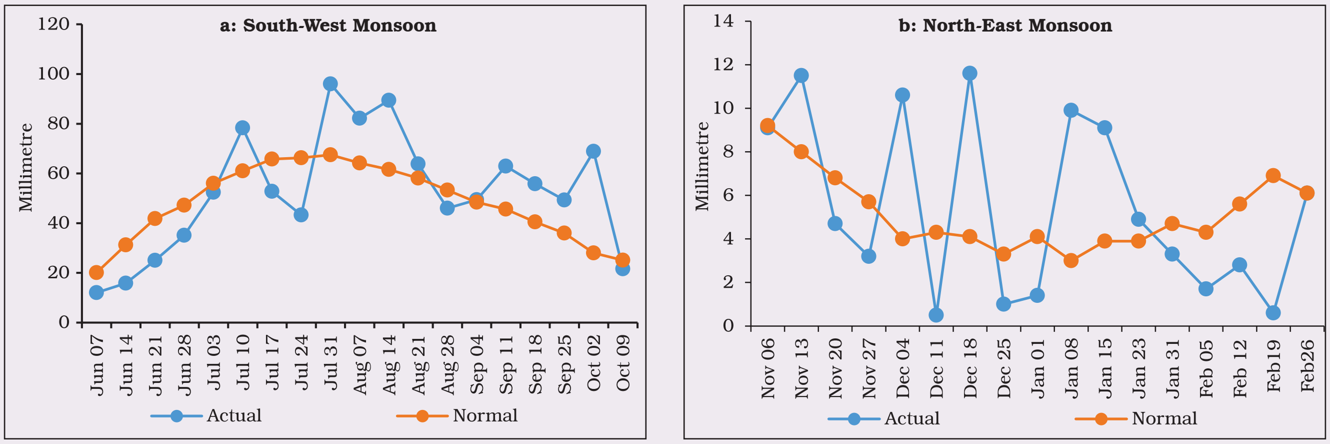
Table II.1.4: Agricultural Production 2019-20

(Lakh Tonnes)

Crop	Season	2018-19		2019-20		2019-20 Variation (Per cent)		
		4th AE	Final	Target	4th AE	Over 2018-19		Over 2019-20
						4th AE	Final	Target
1	2	3	4	5	6	7	8	9
Foodgrains	*Kharif*	1,417.1	1415.2	1,479.0	1,433.8	1.2	1.3	-3.1
	Rabi	1,432.4	1437.0	1,432.0	1,532.7	7.0	6.7	7.0
	Total	2,849.5	2852.1	2,911.0	2,966.5	4.1	4.0	1.9
Rice	*Kharif*	1,021.3	1020.4	1,020.0	1,019.8	-0.1	-0.1	0.0
	Rabi	142.9	144.4	140.0	164.5	15.1	13.9	17.5
	Total	1,164.2	1164.8	1,160.0	1,184.3	1.7	1.7	2.1
Wheat	*Rabi*	1,021.9	1036.0	1,005.0	1,075.9	5.3	3.9	7.1
Coarse Cereals	*Kharif*	309.9	313.8	358.0	336.9	8.7	7.4	-5.9
	Rabi	119.6	116.7	125.0	137.9	15.3	18.2	10.3
	Total	429.5	430.6	483.0	474.8	10.5	10.3	-1.7
Pulses	*Kharif*	85.9	80.9	101.0	77.2	-10.1	-4.6	-23.6
	Rabi	148.0	139.8	162.0	154.4	4.3	10.4	-4.7
	Total	234.0	220.8	263.0	231.5	-1.1	4.8	-12.0
Oilseeds	*Kharif*	212.8	206.8	258.0	223.2	4.9	7.9	-13.5
	Rabi	109.8	108.5	103.0	111.1	1.2	2.4	7.8
	Total	322.6	315.2	361.0	334.2	3.6	6.0	-7.4
Sugarcane	Total	4,001.6	4,054.2	3,855.0	3,557.0	-11.1	-12.3	-7.7
Cotton #	Total	287.1	280.4	358.0	354.9	23.6	26.6	-0.8
Jute & Mesta ##	Total	97.7	98.2	112.0	99.1	1.5	0.9	-11.5

#: Lakh bales of 170 kg each. **##:** Lakh bales of 180 kg each. AE: Advance Estimate.
Source: Ministry of Agriculture and Farmers Welfare, GoI.

Chart II.1.5: Weekly Rainfall (2019-20)



Source: India Meteorological Department.

II.1.18 Overall foodgrains production is estimated at 2,966.5 lakh tonnes in 2019-20 – a record for the third successive year. Foodgrains production is estimated to have grown by 4.0 per cent in 2019-20, driven mainly by record production of rice and wheat. Among commercial crops, oilseeds, cotton, and jute and *mesta* are estimated to have grown by 6.0 per cent, 26.6 per cent and 0.9 per cent, respectively, while sugarcane production contracted by 12.3 per cent over the previous year.

II.1.19 As per the 2nd AE, the production of horticultural crops reached a record level of 3,204.8 lakh tonnes during 2019-20, driven mainly by production of vegetables and fruits (Table II.1.5). All the three key vegetables – onions, tomatoes and potatoes – registered increased production.

Table II.1.5: Horticulture Production

(Lakh Tonnes)

Crops	2017-18	2018-19		2019-20	Variation (Per cent)		
	Final Estimate (FE)	2nd AE	Final Estimate (FE)	2nd AE	2018-19 FE over 2017-18 FE	2019-20 2nd AE over 2018-19 2nd AE	2019-20 2nd AE over the 2018-19 FE
1	2	3	4	5	6	7	8
Total Fruits	973.6	973.8	979.7	990.7	0.6	1.7	1.1
Banana	308.1	312.2	304.6	315.0	-1.1	0.9	3.4
Citrus	125.5	131.5	134.0	139.7	6.8	6.2	4.3
Mango	218.2	209.6	213.8	204.4	-2.0	-2.5	-4.4
Total Vegetables	1,844.0	1,873.7	1,831.7	1,917.7	-0.7	2.3	4.7
Onion	232.6	232.8	228.2	267.4	-1.9	14.8	17.2
Potato	513.1	529.6	501.9	513.0	-2.2	-3.1	2.2
Tomato	197.6	196.6	190.1	205.7	-3.8	4.6	8.2
Plantation Crops	180.8	176.6	163.5	162.4	-9.6	-8.0	-0.7
Total Spices	81.2	86.1	94.3	94.2	16.1	9.4	-0.1
Aromatics and Medicinal	8.7	8.5	8.0	8.0	3.9	-6.6	-0.4
Total Flowers	27.9	28.9	29.1	30.6	4.1	5.8	5.5
Total	**3,117.4**	**3,148.7**	**3,107.4**	**3,204.8**	**-0.3**	**1.8**	**3.1**

FE: Final Estimate. AE: Advance Estimate.
Source: Ministry of Agriculture and Farmers Welfare, GoI.

II.1.20 In recent years, the impact of climate change in terms of volatile rainfall intensity, increase in extreme events and rising temperature has implications for the outlook of agriculture (Box II.1.2).

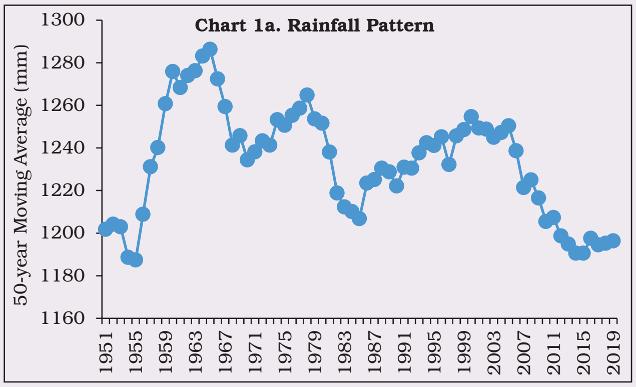
II.1.21 As in the previous two years, minimum support prices (MSPs) announced in 2019-20 for both *rabi* and *kharif* crops ensured a minimum return of 50 per cent over the cost of production.

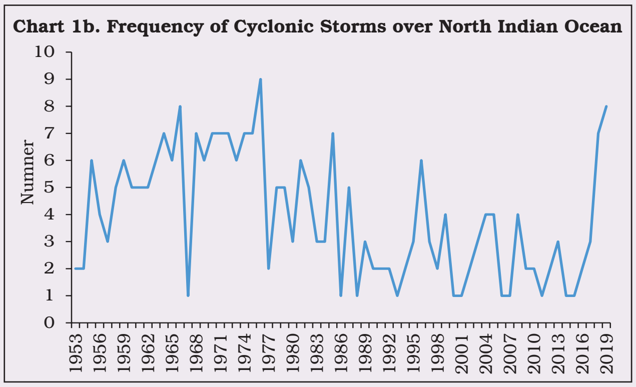
II.1.22 In the Union Budget 2020-21, the government had proposed to operationalise *Kisan Rail* for transporting perishable goods (including milk, meat and fish) to improve the efficiency of agricultural supply chains, reduce post-harvest losses and moderate price fluctuations. Further, *Krishi Udaan* scheme was proposed to help farmers to transport their produce by air on both national and international routes. The Budget has also given a major thrust to development of

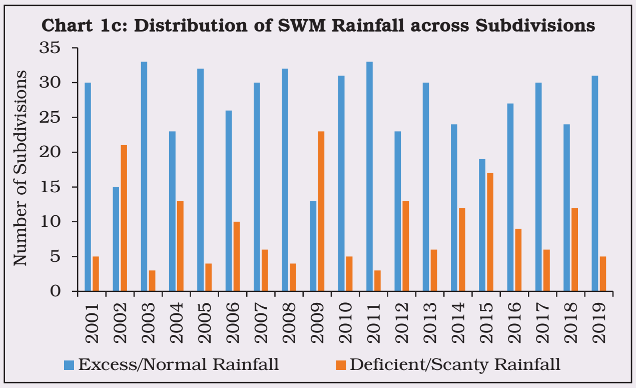
Box II.1.2
Climate Change - The Challenges for Indian Agriculture

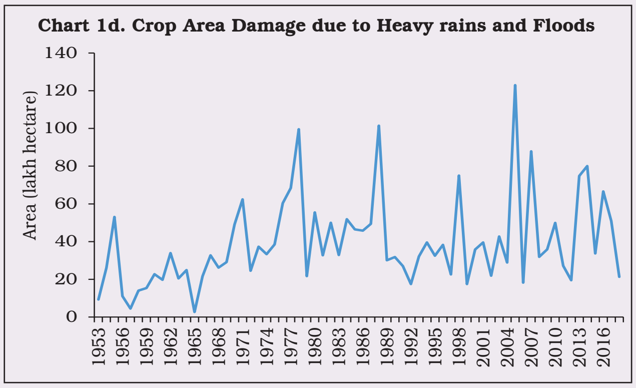
As in many parts of the world, drastic changes in climatic conditions have also been observed in India and these include impact on onset and withdrawal dates of monsoon and the incidence of extreme events (IPCC, 2019 and GoI, 2020).

Consistent with models of climate change, the number of dry days as well as days with extremely high levels of rainfall have increased in India - more intense droughts; downward shifts in average rainfall by 59 mm since 2000 (Chart 1a); higher frequency of cyclones - India was hit by 8 cyclones in 2019 which is the highest since 1976 (Chart 1b); high variation in the number of subdivisions receiving excess/normal and deficient/scanty monsoon rains (Chart 1c); and an increase in the extent of crop area damaged due to unseasonal rains and heavy floods (Chart 1d).









Source: Ministry of Statistics and Programme Implementation (MOSPI); Central Water Commission and Fertiliser Association of India.

(contd....)

Global warming has also led to a sharp rise in the annual average temperature in India by 1.8°C between 1997 and 2019 as compared to a 0.5°C increase between 1901 and 2000 (Chart 2a). This has likely caused a decline in crop yields, undermining farm income (Chart 2b).

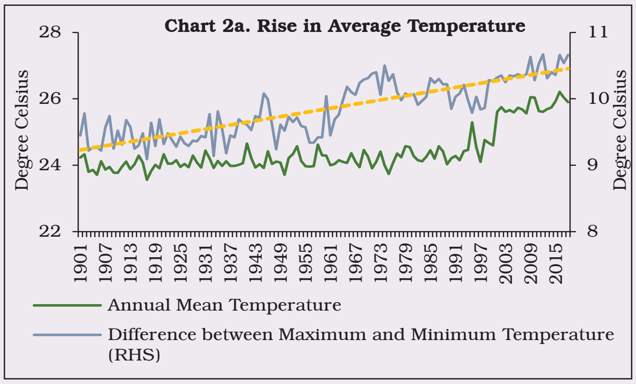


Chart 2a. Rise in Average Temperature

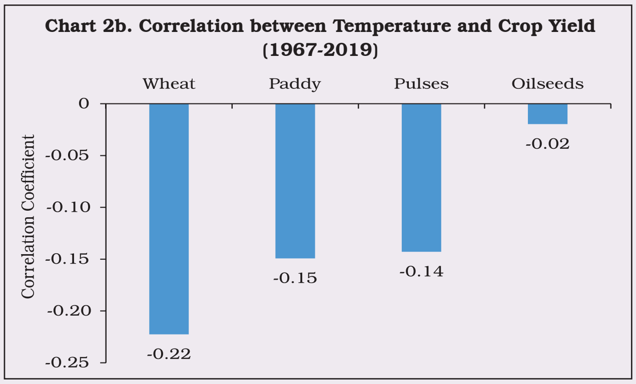


Chart 2b. Correlation between Temperature and Crop Yield (1967-2019)

Source: MOSPI and Ministry of Agriculture and Farmers Welfare, GoI.

Global warming has also led to a sharp rise in the annual average temperature in India by 1.8°C between 1997 and 2019 as compared to a 0.5°C increase between 1901 and 2000 (Chart 2a). This has likely caused a decline in crop yields, undermining farm income (Chart 2b).

Water tables have depleted at an alarming rate, with around 52 per cent of the wells in India recording decline in water levels between the years 2008 and 2018 (Chart 3a). This imparts urgency to move from flood irrigation to micro irrigation methods like drip or hose reel, which can save up to 60 per cent of the water used and also help in preventing pest incidence. At present, the coverage of micro irrigation is much lower in states which have recorded higher declines in water tables (Chart 3b). Alongside, there is a need to adopt crop cycles, credit cycles and procurement patterns to monsoonal shifts.

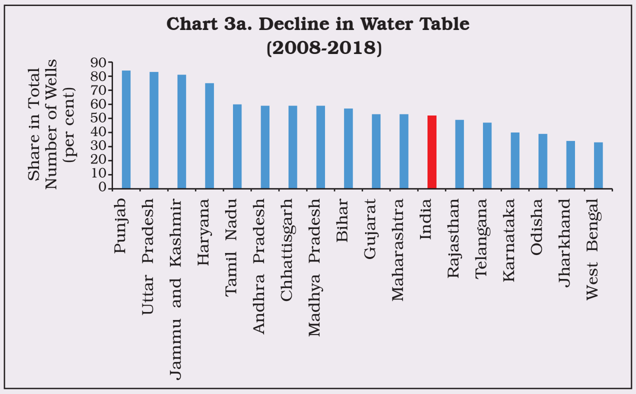


Chart 3a. Decline in Water Table (2008-2018)

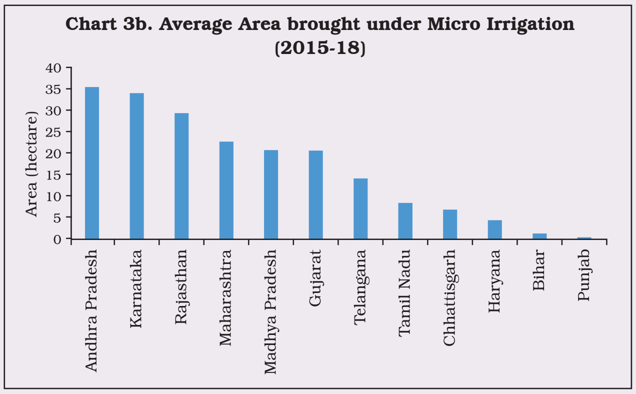


Chart 3b. Average Area brought under Micro Irrigation (2015-18)

Source: Central Water Commission and Ministry of Agriculture and Farmers Welfare, GoI.

References:

1. Government of India, (2020), 'Observed Monsoon Rainfall Variability and Changes during Recent 30 years (1989-2018)', Climate Research and Services Division, *Ministry of Earth Sciences*, India Meteorological Department.

2. Intergovernmental Panel on Climate Change (IPCC) (2019), ' Climate Change and Land', *World Meterological Organisation and United Nations Environment Programme.*

warehousing infrastructure as well as village level storage facilities in the country by involving various stakeholders such as NABARD, Warehouse Development and Regulatory Authority (WDRA), FCI, Central Warehousing Corporation (CWC) and self-help groups (SHGs). *Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhiyan* scheme was launched enabling the farmers to set up solar power generation capacity on their fallow/ barren lands and to sell it to the grid. The government has proposed cluster-based '*One Product One District* ' approach to tap the potential of horticulture sector in enhancing farmers' income. Minimum support prices announced for *kharif* 2020-21 are higher by 2.9 per cent to 12.7 per cent *vis-à-vis* last year, ensuring a minimum return of 50 per cent over all India weighted average cost of production.

II.1.23 Under *Atmanirbhar Bharat Abhiyan* Package, government has announced measures to strengthen infrastructure, logistics, capacity building, governance and administrative reforms for agriculture, animal husbandry, fisheries and food processing. These measures include eight development schemes[4] with fund allocation of ₹1.6 lakh crore which is much higher as compared to funds allocated to the relevant schemes for the Union Budget 2020-21. In addition to the above schemes, the government has also announced three governance and administrative reforms to attract investments in agriculture sector and make it competitive, namely, delisting of various agricultural commodities from the Essential Commodities Act to develop seamless marketing and promote storage infrastructure in agriculture; 'The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Ordinance 2020' to ensure barrier free trade of agriculture produce; and 'The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Ordinance 2020' to empower the farmers to engage with processors, aggregators, wholesalers, large retailers, and exporters in a fair and transparent manner (Annex II).

Industrial Sector

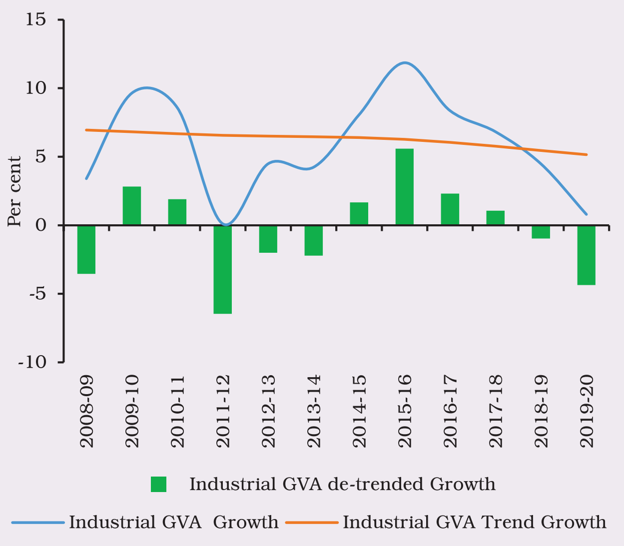
II.1.24 Industrial GVA decelerated sharply in 2019-20 to 0.8 per cent from 4.5 per cent last year. The print for 2019-20 was the lowest in the 2011-12 series, marking the fourth consecutive year of deceleration since 2015-16. The cyclical component[5] of industrial GVA growth moved deeper into contraction (Chart II.1.6).

II.1.25 The deceleration was broad-based with headwinds from subdued demand – both domestic and international. With dwindling confidence and imposition of lockdown, the demand for non-essential items plummeted. The index of industrial production (IIP) shrank by 0.8 per cent during 2019-20 from 3.8 per cent growth a year ago (Chart II.1.7a & 7b).

II.1.26 In the manufacturing sector, which constitutes three-fourths of industry, 17 of 23 industry groups recorded contraction. The motor vehicles segment was the largest negative contributor to manufacturing IIP, while basic metals, largely comprising mild steel slabs, provided a positive impetus.

II.1.27 The mining sector decelerated largely on account of disruptions caused by extended

II.1.6 : Growth, Trend and De-trended Growth

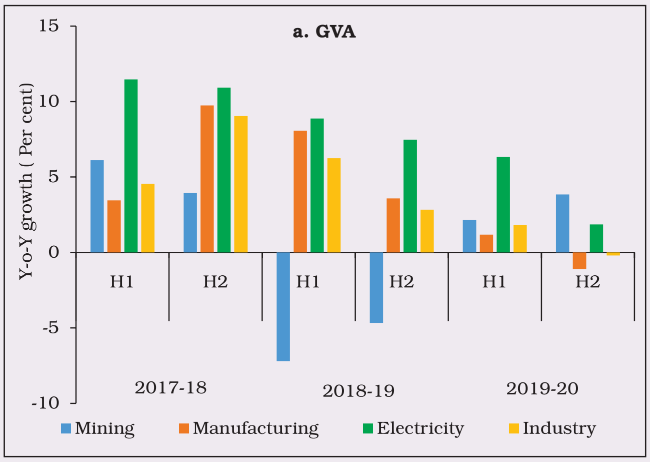


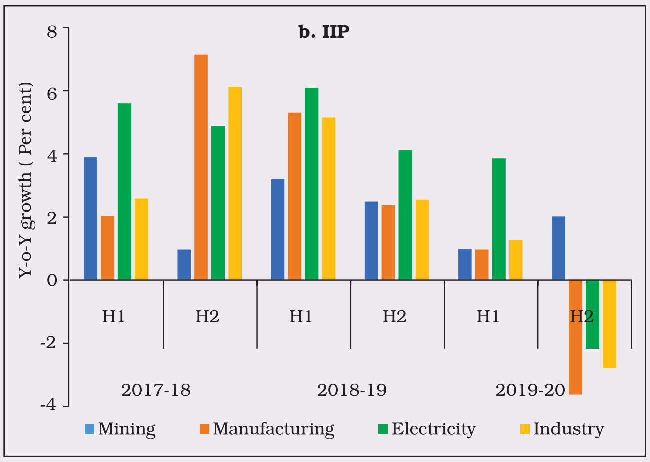
Source: NSO and RBI.

[4] Agri Infrastructure Fund, Promotion of Herbal Cultivation, Extension of Operation Greens to all fruits and vegetables (currently, it is only for tomato, onion and potato), Formalisation of Micro Food Enterprises, *Pradhan Mantri Matasya Sampada Yojana*, National Animal Disease Control Programme, National Animal Husbandry Infrastructure Development Fund and Scheme on Beekeeping.

[5] Estimated through a univariate approach using Hodrick-Prescott filter.

Chart II.1.7: Growth in Industrial Production





Source: NSO and RBI staff calculations.

monsoon. Crude oil and natural gas production declined due to depletion in reserves, flood repairs and industrial strikes, in addition to sluggish demand. There was some recovery in mining activity during H2 as unfavourable weather conditions waned and economic activity picked up in January-February 2020. Electricity generation decelerated due to contraction in thermal power generation, lean industrial demand and the extended monsoon. IIP manufacturing and electricity closely co-moved, indicating that a pick-up in manufacturing activities is essential for electricity demand to improve. Hydro electricity generation registered double digit growth during the year even as the share of renewables increased in the total electricity generation mix.

II.1.28 In terms of use-based classification, much of the deceleration in IIP was caused by a sharp contraction in capital goods and consumer durables production (Table II.1.6).

Table II.1.6: Index of Industrial Production (2011-12 = 100)

(Per cent)

Industry Group	Weight in IIP	Growth Rate						
		2015-16	2016-17	2017-18	2018-19	2019-20	2019-20 (April-June)	2020-21 (April-June)
1	2	3	4	5	6	7	8	9
Overall IIP	100	3.3	4.6	4.4	3.8	-0.8	3.0	-35.9
Mining	14.4	4.3	5.3	2.3	2.9	1.6	3.0	-22.4
Manufacturing	77.6	2.8	4.4	4.6	3.9	-1.4	2.4	-40.7
Electricity	8.0	5.7	5.8	5.4	5.2	1.0	7.3	-15.8
Use-Based								
Primary goods	34.0	5.0	4.9	3.7	3.5	0.7	2.6	-20.3
Capital goods	8.2	3.0	3.2	4.0	2.7	-13.9	-3.5	-64.4
Intermediate goods	17.2	1.5	3.3	2.3	0.9	9.1	9.2	-43.0
Infrastructure/ construction goods	12.3	2.8	3.9	5.6	7.3	-3.6	0.4	-48.3
Consumer durables	12.8	3.4	2.9	0.8	5.5	-8.7	-2.7	-67.6
Consumer non-durables	15.3	2.6	7.9	10.6	4.0	-0.1	7.0	-15.3

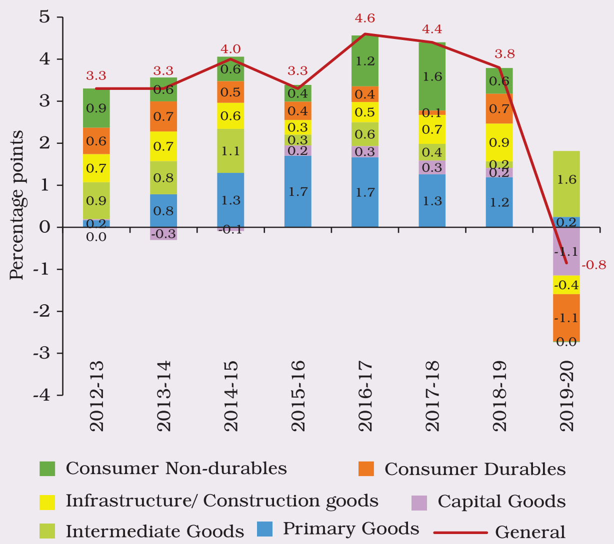
Source: NSO.

II.1.29 In terms of weighted contributions to IIP, the shares of capital goods, construction/infrastructure goods, consumer durables and consumer non-durables declined, while that of intermediate goods increased (Chart II.1.8).

II.1.30 Even as the persisting weakness in capital goods production, and the decline in capacity utilisation have raised concerns in the context of investment slowdown, demand for consumer non-durables has also slumped, suggesting overall weakening of demand conditions (Chart II.1.9).

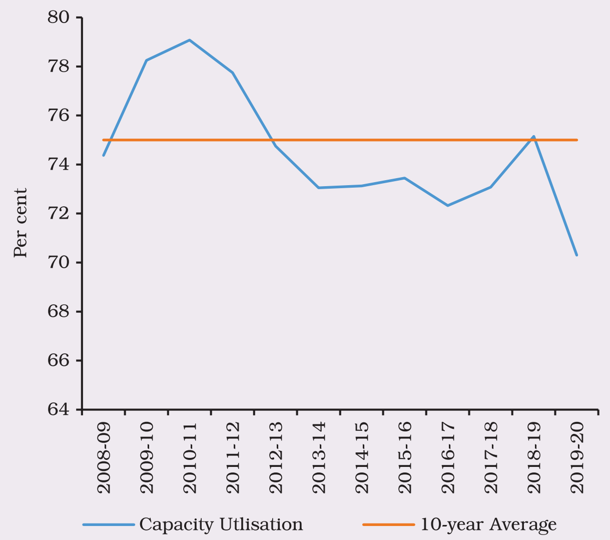
II.1.31 The deceleration in manufacturing activity is aggravated by decline in trade due to trade disruptions with the onset of COVID-19 and declining demand. The import intensity of India's manufacturing products[6], on an average, stood at 35.6 per cent during the period 2015-17 (Table II.1.7).

Chart II.1.8: IIP- Use based: Weighted Contributions



Source: NSO.

Chart II.1.9: Manufacturing Capacity Utilisation



Source: RBI.

II.1.32 Import intensity differs across product groups, with the electronics industry having the highest import dependence, followed by machinery and equipment, reflecting disproportionate impact

Table II.1.7: Select Industry-wise Import Dependence (Average of 2015-2017)

(Per cent)

Industry	Import Intensity of Intermediate Inputs	Import Intensity of Output	Share in Manufacturing GVA
1	2	3	4
Electronics	60.7	42.8	4.6
Machinery	48.5	37.3	8.1
Transport Equipment	5.3	3.4	11.5
Chemicals	29.4	21.0	9.0
Pharmaceuticals	2.7	1.3	6.5
Total Manufacturing	35.6	25.1	100.0

Source: RBI staff estimates.

6 Import intensity = $\frac{\Sigma_{i=1}^{n} QI_i}{\Sigma_{i=1}^{n} Q_i}$

where i = sectors in economy; Q = intermediate inputs used for production in domestic economy; QI = imported intermediate inputs.

of trade restrictions on industries. Accordingly, an import disruption, *ceteris paribus*, would lead to non-availability of crucial components, resulting in contraction in manufacturing GVA by as much as 2.5 per cent (Table II.1.8).

II.1.33 The impact due to factor income loss (capital and labour) of 68 days of lockdown on the manufacturing and mining sectors could be as high as ₹2.7 lakh crore (Table II.1.9).

Services Sector

II.1.34 In tandem with the slowdown in the industrial sector, services sector growth decelerated to 5.0 per cent in 2019-20 – the lowest in the last three decades. All sub-sectors except public administration, defence and other services (PADO) decelerated, the latter cushioning overall services sector growth, despite revenue shortfalls. Excluding PADO, services sector GVA growth decelerated to 3.7 per cent from 7.0 per cent in 2018-19 (Chart II.1.10).

II.1.35 Deceleration in construction and trade, hotels, transport, communication and services

Table II.1.8: Impact of Trade Disruption in India's Manufacturing Sector

(Per cent)

India's Main Imports	Global Import		
	Scenario I: Import Freezes	Scenario II: Import < 50 per cent	Scenario III: Import < 25 per cent
1	2	3	4
Capital Goods (Machinery)	0.84	0.42	0.21
Electronics and Electricals	0.83	0.41	0.21
Pharmaceuticals	0.05	0.01	0.01
Chemicals	0.70	0.18	0.18
Transport Equipment	0.16	0.02	0.04
Combined Effect on GVA of the Above Sectors	2.58	1.04	0.64
Total Manufacturing GVA	**9.90**	**4.95**	**2.48**

Note: All values should be read as negative.
Source: RBI staff estimates

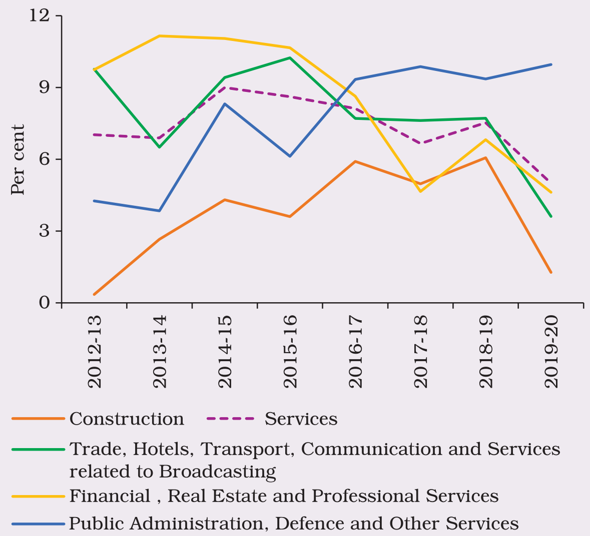
Table II.1.9: Impact on Manufacturing and Mining GVA - Alternate Scenarios

Sectors	Disruptions	Factor Income Loss Estimated in Constant Prices (₹ lakh crore)		
		Phase I & II: Lockdown (40 days)	Phase III & IV: Lockdown (28 days)	Cumulative Effect (68 days)
1	2	3	4	5
Mining & Quarrying	Partial	0.389	0.109	0.498
Manufacturing	Partial	1.664	0.576	2.240
Manufacturing & Mining GVA		**2.053**	**0.685**	**2.738**

Note: 1. The sectoral proportion of labour income shares are taken from India KLEMS database.
2. All values to be read as negative.
3. The Q1:2020-21 impact on manufacturing GVA considers 33 days in Phase I & II, 28 days in Phase III & IV and 61 days in cumulative effect.

Source: RBI staff estimates.

Chart II.1.10: Services Sub-Sector GVA Growth



Source: NSO and RBI staff calculations.

related to broadcasting drove the slowdown in overall services activity (Chart II.1.11).

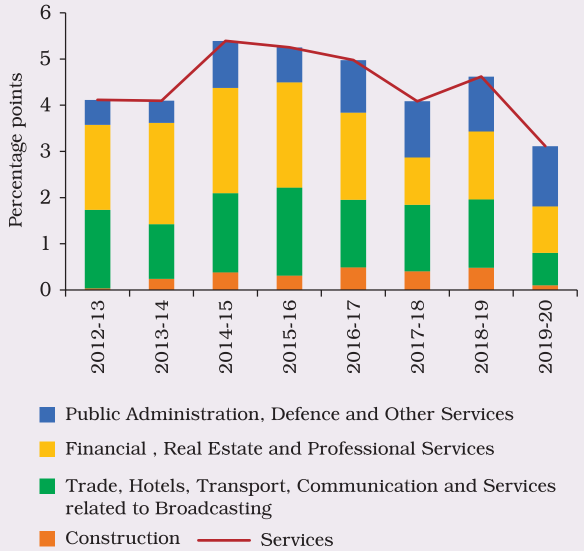
II.1.36 The sluggishness in the road transport sector was reflected in a contraction in commercial vehicle sales that began since H2:2018-19 and intensified through the year. The air transport segment remained stagnant, with contraction in both passenger and cargo traffic. Foreign tourist arrivals fell sharply from February 2020 pointing to difficult times ahead for the hospitality industry in the wake of COVID-19. The hospitality industry is likely to be the worst affected sector globally. Even rail transport decelerated during 2019-20. The construction sector registered its sharpest deceleration – from 6.1 per cent in 2018-19 to 1.3 per cent during 2019-20. Private sector estimates indicates that in the housing sector, new launches and sales declined in Q4:2019-20.

II.1.37 The Reserve Bank's services sector composite index (SSCI)[7], which tracks activity in construction, trade, transport and finance and is a coincident indicator of GVA growth in the services excluding PADO, declined in 2019-20 (Chart II.1.12).

4. Employment

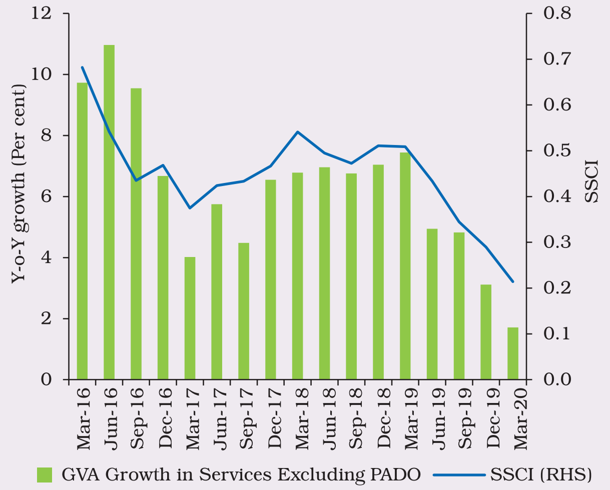
II.1.38 In June 2020, the NSO released the Periodic Labour Force Survey (PLFS) of employment for 2018-19. The labour force participation rate was estimated at 37.5 per cent in 2018-19, an increase of 0.6 percentage points from 2017-18. The unemployment rate according to usual status declined to 5.8 per cent in 2018-19 (6.0 per cent for male and 5.2 per cent for female) from 6.1 per cent in 2017-18 (6.2 per cent for male and 5.7 per cent for female). Worker population rate, an indicator of employment, increased to 35.3 per cent in 2018-19 as compared to 34.7 per cent in 2017-18. In terms of distribution of workers by broad status in employment, the share of regular wage/salaried workers increased from

Chart II.1.11: Services GVA Sub-Sectors Contributions



Source: NSO and RBI staff calculations.

Chart II.1.12: Growth in Services Sector (excluding PADO) and Services Sector Composite Index



PADO: Public Administration, Defence and Other Services.
Source: NSO and RBI staff estimates.

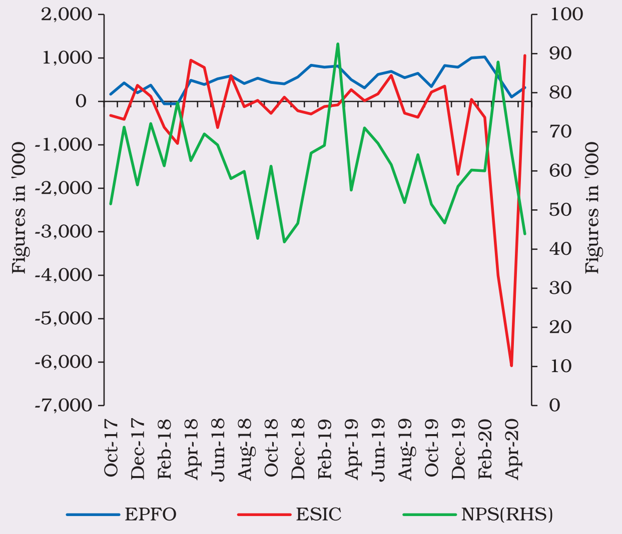
[7] SSCI is constructed by suitably extracting and combining the information collated from high frequency indicators, namely, steel production, cement production, cargo handled at major ports, production of commercial vehicles, railway freight traffic, non-oil imports, tourist arrivals, real bank credit and insurance premium.

22.8 per cent in 2017-18 to 23.8 per cent in 2018-19, with a corresponding fall in the proportion of casual workers from 24.9 per cent to 24.1 per cent during the same period, indicating enhanced formalisation of the economy.

II.1.39 More updated organised sector employment, measured in terms of payroll[8] data from the Employees' Provident Fund Organisation (EPFO), Employees' State Insurance Corporation (ESIC) and National Pension System (NPS), indicated a mixed picture with regard to job creation in 2019-20 (Chart II.1.13). Net subscribers added to EPFO per month averaged 6.5 lakh during April-March 2019-20, up from 5.6 lakh a year ago. On the other hand, the average number of members who paid their contribution to ESIC contracted by 4.1 lakh during 2019-20, in contrast to an addition of 0.6 lakh during 2018-19. New subscribers to NPS increased marginally during the same period.

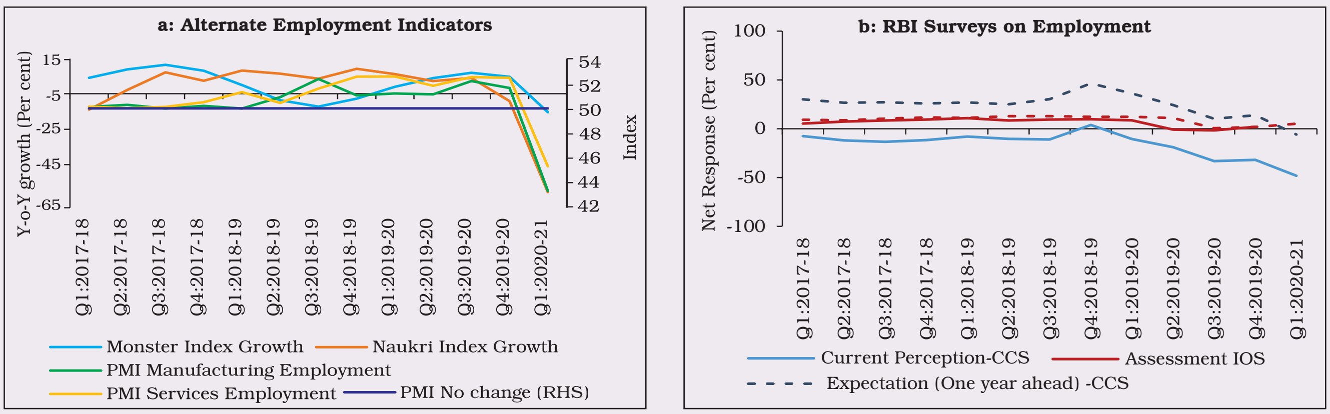
II.1.40 For Q4:2019-20, PMI employment index showed payroll hiring in manufacturing gained momentum whereas, for services, the rate of job creation moderated as compared to previous quarter. Hiring activity measured by online recruitment, showed a mixed pattern. While *Naukri* Job Speak Index contracted sharply, Monster Employment Index registered growth during Q4:2019-20 (Chart II.1.14a). Both the Industrial Outlook Survey (IOS) and Consumer Confidence Survey (CCS) pointed to the sentiments on employment conditions remaining pessimistic during Q4:2019-20 (Chart II.1.14b).

Chart II.1.13: Jobs in Organised Sector - Payroll Employment Indicator



Source: Government of India.

Chart II.1.14 Employment Scenario



Source: RBI, IHS Markit, Monster.com and *Naukri.com*.

[8] EPFO, ESIC and NPS series are not additive due to overlaps in the data.

II.1.41 Considering the small farm size in India, the self-employed in agriculture can be assumed to be relatively unscathed by the pandemic. On the other hand, 40 per cent of casual labourers in rural areas are employed in the construction sector, which has come to a complete halt during the lockdown (Table II.1.10). Self-employed and casual labourers together account for 51.3 per cent of the urban workforce, and hence, the pandemic has disproportionate impact on urban areas.

II.1.42 Several policy initiatives were undertaken by the government during the year for addressing structural bottlenecks in the economy. These policies are aimed at generating employment opportunities such as strategic promotion of labour-intensive manufacturing, increasing public expenditure on MGNREGA, Prime Minister's Employment Generation Programme (PMEGP), *Pandit Deen Dayal Upadhyaya Grameen Kaushalya Yojana* (DDU-GKY) and *Deen Dayal Antodaya Yojana* – National Urban Livelihoods Mission (DAY-NULM). For skill development, a target to train over 69.03 lakh during 2016-17 to 2019-20 has been set to help them earn a livelihood through *Pradhan Mantri Kaushal Vikas Yojana*. As a part of legislative reforms, 44 labour laws have been simplified, amalgamated and rationalised into 4 labour codes in accordance with the recommendations of the 2nd National

Table: II.1.10: Sector and Area-wise Type of Workforce

(Percentage Share in respective Employment Category)

Sectors	Rural			Urban			Rural+ Urban		
	Self employed	Regular /Salaried	Casual	Self employed	Regular/ Salaried	Casual	Self employed	Regular/ Salaried	Casual
1	2	3	4	5	6	7	8	9	10
Agriculture	73.9	4.7	49.9	10.5	0.5	9.3	60.4	2.1	43.6
Mining & Quarrying	0.1	1.1	0.8	0.1	0.8	0.4	0.1	0.9	0.6
Manufacturing	6.5	20.0	4.7	22.8	23.6	17.1	10.0	22.2	6.7
Electricity & Water Supply	0.1	1.8	0.1	0.7	1.7	0.2	0.2	1.9	0.1
Construction	1.9	3.2	40.0	4.7	2.5	51.7	2.5	2.8	42.0
Trade, Hotel & Restaurant	10.9	13.3	1.0	34.6	17.9	7.6	16.0	16.1	1.7
Transport, Storage & Communication	3.0	12.7	2.3	12.3	9.8	8.1	4.9	10.7	3.3
Other Services	3.5	43.3	1.2	14.3	43.2	5.6	5.8	43.3	1.9
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: RBI staff calculations.

Commission on Labour. The Code on Wages, 2019, passed in both the Houses of Parliament, is expected to bring greater formalisation of the labour market and safeguard interests of workers, while facilitating employment creation and ease of doing business.

II.I.43 A package of measures was announced in May 2020 under *Atmanirbhar Bharat Abhiyan* in five tranches cover, among others, rural employment generation, infrastructure, MSMEs, NBFCs, migrant workers and ease of doing business. These measures aggregate around ₹20 lakh crore or 10 per cent of GDP and aim to address the difficulties faced by various categories including MSMEs, NBFCs, power distribution companies and infrastructure projects. The measures, both short-term and long-term in nature, also endeavour to make India self-reliant by boosting private participation in numerous sectors with global quality and competitiveness. The growth of India's personal protective equipment (PPE) sector from scratch before March 2020 to making 1,50,000 pieces a day by beginning of May 2020 shows the potential of India in meeting the challenges.

II.I.44 MSMEs which are badly hit by the pandemic are expected to benefit from various policies of the government such as collateral free loan of ₹3 lakh crore, subordinate debt provision of ₹20,000 crore and equity infusion *via* mother-fund-daughter fund model. Further, the change in definition of classification of MSMEs by including turnover as basis of definition will allow MSMEs to expand without losing benefits and also improve ease of doing business by aligning them with GST. The structural reforms introduced as part of fourth tranche of stimulus is expected to bring in private investments across eight critical sectors[9]. The proposed change in public sector enterprise policy, where all sectors will be opened to private sectors, and public-sector enterprises will operate only in notified strategic sectors, will bring in far-reaching changes in India's industrial sector. The *Atmanirbhar Bharat Abhiyan* Package aims to provide immediate relief to sections of the economy most impacted by the pandemic and to revive economic activity along with creating new opportunities for employment and growth. In the manufacturing sector, 100 per cent FDI in contract manufacturing and commercial coal mining through the automatic route is expected to bring in more private investments.

II.1.45 To sum up, consumption demand slumped during 2019-20. Gross fixed capital formation could not sustain its past momentum and contracted. On the supply side, agriculture and allied activities accelerated with record foodgrains and horticulture production supported by allied activities, which remained robust. Industrial sector activity plummeted during 2019-20, driven down mostly by the manufacturing sub-sector. With services sector growth also decelerating, the outlook for the economy is clouded by uncertainty and testing challenges, mainly the intensity, spread and duration of COVID-19. The priority is to revive growth as the Indian economy heals from the scars of COVID-19.

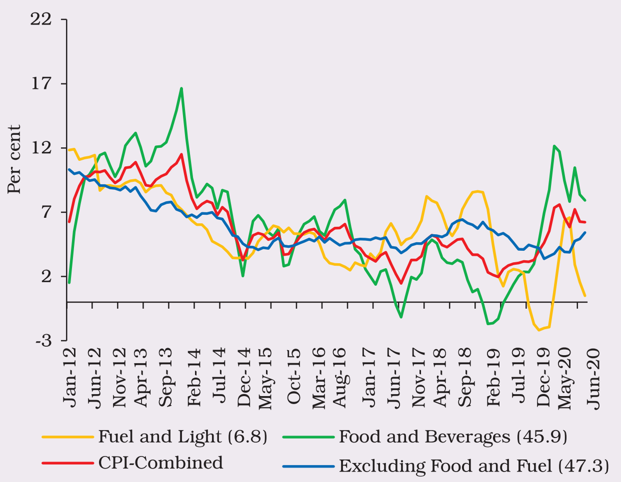
[9] Coal, minerals, defence production, airspace management, power distribution companies, social infrastructure projects, space sectors and atomic energy.

II.2 PRICE SITUATION

II.2.1 The global inflation environment remained benign through 2019 and the early part of 2020, engendered by soft commodity prices and massive monetary policy accommodation. In India too, headline inflation[10] was benign in the first half of 2019-20, but firmed up in the second half due to a sharp spike in food inflation on a combination of adverse developments, *i.e.*, the late withdrawal of the monsoon, unseasonal rains and supply disruptions. During December 2019-February 2020, headline inflation breached the upper tolerance band for inflation mandated for the monetary policy committee (MPC) [Chart II.2.1].

II.2.2 In the event, annual average inflation crossed 4 per cent for the first time since the adoption of flexible inflation targeting (FIT) framework in 2016, amidst accentuated volatility (Table II.2.1). The intra-year distribution of inflation also had a high positive skew, reflecting the spikes

Chart II.2.1: Inflation across Major Components



Note: Figures in parentheses indicate weight in CPI-Combined. April and May 2020 data are imputed by NSO.
Source: NSO and RBI staff estimates.

Table II.2.1: Headline Inflation – Key Summary Statistics

(Per cent)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
1	2	3	4	5	6	7	8	9
Mean	10.0	9.4	5.8	4.9	4.5	3.6	3.4	4.8
Standard Deviation	0.5	1.3	1.5	0.7	1.0	1.2	1.1	1.8
Skewness	0.2	-0.2	-0.1	-0.9	0.2	-0.2	0.1	0.5
Kurtosis	-0.2	-0.5	-1.0	-0.1	-1.6	-1.0	-1.5	-1.4
Median	10.1	9.5	5.5	5.0	4.3	3.4	3.5	4.3
Maximum	10.9	11.5	7.9	5.7	6.1	5.2	4.9	7.6
Minimum	9.3	7.3	3.3	3.7	3.2	1.5	2.0	3.0

Note: Skewness and Kurtosis are unit-free.
Source: NSO and RBI staff estimates.

in food inflation during the second half of the year. Furthermore, kurtosis turned slightly less negative than it was a year ago, suggesting a few instances of large deviations from mean inflation, which was also reflected in the wide gap between maximum and minimum inflation during the year.

II.2.3 Against this backdrop, sub-section 2 assesses developments in global commodity prices and inflation. Sub-section 3 discusses movements in headline inflation and major turning points, followed by a detailed analysis of the major constituents of inflation in sub-section 4. Sub-section 5 discusses other indicators of prices and costs, followed by concluding observations.

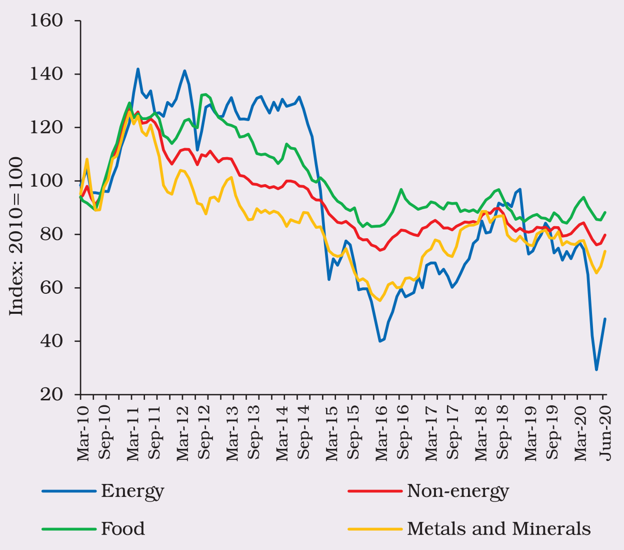
2. Global Inflation Developments

II.2.4 International food prices were range-bound during H1:2019-20, but they firmed up from October 2019, primarily led by wheat (due to strong international demand), maize (supply uncertainty in the US and Argentina), palm oil (lower supply and rising demand for biodiesel in

[10] Headline inflation is measured by year-on-year changes in the all-India CPI-Combined (Rural + Urban) with base year: 2012=100 released by the National Statistical Office (NSO), Ministry of Statistics and Programme Implementation, Government of India.

producing countries), meat (demand from China) and fish prices (Chart II.2.2). Beginning December 2019, prices of rice (drought conditions in Thailand), sugar (lower than expected world production) and other edible oils also hardened. In the non-food category, metal prices remained weak due to US-China trade tensions and subdued global demand. Prices of precious metals, however, registered a sharp increase on safe haven demand amidst global uncertainties. Crude oil prices generally declined during May-August 2019, despite production cuts by the organisation of the petroleum exporting countries (OPEC) and ongoing geopolitical tensions. A supply disruption in Saudi Arabia in September 2019 caused prices to increase temporarily before falling in October 2019. Prices picked up during November-December 2019 on hopes of positive US-China trade talks and deepening of production cuts by OPEC+ from 1.2 million barrels per day (mbpd) to 1.7 mbpd. In January 2020, however, the COVID-19 pandemic hit the transportation sector,

Chart II.2.2: International Commodity Prices



Source: World Bank commodity price data (The Pink Sheet).

which accounts for more than 60 per cent of oil demand. This led to a fall in crude oil prices during January-February 2020 to a level of US$ 53[11] per barrel in February 2020. Subsequently, crude oil prices plunged even lower to US$ 32.2 per barrel in March 2020 as the OPEC+ failed to reach an agreement on production cuts. The price of the Indian basket of crude oil touched US$ 33.4 per barrel in March 2020, the lowest since February 2016. As the COVID-19 pandemic spread across the globe, all commodity prices dipped. The shutdown of industries in China in February 2020 and later in Europe and the US led to a fall in demand for metals, easing their prices. Prices of food items like palm oil, soy oil, sugar and corn also declined with retrenchment in demand for ethanol and bio-diesel as crude oil prices declined. Prices of some food items like rice and wheat were, however, supported by stockpiling by consumers in regions affected by COVID-19. Despite OPEC+ reaching an agreement to cut oil production by about 10 mbpd (about 10 per cent of global supply) in early April, crude oil prices continued to fall on COVID-19 induced slump in demand and exhaustion of storage capacity. Brent crude oil prices fell to a low of US$ 23.3 per barrel in April 2020. Subsequently, crude prices did recover to around US$ 42.8 per barrel in July 2020, but remained far below pre-COVID-19 levels.

II.2.5 Reflecting these global commodity price developments and weak demand conditions, consumer price inflation remained benign during 2019 and early 2020 in a number of economies. Core consumer price inflation was low in advanced economies (AEs), despite robust job growth. Many emerging market and developing economies (EMDEs) also experienced easing of inflation due

[11] World Bank Commodity Price Data (The Pink Sheet).

to subdued economic activity, although some pressures from rising food prices were visible. With the outbreak of COVID-19 and consequential lockdown bringing global economic activity to near standstill, many economies resorted to monetary and fiscal measures to ward off recessionary tendencies and provide support to growth.

3. *Inflation in India*

II.2.6 After trending below the target of 4 per cent during the first half of 2019-20, headline inflation spiked during the second half and reached a multi-year peak of 7.6 per cent in January 2020 (highest in 68 months) [Chart II.2.3]. An atypically prolonged south west monsoon (SWM) along with unseasonal rains during the *kharif* harvest period led to crop damages and supply disruptions which pushed up food prices, especially those of vegetables, from September to December 2019. Thereafter, with the fading of these pressures and encouraging prospects for the *rabi* crop, food inflation started easing from January 2020.

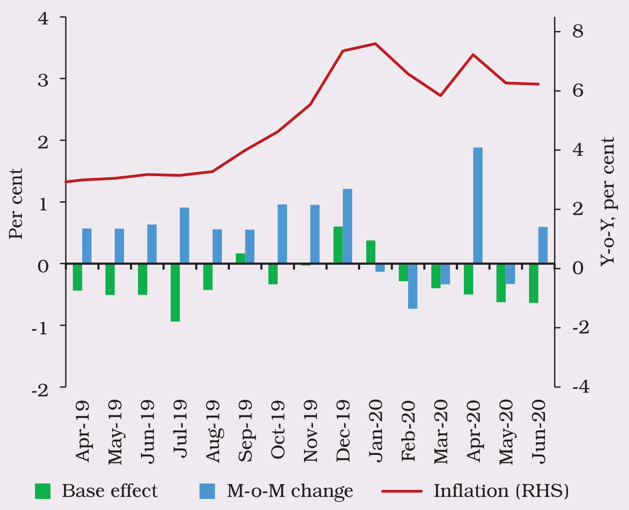
II.2.7 Fuel prices recorded five consecutive months of deflation during July-November 2019, before bouncing back during December 2019-March 2020 on the pressures from international prices of LPG and kerosene. Inflation excluding food and fuel remained generally moderate during the year, with a historic low in October 2019, before gradually picking up again till January 2020.

II.2.8 For the year as a whole, inflation picked up to average 4.8 per cent in 2019-20, 136 basis points (bps) higher than a year ago (Appendix Table 4). With the uptick in headline inflation from September 2019, households' median inflation expectations hardened during the second half of 2019-20 by 103 bps three months ahead and by 133 bps a year ahead. This upturn in expectations is also corroborated by more forward-looking assessments of professional forecasters and by surveys of consumer confidence.

4. *Constituents of CPI Inflation*

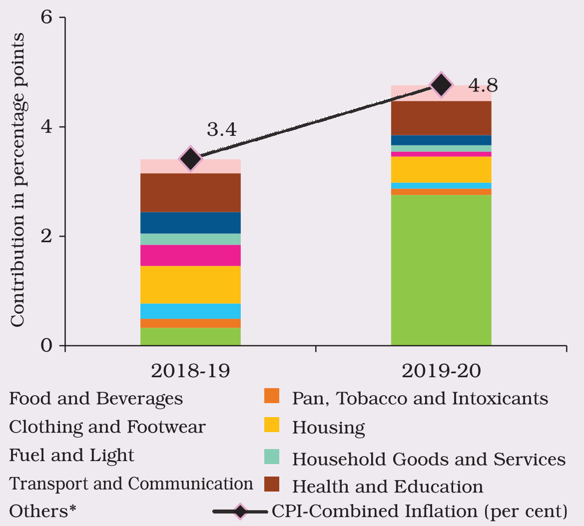
II.2.9 Constituents of CPI headline inflation exhibited distinct shifts during 2019-20 (Chart II.2.4). During the first half of the year, food inflation trailed below headline inflation, whereas

Chart II.2.3: Movements in Headline Inflation



Note: April and May 2020 data are imputed by NSO.
Source: NSO and RBI staff estimates.

Chart II.2.4: Drivers of Inflation (Y-o-Y)



*: Includes Recreation & Amusement and Personal Care & Effects.
Source: NSO and RBI staff estimates.

inflation excluding food and fuel ruled above it. The dynamics reversed during the second half, with food inflation remaining significantly above the headline and inflation excluding food and fuel pacing below it. Inflation in fuel prices had eased below headline inflation from February 2019 to February 2020, but rose above it in March 2020.

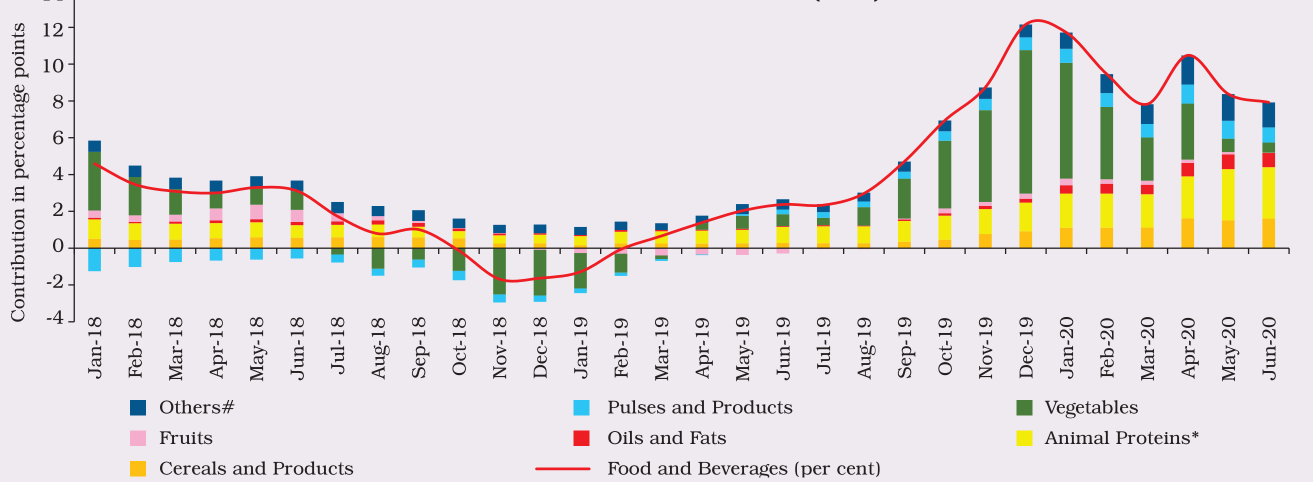
Food

II.2.10 Inflation in prices of food and beverages (weight: 45.9 per cent in CPI) leaped from 1.4 per cent in April 2019 to 12.2 per cent in December 2019. Consequently, its contribution to overall inflation surged to 57.8 per cent in 2019-20 from 9.6 per cent a year ago. The delay in the onset of the southwest monsoon (SWM) by around a week, followed by a considerably longer delay in withdrawal (by 39 days), led to the persistence of high momentum in food prices. Additionally, cyclonic storms and unseasonal rains resulted in supply disruptions and damage to *kharif* crops, primarily vegetables and pulses, during December-January 2019-20 (Chart II.2.5). Price pressures soon became broad-based and were also observed across items such as cereals, milk, eggs, meat and fish, and spices. The delayed winter easing of vegetables prices brought some relief during January-March 2020.

II.2.11 Drilling down into specific pressure points, prices of vegetables (weight: 13 per cent in CPI-Food and beverages) shaped the overall food inflation trajectory during 2019-20. Excluding vegetables, food inflation would have averaged 236 bps lower in 2019-20 (6.0 per cent including vegetables). The crop damage, mentioned earlier, resulted in a historically high build-up of momentum; consequently, vegetables price inflation rose to an all-time high of 60.5 per cent in December 2019 (Chart II.2.6a).

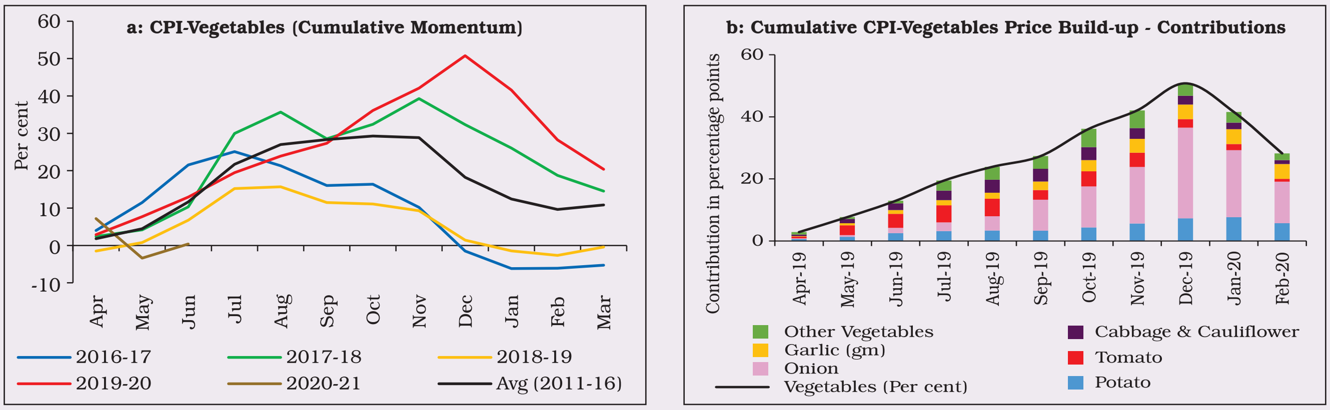
II.2.12 Within vegetables, onion prices dominated the build-up in upside pressures (Chart II.2.6b) right from June 2019 in the wake of a slump in *mandi* arrivals due to reduced *rabi* onion acreage in Maharashtra in drought-like conditions. In addition, unseasonal rains during September-October 2019 damaged the *kharif* onion crop in major producing states of Maharashtra, Madhya Pradesh, Karnataka and Andhra Pradesh, escalating prices from September 2019.

Chart II.2.5: Drivers of Food Inflation (Y-o-Y)



*: Includes meat and fish, egg, and milk and products.
#: Includes sugar and confectionery, spices, non-alcoholic beverages, and prepared meals.
Note: Meat and Fish index for April 2020 and Prepared Meals, Snacks, Sweets, *etc.* indices for April and May 2020 are imputed by NSO.
Source: NSO and RBI staff estimates.

Chart II.2.6: CPI-Vegetables: Seasonality in Prices and Drivers of Price Build-Up



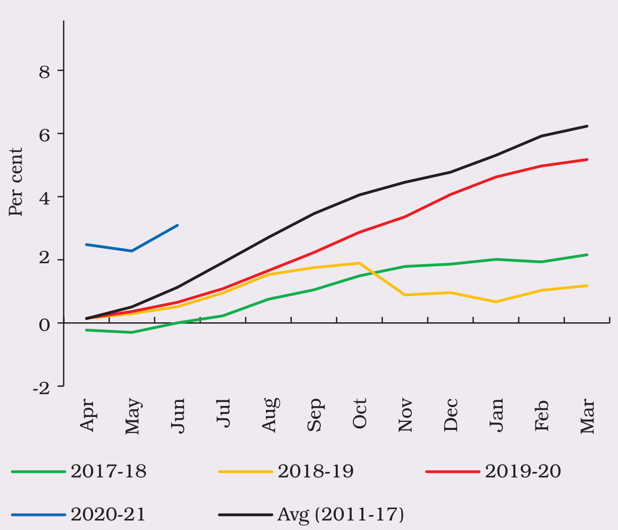
Note: Item level CPI data are not released by NSO for the months of March, April and May 2020.
Source: NSO and RBI staff estimates.

Furthermore, the rains also impacted the transplantation of the late *kharif* onion crop. Onion price inflation skyrocketed to 327.4 per cent in December 2019. Supply side measures, including imposing a minimum export price (MEP) of US$ 850 per tonne, banning export of onions, imposing stock holding limits on wholesale traders and retailers in September 2019, and announcement of import of 1.2 lakh tonnes of onions from Turkey, Afghanistan and Egypt during November-December 2019 did not, however, fully alleviate price pressures. With the arrival of the delayed *kharif* crop and on the back of a better *rabi* crop, which boosted the production of onions, as per the 2nd Advance Estimates (AE) of the Ministry of Agriculture, onion prices started easing from January 2020.

II.2.13 Potato prices also picked up throughout the year (barring September 2019 and February 2020), primarily due to untimely and excess rains, which damaged crops ready for harvest and disrupted supplies to *mandis*. Consequently, potato price inflation reached an all-time high of 63 per cent in January 2020, after emerging out of 7 months of continuous deflation in November 2019. In the case of tomato prices, inflation peaked at 70 per cent in May 2019 and remained in high double digits till December 2019, due to delayed harvesting in Maharashtra and fungus-damaged crops in Karnataka, coupled with the supply disruptions referred to earlier in key supplier states – Karnataka, Maharashtra and Himachal Pradesh. Tomato prices, however, moderated during November 2019 - February 2020, in line with the usual seasonal pattern.

II.2.14 Prices of cereals and products (weight of 21 per cent in the CPI-Food and beverages) also witnessed a build-up in upside pressures during 2019-20 (Chart II.2.7), rising almost continuously

Chart II.2.7: CPI-Cereals and Products Momentum



Source: NSO and RBI staff estimates.

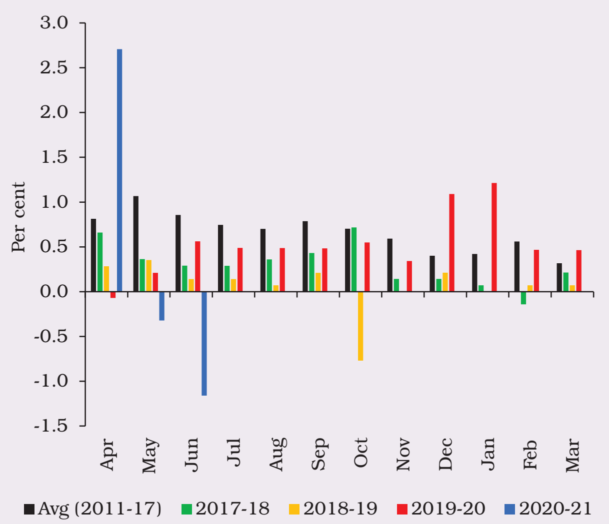
from 1.2 per cent in April 2019 to around 5.3 per cent during January-March 2020. In the case of wheat, inflation averaged around 6.5 per cent during the year, capped by higher procurement which also economised on imports (31.4 per cent lower in 2019-20). Non-PDS rice prices emerged out of 11 months of deflation in October 2019 on account of positive price pressures and unfavourable base effects to reach an inflation level of 4.2 per cent in January 2020, in the wake of higher procurement and damages to the *kharif* crop, but they moderated to 3.9 per cent in February 2020.

II.2.15 Milk and products prices (weight of 14.4 per cent in the CPI-Food and beverages) were another pressure point during the year (Chart II.2.8). Increase in procurement prices of milk led to major milk co-operatives like *Amul* and *Mother Dairy* raising retail milk prices by ₹2-3 per litre twice – during May and again in December 2019. This was followed by similar hikes by milk co-operatives in other states, elevating the momentum of milk and products prices during the year. Increases in the cost of production because of reduced availability of fodder also contributed to an upward revision in procurement prices and, subsequently, in retail prices. Higher global prices for skimmed milk products also supported milk prices. Milk price inflation peaked during the year at 6.5 per cent in March 2020.

II.2.16 In the case of pulses (weight: 5.2 per cent in CPI-Food and beverages), 2019-20 began with the end of a prolonged deflation of 29 months in May 2019. Ahead of this development, a substantial fall (by 54 per cent) in imports during 2018-19 had helped in rebalancing the demand-supply situation. Additionally, a decline in *kharif* pulses production (by 4.6 per cent as per 4th Advance Estimates for 2019-20 over 2018-19 Final Estimates), especially *urad* production (by 44.9 per cent), added to inflation persistence (Chart II.2.9), despite imports being higher by around 14.6 per cent during 2019-20.

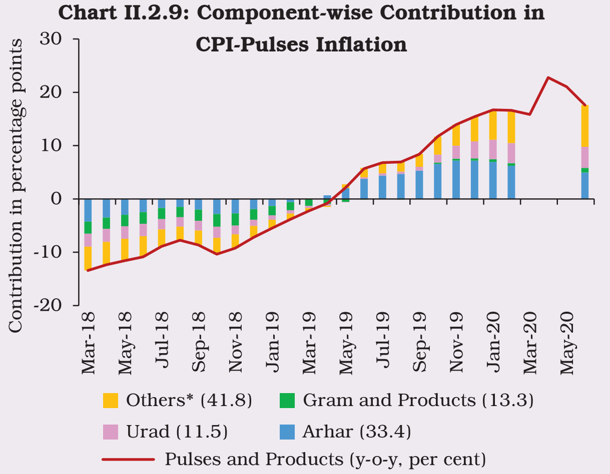
II.2.17 Inflation in protein-rich items such as eggs and meat and fish (weight: 8.8 per cent in CPI-Food and beverages) averaged 4.5 per cent and 9.3 per cent, respectively – the highest in the last six years – and together, they contributed 13.7 per

Chart II.2.8: CPI-Milk and Products Momentum



Source: NSO and RBI staff estimates.

Chart II.2.9: Component-wise Contribution in CPI-Pulses Inflation



*: Includes *moong*, *masur*, peas, *khesari*, *besan* and other pulses products.

Note: 1. Figures in parentheses indicate weight in CPI-Pulses and products.

2. Item level CPI data are not released by NSO for the months of March, April and May 2020.

Source: NSO and RBI staff estimates.

cent of overall food inflation during the year. Meat and fish prices reflected higher feed prices, especially of maize and soybean. Along similar lines, egg prices witnessed heightened prices during September-January 2019-20. With the outbreak and spread of COVID-19, however, the consumption of poultry slumped and prices moderated during February-March 2020.

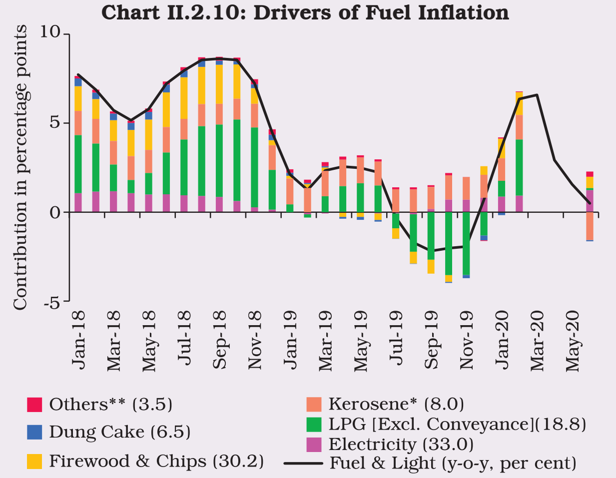
II.2.18 Among other major food items, sugar and confectionery, and oils and fats also contributed positively to overall food inflation, reflecting a decline in domestic production in the case of the former and higher international prices in respect of the latter.

II.2.19 Prices of fruits (weight of 6.3 per cent in the CPI-food and beverages group) emerged out of nine months of deflation in September 2019 but prices generally remained soft in the rest of the year. Prices of spices, especially of dry chillies and turmeric, registered significant pressures due to a reduction in the area under production.

Fuel

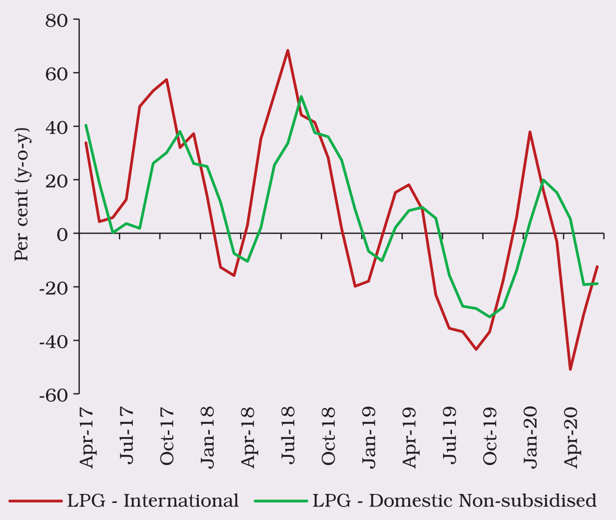
II.2.20 The contribution of the fuel group (weight of 6.8 per cent in CPI) to headline inflation decreased to 1.9 per cent in 2019-20 from 11.3 per cent in the previous year. Fuel inflation eased sequentially from April to June 2019 and moved into deflation during July-November 2019, pulled down by favourable base effects and muted price pressures in major fuel items (Chart II.2.10). Domestic LPG prices, which rose during April-June 2019, sank into deflation in July 2019, tracking the collapse in international LPG prices with a lag (Chart II.2.11). Firewood and chips inflation picked up during December 2019 to February 2020 on the back of strong price pressures on winter demand. Domestic LPG prices also moved out of deflation in January 2020, in line with the upward movement in international LPG prices. Administered kerosene prices continued to rise throughout 2019-20 as oil marketing companies (OMCs) raised prices in a calibrated manner to eventually phase out the kerosene subsidy. Electricity inflation, which had largely remained in negative territory during April-August 2019, also recorded an uptick in H2:2019-20. Reflecting these developments and strong unfavourable base effects, fuel inflation turned positive in December 2019 and reached an intra-

Chart II.2.10: Drivers of Fuel Inflation



*: Includes kerosene PDS and kerosene other sources.
**: Includes diesel, coke, coal, charcoal, and other fuel.
Note: 1. Figures in parentheses indicate weight in CPI-Fuel and light.
2. Item level CPI data are not released by NSO for the months of March, April and May 2020.
Source: NSO and RBI staff estimates.

Chart II.2.11: Movements in LPG Retail Prices



Source: Petroleum Planning and Analysis Cell (PPAC), and Bloomberg.

year peak of 6.6 per cent in March 2020.

Inflation Excluding Food and Fuel

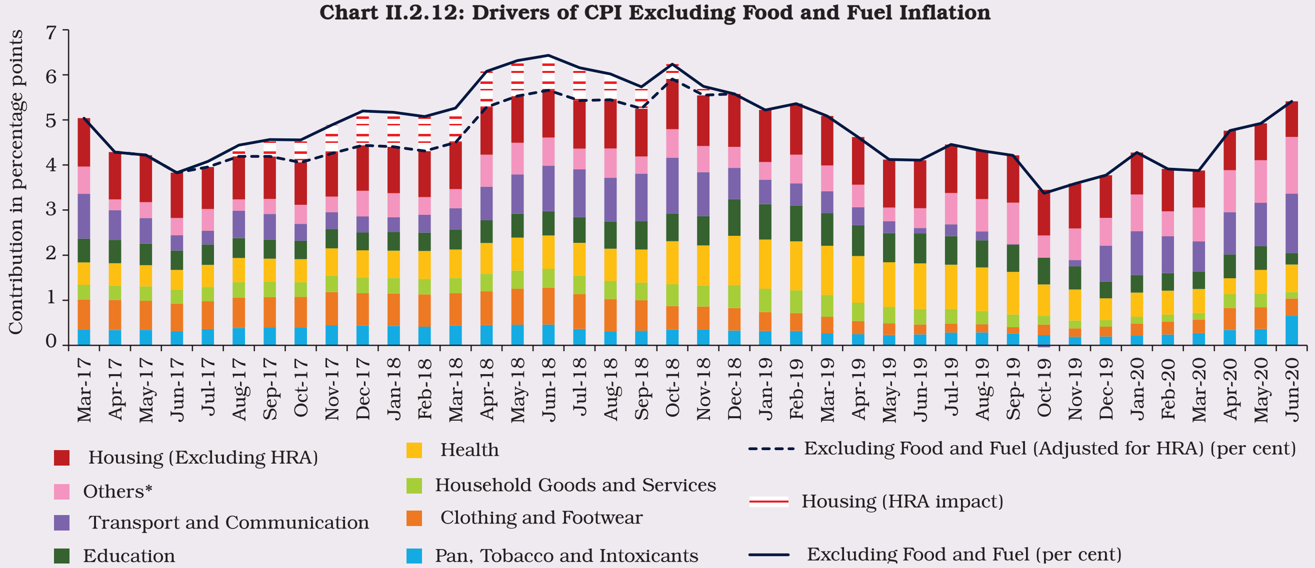
II.2.21 Inflation excluding food and fuel moderated from 2018-19 levels to an average of 4.0 per cent in 2019-20 (Appendix Table 4) with a historic low of 3.4 per cent in October 2019 (Chart II.2.12). Some hardening occurred during November 2019-January 2020 due to prices of personal care and effects and transport and communication sub-groups, reflecting increase in gold prices, hikes in mobile telecom tariffs, and the rise in petrol and diesel prices (Chart II.2.13). Subsequently, a sharp fall in transport and communication prices in February and March 2020 on the back of easing international crude oil prices and falling domestic air passenger traffic led to moderation during February-March 2020.

II.2.22 Among the major constituents of this group, inflation in prices of the miscellaneous category moderated during April-October 2019 reaching 3.4 per cent in October 2019 (lowest since July 2017) and again during February-March 2020. Within the miscellaneous group, price pressures remained generally contained in respect of household goods and services, health, recreation and amusement, and education.

II.2.23 Housing inflation moderated to 4.5 per cent in 2019-20 (6.7 per cent in 2018-19), reflecting the waning of the impact of the increase in house rent allowance (HRA) for central government employees under the 7th Pay Commission award. A historic low of 3.7 per cent was recorded in March 2020. Net of housing, inflation excluding food and fuel averaged 3.9 per cent in 2019-20, down from 5.6 per cent a year ago.

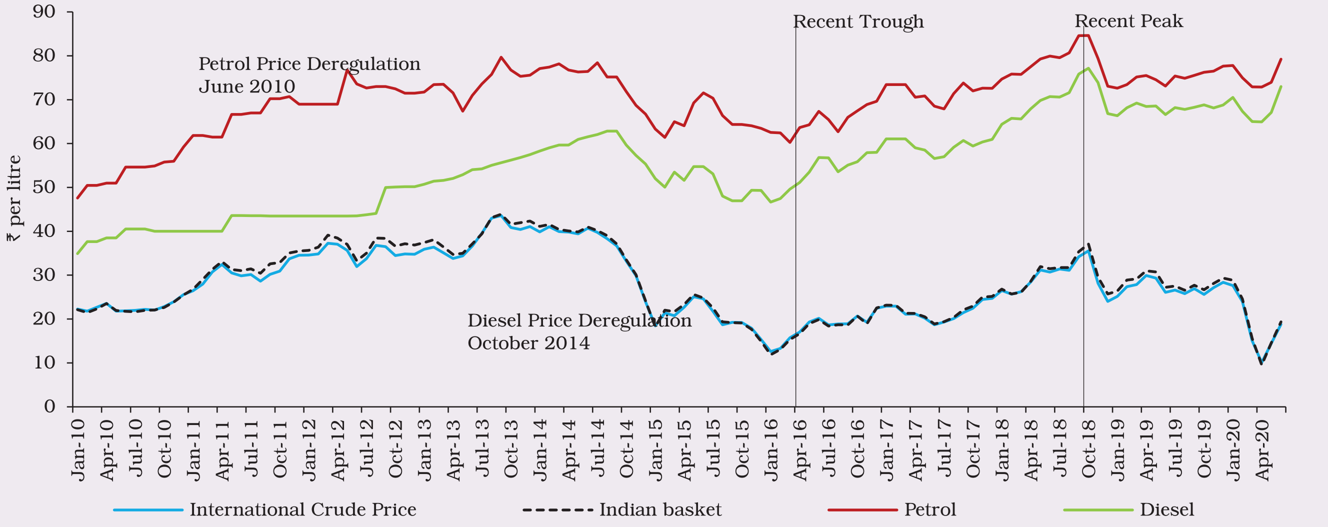
II.2.24 Clothing and footwear inflation eased to a trough of 1.0 per cent in September 2019, largely reflecting muted input costs. International prices of cotton, a major input into clothing production, as measured by the Cotton A Index, fell during May to August 2019, followed by a recovery during September 2019-January 2020. The outbreak of COVID-19 also rattled international cotton markets, with the Cotton A Index registering a fall in February and March 2020.

Chart II.2.12: Drivers of CPI Excluding Food and Fuel Inflation



*: Includes Recreation and Amusement and Personal Care and Effects.
Source: NSO and RBI staff estimates.

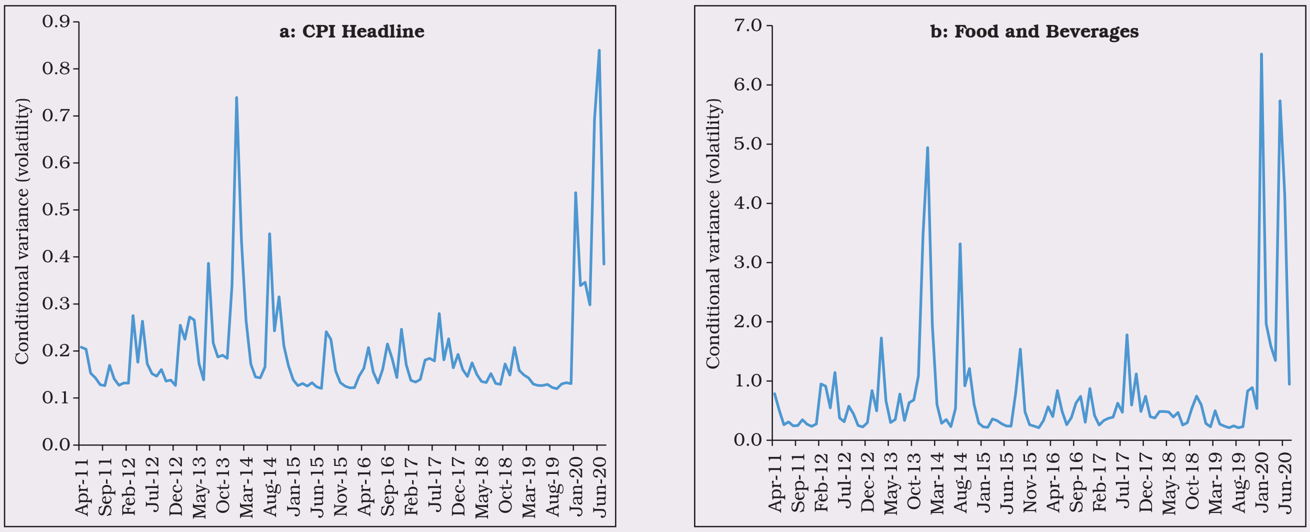
Chart II.2.13: Domestic Oil Price Trends



Note: International crude oil price represents the average price of WTI, Brent and Dubai Fateh.
Source: World Bank Pink Sheet Database, Indian Oil Corporation Limited, and Petroleum Planning and Analysis Cell (PPAC).

II.2.25 Overall, headline inflation was subjected to higher volatility in 2019-20 relative to the previous four years, underpinned by high flux in food prices (Charts II.2.14a & b). Within the food group, price spikes for different items occurred at different time points. Empirical analysis for the period January 2011 and February 2020 suggests that seasonal behaviour has changed in the case of prices of many food items such as, onions, ginger, brinjals, cauliflowers, okras and green peas. Interestingly, despite being the most volatile item, seasonality in onion prices has declined significantly over the years, partly reflecting improvement in cold storage facilities. Volatility

Chart II.2.14: Volatility in Prices



Note: Volatility has been estimated using GARCH model taking into account the imputed price indices published by the NSO for April-May 2020.
Source: NSO and RBI staff estimates.

estimated from asymmetric GARCH[12] models suggest volatility in onion prices is likely to persist in the near term, while tomato price volatility may be short-lived. Inflation is persistent in the case of protein items and dry fruits, more than that for prices of vegetables. There is no evidence of persistence of volatility in prices of items such as petrol, diesel and precious metals, although these items also contribute to volatility in headline inflation.

5. *Other Indicators of Inflation*

II.2.26 During 2019-20, sectoral CPI inflation based on the consumer price index of industrial workers (CPI-IW) remained elevated and reached 9.6 per cent in December 2019 (highest in 73 months), primarily due to housing and food prices. With the impact of HRA revision of the 7th central pay commission (CPC) completely waning in January 2020 and food prices easing along with favourable base effects, CPI-IW inflation softened to 5.5 per cent in March 2020. Inflation based on the consumer price index of agricultural labourers (CPI-AL) and the consumer price index of rural labourers (CPI-RL), which do not have housing components, also increased during the year and reached 11.1 per cent and 10.6 per cent, respectively, in December 2019 (highest in 72 months) before easing thereafter, on softening of food prices and favourable base effects.

II.2.27 Inflation, measured by the wholesale price index (WPI), remained subdued during 2019-20. It reached an intra-year low of zero per cent in October 2019 (lowest in 40 months) due to deflation in prices of non-food manufactured products and fuel and power. It picked up during November 2019-January 2020, however, driven by a sharp uptick in prices of primary articles and unfavourable base effects, before moderating to 0.4 per cent in March 2020 due to softening in the prices of all three major groups, *i.e.*, primary articles, fuel & power and manufactured products. On an annual average basis, WPI inflation softened to 1.7 per cent in 2019-20 from 4.3 per cent in 2018-19. A similar easing was also visible in the GDP deflator to 2.9 per cent in 2019-20 from 4.6 per cent in 2018-19.

II.2.28 After major increases in minimum support prices (MSPs) during 2018-19 for *kharif* and *rabi* crops, MSPs witnessed a moderate hike in 2019-20. The extent of MSP increases varied across crops, ranging from 1.1 per cent in the case of *moong* and nigerseed to 9.1 per cent for yellow soybean. MSPs of rice and wheat were increased by 3.7 per cent and 4.6 per cent, respectively.

II.2.29 Wage growth for agricultural and non-agricultural labourers generally remained subdued during the year, averaging around 3.4 per cent, and reflecting the slowdown in the construction sector. In the corporate sector, pressures from staff costs remained moderate during the year.

II.2.30 In sum, headline inflation picked up strongly during the closing months of 2019-20 and the short-term outlook for food inflation has turned uncertain. Global crude oil prices have started firming modestly in more recent weeks. Disruptions in food and manufactured items' supply chains could amplify sectoral price pressures, thus posing an upside risk to headline inflation. Heightened volatility in financial markets could also have a bearing on inflation. All of these may influence inflation expectations of households, which are adaptive in nature, and show significant sensitivity to shocks to food and fuel prices. Monetary policy, therefore, has to keep a constant vigil on price movements, especially as they can translate into generalised inflation.

[12] The volatility has been estimated through asymmetric threshold GARCH model proposed by Glosten, Jagannathan and Runkle (1993).

II.3 MONEY AND CREDIT

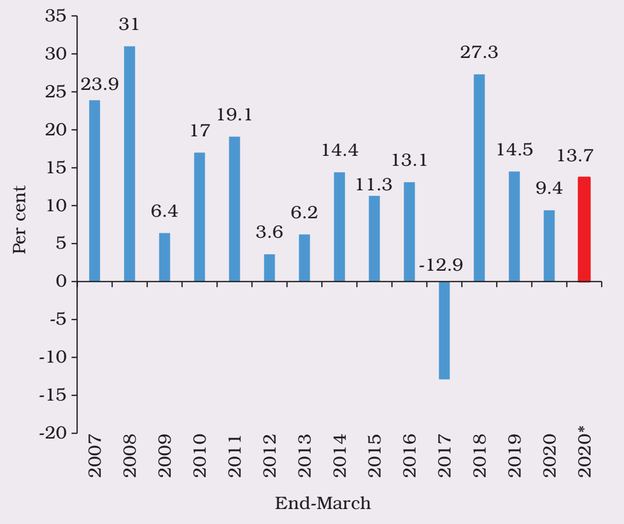
II.3.1 Monetary and credit conditions moderated through 2019-20 reflecting the weakening of underlying economic activity, with inflation remaining benign in the first half of the year before spiking on food price pressures in the later months. The rate of money supply (M3) slackened as deposit growth moderated. Towards the close of the year, the slowing of deposit growth became accentuated as COVID-19 impelled a flight to cash. In terms of the sources of money supply, credit growth slumped to half its rate a year ago, reflecting weak demand and risk aversion among banks. Contra-cyclically, reserve money (RM) expansion, adjusted for first round effects of cash reserve ratio (CRR) changes, was broadly maintained at the preceding year's rate, bolstered by a build-up of net foreign assets (NFA) of the Reserve Bank and its monetary policy operations in consonance with the accommodative policy stance adopted since June 2019 – open market purchases; reduction in the CRR; special market operations (in the form of long-term repo operations and targeted long-term repo operations); and USD/INR swaps. These developments engendered abundant liquidity in the system which eased liquidity premia in the midst of strong discrimination by financial markets on credit risk concerns.

II.3.2 Against this backdrop, sub-section 2 delves into the dynamics underlying movements in RM and, thereby, into the role of the Reserve Bank's balance sheet in the larger context of the state of the economy. This section also analyses the impact of COVID-19 on currency in circulation. Sub-section 3 examines developments in money supply in terms of its components and sources, throwing light on the behaviour of assets and liabilities of the banking sector. The underpinnings of bank credit evolution during the year have been covered in sub-section 4. This is followed by concluding observations and some policy perspectives.

2. Reserve Money

II.3.3 Reserve money – a stylised depiction of the Reserve Bank's balance sheet that focuses on its 'moneyness'[13] comprising currency in circulation, bankers' deposits and other deposits with the Reserve Bank – increased by 9.4 per cent in 2019-20, lower than 14.5 per cent a year ago as well as its decennial trend rate of 11.4 per cent (2010-19) [Chart II.3.1; Appendix Table 4]. Adjusted for the reduction in the CRR by 100 basis points (bps), effective March 28, 2020 – which reduced RM statistically by around ₹1,37,000

Chart II.3.1: Reserve Money Growth



*: RM adjusted for CRR reduction.
Source: RBI.

[13] 'Moneyness' refers to the characteristics of an asset to convert readily into liquidity at a low or zero transaction cost.

crore – RM grew by 13.7 per cent during the year, as against 13.9 per cent in 2018-19.

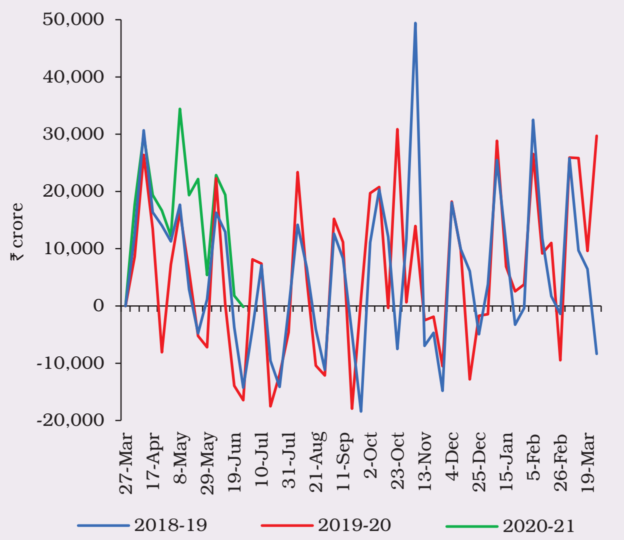
II.3.4 Drilling into the unravelling of reserve money changes during the year reveals interesting behavioural shifts. Among components, the expansion in RM was driven by currency in circulation (CiC) – 120 per cent of the RM expansion during the year. At the end of March 2020, CiC constituted around 81 per cent of RM.

II.3.5 The demand for CiC normally follows a defined intra-month pattern – expansion during the first fortnight due to transactions by households, followed by a contraction in the second fortnight due to flow back of currency from households to the banking system (Chart II.3.2).

II.3.6 CiC also exhibits seasonality across months/quarters – expanding in Q1, followed by contraction in Q2, with more than three-fourths of its annual variation occurring during Q3 and Q4. The year 2019-20 began with the usual seasonal spurt in currency demand in Q1 associated with summer holidays, weddings, *rabi* procurement and *kharif* sowing. In the following quarter, CiC contracted due to seasonal slack of economic activity in cash-intensive sectors such as construction and agriculture. Thereafter, CiC expanded, reflecting rise in currency demand for *kharif* harvest and festivals in Q3 and the harvest of *rabi* crops during Q4. The year ended with a surge in pandemic-related rush to cash. Overall, CiC growth of 14.5 per cent was slightly lower *vis-a-vis* 16.8 per cent a year ago (Chart II.3.3); however, the currency-GDP ratio increased to its pre-demonetisation level of 12.0 per cent in 2019-20 from 11.3 per cent a year ago, indicating the rise in cash-intensity in the economy in response to the pandemic (Chart II.3.4).

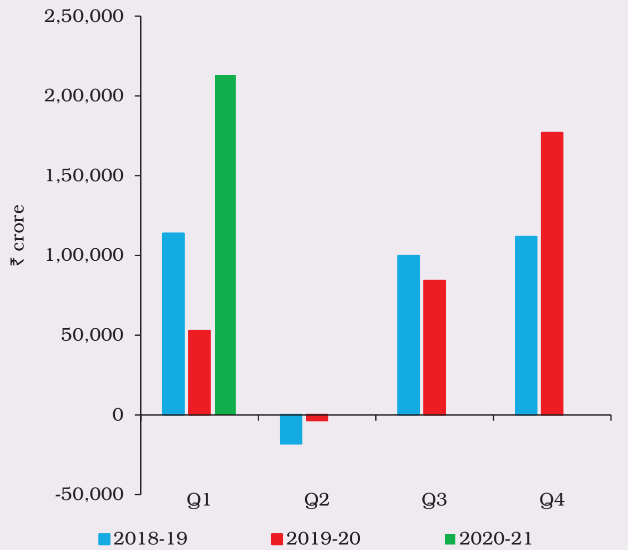
II.3.7 There was an unusual rise in month-over-month (M-o-M) CiC variation during March-June 2020 *vis-à-vis* the corresponding period in previous years[14] (Chart II.3.5 and Chart II.3.6).

Chart II.3.2: Weekly Variation in Currency in Circulation



Source: RBI.

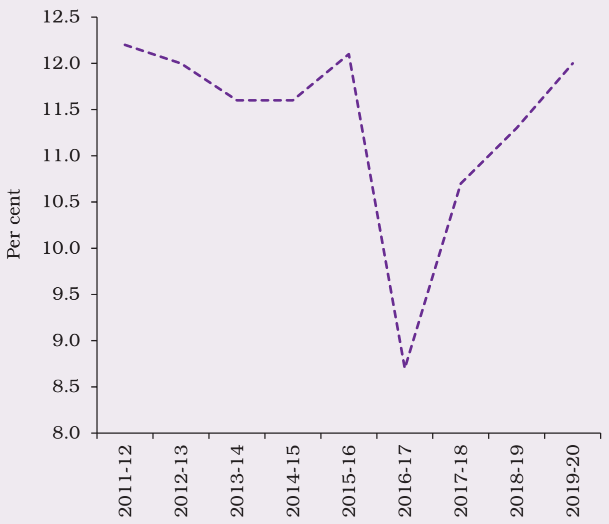
Chart II.3.3: Quarterly Variation in Currency in Circulation



Source: RBI.

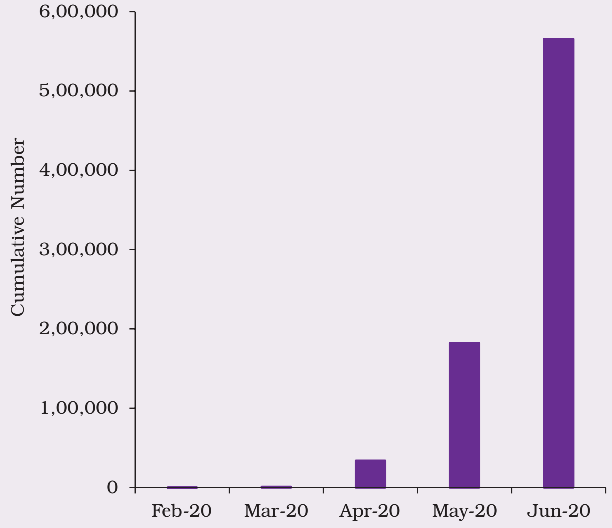
[14] The unusual increase in CiC during January-June 2017 was on account of the remonetisation process, post-demonetisation.

Chart II.3.4: India's Currency-GDP Ratio



Source: RBI.

Chart II.3.6: Total Number of Confirmed COVID-19 Cases in India

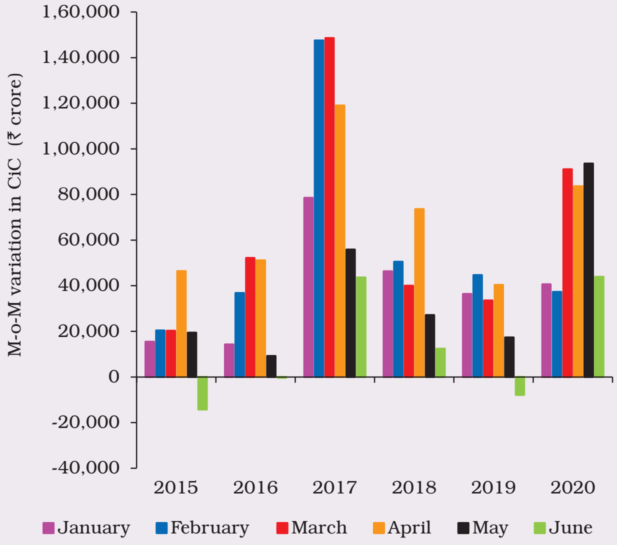


Source: Ministry of Health and Family Welfare, GoI.

II.3.8 Bankers' deposits with the Reserve Bank decreased by 9.6 per cent in 2019-20 as against an increase of 6.4 per cent in the previous year, mirroring subdued deposit mobilisation and the reduction in CRR to 3.0 per cent for a period of a year, effective March 28, 2020 (Chart II.3.7).

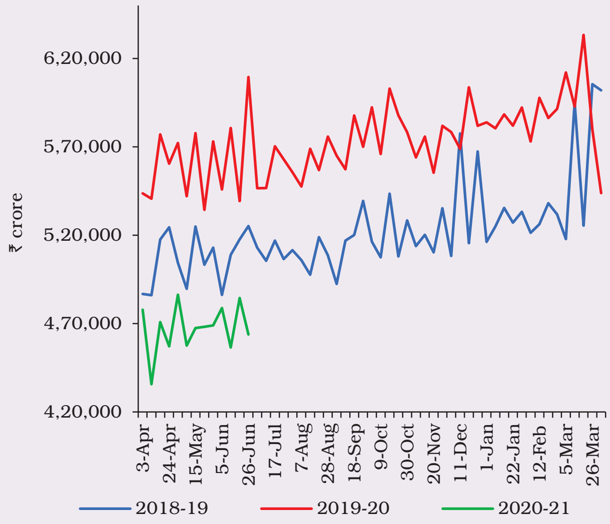
II.3.9 Amongst sources of RM, net domestic assets (NDA) and NFA have alternated in determining RM growth (Chart II.3.8). During 2019-20, the main driver was NFA, with net purchases from Authorised Dealers at ₹3,12,005 crore *vis-à-vis* net sales at ₹1,11,945 crore in the

Chart II.3.5: Impact of COVID-19 on CiC



Source: RBI.

Chart II.3.7: Bankers' Deposits with the Reserve Bank



Source: RBI.

previous year. Consistent with the accommodative stance of monetary policy set out in June 2019, the Reserve Bank ensured comfortable liquidity conditions, augmenting its liquidity management toolkit with unconventional instruments.

II.3.10 Net open market purchases of ₹1.1 lakh crore resulted in an increase in net Reserve Bank credit to the government by ₹1.9 lakh crore, which became the main driver of NDA in 2019-20. Among other constituents of NDA, net claims on banks[15] and the commercial sector (mainly PDs), reflected mainly net LAF absorption aimed at sterilising forex operations and managing the large overhang of liquidity in the system (Chart II.3.9).

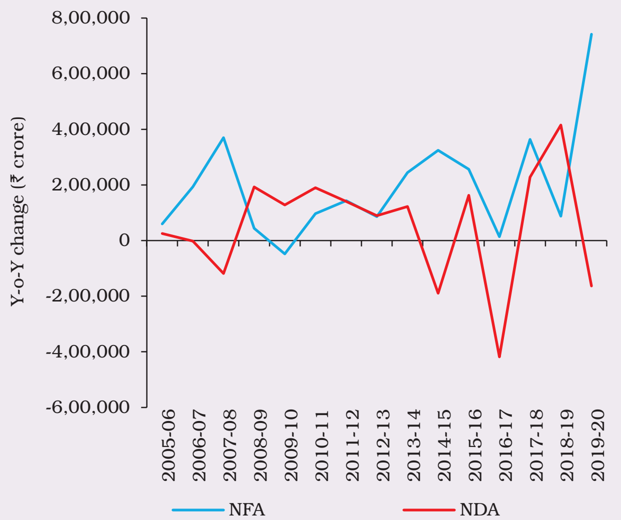
II.3.11 The net LAF position was in repo mode during April-May 2019, but turned into reverse repo mode for the remainder of the financial year (Chart II.3.10a and Chart II.3.10b).

3. Money Supply

II.3.12 M3, comprising currency with the public (CwP), aggregate deposits (AD) and other deposits with the Reserve Bank, averaged 10.2 per cent for the first three quarters of 2019-20 (10.1 per cent a year ago), before dropping off sharply in February and March 2020 to end the year at 8.9 per cent (Chart II.3.11).

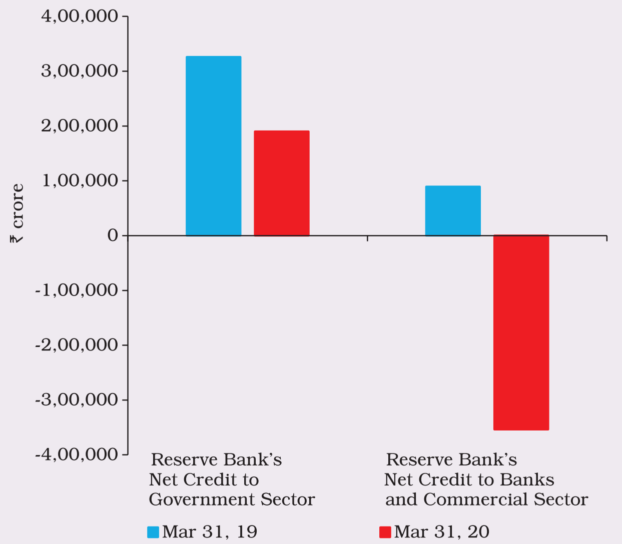
II.3.13 From the components side, M3 expansion was contributed by AD, its largest constituent (86 per cent), led mainly by time deposits – AD accounted for 78 per cent of the increase in M3 during the year. On a year-on-year basis, however, there was a moderation in time deposit growth due to the decline in interest rates and the general

Chart II.3.8: Variation in Domestic and Foreign Assets of the Reserve Bank



Source: RBI.

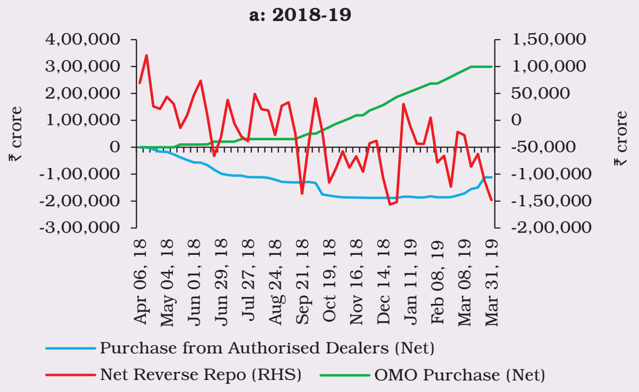
Chart II.3.9: Net Domestic Assets (Y-o-Y Variation)

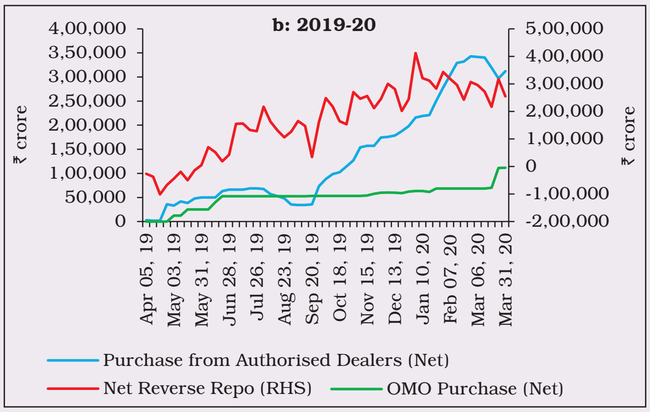


Source: RBI.

15 Durable liquidity of ₹1,25,000 crore was injected into the banking system through five long-term repo operations (LTROs) for one-year and three-year tenors. The Reserve Bank had also conducted four simultaneous purchase and sales of securities under Special OMOs (or Operation Twist) between December 23, 2019 and January 23, 2020, which augmented net banking system liquidity by ₹11,724 crore.

Chart II.3.10: Liquidity Injection/Absorption



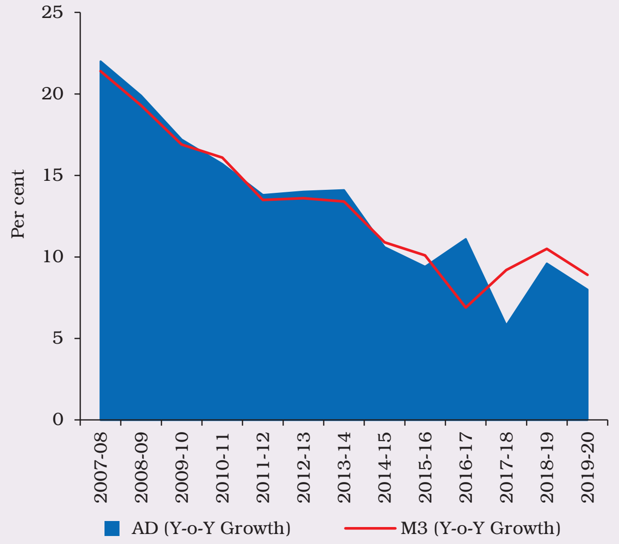


Source: RBI.

slowdown in economic activity (Chart II.3.12). As usual, demand deposits remained volatile, mirroring largely the variations in CwP (Chart II.3.13), which grew at a lower rate of 14.5 per cent *vis-à-vis* 16.6 per cent in the previous year. The flight towards cash and a concomitant drawdown on demand deposits was particularly visible in the last quarter of 2019-20, in the wake of uncertainities related to COVID-19 pandemic.

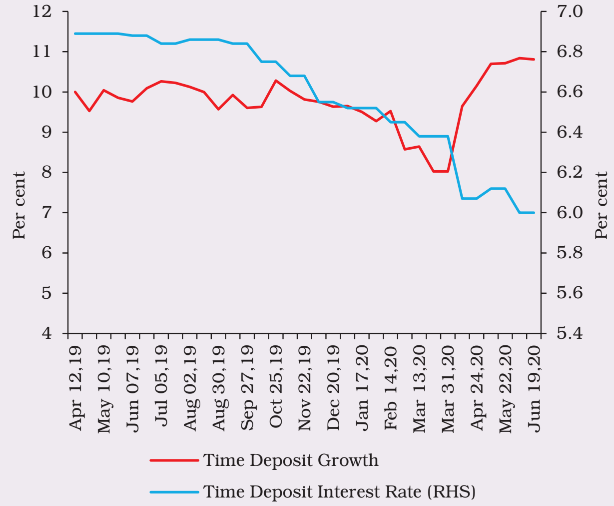
II.3.14 Bank credit to the commercial sector, followed by net bank credit to the government and net foreign exchange assets of the banking sector, led the expansion in M3. Nonetheless, bank credit to the commercial sector grew at a lower rate than a year ago, reflecting lower bank credit offtake in the economy (Chart II.3.14 and Table II.3.1). With non-SLR investments of banks also decelerating, commercial banks augmented their SLR portfolios, which was reflected in net bank credit to

Chart II.3.11: Aggregate Deposits and M3



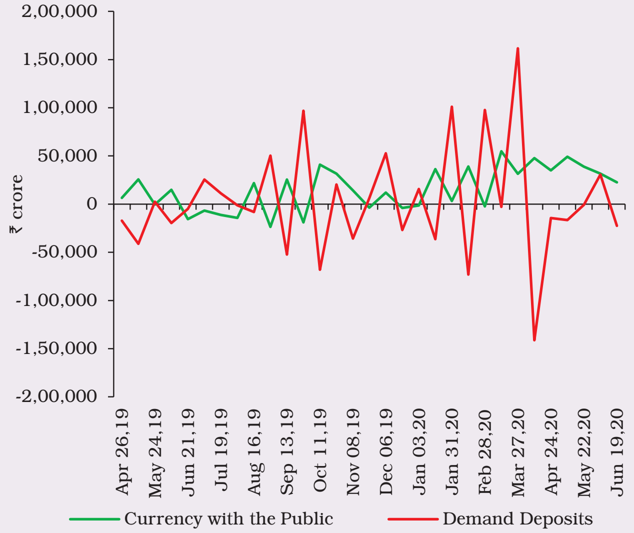
Source: RBI.

Chart II.3.12: Time Deposits: Y-o-Y Growth and Interest Rate



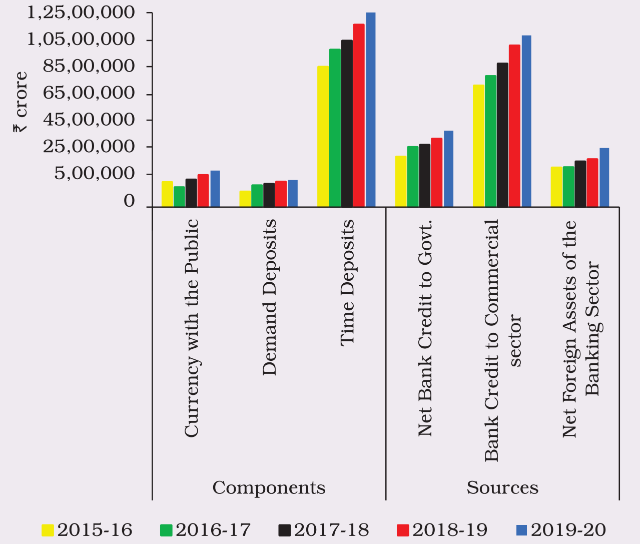
Source: RBI.

Chart II.3.13: Currency with the Public and Demand Deposits: Fortnightly Variation



Source: RBI.

Chart II.3.14: Broad Money (M3): Components and Sources



Source: RBI.

government increasing by 11.8 per cent as compared with 9.7 per cent a year ago. Growth of NFA of the banking sector mirrored NFA in RM.

Key Monetary Ratios

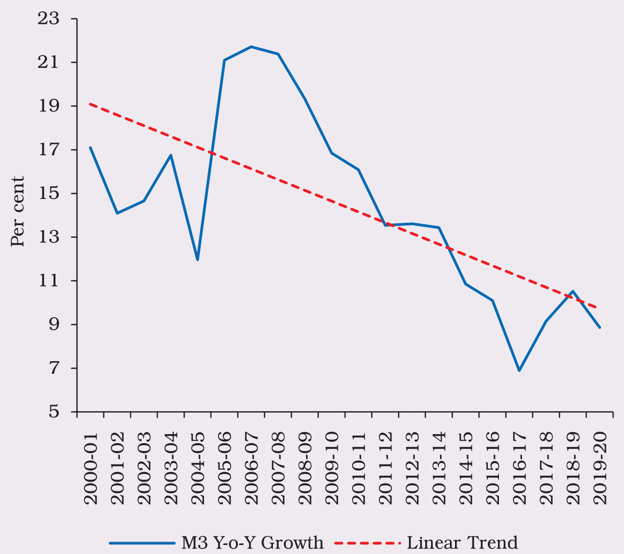
II.3.15 The money multiplier declined to 5.5 by end-March 2020 from 5.6 a year ago, converging towards its decennial average level (2010-19) of 5.5. Adjusted for reverse repo, however, analytically akin to banks' deposits with the central bank – the money multiplier turned out to be lower at 4.8 by end-March 2020, reflecting the deceleration in the rate of money supply below its secular trend (Chart II.3.15).

Table II.3.1: Monetary Aggregates

Item		Outstanding as on March 31, 2020 (₹ Crore)	Year-on-year growth rate (in per cent)		
			2018-19	2019-20	2020-21 (as on June 19, 2020)
1		2	3	4	5
I.	Reserve Money (RM)	30,29,674	14.5	9.4	11.8
II.	Money Supply (M3)	167,99,930	10.5	8.9	12.3
III.	**Major Components of M3**				
	III.1. Currency with the Public	23,49,715	16.6	14.5	21.3
	III.2. Aggregate Deposits	144,11,708	9.6	8.0	10.9
IV.	**Major Sources of M3**				
	IV.1. Net Bank Credit to Government	49,06,583	9.7	11.8	19.8
	IV.2. Bank credit to Commercial Sector	110,38,644	12.7	6.3	6.3
	IV.3. Net Foreign Assets of the Banking Sector	38,01,036	5.1	23.8	27.4
V.	M3 net of FCNR(B)	166,18,480	10.5	8.8	12.5
VI.	Money Multiplier	5.5			

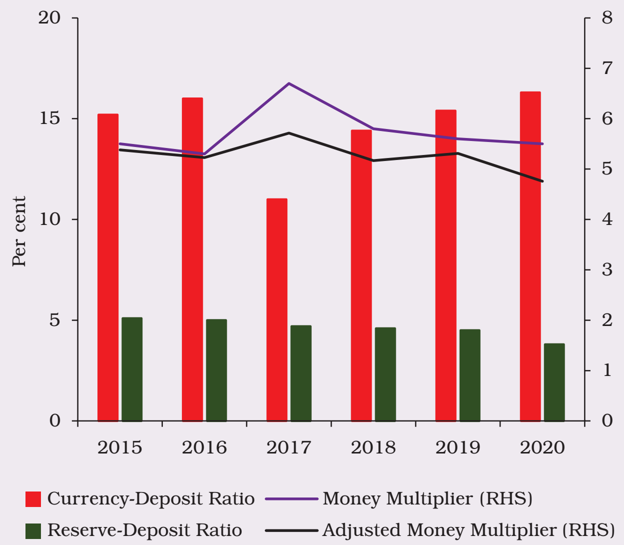
Note: 1. Data are provisional.
2. The data for RM pertain to June 26, 2020.
Source: RBI.

Chart II.3.15: M3 Growth



Source: RBI.

Chart II.3.16: Monetary Ratios



Source: RBI.

II.3.16 Linking this phenomenon of money creation process to the dynamics of economic activity, empirical analysis[16] considering data from Q1:2010 to Q4:2019 suggests that the money multiplier adjusted for reverse repo could be a lead indicator for gauging the movement of economic activity. Also, the money multiplier adjusted for reverse repo appears to be a better indicator, capturing the recent dynamics of economic activity more closely than the unadjusted money multiplier.

II.3.17 The currency-deposit ratio at 16.3 per cent at end-March 2020 moved above its decennial average (2010-19) of 15.1 per cent. During the year, the pace of expansion in currency and a rise of the currency-deposit ratio pointed to a shift in public's preference towards holding cash in response to the uncertainty caused by the pandemic. As at end-March 2020, the reserve-deposit ratio was 3.8 per cent (4.5 per cent last year), reflecting the impact of the CRR reduction (Chart II.3.16).

II.3.18 With the statutory requirements for CRR and statutory liquidity ratio (SLR), at 3 per cent and 18 per cent, respectively, around 79 per cent of deposits were available with the banking system as on end-March 2020 for credit expansion. The moderation in the credit-deposit ratio to 76.4 per cent as at end-March 2020 from 77.7 per cent a year ago was largely a reflection of subdued demand conditions in the economy due to several factors examined subsequently.

II.3.19 The credit-deposit ratio, which measures the demand for credit relative to funding available in the banking system, underwent four distinct phases since independence. It varied with the evolution of the economy – from the pre-

[16] Based on Granger Causality under Vector Autoregression (VAR) Framework.

nationalisation phase to the post-nationalisation phase, and subsequently, the reform phase starting from early 1990s followed by movements dictated by upturns and downturns in growth cycles. These movements also reflected changes in statutory requirements for CRR and SLR. The average credit-deposit ratio of 72 per cent during the first two post-independence decades fell to 69 per cent during the next two decades as deposit growth gained momentum with the geographic spread of banking services, and further to 55 per cent during 1990-2004 due to phases of subdued credit demand. Subsequently, the average credit-deposit ratio increased to 75 per cent during 2005-20 on the back of a credit boom (2005-14), and supportive economic growth conditions (Chart II.3.17).

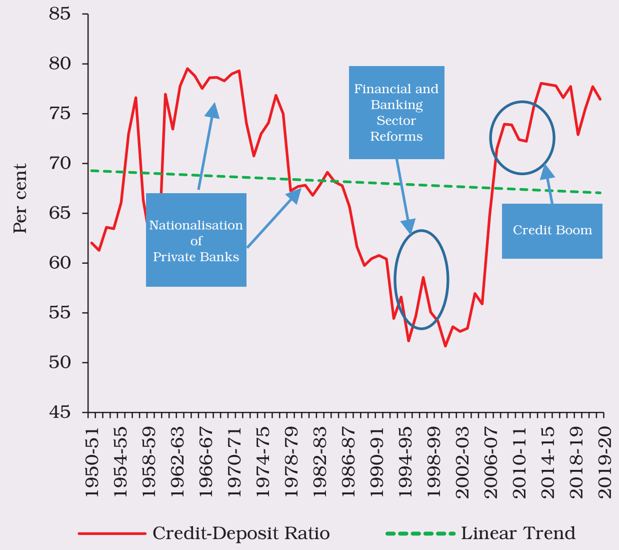
4. Credit

II.3.20 Credit offtake from SCBs was muted during 2019-20, growing at 6.1 per cent y-o-y in a sharp loss of pace from 13.3 per cent a year ago and from a recent peak of 15.0 per cent in December 2018.

II.3.21 Credit demand has been ebbing away across all sectors, despite the post-IL&FS shift among large borrowers, including non-banking financial companies (NBFCs) and housing finance companies (HFCs), away from non-bank sources and towards the banking system for meeting funding requirements. The unabated weakening of economic activity, coupled with deleveraging of corporate balance sheets and risk aversion by banks due to asset quality concerns, was accentuated towards the close of the year by the pandemic woes (Chart II.3.18), producing a reduction in the incremental credit-deposit ratio (Chart II.3.19). The credit-to-GDP gap remained wide during 2019, reflecting the slack in credit demand (Chart II.3.20).

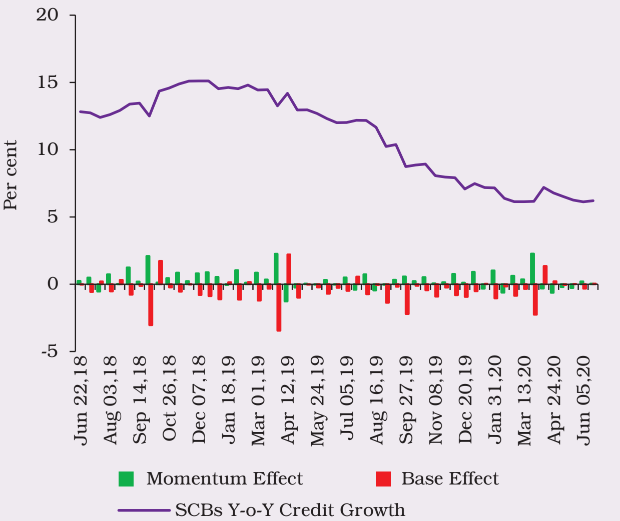
II.3.22 The COVID-19 outbreak has affected more than 200 countries across the globe, bringing global economic activity to a near standstill,

Chart II.3.17: Credit-Deposit Ratio



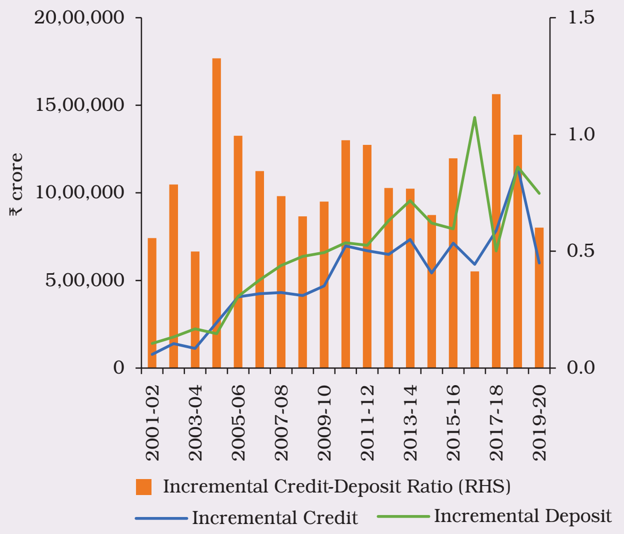
Source: RBI.

Chart II.3.18: SCBs Credit Growth: Momentum and Base Effect



Source: RBI.

Chart II.3.19: Incremental Credit-Deposit Ratio

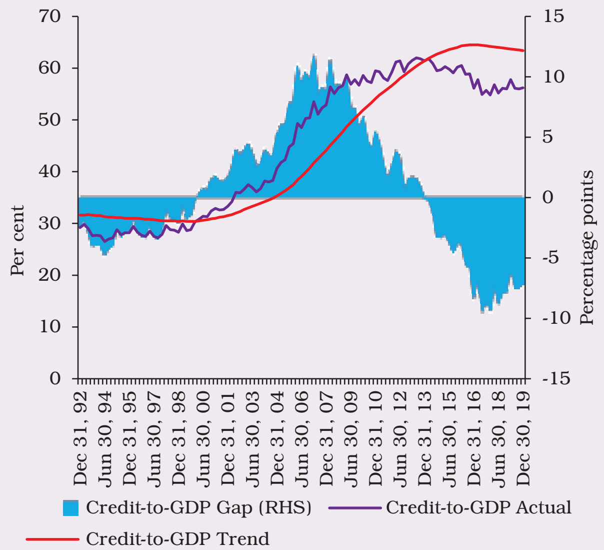


Source: RBI.

through lockdown and social distancing norms necessary for the safety and health concerns of the human beings. Several fiscal and monetary policy measures were also undertaken in India in sync with other countries to mitigate the macroeconomic impact caused by the pandemic (Annex II). With a nation-wide lockdown and people mostly remaining indoors, amidst fear and uncertainty, the usage of cash witnessed an abnormal rise (Chart II.3.21). The Reserve Bank undertook expansionary monetary policy measures to ensure the availability of adequate liquidity in the system. COVID-19 has imparted scars on monetary and credit aggregates towards the end of the year (Box II.3.1).

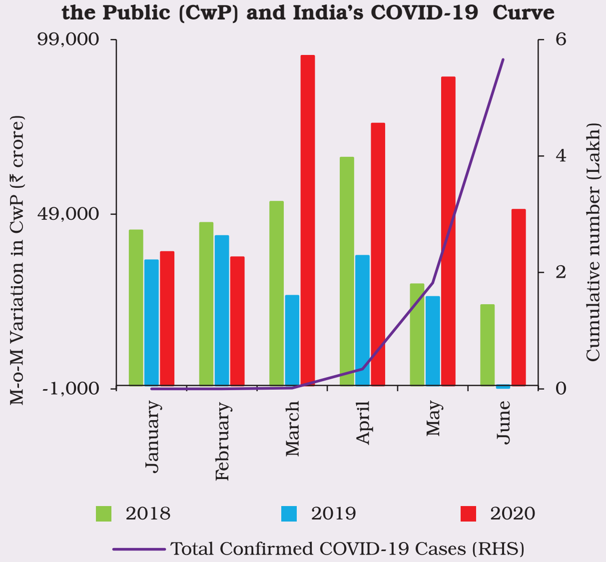
II.3.23 Data on sectoral deployment of bank credit[17] for March 2020 point to a broad-based slowdown. Credit growth to agriculture and allied activities, and industry – mainly large and medium units – decelerated in 2019-20. However, credit growth to micro and small industries accelerated. Within industry, credit growth to beverage and tobacco, mining and quarrying, petroleum, coal products and nuclear fuels and rubber, plastic and

Chart II.3.20: Credit-to-GDP Gap



Source: RBI.

Chart II.3.21: Monthly Variation in Currency with the Public (CwP) and India's COVID-19 Curve



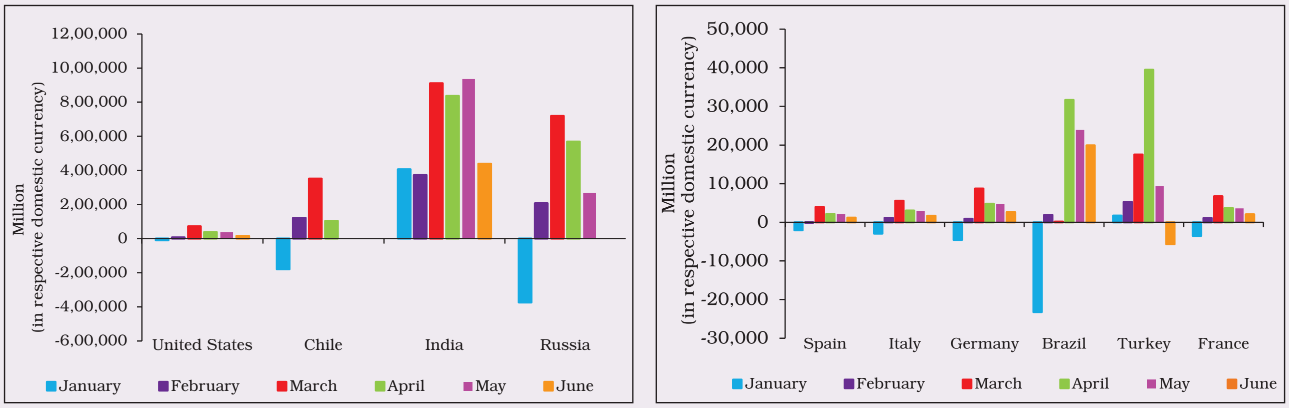
Source: RBI.

[17] Data on sectoral deployment of bank credit is collected on a monthly basis from select scheduled commercial banks (33 banks), which accounts for about 90 per cent of the total non-food credit deployed by all scheduled commercial banks.

Box II.3.1
Impact of COVID-19 on Monetary and Credit Aggregates

Many economies, especially in the emerging world, where the virus has spread rapidly, experienced the phenomenon of rising cash in circulation. Cross-country monetary statistics (IMF, 2020) indicate that the increase in currency in circulation was particularly sharp in Brazil, Chile, India, Russia and Turkey, as also in advanced economies such as the US, Spain, Italy, Germany and France, where the use of cash is less (Chart 1). The rise in currency in circulation in these countries occurred concomitantly with liquidity injecting measures undertaken by their central banks. They were also impacted by the COVID-19 build-up of precautionary balances.

Chart 1: Month-over-Month Variation in Currency in Circulation in Select Economies (January – June 2020)

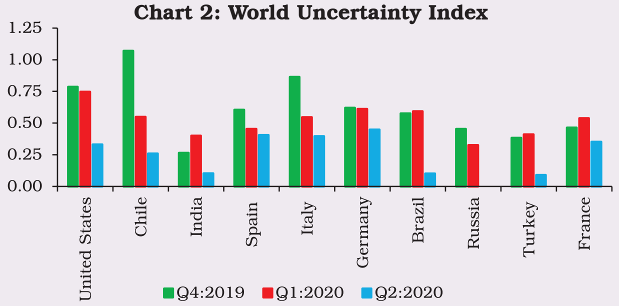


Source: International Financial Statistics, IMF.

Concurrently, the World Uncertainty Index (WUI) and the World Pandemic Uncertainty Index (WPUI) of the economies mentioned above remained high during Q1:2020 (Chart 2 and 3). Rising uncertainty reduces the willingness of businesses to invest money and generate employment opportunities whereas, on the other hand, it reduces consumer spending (Ahir, *et al.* 2020).

A spurt in the number of confirmed COVID-19 cases in India after March 13, 2020 accentuated the deceleration of deposit growth that had commenced from February 2020, essentially reflecting a 'dash to cash' under extreme uncertainty (Chart 4). Concomitantly, the y-o-y growth in currency with the public (CwP) accelerated from 11.3 per cent as on February 28, 2020 to 14.5 per cent at end-March 2020 and to 21.3 per cent by June 19. By contrast, bank credit, which had decelerated continuously during the year, has remained largely stable through the COVID-19 outbreak despite sharp contraction in activity levels.

Chart 2: World Uncertainty Index



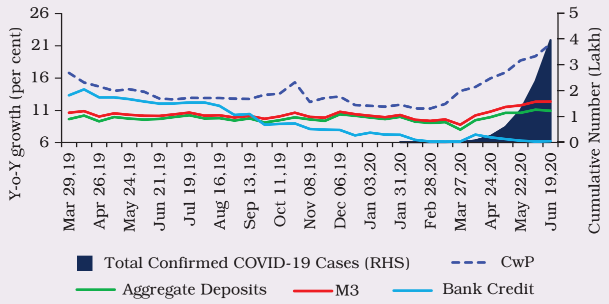
Source: Data accessed through https://worlduncertaintyindex.com/data/.

Chart 3: World Pandemic Uncertainty Index

Source: Data accessed through https://worlduncertaintyindex.com/data/.

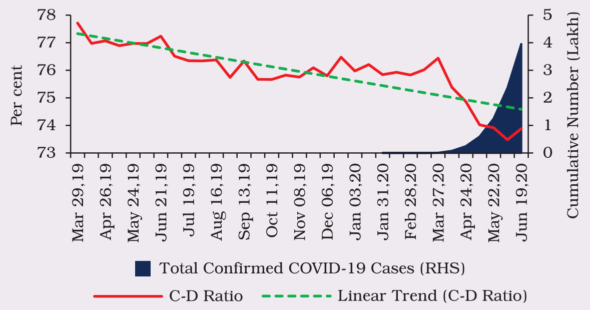
(contd.)

Chart 4: Impact of COVID-19 on Monetary Aggregates



Source: RBI and Ministry of Health and Family Welfare, GoI.

Chart 5: Impact of COVID-19 on Monetary Aggregates



Source: RBI and Ministry of Health and Family Welfare, GoI.

Reflecting these developments, the credit-deposit (C-D) ratio increased from 75.8 per cent at end-January 2020 to 76.4 per cent at end-March 2020, led by the increased demand for cash for transactions as digital payments declined. Post-March 2020, the easing was primarily due to a sharp rise in deposits, driven by a heightened propensity to save in response to the uncertainty caused by COVID-19 (Chart 5).

Reference:

Ahir, H., Bloom, N. and Furceri, D. (2020). '60 Years of Uncertainty', *Finance and Development*, March.

their products accelerated whereas flows to chemicals and chemical products, cement and cement products and construction decelerated. Credit growth to food processing, basic metal and metal products and infrastructure contracted (Table II.3.2 & Chart II.3.22a).

II.3.24 Credit growth to infrastructure contracted during 2019-20, mainly due to reduction in offtake by the power segment and deceleration in credit flows to the roads and telecommunications segments. Credit to the services sector decelerated sharply, primarily driven down by slowdown in credit growth to NBFCs, on account of concerns relating to the health of the sector. There was also a sharp deceleration in credit to the trade segment. Personal loan growth decelerated moderately. Housing loans, which constitute the largest segment of personal loans, witnessed a moderate deceleration, along with credit cards outstanding. However, there was an acceleration in growth of vehicle loans during the year.

II.3.25 As on March 27, 2020, non-food credit (NFC) growth decelerated to 6.7 per cent from 12.3 per cent last year. Among bank groups, credit growth by public sector banks (PSBs) decelerated sharply to 3.4 per cent in March 2020 from 10.2 per cent a year ago, reflecting stress from impaired balance sheets. Credit growth by private sector banks also decelerated to 13.9 per cent in March 2020 from 17.5 per cent a year ago, mainly attributable to deceleration in credit growth to the services sector (Chart II.3.22a and Chart II.3.22b).

II.3.26 To sum up, even as monetary and credit conditions moderated through 2019-20, COVID-19 led to an unusual surge in currency demand, along with deceleration in aggregate deposits. Credit growth weakened during the year, with deceleration in all major sectors. The Reserve Bank pro-actively managed liquidity conditions through conventional and unconventional measures to augment system-level liquidity. Going forward, surplus liquidity conditions, coupled with policy

Table II.3.2: Credit Deployment to Select Sectors

Sectors	Outstanding as on March 27, 2020 (₹ Crore)	Year-on-Year Growth (Per cent)		
		2018-19*	2019-20#	2020-21##
1	2	3	4	5
Non-food Credit (1 to 4)	**92,11,544**	**12.3**	**6.7**	**6.7 (11.1)**
1. Agriculture & Allied Activities	**11,57,795**	**7.9**	**4.2**	**2.4 (8.7)**
2. Industry (Micro & Small, Medium and Large)	**29,05,151**	**6.9**	**0.7**	**2.2 (6.4)**
2.1. Micro & Small	3,81,825	0.7	1.7	-3.7 (0.6)
2.2. Medium	1,05,598	2.6	-0.7	-9.0 (2.2)
2.3. Large	24,17,728	8.2	0.6	3.7 (7.6)
(i) Infrastructure *of which:*	10,53,913	18.5	-0.2	4.2 (15.2)
(a) Power	5,59,774	9.5	-1.6	0.9 (9.7)
(b) Telecommunications	1,43,760	36.7	24.4	36.8 (20.9)
(c) Roads	1,90,676	12.2	2.0	4.7 (14.6)
(ii) Chemicals & Chemical Products	2,02,949	17.5	6.0	3.1 (11.1)
(iii) Basic Metal & Metal Product	3,50,325	-10.7	-5.7	-0.5 (-10.3)
(iv) Food Processing	1,54,146	1.1	-1.9	4.2 (1.2)
3. Services	**25,94,945**	**17.8**	**7.4**	**10.7 (13.0)**
4. Personal Loans	**25,53,652**	**16.4**	**15.0**	**10.5 (16.6)**
5. Priority Sector	**28,97,461**	**7.3**	**5.8**	**1.9 (10.2)**

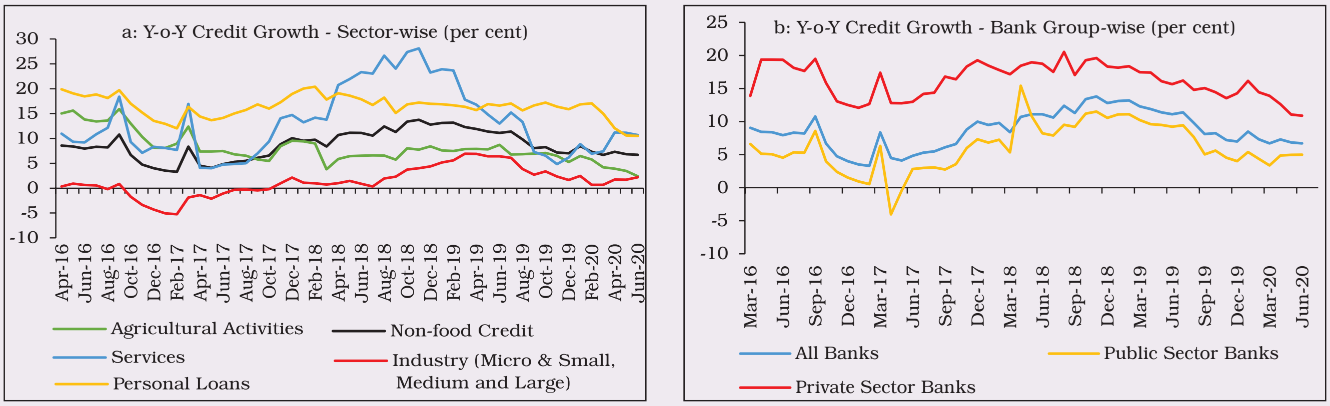
*: March 2019 over March 2018. #: March 2020 over March 2019. ##: June 2020 over June 2019.

Note: 1. Data are provisional.
2. Figures in parentheses indicate growth rates in June 2019 over June 2018.

Source: RBI.

rate reductions, are expected to instill confidence, easing financial conditions and incentivising the flow of funds at affordable rates so as to rekindle investment and lay the foundations of strong sustainable growth as the COVID-19 curve flattens and the economy repairs and revives.

Chart II.3.22: Sectoral Deployment of Non-Food Bank Credit Growth



Note: Data are provisional.
Source: RBI.

II.4 FINANCIAL MARKETS

II.4.1 Global financial markets, which traded on a buoyant note during most part of 2019 and early 2020, experienced panic sell-offs across asset classes, triggered by the outbreak of COVID-19. Volatility soared to extraordinarily high levels, reminiscent of the turbulence seen during the global financial crisis (GFC). As investors scrambled into US dollar positions to seek safe haven, depreciations set in upon almost all other currencies. Bond yields firmed up on massive sell-offs, but speedy central bank actions with widespread policy rate cuts and large amounts of liquidity injection along with fiscal measures appeared to have calmed sentiment.

II.4.2 In India, equity market also fell sharply in sync with global markets with the outbreak of COVID-19. After the announcement of the corporate tax rate cut in September 2019, it made handsome gains and rose to record new highs in January 2020 on the back of positive sentiments on US-China trade talks and the likelihood of an orderly Brexit. However, this positive momentum was interrupted by the escalation of geo-political tensions between the US and Iran, weakening domestic growth prospects and higher inflation expectations. COVID-19 brought an abrupt change in sentiments in March 2020. After exhibiting range-bound two-way movements with weakening bias during first three quarters, Indian rupee depreciated to an all-time low during Q4:2019-20 on large capital outflows from both the equity and debt markets. In the money market, as detailed in sub-section 2, overnight money market rates (call money, triparty repo, and market repo) were largely aligned with the policy rates *albeit* with a downward bias, and were insulated from adverse global developments by proactive liquidity management by the Reserve Bank. Bond yields softened significantly during 2019-20 as discussed in sub-section 3, aided initially during H1:2019-20 by positive sentiments from the general election results, policy rate cuts, infusion of liquidity by the Reserve Bank and the possibility of the fiscal deficit slippage being contained. During H2:2019-20, yields softened further on the back of auction of special OMOs, softening of US treasury yields, easing crude oil prices and announcement of comprehensive liquidity measures on March 27, 2020 to mitigate the adverse impact of COVID-19. Sub-section 4 profiles developments in the corporate bond market wherein yields softened during 2019-20, reflecting policy rate cuts by the MPC and injection of systemic liquidity, especially through the special OMOs and Long-term Repo Operations (LTRO) conducted during the latter part of the year. Sub-section 5 presents developments in the domestic equity market, followed by a discussion on movements in the Indian rupee in the foreign exchange market in sub-section 6. The section concludes with some forward-looking perspectives.

2. Money Market

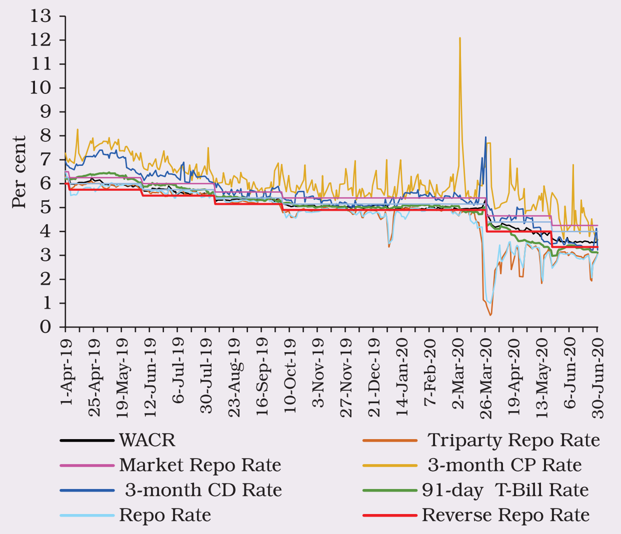
II.4.3 The money market remained generally stable during 2019-20, especially in H1. In the second half of the year, bouts of volatility, mainly in March 2020 on account of the spread of COVID-19, dispelled the calm.

II.4.4 Beginning June 2019, liquidity conditions transited gradually out of deficit conditions during Q1:2019-20. The Reserve Bank proactively managed frictional liquidity conditions with a slew of conventional liquidity measures, *viz.,* reduction in the CRR and easing of daily maintenance requirements, variable and fixed rate repos/reverse repos of various tenors and access to the Marginal Standing Facility (MSF) as well as several unconventional measures, including long-term repo operations (LTRO), targeted long-term repo operations (TLTRO), line of credit to financial institutions, and a special liquidity facility for mutual funds (MFs).

II.4.5 The weighted average call rate (WACR) in the unsecured inter-bank call money market remained aligned with the policy repo rate during the year with a downward bias (Chart II.4.1). The average absolute spread of the WACR over the policy rate increased to 11 basis points (bps) in 2019-20 from 9 bps in 2018-19, as surplus liquidity conditions prevailed in the banking system for most of the year.

II.4.6 Volatility in the call money segment, measured by the coefficient of variation[18] of the WACR, increased to 7.55 in 2019-20 from 3.40 a year ago, reflecting the swings in liquidity conditions. The triparty repo and market repo rates remained below the WACR, on average, by 22 bps each.

Chart II.4.1: Key Policy and Money Market Rates



Source: RBI, Bloomberg, CCIL-Ftrac, FBIL and RBI staff calculations.

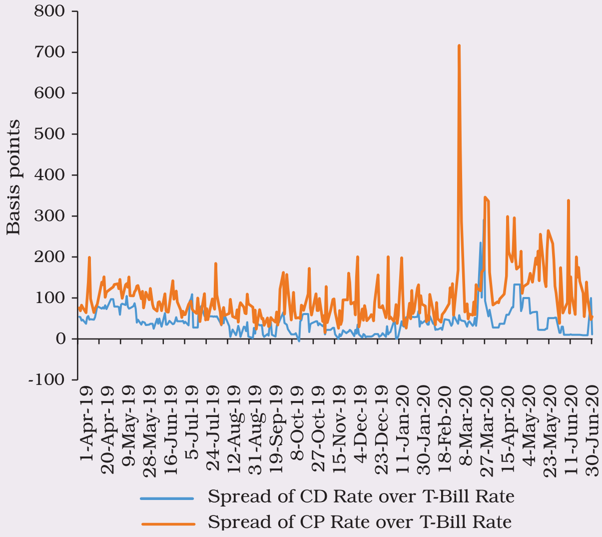
II.4.7 Average daily volume in the money market (call money, triparty repo and market repo taken together) increased by 16 per cent to ₹2,42,658 crore during 2019-20 from ₹2,09,152 crore in 2018-19. Volumes in the triparty repo and market repo segments increased by 24 per cent and 9 per cent, respectively. The share of triparty repo and market repo segments were 68 per cent and 25 per cent, respectively, of the total money market volume during 2019-20 as compared with 64 per cent and 27 per cent, respectively, in 2018-19. In the call money segment, average daily volumes decreased by 17 per cent during the year to ₹16,558 crore, reducing its market share to 7 per cent from 9 per cent in the previous year. The traded volumes in both secured and unsecured money market segments increased in recent months, in spite of COVID-19.

II.4.8 Interest rates on longer tenor money market instruments, *viz.,* 91-day Treasury Bills (T-bills), certificates of deposit (CDs) and commercial papers (CPs) generally moved in sync with the policy repo rate during 2019-20. The spread of CD rates over T-bill rates narrowed in Q3:2019-20 to 21 bps from 39 bps in Q2; however, it widened to 48 bps in Q4 following the outbreak of COVID-19 and the usual year-end balance sheet phenomenon (Chart II.4.2).

II.4.9 In the primary market, fresh issuances of CDs decreased to ₹3.88 lakh crore during 2019-20 as compared with ₹5.65 lakh crore in the previous year. New issuances of CPs in the primary market declined to ₹21.95 lakh crore in 2019-20 from ₹25.96 lakh crore in 2018-19. The weighted average discount rates in the primary CP market hardened from September 2019 until mid-October 2019 on increased risk perceptions

[18] Coefficient of variation is measured as a ratio of standard deviation to the mean and has no unit.

Chart II.4.2: Spread of 3-Month CP and CD Rate over 3-Month T-Bill Rate



Source: FBIL, CCIL-Ftrac and RBI staff calculations.

resulting from defaults and rating downgrades of a few NBFCs. However, it softened by 10 bps to 5.78 per cent by end-February 2020, as risks subsided, before hardening marginally to stand at 6.15 per cent at end-March 2020.

3. G-sec Market

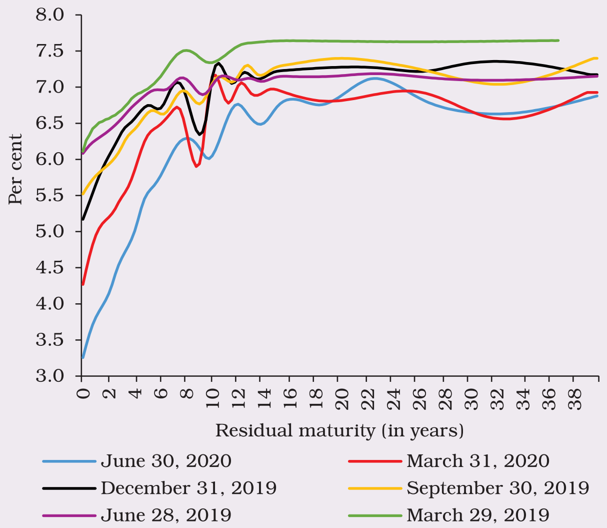
II.4.10 G-sec yields hardened in April 2019 in response to the Reserve Bank maintaining a neutral monetary policy stance contrary to market expectation, sustained higher crude oil prices following the US announcement of stopping of imports from Iran and supply disruptions in Libya and Venezuela, and depreciation of the Indian rupee (INR). In the rest of Q1:2019-20, the benchmark G-sec yield softened by 47 bps, taking positive cues from the general election results, infusion of liquidity by the Reserve Bank and lower crude oil prices. Market sentiment was buoyed further by the MPC's decision to reduce the policy repo rate by 25 bps to 5.75 per cent on June 6, 2019 coupled with the change in policy stance from neutral to accommodative. The yield on the 10-year benchmark security softened from 7.35 per cent at end-March 2019 to 6.88 per cent on June 29, 2019 with some intermittent upswings.

II.4.11 The softening of G-sec yields continued with a decline in yield by 20 bps in Q2:2019-20, barring some hardening in August and September 2019. Notwithstanding a larger than expected policy rate cut of 35 bps by the Reserve Bank, rollback of surcharge on foreign portfolio investments (FPIs) and higher than expected surplus transfer by the Reserve Bank, market participants remained wary in August and September with the yield hardening by 19 and 14 bps, respectively, on concerns over fiscal slippage and geo-political tensions following the attack on Saudi oil refineries.

II.4.12 In Q3:2019-20, G-sec yields moved in a narrow range during October-November 2019, before hardening in the first fortnight of December 2019. Initially, the yield on the new 10-year benchmark (6.45% GS 2029), issued on October 7, 2019, hardened by 34 bps from 6.46 per cent (opening yield) on the day of the monetary policy announcement on December 5 (MPC decided to leave the policy repo rate unchanged) to 6.80 per cent on December 16, 2019 as market sentiment turned jittery over the central government's fiscal position and rising US treasury yields. However, the Reserve Bank's decision to conduct special OMOs on December 19 resulted in a decline in the benchmark yield by 5 bps (as compared to December 16, 2019). Overall, the G-sec yield declined by 11 bps in Q3:2019-20 (Chart II.4.3).

II.4.13 During Q4:2019-20, yields traded with a softening bias, supported by special OMO purchases by the Reserve Bank, opening of select

Chart II.4.3: G-sec Yield Curve Based on Zero Coupon



Source: FBIL.

securities fully for FPIs, no additional borrowing by the government and announcement of LTRO by the Reserve Bank. Yields continued to trade with a downward bias on account of fall in global bond yields due to risk aversion in the aftermath of the COVID-19 outbreak and lower crude prices. However, yields hardened during the latter part of Q4:2019-20 due to sustained FPI selling amidst flight to safety. Subsequently, G-sec yields resumed easing, following a slew of policy measures announced by the Reserve Bank to alleviate COVID-19 induced financial stress. The yield on benchmark 10-year G-sec closed at 6.14 per cent at the end of 2019-20, reflecting the impact of Reserve Bank's operations (Box II.4.1).

Box II.4.1
Impact of Special Operations by the Reserve Bank on Financial Markets

Following Swanson, *et al.,* (2011), a high frequency event study analysis was conducted around the announcement day of the Reserve Bank's special OMOs in the nature of "Operation Twist (OT)". One-day change in G-sec yields between the announcement day and the next trading day is calculated because the press releases of these announcements were posted on the Reserve Bank website after the close of financial markets. Statistical significance is measured relative to the unconditional standard deviation of the corresponding rate changes over similarly sized windows over a period of one year preceding the month of these announcements (Table 1). The results indicate that there was a statistically significant negative impact of the Reserve Bank's OT announcements in December 2019 on 10-Year G-sec yields.

Table 1: Impact of Operation Twist Announcements on G-sec Yields on the Day of Announcement

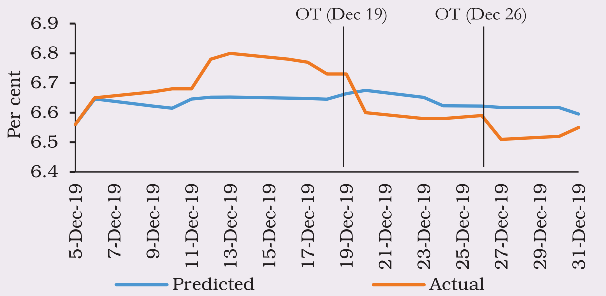
1-day Change	10-Year Benchmark
1	2
December 19, 2019 - December 20, 2019	-13**
December 26, 2019 - December 27, 2019	-8*
January 2, 2020 - January 3, 2020	0
January 16, 2020 - January 17, 2020	0
April 23, 2020 - April 24, 2020	0
June 29, 2020 - June 30, 2020	-2
Cumulative, all announcements (in bps)	-23**

*: significant at 10 per cent **: significant at 5 per cent level.
Source: RBI staff estimates.

The dynamic impact of OT on the 10-year G-Sec yield is obtained by applying a Local Linear Projection (LLP) model which forecasts the path of the yield in response to the December 5, 2019 monetary policy announcement. The LLP model uses the overnight index swap (OIS) rates and the strategy expounded by Lloyd (2018) and Das *et al.* (2020), to filter 'large surprise' in monetary policy announcements between 2014 and 2019, and provides the impulse response of the yields to such 'large surprises.' Overall, twenty such 'large surprise' policies are identified between 2014 and 2019, including the policy announcement of December 5, 2019. The forecasted path is then compared with the observed path of the yield (Chart 1). The result suggests that the 10-year G-sec yield would have been higher without the two OT announcements in December 2019.

(contd....)

Chart 1: Actual vs. Model Predicted Yields



Source: RBI staff estimates.

The Reserve Bank first announced its intention to carry out LTRO in its Statement on Developmental and Regulatory Policies (February 6, 2020).

The Reserve Bank made a total of eight announcements of LTRO till June 2020 out of which five were targeted LTRO announcements. The change in the yield of the securities selected under LTRO are analysed (Table 2). The results show that the cumulative impact of LTRO announcements was a reduction in 3-Year and 1-Year G-sec yields.

Table 2: Impact of LTRO on G-sec Yield

Estimated Responses to Announcements (in bps)	3-Year G-sec	1-Year G-sec
1	2	3
3-day change, Feb 5, 2020 - Feb 10, 2020	-27.9*	-8.5
1-day change, Feb 25, 2020 - Feb 26, 2020	-5.3	-1.9
1-day change, Mar 16, 2020 - March 17, 2020	6.8	11.1*
2-day change, Mar 26, 2020-Mar 30, 2020#	-25.3*	-19.0*
1-day change, Mar 30, 2020-Mar 31, 2020#	-0.4	-14.4*
1-day change, Apr 3, 2020 - Apr 7, 2020#	8.2	-3.5
1-day change, Apr 15, 2020 - Apr 16, 2020#	-9.0	-2.0
2-day change, Apr 16, 2020 - Apr 20, 2020#	-37.6*	-23.8*
Cumulative, all announcements (in bps)	-90.5*	-62.0*

*: significant 1 per cent level. #: Targeted LTRO dates.

Source: RBI staff estimates.

References:

1. Lloyd, S. P. (2018), 'Overnight Index Swap Market-based Measures of Monetary Policy Expectations', *Bank of England Staff Working Paper No. 709.*
2. Swanson, E. T., Reichlin, L., & Wright, J. H. (2011), 'Let’s Twist Again: A High-Frequency Event-Study Analysis of Operation Twist and Its Implications for QE2' [with Comments and Discussion], *Brookings Papers on Economic Activity*, 151-207.
3. Das, S., Ghosh, S., & Kamate, V. (2020), 'Monetary Policy and Financial Markets: Twist and Tango', *Reserve Bank of India Bulletin,* Volume LXXIV (8), 41-50.

II.4.14 FPI limits are revised on a half yearly basis under the medium-term framework (MTF)[19], with the objective of ensuring a more predictable regime for investment by the FPI. Accordingly, investment limits for FPI in G-sec including State Development Loan (SDLs) were increased in a phased manner from ₹3,27,900 crore as on April 6, 2018 to ₹3,95,200 crore as on April 1, 2019. The limit was increased further to ₹4,29,500 crore as on October 1, 2019. During April-December 2019, FPIs made investment in G-secs and SDLs of ₹23,522 crore, while they pulled out ₹57,348 crore in Q4:2019-20, resulting in an overall net outflow during 2019-20. The outflow was pronounced in the fourth quarter, particularly in March 2020 that witnessed an outflow of ₹48,279 crore, in line with other emerging market economies (EMEs) hit by the outbreak of

[19] The medium-term framework (MTF) for FPI limits in debt securities were worked out in October 2015 to have more predictable regime for FPI investment. Under the MTF, the limits for FPI investment in the central government securities (G-secs) were increased in phases to reach 5 per cent of the outstanding stock by March 2018. In case of SDLs, this limit was fixed at 2 per cent of the outstanding stock by March 2018 in a phased manner. In April 2018, this limit was reviewed and the limit for FPI investment in G-secs were increased by 0.5 per cent each year to 5.5 per cent of outstanding stock of securities in 2018-19 and 6.0 per cent of outstanding stock of securities in 2019-20. The limit for FPI investment in SDLs were kept unchanged at 2.0 per cent of outstanding stock of securities. The limit for FPI investment in corporate bonds was 9 per cent of outstanding stock for 2019-20. The limits for FPI investment in G-secs and SDLs remained unchanged at 6 per cent and 2 per cent, respectively, of outstanding stocks of securities for 2020-21. Further, the limit for FPI investment in corporate bonds has been increased from 9 per cent to 15 per cent of outstanding stock for 2020-21. The actual revised limits for G-secs, SDLs and corporate bonds are now set out for half year April-September and half year October-March at the beginning of the year.

COVID-19. Therefore, FPI utilisation of total available limit (inclusive of investments in SDL) declined to 37.5 per cent on March 31, 2020 from 54.1 per cent a year ago. It was announced in the Union Budget 2020-21 that certain specified categories of G-sec would be open fully for non-resident investors apart from being available to domestic investors. Accordingly, in consultation with the government, a separate route, *viz.,* the Fully Accessible Route (FAR) for investments by non-residents, including FPIs, in G-secs was introduced with effect from April 1, 2020. Five G-secs were specified as eligible for investment under the FAR, from the date on which the scheme comes into effect. In addition, all new issuances of G-secs of 5-year, 10-year and 30-year tenors from the financial year 2020-21 will be eligible for investment under the FAR as 'specified securities'.

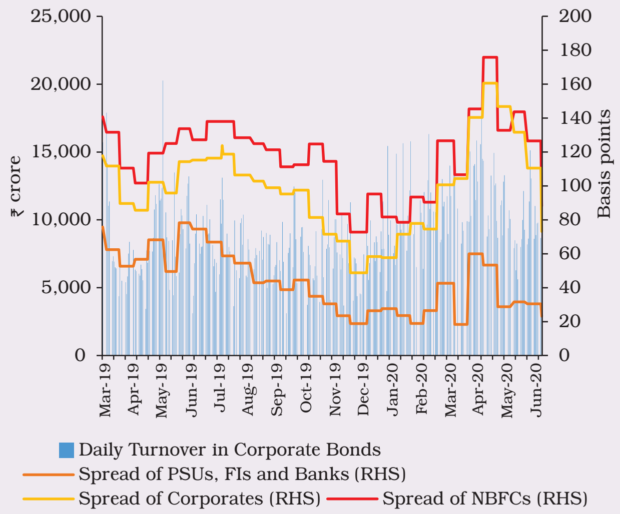
4. Corporate Debt Market

II.4.15 Corporate bond yields largely tracked G-sec yields. The yield on 5-year AAA-rated corporate bonds softened during 2019-20, reflecting reduction in the policy repo rate, surplus systemic liquidity conditions, and the impact of special OMOs and LTRO auctions conducted during the latter part of the year. However, yields registered some uptick in March 2020 with the unfolding of distress in a major private bank and COVID-19. During the period March 12-25, 2020, turbulence in global financial markets and worsening of financial conditions resulted in a hardening of 5-year AAA-rated corporate bond yield by 72 bps. This was addressed by the announcement of various liquidity measures by the Reserve Bank on the back of a sizeable reduction in the policy rate. Overall, the 5-year AAA-rated corporate bond yield eased by 108 bps to 7.02 per cent during 2019-20.

II.4.16 The risk premia or spread (5-year AAA-rated bond yield over 5-year G-sec yield) on bonds issued by public sector undertakings (PSUs), financial institutions (FIs) and banks; NBFCs; and corporates fell by 58 bps, 34 bps and 14 bps, respectively. The average daily turnover in the corporate bond market increased to ₹8,532 crore during 2019-20 from ₹7,587 crore a year ago (Chart II.4.4).

II.4.17 Primary corporate bond issuances increased by 6.6 per cent to ₹6.9 lakh crore during 2019-20 as softening of yields encouraged corporates to mobilise higher resources from the corporate bond market, particularly public sector entities. Private placements remained the preferred choice for corporates, accounting for 97.8 per cent of total resources mobilised through the bond market. In order to provide an alternative source of financing for public sector entities at lower cost and help deepen bond markets by diversifying investor base with increased retail participation, the Government of India (GoI) launched the *Bharat* Bond Exchange Traded Fund

Chart II.4.4: Turnover in Corporate Bond Market and Yield Spread



Source: SEBI and Bloomberg.

(ETF) in December 2019 – the first ETF for corporate bonds in India – under which ₹12,395 crore were mobilised. Outstanding corporate bonds increased by 6.1 per cent y-o-y to ₹32.5 lakh crore or 16.0 per cent of GDP at end-March 2020. Investments by FPIs in corporate bonds decreased to ₹1.73 lakh crore at end-March 2020 from ₹2.19 lakh crore at end-March 2019. Consequently, utilisation of the approved limit by FPIs declined to 54.5 per cent at end-March 2020 from 75.9 per cent at end-March 2019.

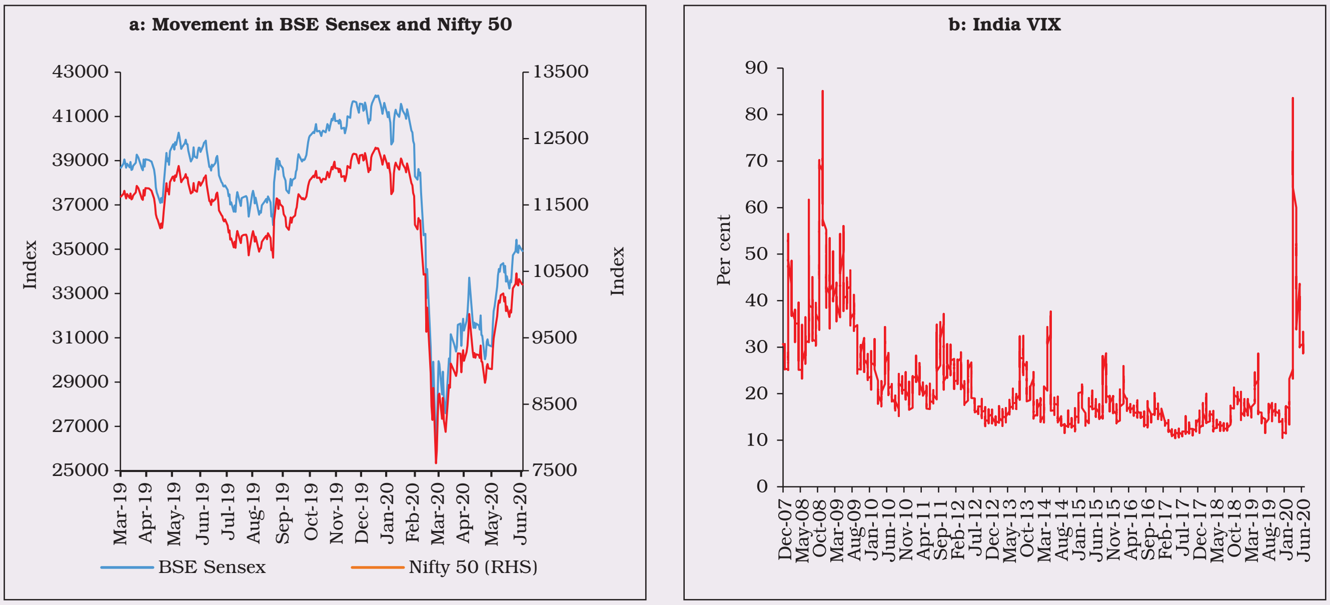
5. *Equity Market*

II.4.18 The Indian equity market, which reached an all-time high on January 14, 2020, began to slide thereafter and trimmed its gains during 2019-20, especially after the outbreak of COVID-19. Volatility soared to unusually high levels. Overall, the BSE Sensex and the Nifty 50 plummeted by 23.8 per cent and 26.0 per cent, respectively, over end-March 2019. The India VIX, which captures short-term volatility of the Nifty 50, surged to 83.6 per cent on March 24, 2020 compared with 85.1 per cent during the GFC, before closing at 64.4 per cent on March 31, 2020 (Chart II.4.5).

II.4.19 The BSE Sensex commenced the year with modest gains before declining during early May 2019 on concerns over weak corporate earnings and intensification of trade tensions between the US and China. However, prospects of a stable government and expectations of further monetary easing by the Reserve Bank buoyed market sentiment driving the BSE Sensex to 40,000 levels in June 2019. However, this rally proved transient as bearish sentiment gripped markets after a default by a housing finance company fuelled liquidity concerns in the NBFC sector in June 2019.

II.4.20 The downtrend deepened in July 2019 over the Budget proposals such as (i) tax on super rich; (ii) buyback tax; and (iii) increase in minimum public shareholding in listed companies. Markets remained under pressure on negative cues from global equity markets, reporting of a borrowing

Chart II.4.5: Equity Market



Source: BSE and NSE.

fraud in a public sector bank, concerns over lacklustre corporate earnings results for Q1:2019-20, slow progress of monsoon and continued FPI outflows due to the proposed increase in tax surcharge for FPIs registered as non-corporates. The BSE Sensex declined marginally in August 2019, unsettled by adverse domestic developments such as tepid corporate earnings results for Q1:2019-20, lukewarm industrial activity and auto sales, and negative global cues, *viz.*, political unrest in Hong Kong, debt default in Argentina and uncertainty over the US-China trade relations. However, the rollback of the super-rich tax on FPIs, front-loading of capitalisation of public sector banks and deferment of a hike in registration fees for automobiles provided some support to market sentiment.

II.4.21 The BSE Sensex rose by five per cent on a single day on September 20, 2019 after the announcement of a reduction in the corporate tax rate. Subsequently, fresh optimism over the US-China trade negotiations and agreement on Brexit deal helped the BSE Sensex to reclaim 40,000 level on October 30, 2019. The bullish momentum gathered strength on growth boosting measures by the GoI, support to the Insolvency and Bankruptcy Code (IBC) amendment and approval for a partial credit guarantee scheme for public sector banks to purchase pooled assets from NBFCs. Furthermore, global tailwinds due to the US Fed's dovish outlook, the US-China Phase-1 trade deal and Brexit-favouring UK election outcome aided the upswing. A slew of positive macroeconomic developments thereafter, including fall in global crude prices, recovery in industrial output in November, higher GST collections and expansion in manufacturing Purchasing Managers' Index (PMI) for December, drove the BSE Sensex to close at a record of 41,953 on January 14, 2020.

II.4.22 Markets wilted, however, under escalating geo-political tensions between the US and Iran, a weak domestic GDP growth outlook along with downward revision of India's growth forecast for 2019-20 by the International Monetary Fund (IMF) and higher CPI inflation print for December 2019. The decline intensified on February 1, 2020 with the Sensex plunging by 988 points (2.4 per cent) as proposals in the Union Budget 2020-21 fell short of market expectations. However, markets made a V-shaped recovery on February 4, 2020 on the back of a sharp fall in crude oil prices and release of robust manufacturing PMI data for January 2020. Subsequently, the announcement of credit and liquidity enhancing measures on February 6, 2020 also supported market. This recovery, however, proved short-lived.

II.4.23 Beginning February 20, 2020, fears over COVID-19 induced slowdown reverberated across the globe as equity markets both in advanced and EMEs, including in India, witnessed panic sell-offs. The BSE Sensex fell by 2,919 points (8.2 per cent) on March 12, 2020 following the declaration of COVID-19 as pandemic by the WHO. The market lost further ground with the BSE Sensex falling over 10 per cent during early hours of trading, attracting circuit breakers and suspension of trading for 45 minutes. A statement from SEBI indicating that the fall in the Indian stock indices has been significantly lower than in many other countries and assuring market participants of suitable and appropriate actions, if required, helped calm market nerves with the BSE Sensex ending on March 13, 2020 with a net gain of 1,325 points (4.0 per cent), the largest ever recovery in a single day. However, these gains could not be sustained as bearish sentiment returned on the back of continued moderation in global crude prices and growing worries over the impending recession. The Indian equity market breached the lower circuit bound for the second time in a month, with the BSE Sensex recording its biggest fall of 3,935 points (13.2 per cent) on March 23, 2020. Markets regained some lost ground thereafter amidst expectations of fiscal measures by the government, announcement of comprehensive monetary, liquidity and regulatory measures by the Reserve Bank including a sizeable reduction in policy rates on March 27, 2020. Overall, the BSE Sensex registered a decline of 23.1 per cent during March 2020. This sell-off in the equity market was accompanied by a surge in VIX from 23.2 per cent at end-February 2020 to a high of 83.6 per cent during March 2020 before closing at 64.4 per cent. However, it is observed that over the last few years, domestic institutional investors (DIIs) are increasingly emerging as a counter balancing force to FPIs during stress situation. During March 2020, when FPIs were net sellers to the tune of ₹62,434 crore, DIIs, led by MFs and insurance companies, were net buyers to the tune of ₹55,595 crore, thereby largely counter-balancing the withdrawal by FPIs. Further, the correlation between monthly net investments of MFs and FPIs during 2019-20 came out as high as -0.9, suggesting a strong counter balancing force during the time of FPI sell-offs.

II.4.24 The market capitalisation of companies listed on BSE declined by 27 per cent to ₹113.5 lakh crore at end-March 2020 from ₹155.5 lakh crore at end-December 2019, before recovering to ₹129.4 lakh crore at end-April 2020. Hence, market capitalisation at end-March 2020 stood at 55.8 per cent of GDP as compared with 77.9 per cent at end-December 2019.

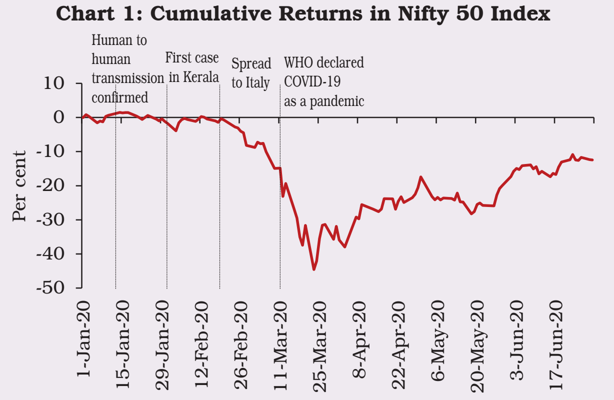
II.4.25 Heightened volatility in domestic financial markets was caused by panic selling by FPIs (Box II.4.2). To comprehend the overall financial conditions, a Financial Conditions Index (FCI) was constructed using Principal Component Analysis on twelve indicators across different market

Box: II.4.2

India's Financial Markets: Impact of COVID-19

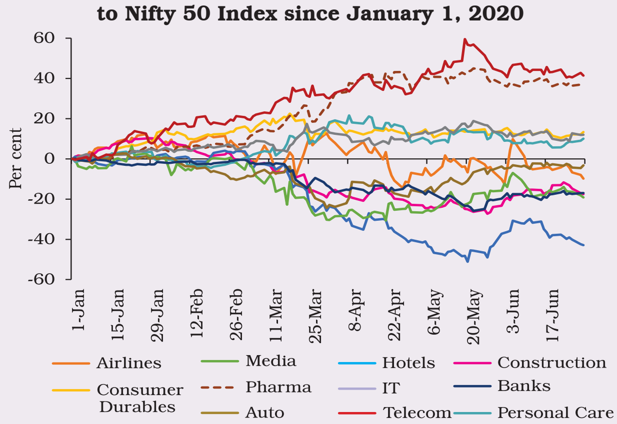
The outbreak of COVID-19 impacted global financial markets and brought an abrupt tightening of financial conditions. In India, the stock market began to fall starting mid-February 2020 and plummeted thereafter with the declaration of COVID-19 as a pandemic by the WHO on March 11, 2020. Nifty 50 slumped by 38.4 per cent by March 23, 2020 from its peak of 12,362 on January 14, 2020 before making some recovery (Chart 1). The sectors that have been hit hardest include hotels, media, construction, power, auto, metals and banks, whereas telecom, pharmaceuticals, personal care, tea and coffee, petroleum, gas and IT have outperformed the overall market (Chart 2).

Chart 1: Cumulative Returns in Nifty 50 Index



Source: Refinitiv.

Chart 2: Cumulative Returns of Sectoral Indices relative to Nifty 50 Index since January 1, 2020

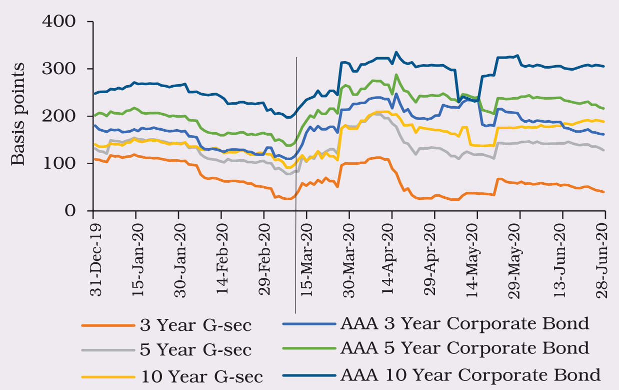


Source: Refinitiv.

(contd....)

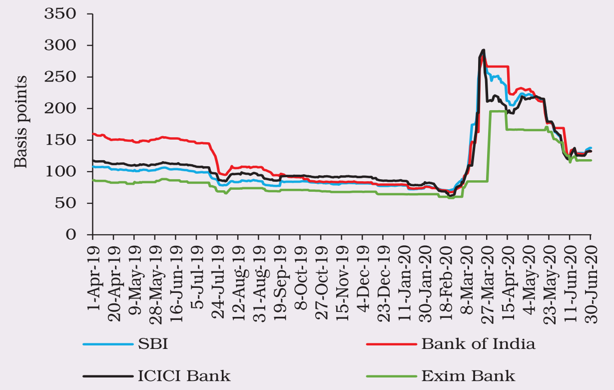
Financial conditions tightened across fixed income markets due to panic sell-offs by FPIs from EMEs, coupled with liquidation of positions by MFs to meet redemption pressures from investors, particularly those invested in funds with higher credit risk. This was reflected in widening of spread of G-sec and corporate bond yields over the policy repo rate (Chart 3). However, spread of 3-year and 5-year G-sec and corporate bond yields narrowed subsequently over the policy repo rate. Credit default swaps (CDS) premium of Indian banks dropped sharply from six-year highs on expectations that recent policy support would help lenders to avoid worse damage from the pandemic (Chart 4).

Chart 3: Spread over Repo Rate



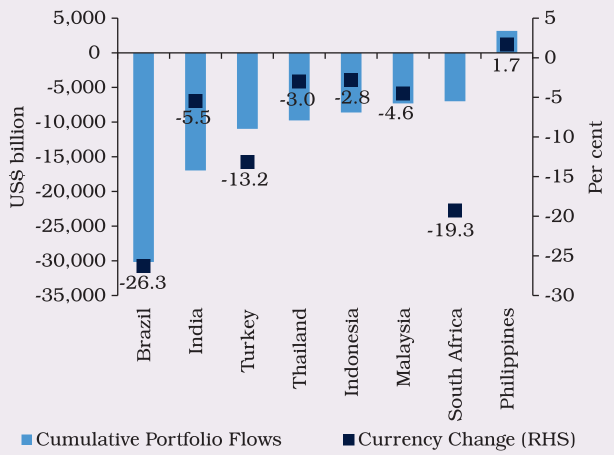
Source: Bloomberg.

Chart 4: CDS Spread of Indian Banks



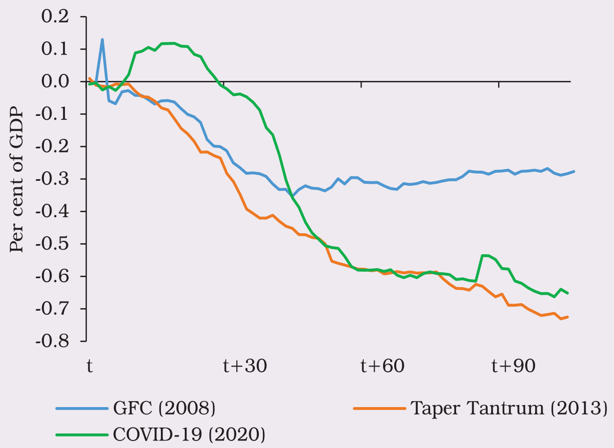
Source: Refinitiv.

Chart 5: Portfolio Flows vs. Currency
January 1 to June 30, 2020



Source: Bloomberg.

Chart 6: Cumulative FPI Flows



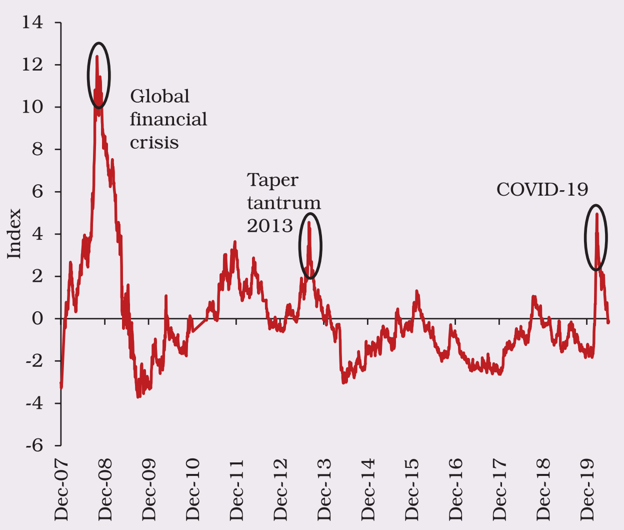
Source: Bloomberg.

As bearish sentiment gripped markets, EMEs witnessed sharp reversal of capital flows with their currencies experiencing significant depreciations. India experienced one of the highest outflows amongst emerging market peers, but its currency performed relatively better (Chart 5), with the depreciation of the rupee being lower than at the time of the GFC and taper tantrum despite large outflows (Chart 6).

References:

1. IMF (2020), 'Global Financial Stability Report', April.
2. Ramelli and Wagner (2020), 'Feverish Stock Price Reactions to COVID-19', *CEPR Discussion Paper*, No. DP14511.

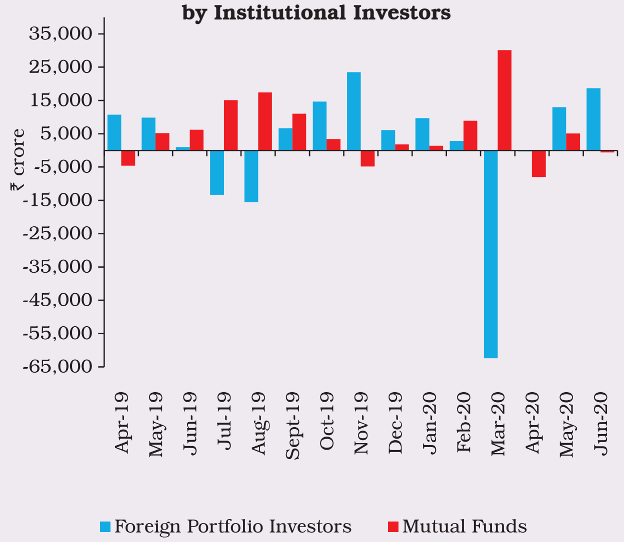
Chart II.4.6: Financial Conditions Index



Source: RBI staff calculations.

segments. The values of the FCI above zero indicate higher-than-average levels of financial market stress/tightened financial conditions, while values below zero indicate lower-than-average levels of stress/loose financial conditions. The significant tightening of financial conditions as manifested in sharp correction in equity markets,

Chart II.4.7: Net Investment in Equity by Institutional Investors



Source: NSDL and SEBI.

widening of credit spreads and depreciation of the Indian rupee, is suggested by the FCI as well. Financial conditions eased subsequently in response to various liquidity measures undertaken by the Reserve Bank (Chart II.4.6).

II.4.26 Net investment by DIIs, particularly MFs, provided support to the equity market during 2019-20. While MFs were net buyers to the tune of ₹91,160 crore, FPIs were net sellers of ₹6,204 crore, in the Indian equity market (Chart II.4.7). FPIs made net purchases of ₹63,509 crore during September 2019 to February 2020, but they made net sales of ₹62,434 crore during March 2020 as the spread of COVID-19 triggered flight to safety.

Primary Market Resource Mobilisation

II.4.27 The primary segment of the equity market witnessed increased activity during 2019-20. Resource mobilisation through initial public offers (IPOs), follow-on public offers (FPOs) and rights issues jumped more than four-fold to ₹76,382 crore during 2019-20. Of these, ₹21,323 crore were mobilised through 60 IPO/ FPO issues, out of which 46 issues amounting to ₹495 crore were listed on the Small and Medium Enterprises (SME) platform of the BSE and the NSE. Resource mobilisation through rights issues amounted to ₹55,059 crore mostly by telecom companies. Resource mobilisation through qualified institutional placement (QIP) also increased sharply to ₹51,216 crore in 2019-20 from ₹10,289 crore in 2018-19 (Appendix Table 5).

II.4.28 Net resources mobilised by mutual funds declined by 20.4 per cent to ₹87,301 crore in 2019-20. Net resource mobilisation through equity-oriented schemes declined to ₹81,597 crore in 2019-20 from ₹1.1 lakh crore in 2018-19.

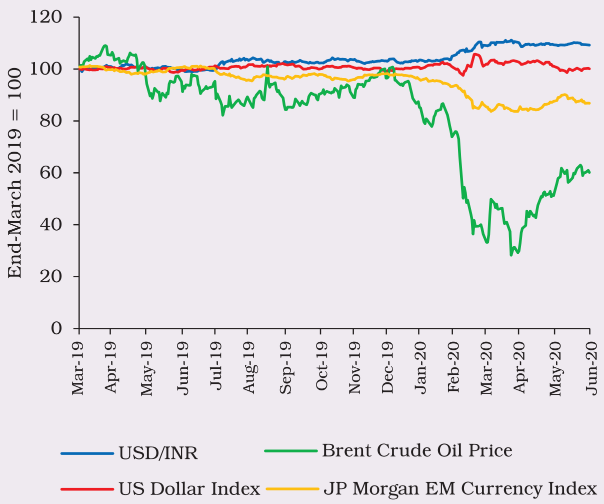
Assets under management of equity-oriented mutual funds declined by 32.4 per cent to ₹6.0 lakh crore at end-March 2020 from ₹8.9 lakh crore at end-March 2019.

6. *Foreign Exchange Market*

II.4.29 In the foreign exchange market, turnover in both merchant and the inter-bank segments of the spot and forward market mostly remained at the previous year's levels, while the swap segment exhibited an increase in activity during the latter part of the year.

II.4.30 The Indian rupee traded with a weakening bias, tracking other EME currencies during 2019-20, touching a then lifetime low against the US dollar in March 2020. While the depreciation of rupee was modest during H1:2019-20 – it depreciated by 2.31 per cent against the US dollar – mainly due to a sell-off in the equity market during July-August 2019 amidst concerns over escalating US-China trade tensions and tepid global growth. Thereafter, the rupee recovered some lost ground, tracking gains in the equity market following the announcement of corporate tax cuts. The rupee continued to extend the gains heading into H2:2019-20 on positive sentiment around growth boosting measures by the government and the trade truce between the US and China. However, the rupee came under intense pressure since then, triggered by flight to safety by FPIs on weakening of growth and COVID-19 concerns. It touched an all-time intra-day low of ₹76.29 on March 23, 2020. Although the Indian rupee depreciated by 8.88 per cent against the US dollar during 2019-20, it performed better than other EME currencies. (Chart II.4.8).

Chart II.4.8: Movement in Rupee, US Dollar, Crude Oil Price and EM Currency Index



Source: Bloomberg and RBI staff calculations.

II.4.31 In tandem with movements in the nominal exchange rate of the rupee, the 36-currency nominal/real effective exchange rate (NEER/ REER) remained range-bound during 2019-20, barring a sharp depreciation in both 36-currency NEER and REER in August 2019 and March 2020. On average, the 36-currency NEER and REER appreciated by 0.9 per cent and 2.4 per cent, respectively, during 2019-20 on a y-o-y basis.

II.4.32 Forward premia softened across the tenors during the year under the downward pressure exerted by the substantial increase in banking system liquidity. However, the near-term premia edged higher in the February-March period as rupee demand increased ahead of end-year closure of accounts.

II.4.33 Going forward, financial market movements would hinge to a large extent on the progress made in containing the COVID-19 pandemic. Measures taken by the government and the central bank in addressing the macroeconomic and financial fallout of COVID-19 would also play an important role in shaping the behaviour of financial markets.

II.5 GOVERNMENT FINANCES

II.5.1 In 2019-20, general government finances deviated from budgetary targets. For the central government, the overshoot of 1.3 percentage points in its gross fiscal deficit (GFD) was mainly due to lower than budgeted tax collections, reflecting the growth slowdown as well as rationalisation of corporate tax rates. Thus, the central government took recourse to the escape clause under Section 4 (3) of the revised FRBM Act twice in 2019-20 – first, for its GFD being placed at 3.3 per cent of GDP in the budget estimates (BE) (0.2 percentage points above the glide path specified in 2018-19) on account of GST stabilisation and second, for the GFD overshooting to 3.8 per cent in its revised estimates (RE). As per provisional accounts (PA), however, the central government's realised GFD reached 4.6 per cent. In the case of states, the consolidated GFD deviated from the budgeted level, again mainly on account of lower revenue collections[20].

II.5.2 Against this backdrop, sub-sections 2 and 3 present the position of central government finances in 2019-20 and 2020-21, respectively. Sub-sections 4 and 5 outline the developments in state government finances during 2019-20 and 2020-21, respectively. General government finances are discussed in sub-section 6. The final section sets out concluding remarks and some policy perspectives.

2. Central Government Finances in 2019-20

II.5.3 In 2019-20, the provisional accounts (PA) indicate that the central government's GFD recorded a slippage of 1.3 percentage points from the target set in the Union Budget. Estimates for gross tax revenue in 2019-20 were brought down by ₹4.51 lakh crore *vis-à-vis* BE. On a year-on-year (y-o-y) basis, direct taxes declined by 7.7 per cent in 2019-20 (PA) as against a 13.4 per cent increase in 2018-19, whereas indirect tax growth decelerated to 1.7 per cent from 2.9 per cent a year ago. Although the shortfall in tax revenues was partially compensated by an increase in non-tax revenues, primarily due to transfer of excess reserves from the Reserve Bank[21] and partial settlement of pending adjusted gross revenue (AGR) dues by telecom companies, they fell short of the RE. Moreover, only about half of the budgeted disinvestment target of ₹1.05 lakh crore was achieved. While capital expenditure was close to the budget target, revenue expenditure was curtailed to 96.0 per cent of the budgeted level, primarily through rollover of food subsidy.

3. Central Government Finances in 2020-21

II.5.4 The Union Budget 2020-21 attempts to balance the dual imperatives of providing countercyclical support to growth and charting a return to the FRBM's prescribed fiscal deficit path (Table II.5.1). The consolidation in 2020-21 budget is to be achieved through higher non-tax revenue, led by spectrum auction and usage charges budgeted at ₹1.3 lakh crore. Moreover, non-debt capital receipts have also been budgeted higher, on the back of disinvestment receipts of ₹2.1 lakh crore, almost four times of what was realised in 2019-20 (Chart II.5.1).

II.5.5 The implicit tax buoyancy of 2.0 in 2020-21 (BE) over 2019-20 (PA) is higher than the

[20] Pertains to revised estimates of 25 states.

[21] As per the recommendations of the Expert Committee to Review the Extant Economic Capital Framework (Chair: Dr. Bimal Jalan), 2019.

Table II.5.1: Central Government's Fiscal Performance*

(Per cent of GDP)

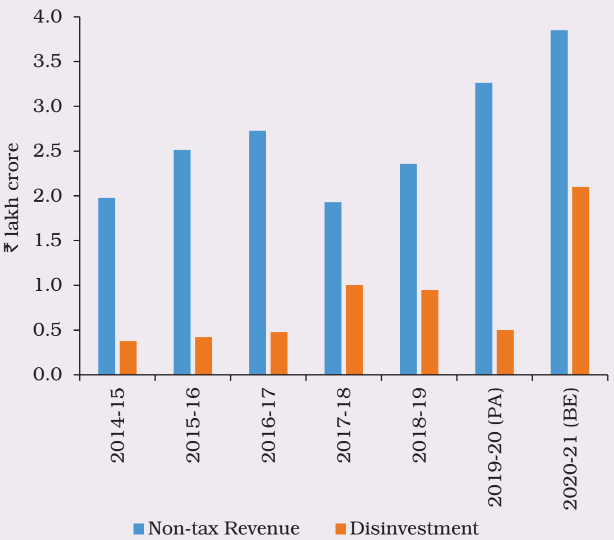
Item	2004-08	2008-10	2010-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2019-20 (PA)	2020-21 (BE)
1	2	3	4	5	6	7	8	9	10	11	12
Non Debt Receipts	11.0	9.7	9.5	9.2	9.1	9.4	9.1	8.8	9.5	8.6	10.0
Gross Tax Revenue (a+b)	10.7	10.4	10.2	10.0	10.6	11.1	11.2	11.0	10.6	9.9	10.8
a) Direct Tax	5.1	6.0	5.7	5.6	5.4	5.5	5.9	6.0	5.8	5.2	5.9
b) Indirect Tax	5.6	4.4	4.5	4.4	5.2	5.6	5.4	5.0	4.9	4.7	4.9
Net Tax Revenue**	7.9	7.6	7.3	7.2	6.9	7.2	7.3	6.9	7.4	6.7	7.3
Non-tax Revenue	2.2	1.8	1.8	1.6	1.8	1.8	1.1	1.2	1.7	1.6	1.7
Non Debt Capital Receipts	0.9	0.3	0.4	0.4	0.5	0.4	0.7	0.6	0.4	0.3	1.0
Total Expenditure	14.5	16.1	14.4	13.3	13.0	12.8	12.5	12.2	13.3	13.2	13.5
Revenue Expenditure	12.1	14.4	12.6	11.8	11.2	11.0	11.0	10.6	11.6	11.6	11.7
Capital Expenditure	2.4	1.7	1.8	1.6	1.8	1.8	1.5	1.6	1.7	1.7	1.8
Revenue Deficit	2.0	5.0	3.5	2.9	2.5	2.1	2.6	2.4	2.5	3.3	2.7
Gross Fiscal Deficit	3.5	6.3	4.9	4.1	3.9	3.5	3.5	3.4	3.8	4.6	3.5

BE: Budget Estimates. RE: Revised Estimates. PA: Provisional Accounts.
*: GDP figures used in this table are on 2011-12 base, which are the latest available estimates. Going by the principle of using latest available GDP data for any year, GDP used for 2019-20 (RE) is the latest available Provisional Estimate (released on May 29, 2020). In view of this, the fiscal indicators as per cent of GDP given in this Table may at times marginally vary from those reported in the Union Budget Documents.
**: Net tax revenue represents gross tax revenue net of devolution to state governments.
Source: Union Budget Documents.

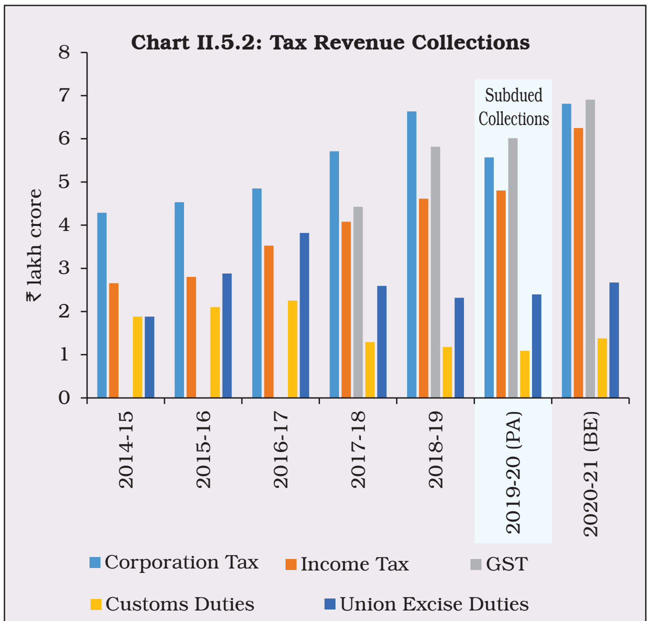
realised buoyancy of (-) 0.5 in 2019-20 (PA); this might also prove to be challenging (Chart II.5.2).

II.5.6 Total expenditure is budgeted to grow at a lower rate of 13.2 per cent in 2020-21 as compared with 16.0 per cent in 2019-20 (PA) due to a sharp deceleration in the growth of revenue expenditure from 17.0 per cent in 2019-20 to 11.9 per cent in 2020-21 (BE). The freeze in dearness allowance, as announced by the Union Government, and the compression under other heads of revenue expenditure will likely be offset by the increased expenditure requirement to fight COVID-19, including the increased interest expenditure due to higher volume of borrowings. Expenditure on major subsidies, *viz.*, food, fuel and fertilisers, is budgeted to decline marginally to 1.0 per cent of GDP in 2020-21 from 1.1 per cent in 2019-20. Capital expenditure, on the other hand, is budgeted to grow at 22.4 per cent in 2020-21. The capital expenditure target for communications, however, has been budgeted five times higher in the Union Budget 2020-21 than in 2019-20 (RE), again a challenging task. An important goal of the Budget is reforms in the areas of labour, investment, coal

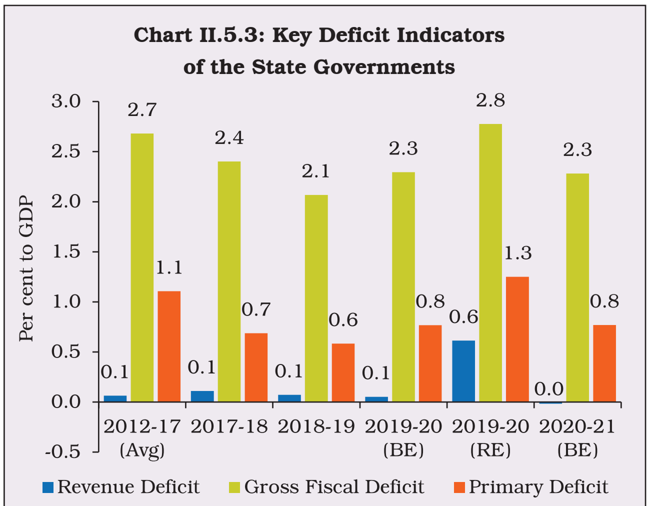
Chart II.5.1: Non-tax Revenue and Disinvestment



Source: Union Budget Documents.



Source: Union Budget Documents.



Note: 1. Data from 2018-19 to 2020-21 are based on budget documents of 25 states.
2. Data before 2018-19 are for 28 states and 3 UTs.
3. For all states and UTs, ratio of GFD-GDP was budgeted at 2.6 per cent for 2019-20.

Source: State Budget Documents.

and mining, which could revive economic activity and impart buoyancy to revenues.

4. State Finances in 2019-20

II.5.7 As per the information available for 25 state governments, the consolidated fiscal position of states – in terms of the GFD-GDP ratio – deteriorated to 2.8 per cent in 2019-20 (RE) *vis-à-vis* BE of 2.3 per cent (Chart II.5.3). This deviation was mainly caused by the economic slowdown leading to lower revenue – both own and central transfers. Under own tax revenue, the decline was pronounced in states' goods and services tax (SGST) and taxes on vehicles, which induced cuts in capital expenditure. Under revenue expenditure, allocation to development expenditure was increased, while non-development expenditure was reduced. The reduction in capital expenditure was largely reflected in reduced spending towards rural development[22,23].

5. State Finances in 2020-21

II.5.8 For 2020-21, states budgeted a consolidated GFD-GDP ratio of 2.3 per cent, mainly through higher revenue and lower expenditure. The increase in revenue is expected from higher own tax revenue and devolution of tax. The reduction in expenditure is likely to be more under spending on education, social security and welfare, relief on account of natural calamities, other agricultural programmes and energy. While higher capital spending is budgeted in education, medical and public health, rural and urban development, spending on energy and transport is expected to be curtailed. COVID-19 poses a major fiscal challenge to states' budgets, especially as they are also using discretionary (pro-cyclical) tax policy such as hiking duties on petrol and diesel and increasing sales tax/VAT on alcohol to offset revenue losses.

[22] The above analysis is based on budget data of 25 states.

[23] As states have a tendency to cut expenditures in the last quarter, actual numbers may differ from the revised estimates.

6. General Government Finances

II.5.9 Based on information of 25 states, the general government fiscal deficit increased from 5.4 per cent of GDP in 2018-19 to 6.5 per cent in 2019-20 (RE). Outstanding liabilities also increased to 70.4 per cent of GDP in 2019-20 (RE) from 67.5 per cent in 2018-19. In 2020-21, fiscal deficit and outstanding liabilities are budgeted at 5.8 per cent and 70.5 per cent of GDP, respectively (Appendix Tables 6 and 7). However, based on provisional accounts information, the general government fiscal deficit (including all states) is expected to deteriorate further to about 7.5 per cent in 2019-20. Thus, the fiscal gains achieved in the previous two years were reversed in 2019-20. A caveat is that most of the estimates for 2020-21 were worked out before the nation-wide lockdown. Given the shortfall in revenues – a direct fallout of subdued economic activity and increased expenditure requirement to fight the pandemic – the general government fiscal deficit and debt are likely to be materially higher than budgeted.

II.5.10 In sum, the deterioration in major deficit indicators in 2019-20 may be attributed to tax revenue shortfall, both cyclical and structural. At the same time, a significant curtailment in expenditure was justifiably avoided in view of the economic slowdown, which got accentuated from the second half of 2018-19. Meeting the fiscal targets budgeted in 2020-21 has become even more challenging due to COVID-19, in view of containment measures and fiscal interventions for providing health infrastructure, helping vulnerable sections of the society and sector-specific relief measures. In this scenario, it is desirable to have a clear exit strategy with credible consolidation milestones and timelines in reworking the path towards fiscal rectitude in the coming years.

II.6 EXTERNAL SECTOR

II.6.1 Developments in the external sector during 2019-20 mirrored the unusual interplay of weak domestic and external demand, terms of trade gains from falling international crude prices and surges in net capital inflows. In the event, reserve buffers were strengthened, despite portfolio outflows towards the close of the year on widespread risk aversion triggered by the spread of COVID-19.

II.6.2 Against this backdrop, sub-section 2 presents a brief overview of global economic and financial conditions followed by an analysis of merchandise exports and imports in sub-section 3. Sub-section 4 delves into the behaviour of invisibles. Together, sub-sections 3 and 4 unravel the movements in the current account balance during the year. Sub-section 5 dwells on net capital flows and movements in reserves. External vulnerability indicators are evaluated in sub-section 6, followed by concluding observations.

2. Global Economic Conditions

II.6.3 In January 2020, the international environment began to improve with expectations of a US-China Phase 1 trade deal and an orderly Brexit. International organisations such as the IMF and the World Bank projected a recovery in global growth and trade for 2020 and 2021. The sudden outbreak of COVID-19 and swift contagion forcing the ensuing lockdown shattered this optimism. The loss of output, employment and life itself across 200 countries brought the global economy to standstill. This triggered a wave of downward revisions to global output growth, with the IMF projecting a contraction of world GDP by 4.9 per cent and trade volume by 11.9 per cent[24] in 2020. The contraction in advanced economies (AEs) is projected to be more severe at 8.0 per cent while for the emerging markets and developing economies (EMDEs), it is milder at 3.0 per cent. The World Bank and the OECD also projected contraction in world GDP by 5.2 per cent and 6.0 per cent, respectively. In fact, the OECD projected a sharper contraction of 7.6 per cent, in case a second wave of COVID-19 hits before the year end. The impact on trade is expected to occur through various channels, including supply-chain disruptions, adoption of restrictive trade policies, volatility in international commodity prices, after-effects of lockdowns and lower demand resulting from the projected global recession.

II.6.4 According to the WTO's forecast of April 2020, world merchandise trade volume may plummet by 13 to 32 per cent during 2020. The WTO's goods barometer index[25] of May 2020 was at 87.6, its lowest value on record since the indicator was launched in July 2016. Prices of commodities dropped precipitously, creating pressure on commodity-exporting countries. Crude oil prices declined sharply due to demand compression caused by lockdowns coupled with a delay in production cuts by the Organisation of Petroleum Exporting Countries (OPEC) and its partners (OPEC plus). On the other hand, gold prices increased, reflecting safe-haven demand by investors amidst heightened global uncertainty. Inflationary pressures faced by EMDEs eased due to weaker demand and the sharp decline in oil prices. Global financial markets were buffeted by bouts of volatility amid investor concerns about downside risks to global growth accentuating towards the end of 2019-20.

II.6.5 With the onset of the pandemic and growing fear of a deeper recession, global financial conditions tightened abruptly with a sharp fall in asset prices in EMEs as investors rushed to safety and liquidity. Currencies have fallen in the range of 5-25 per cent in Q4:2019-20 – faster than in the early months of global financial crisis (GFC). Central banks resorted to currency interventions and established swap lines with the US Fed and the ECB. Financial markets witnessed spikes in risk reversals and portfolio outflows of the order of US$ 95 billion from major EMEs between mid-January and end-March 2020 – more than thrice the amount experienced during the GFC. Several countries provided liquidity backstops to enable domestic banks to offer broad loan forbearance to borrowers. Central banks across the world have cut policy rates and pumped massive amounts of liquidity into markets through various conventional and unconventional measures, supplementing governments' fiscal efforts to mitigate the fallout of COVID-19.

3. Merchandise Trade

II.6.6 Global trade remained weak in 2019 due to trade tensions and slowing world economic growth. As per the WTO, global merchandise trade growth dropped to 0.1 per cent in volume terms in 2019, after growing by 2.9 per cent in 2018. India's merchandise exports and imports contracted by 5.1 per cent and 7.8 per cent, respectively, during 2019-20, after three successive years of growth. Notwithstanding a marginal appreciation of the rupee in real effective

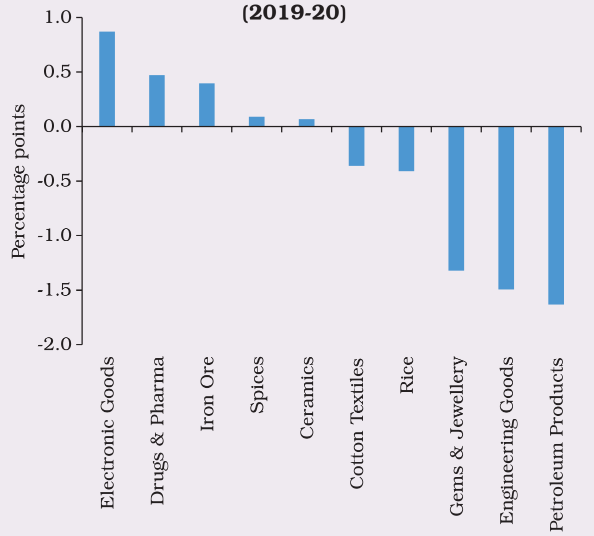
[24] IMF World Economic Outlook Update, June 2020.

[25] It is a leading indicator that signals changes in world trade growth two to three months ahead of merchandise trade volume statistics. Its baseline value is 100, a value greater than 100 suggests above-trend growth while a value below 100 indicates below-trend growth.

terms – a measure of trade competitiveness – the estimated export volume remained more or less constant in 2019-20 *vis-à-vis* 2018-19, but falling export prices caused a decline in value terms. The deterioration in exports performance was broad-based – commodity groups constituting more than four-fifths of the export basket recorded lower values of shipments. The worsening profile of key export items, *i.e.*, engineering products, gems and jewellery, petroleum products, rice, and cotton textiles was sector-specific, amplified by global developments (Chart II.6.1). Exports of items such as electronic goods, drugs and pharmaceutical and iron ore proved resilient and recorded expansion.

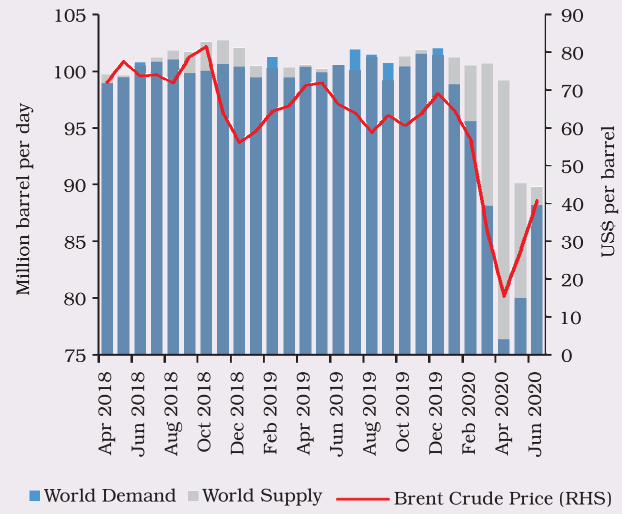
II.6.7 The fall in exports of petroleum, oil and lubricants (POL) was largely driven by the softening of international crude oil prices, which plunged by 12.9 per cent during the year following the failure of the OPEC in reaching an agreement with Russia on production cuts and the resulting oversupply in global oil markets (Chart II.6.2). In volume terms, however, POL exports declined by 3.8 per cent. According to the Petroleum Planning and Analysis Cell (PPAC) of the Ministry of Petroleum & Natural Gas, crude oil processed by refineries witnessed a decline of 1.1 per cent (y-o-y), reflecting the closures of domestic refineries to meet the International Maritime Organisation (IMO) 2020 bunker fuel specifications as well as Bharat Stage (BS) VI emission norms which entailed supply of less polluting fuel across the country from April 1, 2020.

Chart II.6.1: Relative Contribution of Sectors to Export Growth (2019-20)



Source: DGCI&S.

Chart II.6.2: World Crude Oil Demand and Supply



Source: Reuters.

II.6.8 Rice exports declined due to non-basmati rice turning uncompetitive *vis-à-vis* other major exporters like China, Thailand, Vietnam and Pakistan, on account of the rise in minimum support price (MSP) of paddy.

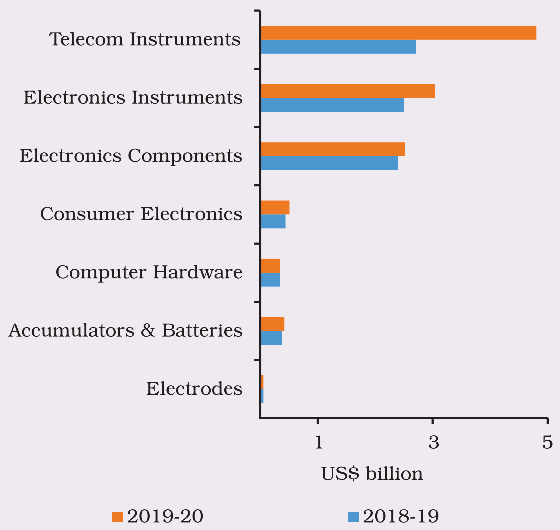
II.6.9 Gems and jewellery exports contracted by 10.8 per cent in 2019-20 on top of a decline of 3.1 per cent a year ago on account of the rise in import duty on precious stones and sluggish import demand from key destinations. Component-wise, the decline was mainly due to the slump in exports of pearl, precious and semi-precious stones. Destination-wise, Hong Kong, the UAE, the USA, Belgium and Israel, which account for 87 per cent of total gems and jewellery exports, registered a decline in demand.

II.6.10 Engineering goods registered a decline of 5.9 per cent during 2019-20 as against a growth of 6.3 per cent a year ago. All major components, except electrical machinery and equipment (which accounted for around 11 per cent of total engineering goods exports), registered contraction. In particular, auto components and parts, ships, boats and floating structures, non-ferrous metals and products thereof, and industrial machinery were the key contributors to the decline. Destination-wise, the USA, which accounts for 16 per cent of India's engineering goods exports, registered just 0.2 per cent growth. Germany, the UK, Nepal, Bangladesh and Mexico, which account for 17 per cent, registered a contraction in 2019-20.

II.6.11 Exports of cotton textiles registered a decline of 10.6 per cent during 2019-20 as against a growth of 9.3 per cent a year ago. The contraction was mainly contributed by a decline of 29.1 per cent in the exports of cotton yarn. Bangladesh and China, which together accounted for around 43 per cent of these exports, posted double-digit declines.

II.6.12 Electronic goods exports, which account for 3.7 per cent of total exports, grew continuously for 25 straight months since February 2018, driven by a rise in exports of telephone instruments, including smartphones (Chart II.6.3), and expanded by 32.5 per cent during 2019-20. Though India is not a significant player in the global smartphone market which is dominated by China, Vietnam and Hong Kong, it has the potential to play a crucial role in this market due to huge domestic demand and the rise of its digital economy. The UAE emerged as the largest destination for Indian mobile phone exports, followed by Russia, the US, Netherlands, South Africa and China (Chart II.6.4).

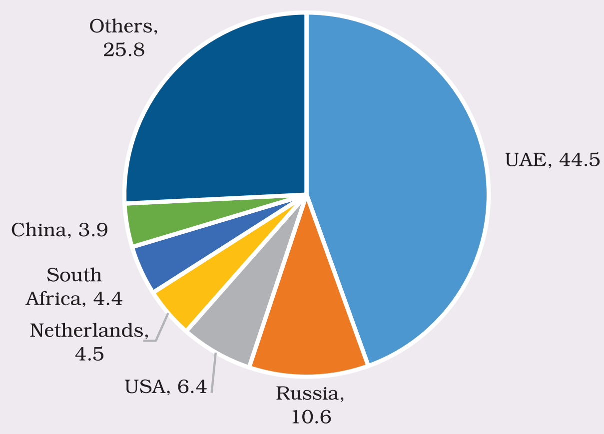
Chart II.6.3: Composition of Electronics Exports



Source: DGCI&S.

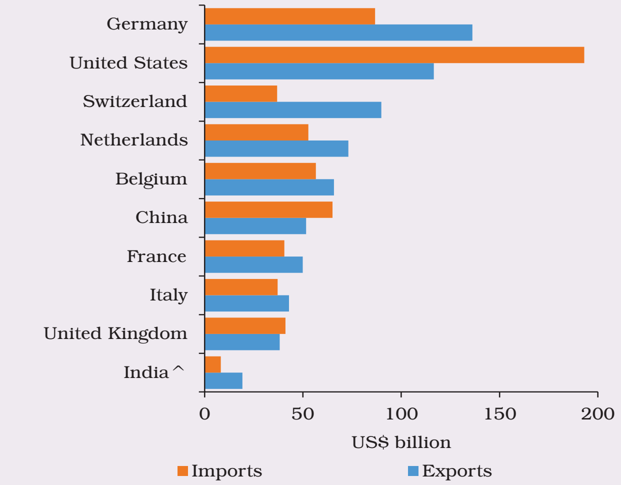
II.6.13 Drugs and pharmaceuticals exports grew by 8.1 per cent during 2019-20. COVID-19 has highlighted the concentration risks associated with China as India imports close to 70 per cent of active pharmaceutical ingredients (APIs), *i.e.,* bulk

Chart II.6.4: Mobile Phone Exports - Destinationwise (2019-20)



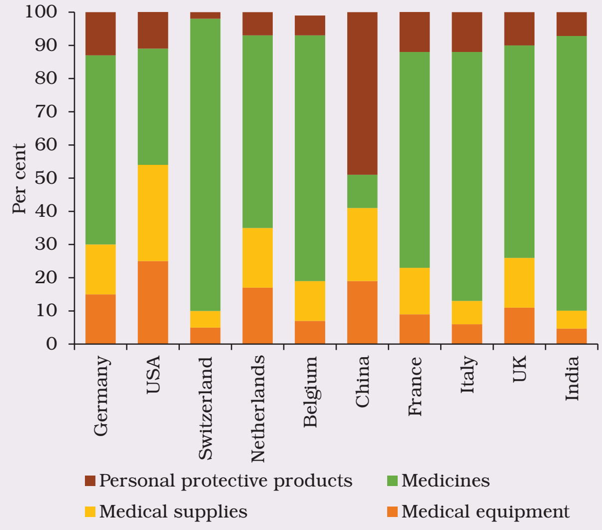
Source: DGCI&S.

Chart II.6.5: Top Exporters and Importers of Medical Goods in 2019



^: India is not among the top 10 exporters or importers of medical goods.
Source: WTO and DGCI&S.

Chart II.6.6: Composition of Total Medical Goods Exports in 2019



Source: WTO and DGCI&S.

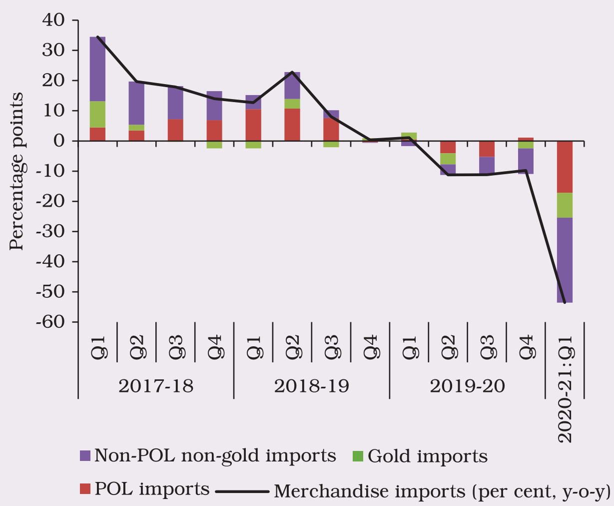
drugs and intermediates, from China for manufacturing finished pharmaceutical products. Notably, India is not among the top 10 exporters or importers of medical products, and its medical exports are concentrated in medicines (pharmaceuticals) [Charts II.6.5 and II.6.6].

II.6.14 Iron ore exports picked up during 2019-20 on the back of a sharp increase in global iron ore prices, following production outages in Brazil. Nearly 80 per cent of total iron ore exports from India are shipped to China, which is the largest steel producer in the world.

II.6.15 More than two-thirds of world trade passes through global value chains (GVCs) which straddle at least one border before final assembly. COVID-19 has posed challenges to GVCs as companies across the globe have significant exposure to Chinese GVCs (Box II.6.1).

II.6.16 The slowdown in India's merchandise imports that commenced in the second half of 2018-19 deepened further in 2019-20, with imports declining by 11.3 per cent in Q2:2019-20 as compared with an increase of 22.8 per cent in Q2:2018-19. Contraction in imports at the rate of 11.2 per cent set in during Q3:2019-20. COVID-19 accentuated the decline and imports fell by 9.8 per cent in Q4:2019-20. For the year as a whole, imports shrank by 7.8 per cent (Chart II.6.7). The retrenchment in imports during the year was

Chart II.6.7: Composition of Merchandise Import Growth



Source: DGCI&S.

Box II.6.1
Global Value Chains in Pandemic Times

World trade expanded rapidly on the back of the rise of global values chains (GVCs) after the 1990s, whose share in the world trade increased from around 38 per cent in 1970 to 41.6 per cent in 1990 and further to 51.8 per cent in 2008. Advancements in transportation, information and communication technologies and lowering of trade and tariff barriers encouraged manufacturers to extend production process beyond national boundaries (World Bank, 2020). According to the OECD, India's foreign value-added content of exports increased to 25.1 per cent in 2011, from 18.8 per cent in 2005, although it declined to 16.1 per cent in 2016, lower than OECD and G-20 averages (25.3 per cent and 16.5 per cent, respectively). The decline is likely due in part to a shift towards local suppliers of intermediate inputs, particularly in the growing services sector. Recently, however, COVID-19 has revealed the fragility associated with GVCs, especially those associated with China, the US and Europe.

Empirical findings suggest that a one per cent increase in GVC participation may boost per capita income levels by more than one per cent (World Bank, 2020). GVCs also have a more positive impact on productivity than conventional trade (IMF, 2019). Labour costs also play an important role in GVC participation (Ignatenko, Raei and Mircheva, 2019) - high labour costs in the exporting country decrease its competitiveness and thus limit its participation in GVC. Furthermore, the gains from participation in GVCs have not been distributed equally across and within countries. On the other hand, as the recent COVID-19 experience has shown, the concentration risk of GVCs in a single country can produce large global spillovers, impacting income, trade and investment.

Indian industry's integration with top 10 trading partners across 15 key sectors (which account for around three-fourths of India's exports) can be measured through the Grubel-Lloyd Index (GLI)[26]. The following key points emerge: (i) India's exposure to Chinese GVCs is somewhat limited (barring pharmaceutical and textiles) though China has a strong GVC presence in sectors like precision instruments, automotive and electrical machinery; (ii) India has a higher level of intra-industry trade integration with the Eurozone, followed by the US, Hong Kong, the UAE and Indonesia. Sector-wise and country-wise analysis suggests that intra-industry trade diversification may be strengthened with the Euro area, Indonesia and USA with regard to the automotive industry; with the Euro area, the USA, the UAE and Hong Kong for electrical machinery; and with Hong Kong, the USA, Indonesia and the UAE for precision instruments[27] (Table 1).

Table 1: India - Integration in GVC, by Sector, for Top 10 Major Trading Partners (Grubel-Lloyd Index)

Sector	China	Euro	USA	UAE	Saudi Arabia	Hong Kong	Switzer-land	Indo-nesia	Korea	Singa-pore
1	2	3	4	5	6	7	8	9	10	11
Petroleum Crude & Products	0.081	0.097	0.111	0.182	0.023	0.014	0.000	0.103	0.896	0.169
Pharma Products	0.417	0.412	0.089	0.003	0.000	0.079	0.131	0.730	0.447	0.665
Chemicals excluding Pharma	0.193	0.475	0.342	0.144	0.286	0.285	0.328	0.162	0.280	0.214
Rubber/Plastics	0.103	0.541	0.444	0.135	0.061	0.217	0.055	0.154	0.043	0.071
Leather Products	0.158	0.171	0.048	0.008	0.002	0.082	0.166	0.563	0.311	0.641
Wood Products/Furniture	0.049	0.388	0.128	0.296	0.008	0.053	0.263	0.090	0.200	0.121
Paper Products/Publishing	0.085	0.161	0.128	0.115	0.044	0.089	0.025	0.057	0.016	0.167
Textiles and Apparel	0.105	0.083	0.023	0.013	0.014	0.137	0.075	0.251	0.208	0.131
Gems & Jewellery	0.019	0.462	0.527	0.419	0.008	0.288	0.005	0.004	0.021	0.528
Metals and Metal Products	0.069	0.358	0.200	0.125	0.043	0.070	0.247	0.323	0.188	0.206
Office Mach/Machinery Various	0.077	0.575	0.610	0.184	0.041	0.422	0.199	0.275	0.106	0.291
Communication Equipment	0.021	0.576	0.785	0.136	0.006	0.237	0.275	0.379	0.024	0.118
Electrical Machinery	0.055	0.597	0.530	0.466	0.016	0.331	0.256	0.306	0.076	0.188
Automotive	0.122	0.706	0.207	0.029	0.000	0.315	0.146	0.243	0.168	0.160
Precision Instruments	0.183	0.294	0.496	0.397	0.024	0.523	0.104	0.411	0.187	0.319

Source: RBI staff calculations.

(contd...)

[26] $$GL_i = \frac{(X_i + M_i) - |X_i - M_i|}{X_i + M_i} = 1 - \frac{|X_i - M_i|}{X_i + M_i} \quad ; 0 \le GL_i \le 1$$

Where X_i denotes export and M_i the import of good i. Value of index increases with increase in intra-industry trade. Estimations are based on latest available data from UNCTAD. Aggregation at the sectoral level has been made by using bilateral trade shares (UNCTAD, 2020).

[27] As per available literature, the interpretation of the traditional GL index requires caution, for instance, the values of GL index rise with the level of aggregation (*i.e.*, they are lower when calculated at more detailed levels).

Since several countries are looking to diversify away from China, this also provides a unique opportunity for India (Reynolds and Urabe, 2020; Chaudhary, 2020). Strengthening the domestic manufacturing sector's participation in global value chains, liberalising trade, investments and FDI policy with regard to developing infrastructure (both hard and soft), providing reliable intellectual property rights for the international investor and implementing labour market reforms hold the key to India's emergence as an important player in GVCs, going forward.

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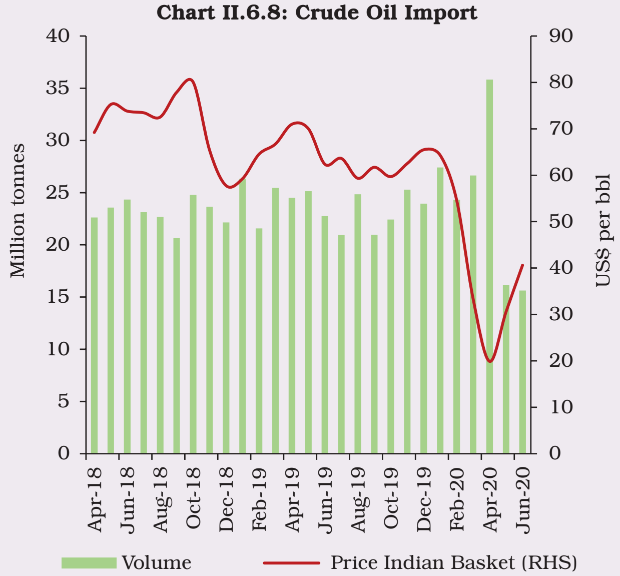
6. OECD (2018), 'Trade in Value Added: India'.

spread across sectors, which constituted 95.4 per cent of the import basket, but mainly led by petroleum, oil and lubricants (POL), followed by pearls and precious stones, gold, coal, and transport equipment. In volume terms, however, imports remained stable in 2019-20 while import unit value declined by 8.6 per cent in 2019-20 as against a growth of 4.8 per cent a year ago. A few sectors, such as cotton, pulses, pharmaceutical products, and fruits and vegetables weathered the downturn and witnessed an expansion in imports during 2019-20.

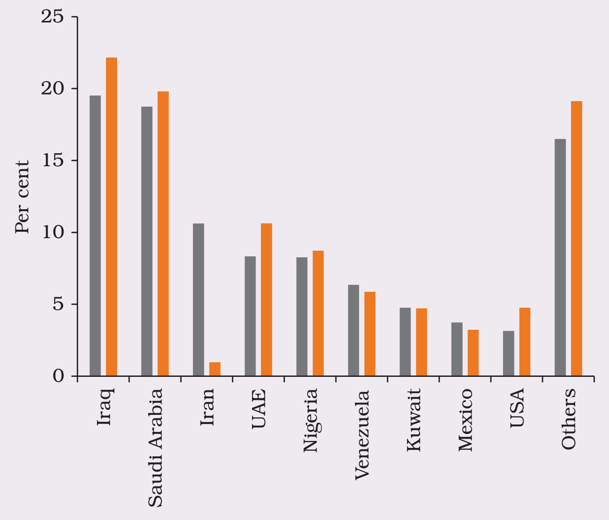
II.6.17 Imports of POL shrank by 7.4 per cent during 2019-20 on the back of a decline in international crude oil prices by 12.9 per cent (Chart II.6.8). Low global oil demand and expansion in production from non-OPEC countries such as the US and Canada limited upsides to international crude prices emanating from supply-side disruptions in Saudi Arabia, falling production of OPEC and the US sanctions on Iran and Venezuela. From January 2020, crude oil prices declined due to the Saudi-Russia price war and depressed demand. Venezuela and Iran, which together met 17.0 per cent of India's crude oil imports in 2018-19, lost share in the aftermath of US sanctions. From June 2019, India stopped importing oil from Iran, compensating with stepped-up imports from other top suppliers such as Iraq, Saudi Arabia, the UAE and the US (Chart II.6.9). These developments created an upward price risk for India, as apart from being major sources of crude oil imports, Iran and Venezuela's per barrel cost are lower than that of other suppliers, particularly the US. The estimated price of oil imported from Iran, Venezuela and the US was US$ 69, US$ 48 and US$ 70 per barrel, respectively, in 2019-20.

Chart II.6.8: Crude Oil Import



Source: DGCI&S and PPAC.

Chart II.6.9: Sources of India's Crude Oil Imports



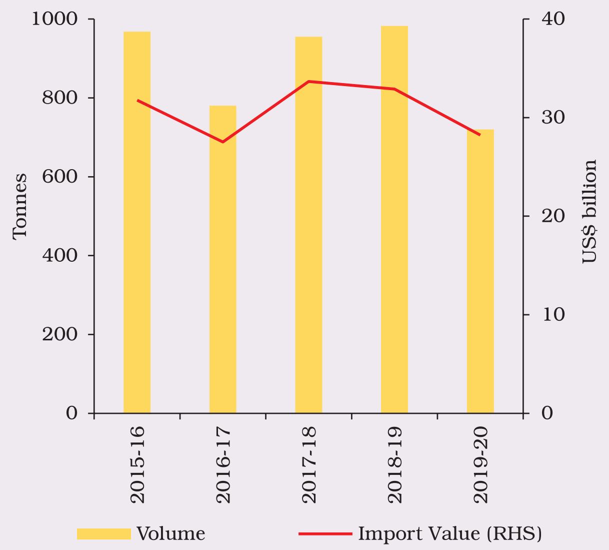
Source: DGCI&S.

II.6.18 Gold imports at US$ 28.2 billion registered a decline of 14.2 per cent (y-o-y) in 2019-20. In volume terms, there was a significant contraction by 26.7 per cent in response to the rise in international gold prices by 15.8 per cent on safe haven demand (Chart II.6.10). The increase in gold import duty from 10 per cent to 12.5 per cent announced in the Union Budget 2019-20 also contributed to the decline in the volume of gold imports.

II.6.19 Non-oil non-gold imports started contracting from Q4:2018-19, and the intensity of contraction deepened further during 2019-20. Among non-oil non-gold imports, pearls and precious stones, coal and chemical were major contributors to the deterioration (Chart II.6.11). A fall in coal imports by 14.2 per cent during 2019-20 was driven by a sharp slump of 29.2 per cent in international coal prices. In volume terms, coal imports registered a modest growth of 4.6 per cent during the year.

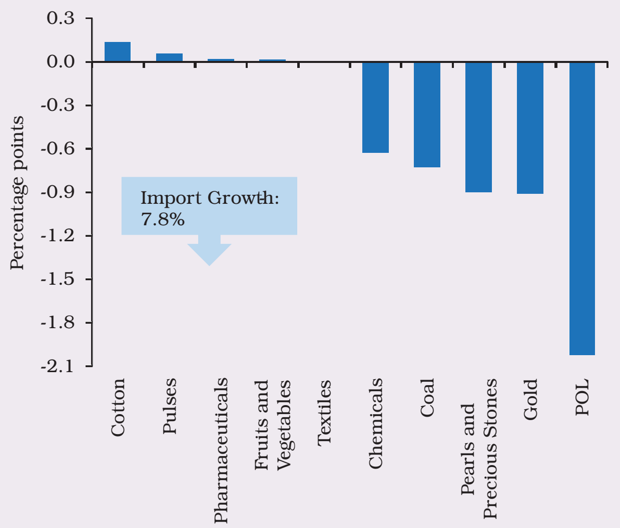
II.6.20 Imports of transport equipment contributed to the decline in capital goods imports. These imports were mainly pulled down by sectors such as ships, boats and floating structures, automobile parts and components, and railway equipment, mirroring subdued domestic demand conditions. China, Germany and the US accounted for about 42 per cent of India's automobile parts and component imports. Imports of pearls and precious

Chart II.6.10: Gold Imports



Source: DGCI&S.

Chart II.6.11: Weighted Contribution of Major Sectors to Import Growth in 2019-20



Source: DGCI&S.

stone at US$ 22.5 billion contracted by 17.1 per cent in 2019-20 as imports from trading partners accounting for 89.2 per cent of India's total imports of pearls and precious stones registered negative growth. Within pearls and precious stones, the decline was driven by a fall in the import of diamonds by 17.7 per cent (y-o-y) in 2019-20, the latter driving a decline in exports shipment of diamonds by 21.3 per cent (y-o-y) during the year.

II.6.21 The pharmaceutical sector is a major contributor to India's import growth. Medicinal and pharmaceutical products imports at US$ 6.5 billion registered a growth of 1.6 per cent (y-o-y) in 2019-20. Within this segment, imports of bulk drugs, intermediates and drug formulation together accounted for 88 per cent of pharmaceutical imports in 2019-20. India's imports from China were as high as 68.0 per cent of its total bulk drugs and intermediates imports during this period.

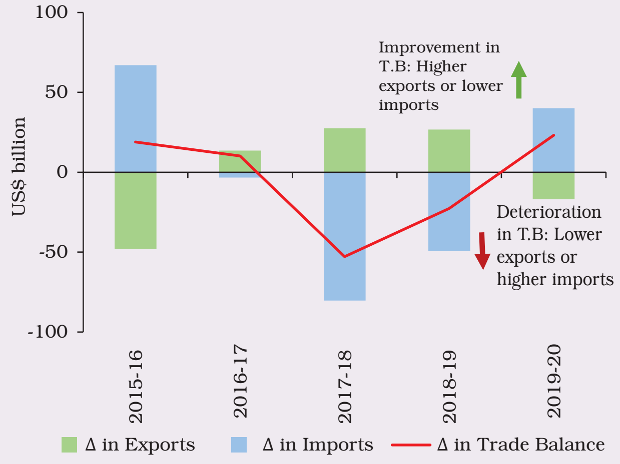
II.6.22 As the decline in imports was much larger than in exports during 2019-20, the merchandise trade deficit narrowed by US$ 23.1 billion to US$ 160.9 billion from US$ 184.0 billion a year ago, reflecting both subdued domestic economic activity and lacklustre export performance (Chart II.6.12).

4. Invisibles

II.6.23 Net receipts from invisibles, reflecting cross-border transactions of services, income and transfers, increased during 2019-20, *albeit* at a slower pace than a year ago (Appendix Table 8). The growth in exports of software services and remittances receipts from overseas Indians boosted net invisible receipts which financed 84 per cent of the trade deficit during 2019-20 – higher than 68 per cent a year ago.

II.6.24 India's net export of services recorded a broad-based improvement across all sub-sectors,

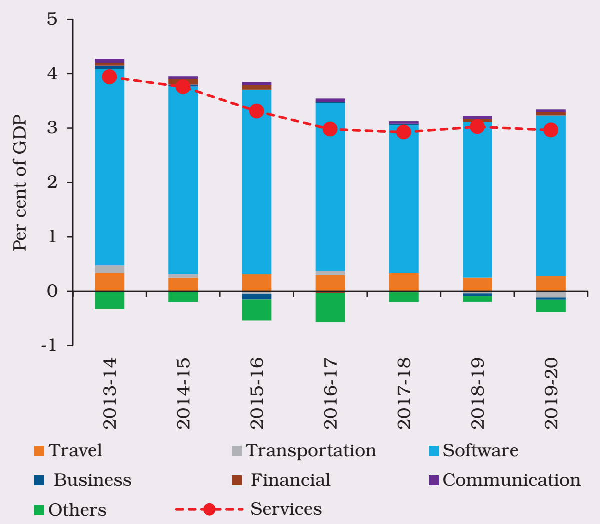
Chart II.6.12: Change in Merchandise Trade Flows



Note: Δ reflects a change in value over the previous year. However, for imports sign is reversed, *i.e.*, a positive Δ imports implies lower imports and *vice versa*; T.B: Trade Balance.
Source: DGCI&S.

barring transportation, insurance and communication services (Chart II.6.13). Software services exports expanded at a quicker pace despite higher rejection rate of H-1B visa applications filed by Indian IT services firms in the US. Major IT companies secured multi-year IT services contracts and strategic deals in overseas

Chart II.6.13: India's Net Exports of Services



Source: RBI.

markets. They also accelerated efforts towards new technologies such as artificial intelligence, machine learning, cloud computing and big data analytics to support their customers' enterprise-wide transformation initiatives.

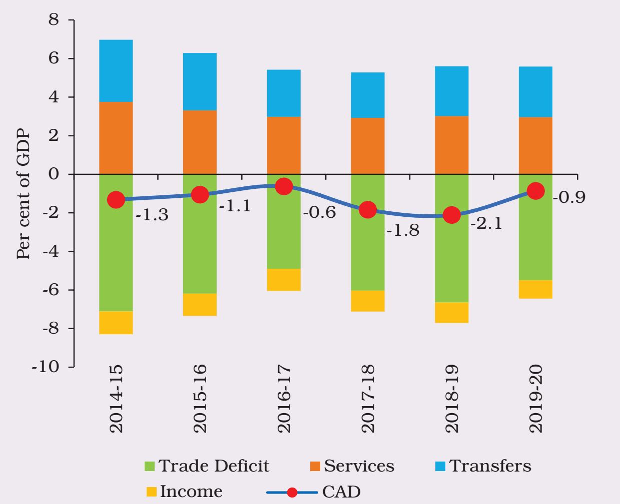
II.6.25 Net receipts from travel recorded double digit growth during 2019-20, reflecting the lower growth of payments on outbound travel, even though the tourist arrivals from high-income countries (except the US) were lower than a year ago. Reflecting the impact of the global spread of COVID-19, arrival of foreign tourists at 3.28 lakh recorded a contraction of 66.2 per cent on y-o-y basis in March 2020 which led to decline in tourist arrivals during 2019-20 by 3.8 per cent.[28] Sluggish domestic economic activity and travel restrictions due to COVID-19 impacted outbound tourists from India, resulting in slower growth in travel payments (1.4 per cent) as compared with 11.2 per cent a year ago.

II.6.26 Inbound remittances from Indians working abroad grew for the third consecutive year in 2019-20, though at a slower pace. Subdued remittance flows largely reflected weaker growth in AEs and lower crude oil prices weighing on incomes of oil producing Gulf countries. Nevertheless, India was the largest recipient, with a share of 11.3 per cent in global remittances in 2019. According to the World Bank estimate, the average cost of sending remittances to India decreased from 5.6 per cent in 2018-19 to 5.3 per cent in 2019-20 and remained significantly lower than the global average of 6.8 per cent.[29]

II.6.27 Under the income account, net cross-border income payments associated with the production and ownership of financial and other non-produced assets were lower during 2019-20 than in the preceding year. The decline was attributable mainly to a lower net outgo on account of investment income, which consists of dividends and withdrawals from income of *quasi*-corporations, reinvested earnings, and interest. Notwithstanding higher payments on debt and non-debt liabilities of the economy on account of foreign investments and external commercial borrowings, net outgo declined as interest earnings on foreign currency assets and dividend earnings of Indian FDI enterprises abroad increased over the preceding year.

II.6.28 With the current account balance turning from deficit to surplus in Q4, the current account deficit (CAD) for the year narrowed to 0.9 per cent of GDP from 2.1 per cent in 2018-19 as the merchandise trade deficit contracted, reflecting the terms of trade gains accrued from lower commodity prices for crude oil, coal and fertilisers, and a contraction in import volumes (Charts II.6.14 and II.6.15).

Chart II.6.14: Composition of India's Current Account Deficit

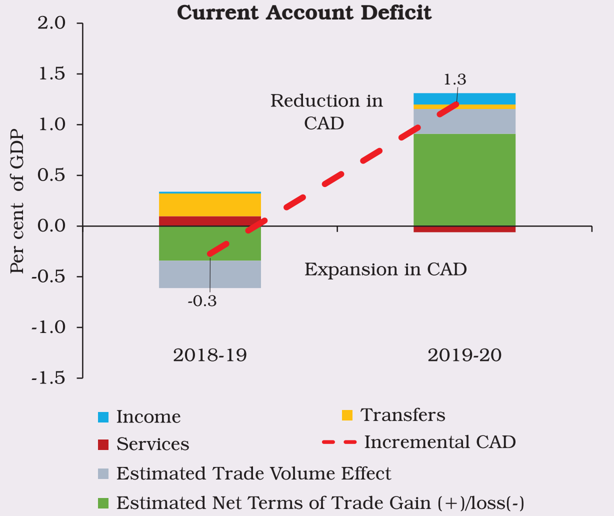


Source: RBI.

[28] Foreign tourist arrivals during April-February 2019-20 were higher by 2.5 per cent than the corresponding period of 2018-19.

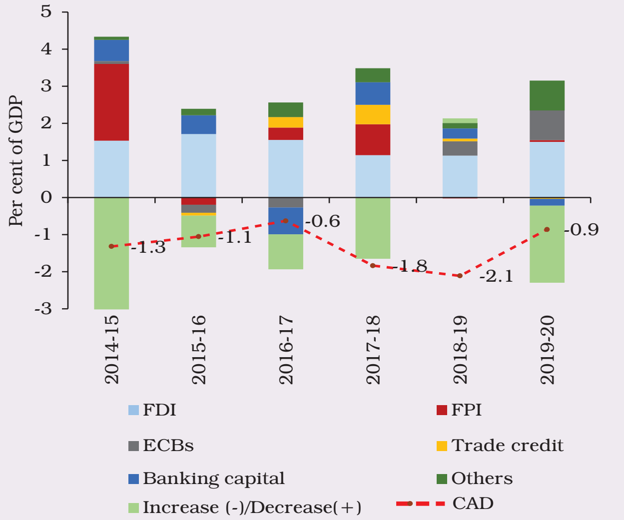
[29] Remittance Prices Worldwide - World Bank, June 2020.

Chart II.6.15: Sources of Incremental Current Account Deficit



Note: Incremental value of CAD may not be equal to the difference of CAD in two years due to rounding off.
Source: RBI.

Chart II.6.16: Financing of Current Account Deficit



Note: 'Others' include net external assistance, rupee debt service and other capital.
Source: RBI.

5. External Financing

II.6.29 In the financial account, all major sources of foreign capital increased. Net capital inflows were more than sufficient to finance the lower CAD and, therefore, this led to a large accretion to foreign exchange reserves in 2019-20 (Chart II.6.16). On a BoP basis (excluding valuation effect), forex reserves increased by US$ 59.5 billion in 2019-20 after a depletion of US$ 3.3 billion in 2018-19 (Box II.6.2).

Box II.6.2
Capital Flows and Foreign Exchange Reserves: An Analytical Perspective on Absorptive Capacity of the Domestic Economy

The juxtaposition of the recent slowdown in domestic growth and surge in capital inflows leading to historically high build-up of reserves has brought into focus the question of the economy's absorptive capacity – how much foreign capital can be effectively used by the economy for boosting growth, productivity and development (RBI, 2002). The issue assumes special relevance because foreign capital is generally seen to be beneficial to an economy; however, if it is not absorbed into the real economy to finance investment, it can possibly lead to upward pressure on the exchange rate, overheating of the economy and asset price bubbles. In countries with limited absorptive capacity, net capital flows greater than the funding needs of the CAD can lead to large accretions in foreign exchange reserves which are deployed outside the economy without realising benefits in terms of higher real consumption and investment. In other words, lack of absorptive capacity may constrain the growth-augmenting role of foreign capital. The absorptive capacity of an economy is generally constrained by lack of domestic demand; the scarcity of complementary factors of production such as skilled labour, technology, management and intermediate production inputs; and lack of institutional development. Incidentally, capital flows can be associated with higher growth only when the negative impact of their volatility on output and consumption is controlled for (World Bank, 2001).

In the case of India, almost half of net capital flows (average of 2.7 per cent of GDP during 2013-14 to 2019-20) were accumulated as reserves (1.3 per cent of GDP) on the back of insufficient absorptive capacity in the domestic economy. Even though higher CAD (due to higher trade deficit) absorbed foreign capital flows during the post-GFC period (2009-10 to 2012-13), the quality of imports was characterised by unproductive gold imports and higher international crude oil prices rather than growth-inducing non-oil non-gold imports. In the post-taper tantrum phase of

(contd....)

2013-14 to 2019-20, net capital flows (as a ratio to GDP) were lower but exceeded the modest level of CAD, caused by lower crude oil prices and sharp moderation in growth in non-oil non-gold imports (*i.e.,* average 2.4 per cent during 2013-14 to 2019-20 *vis-à-vis* 12.0 per cent during 2009-10 to 2012-13).

Besides structural factors, low growth in recent years mainly due to subdued domestic demand has also constrained the capacity of the economy to absorb capital inflows. A vector error correction model using data for period 1997-98:Q1 to 2019-20:Q4 shows that oil import volume (both crude and products) has the largest growth-inducing impact, followed by capital goods and non-oil non-gold imports (Table 1). Imports with a good mix of capital goods, therefore, may not only enhance the domestic absorptive capacity but will also add to growth by ensuring productive use of foreign capital.

To sum up, absorption of foreign capital is crucial for economic growth. It is the quality of CAD which matters in enhancing the absorptive capacity of the economy through growth-inducing imports. Further structural reforms backed by improved quality of CAD, therefore, would help the country lift the potential and sustain growth.

Table 1: Growth inducing Impact of Imports
(Dependent Variable: Real GDP)

Import	Error correction term	Long-run effect
1	2	3
Oil (crude and products)	-0.06**	1.02*
Non-oil non-gold#	-0.04*	0.56*
Capital goods#	-0.02***	0.81*
Gold	No long-run relationship^	

#: Estimate based on period 2001-02: Q1 to 2019-20: Q4.
^: No cointegrating relationship found based on the Johansen test.
*, ** and ***: Indicate statistical significance at 1, 5 and 10 per cent, respectively.
Note: 1. All variables are in log form and estimates checked for Vector Error Correction Residual Serial Correlation and their normality. Optimal number of lags used is 4.
2. Estimates for imports of oil and gold are based on actual volumes reported by DGCI&S while non-oil non-gold imports and capital goods imports were deflated by UVI of India's imports available under UNCTAD database.
Source: RBI staff calculations.

References:

1. Grenville, Stephen (2008), 'Central Banks and Capital Flows', *ADBI Discussion Paper No. 87*, Asian Development Bank Institute: Tokyo.
2. World Bank (2001), 'International Capital Flows and Economic Growth', *Global Development Finance 2001*, Chapter 3.
3. Reserve Bank of India (2002), Report on Currency and Finance.

II.6.30 Foreign direct investment (FDI) remained the predominant source of external financing, as in the preceding year. In both gross and net terms, FDI flows in 2019-20 were well above their respective levels in 2018-19 (Table II.6.1). Despite a slowdown in the global economy and growing global investment concerns due to disruptions in supply chains, India was able to sustain the pace of FDI in 2019-20 and was the 9th largest recipient country globally in 2019.[30] Sustained business reforms in the areas of starting business, construction permits and insolvency resolution under the Insolvency and Bankruptcy Code (IBC) helped India gain 14 places and move to the 63rd position in the World Bank's ease of doing business index (2020)[31], from 77th position a year

Table II.6.1: Foreign Direct Investment Inflows

(US$ billion)

Item		2017-18	2018-19	2019-20 (P)
1		2	3	4
1	Net FDI (1.1 - 1.2)	30.3	30.7	43.0
1.1	Net Inward FDI (1.1.1 - 1.1.2)	39.4	43.3	56.0
1.1.1	Gross Inflows	61.0	62.0	74.4
1.1.2	Repatriation/Disinvestment	21.5	18.7	18.4
1.2	Net Outward FDI	9.1	12.6	13.0

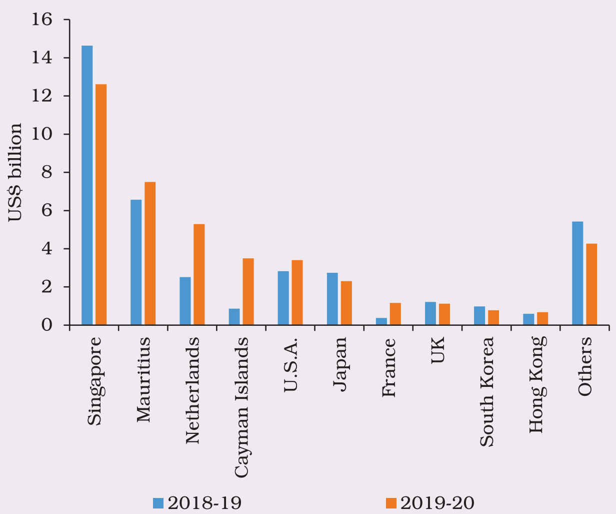
P: Provisional
Source: RBI.

30 World Investment Report 2020, UNCTAD.
31 Doing Business 2020, the World Bank.

ago. According to the World Bank, India was one of the world's top 10 most improved countries in terms of doing business for the third consecutive year. Most of FDI equity flows went to the services sector, including communication services, retail and wholesale trade, financial services, computer and business services and the manufacturing sector. Singapore and Mauritius remained the major source countries, accounting for about 50 per cent of total FDI flows in 2019-20, followed by the Netherlands, the Cayman Islands, the US and Japan (Chart II.6.17 and Appendix Table 9).

II.6.31 Apart from equity investments, there was a substantial increase in the inter-corporate debt of FDI companies, which covers the borrowing or lending between affiliated direct investment enterprises. A simplification of the policy framework for external commercial borrowings (ECBs) since January 2019, allowing all entities that are eligible for FDI to raise ECBs and other relaxations such as expansion of scope of end-use of resources led to increased FDI flows of US$ 8.3 billion in 2019-20, triple the level a year ago.

Chart II.6.17: Source Country-wise Inflow of FDI (Equity)

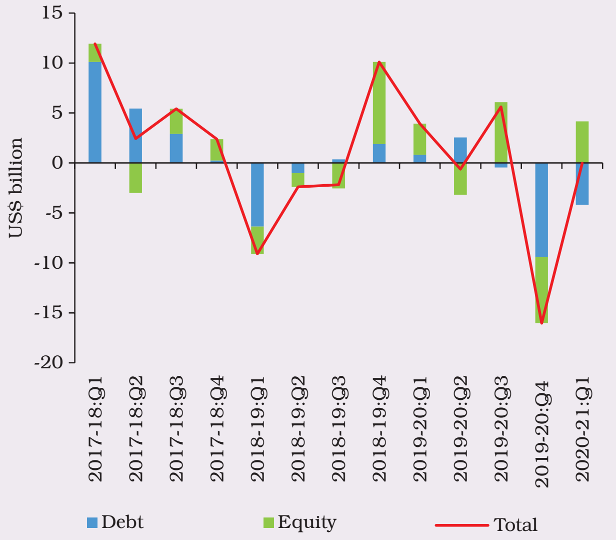


Note: Country-wise FDI data include equity flows through approval and automatic routes only.
Source: RBI.

II.6.32 Outward direct investment by Indian entities also remained robust as Indian entities continued to expand their overseas business operations. Outward FDI was mainly in the form of equity and loans to subsidiaries/ affiliated enterprises, primarily to Singapore, the US, the UK, Mauritius, Switzerland and the Netherlands, which accounted for 75 per cent of total overseas investments during the period. Most of these investments were made in the business services, manufacturing and restaurants and hotels sector.

II.6.33 Foreign portfolio investment (FPI) flows have remained volatile since the beginning of 2019-20 on account of multiple headwinds. Net FPI outflows under the general route were US$ 7.1 billion in 2019-20. After robust inflows in Q1:2019-20, FPIs undertook sell-offs in the equity segment in July 2019 on account of the domestic slowdown, particularly the auto sector, and the super-rich tax surcharge announced in the Union Budget. Outflows reversed, however, with the rollback of the tax surcharge and the corporate tax rate cut in September 2019. Monetary easing by major central banks and the US-China Phase 1 trade deal also supported FPI inflows in Q3:2019-20. However, an unprecedented wave of global risk aversion arising from the fear of global recession in the wake of COVID-19 and the ongoing crude oil price war between Saudi Arabia and Russia, triggered risk-off sentiments among global investors leading to net sell-offs of US$ 16.0 billion in Q4:2019-20 (Chart II.6.18). Nearly 70 per cent of the FPI outflows were from the banking and other financial services, software, oil and gas, and automobiles and auto components

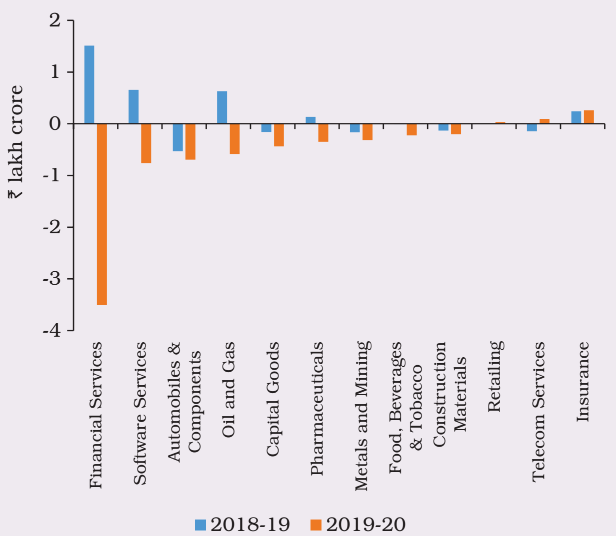
Chart II.6.18: Net Foreign Portfolio Flows to India



Source: NSDL and SEBI.

(Chart II.6.19). Country-wise, the composition of assets under custody as at end-March 2020 shows continued dominance of US-based foreign portfolio investors, followed by those operating through Mauritius, Luxembourg and Singapore. The Voluntary Retention Route (VRR), introduced to encourage long-term FPI in the debt market,

Chart II.6.19: Change in FPIs' Exposure in Equity Market



Source: NSDL and SEBI.

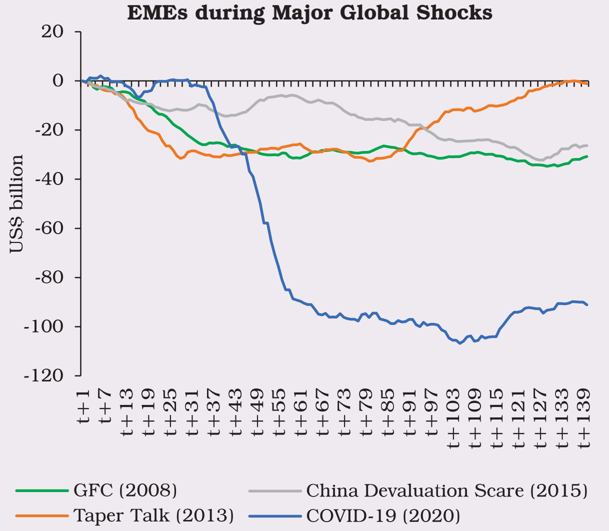
however, attracted US$ 8.6 billion by end-March 2020.

II.6.34 Various policy measures were undertaken during 2019-20 to expand investment opportunities and impart confidence to foreign investors: (i) increase in the statutory limit for FPI investment from 24 per cent to sectoral foreign investment limit with the option for corporates to limit it to a lower threshold; (ii) permitting FPIs to subscribe to listed debt securities issued by real estate investment trusts (ReITs) and infrastructure investment trusts (InvITs); and (iii) rationalisation of KYC norms for foreign investors. The Reserve Bank also introduced a slew of measures to encourage foreign inflows, which included (i) hike in the short-term investments by FPIs from 20 per cent to 30 per cent of the total FPI investment in central government securities (including Treasury Bills) or state development loans (SDLs); (ii) increase in investment cap under VRR scheme to ₹1,50,000 crore from ₹75,000 crore; (iii) flexibility to transfer investment under the general investment limit to the VRR scheme; and, (iv) expansion of the scope of instruments for investments under VRR to include exchange traded funds investing only in debt instruments. For 2020-21, the FPI limit in the domestic corporate bond market has been further raised from 9 per cent to 15 per cent of total outstanding stock of corporate bonds. Notwithstanding several confidence building measures and enhancement of FPI limits, FPI activity in 2019-20 was largely influenced by global developments. Utilisation of FPI limits dipped to 37.5 per cent in the government debt market (both G-sec and SDLs) and 54.5 per cent in the corporate debt market by end-March 2020 from 54.0 per cent and 75.9 per cent, respectively, a year ago.

II.6.35 FPI outflows from the domestic capital market tracked the reversal of portfolio flows in major EMEs. In fact, FPI outflows from EMEs in Q4:2019-20 were the largest ever in any phase of flight to safety, including the Global Financial Crisis (GFC) (Chart II.6.20).

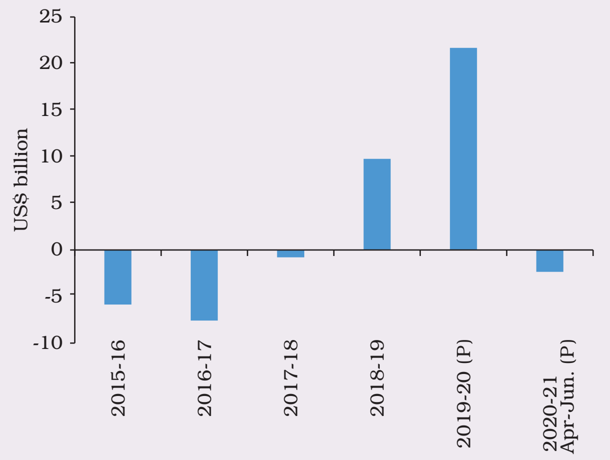
II.6.36 Among other forms of financial flows, ECBs[32] to India at US$ 21.7 billion in 2019-20 increased substantially from US$ 9.8 billion last year (Chart II.6.21). Ample global liquidity and a favourable overseas interest rate environment, along with various ECB liberalisation measures undertaken by the Reserve Bank to ease financial conditions, facilitated the access of domestic entities to global markets. The Reserve Bank allowed (i) ECBs with a minimum maturity of 10 years for working capital and general corporate purposes; (ii) ECBs with a minimum maturity of 7 years for repayment of rupee loans availed domestically for capital expenditures and minimum maturity of 10 years for non-capital expenditures; (iii) non-banking finance companies (NBFCs) to avail ECBs for on-lending for the same purposes as above; and (iv) ECBs with a minimum maturity of 7 years for rupee loans availed domestically for capital expenditure in manufacturing and infrastructure sector if classified as Special Mention Accounts (SMA-2) or Non-performing Assets (NPAs) under any one-time settlement with lenders. The favourable impact of these measures was reflected in higher utilisation of ECBs – 75 per cent of approvals in 2019-20 were utilised for on-lending or sub-lending, rupee expenditure on local capital goods, refinancing of rupee loans, working capital, infrastructure development and import of capital goods (Chart II.6.22). While rupee denominated loans and rupee denominated bonds (RDBs) accounted for 7.1 per cent of the agreement amount, 56.7 per cent (other than rupee denominated bonds/loans) was hedged in 2019-20 as compared with 45.6

Chart II.6.20: Cumulative Portfolio Flows in Select EMEs during Major Global Shocks



Note: 't' refers to the starting day of FPI outflow in each shock period.
Source: Institute of International Finance (IIF).

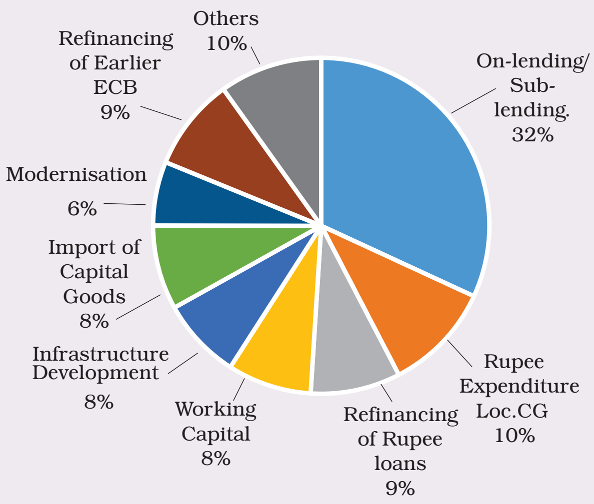
Chart II.6.21: External Commercial Borrowings to India (Net)



P: Provisional
Source: RBI.

[32] Excluding inter-corporate borrowings of FDI companies.

Chart II.6.22: End-Use of ECBs in 2019-20



Source: RBI.

per cent a year ago. Higher repayments relative to fresh disbursals, however, led to net outflows of US$ 1.8 billion in RDBs as against inflows of US$ 0.8 billion a year ago. After marginal net inflows in Q1, short-term trade credit declined in subsequent quarters as demand for fresh disbursals, both buyers' and suppliers' credit, moderated with slowdown in merchandise trade activity. Trade credit was primarily availed by domestic companies to finance imports of crude oil, coal, copper and gold, which together accounted for around 45 per cent of the total short-term trade credit raised during the period.

II.6.37 Net flows into non-resident deposit account declined by 17 per cent in 2019-20 as deposits under the Non-Resident (External) Rupee (NRE) accounts, which accounted for the bulk of the inflows, declined sharply. Softening of term deposit rates and expectations of further depreciation of rupee amidst global uncertainties partly moderated flows into this account. Among the other two accounts, deposits in Non-Resident Ordinary Rupee (NRO) accounts and the Foreign Currency Non-Resident (Banks) [FCNR (B)] accounts remained at the previous year's level (Table II.6.2).

6. *Vulnerability Indicators*

II.6.38 At end-March 2020, India's external debt increased by US$ 15.4 billion (*i.e.*, 2.8 per cent) from its level at end-March 2019, primarily on account of commercial borrowings. The increase in external debt was partially offset by valuation gains of US$ 16.6 billion resulting from the appreciation of the US dollar against Indian rupee and major currencies (such as euro and SDR). Excluding the valuation effect, the increase in external debt would have been US$ 32.0 billion instead of US$ 15.4 billion. Commercial borrowings remained the largest component of external debt, with a share of 39.4 per cent, followed by non-resident deposits (23.4 per cent) and short-term trade credit (18.2 per cent). As a ratio of GDP, external debt increased from 19.8 per cent at end-March 2019 to 20.6 per cent at end-March 2020. Notwithstanding an increase in external debt, other debt- and reserve-related indicators of external vulnerability improved. The share of short-term debt (on both original and residual

Table II.6.2: Flows under Non-Resident Deposit Accounts

(US$ billion)

	2017-18	2018-19	2019-20
1	2	3	4
1. Non-Resident External (Rupee) Account	7.1	7.3	5.6
2. Non-Resident Ordinary Account	1.5	1.9	2.0
3. Foreign Currency Non-Resident (B) Account	1.0	1.1	1.1
Non-Resident Deposits (1+2+3)	**9.7**	**10.4**	**8.6**

Source: RBI.

maturity basis) in total debt declined. Similarly, foreign exchange reserve cover of imports and short-term debt (on both original and residual maturity basis) improved during the year, mainly reflecting the sizeable accretion in reserves. The latter also led to India's net international investment position (NIIP) improving by US$ 57.6 billion (*i.e.,* fall in net claims of non-residents on India) during the same period (Table II.6.3, and Appendix Table 1).

II.6.39 Robust capital inflows, particularly during Q1 to Q3 of 2019-20, led to an accretion to the foreign exchange reserves, which reached a historic high of US$ 487.2 billion as on March 6, 2020. Consequent upon the 6-month US dollar sell/buy swap auction undertaken twice by the Reserve Bank in March 2020 to provide liquidity to the foreign exchange market and valuation losses caused by a sharp appreciation of the US dollar against major currencies, foreign exchange reserves, however, dipped to US$ 477.8 billion as at end-March 2020.

Table II.6.3: External Vulnerability Indicators (End-March)

(Per cent, unless indicated otherwise)

Indicator	2013	2018	2019	2020
1	2	3	4	5
1. External Debt to GDP ratio	22.4	20.1	19.8	20.6
2. Ratio of Short-term Debt (original maturity) to Total Debt	23.6	19.3	20.0	19.1
3. Ratio of Short-term Debt (residual maturity) to Total Debt	42.1	42.0	43.4	42.4
4. Ratio of Concessional Debt to Total Debt	11.1	9.1	8.7	8.6
5. Ratio of Reserves to Total Debt	71.3	80.2	76.0	85.5
6. Ratio of Short-term Debt (original maturity) to Reserves	33.1	24.1	26.3	22.4
7. Ratio of Short-term Debt (residual maturity) to Reserves	59.0	52.3	57.0	49.5
8. Reserves Cover of Imports (in months)	7.0	10.9	9.6	12.0
9. Debt Service Ratio (debt service to current receipts)	5.9	7.5	6.4	6.5
10. External Debt (US$ billion)	409.4	529.3	543.1	558.5
11. Net International Investment Position (NIIP) (US$ billion)	-326.7	-418.5	-436.9	-379.3
12. NIIP/GDP ratio	-17.8	-15.9	-15.9	-14.0
13. CAD/GDP ratio	4.8	1.8	2.1	0.9

Source: RBI and Government of India.

II.6.40 To sum up, India's balance of payments in 2019-20 reflected muted domestic activity, but capital flows were robust, which engendered a large accretion to foreign exchange reserves. Improvement in major external vulnerability indicators occurred during the year, which should help mitigate spillovers from external shocks. The ensuing year is likely to be challenging due to a highly uncertain global trade and investment environment, and extreme fear and uncertainty about the intensity and spread of COVID-19. While terms of trade gains may provide some respite, the outlook is uncertain for exports, remittance inflows and the tourism sector. While companies may put their IT expansion plans on hold and cut back their overall IT spending, there could be pockets of opportunity for software and related services for Indian IT companies due to an increase in demand and usage for certain IT-enabled services by consumers and companies impacted by the pandemic. The prospects for capital flows face uncertainty due to their sensitivity to shifts in the global macroeconomic outlook. Going forward, the effectiveness of policy measures undertaken to address COVID-19 related stress is also likely to play a critical role in preserving the resilience of India's external sector.

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

III MONETARY POLICY OPERATIONS

With downside risks to the outlook for growth getting accentuated by COVID-19 and outweighing concerns around inflation exceeding the upper tolerance band for the target during December 2019-February 2020, the monetary policy committee reduced the policy rate by a cumulative 250 basis points (bps) during February 2019-June 2020, including a sizeable 115 bps in its off-cycle meetings in March and May 2020, and shifted the stance from neutral to accommodative in June 2019. Systemic liquidity remained in large surplus starting June 2019. The Reserve Bank undertook a series of measures to counter the effects of COVID-19. Monetary transmission improved in the second half of 2019-20.

III.1 The conduct of monetary policy in 2019-20 was guided by the objective of achieving the medium-term target for consumer price index (CPI) inflation of 4 per cent with a tolerance band of +/- 2 per cent, while supporting growth. Inflation remained benign during the first half of 2019-20 but exceeded the upper tolerance band around the target during December 2019-February 2020 on the back of rising food price pressures. Real gross domestic product (GDP) growth, however, slowed down over the course of the year. The COVID-19 outbreak and the nation-wide lockdown from the final quarter of the year brought in unprecedented downside risks to the growth outlook. The monetary policy committee (MPC) cut the policy repo rate by a cumulative 185 basis points (bps) during 2019-20, including a sizeable 75 basis points in its off-cycle meeting in March 2020. The MPC shifted the stance from neutral to accommodative in June 2019 and in March 2020, it committed on maintaining the accommodative stance as long as necessary to revive growth and mitigate the impact of COVID-19 on the economy.

III.2 During 2019-20, systemic liquidity remained in surplus beginning June 2019, with the overhang increasing in the subsequent months. The Reserve Bank employed multiple tools to manage both frictional and durable liquidity and simplified the liquidity management framework with a focus on a clearer communication of the objectives and the toolkit for liquidity management.

III.3 In response to the COVID-19 pandemic, the Reserve Bank undertook a series of measures – long-term repo operations (LTROs); targeted LTROs (TLTROs) for specific sectors and entities; cut in the cash reserve ratio (CRR); more flexibility to banks in the daily maintenance of CRR; increase in the limit under the marginal standing facility (MSF); widening of the policy corridor and making it asymmetric; refinance facility to all-India financial institutions; and special liquidity facility for mutual funds. These measures were aimed at expanding liquidity in the system sizeably to ensure that financial markets and institutions are able to function normally in the face of COVID-related dislocations. Monetary transmission improved especially in the second half of 2019-20 after new floating rate loans were linked to an external benchmark.

III.4 Against this backdrop, section 2 presents the implementation status of the agenda set for 2019-20 while section 3 sets out the agenda for 2020-21. The chapter has been summarised at the end.

2. Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

III.5 In last year's Annual Report, the Department had set out the following goals:

- Refining the liquidity forecasting framework, sharpening the estimation of currency in circulation at various frequencies and an overall reviewing of operational aspects of the liquidity management framework, including aspects relating to structural liquidity balance and distributional asymmetry in liquidity (*Utkarsh*) [Para III.16 and III.38];
- An analysis of food inflation dynamics to understand the sources of volatility and to examine the relative role of cyclical and structural factors at play to improve inflation forecasts (Para III.38);
- Spatial dimensions of inflation to better understand the divergences in inflation rates across major groups/sub-groups and changes in them over time and implications for aggregate inflation (Para III.38);
- An analysis of sectoral credit flows to understand monetary transmission (Para III.38); and
- Implications of the asset quality/health of the banking sector and NBFCs on credit flows to the commercial sector (Para III.38).

Implementation Status of Goals

Monetary Policy

III.6 In April 2019, in its first bi-monthly monetary policy meeting for the year 2019-20, the MPC reduced the policy repo rate by 25 bps on top of reduction by 25 bps in February 2019. The first bi-monthly statement projected headline inflation in the range 2.9-3.0 per cent for H1:2019-20 and 3.5-3.8 per cent for H2:2019-20, with risks broadly balanced. Real GDP growth was projected at 7.2 per cent for 2019-20, while noting headwinds, especially on the global front. The MPC voted to reduce the policy repo rate by 25 bps to 6.0 per cent, with a majority of 4 to 2; it persevered with a neutral policy stance by a vote of 5 to 1.

III.7 The second bi-monthly policy review of June 2019 was held against the backdrop of a further weakening of domestic growth impulses. Although inflation had edged up, it was projected to remain within the target of 4 per cent over the course of the year. Concerned over the sharp slowdown in investment activity and the continuing moderation in consumption demand, the MPC saw scope to accommodate growth concerns while remaining consistent with the flexible inflation targeting mandate. It, therefore, unanimously reduced the policy repo rate by another 25 bps to 5.75 per cent and also changed the stance of monetary policy from neutral to accommodative.

III.8 At the time of the third bi-monthly monetary policy review of August 2019, there was a further loss of momentum in growth and forward-looking surveys pointed to muted demand conditions ahead. The inflation scenario continued to be benign and the outlook was largely unchanged from the second bi-monthly review – it was projected to remain within the target over a 12-month horizon. This provided the MPC headroom for policy action to address growth concerns by boosting aggregate demand, especially private investment. The MPC unanimously decided on a rate reduction and a continuation of the accommodative monetary policy stance. The MPC reduced the policy repo rate by 35 bps with a majority vote of 4 to 2 (2 members voted for a cut of 25 bps).

III.9 The MPC met for the fourth bi-monthly review in October 2019 against the backdrop of a further weakening of economic activity, both global and domestic. Real GDP growth projection for 2019-20 was revised downwards by 80 bps from 6.9 per cent in the third bi-monthly resolution to 6.1 per cent on the back of moderation in both investment and consumption demand. On the inflation front, the outlook for H2:2019-20 and Q1:2020-21 was unchanged from the third bi-monthly projections, although the near-term projections were revised upwards due to an uptick in food inflation. Given the policy space and the growth concerns, the MPC unanimously voted for a further reduction of 25 bps in the policy rate, with a majority vote of 5 to 1 (one member voted for a cut of 40 bps). The MPC also unanimously voted to continue with an accommodative stance as long as necessary to revive growth, while ensuring that inflation remained within the target.

III.10 The inflation trajectory underwent a dramatic change when the MPC met for the fifth bi-monthly policy in December 2019. After remaining benign for more than a year, headline inflation rose sharply to 4.6 per cent in October, propelled by a surge in food inflation, which spiked to a 39-month high in October. Vegetable prices soared due to heavy unseasonal rains and the incipient price pressures in other food items such as milk, pulses, and sugar were expected to sustain. By contrast, inflation in CPI excluding food and fuel moderated to a historic low in October. The sudden and unanticipated spike in food prices significantly altered the near-term inflation trajectory and the CPI inflation projections were revised upwards to 5.1-4.7 per cent for H2:2019-20 and 4.0-3.8 per cent for H1:2020-21, with risks broadly balanced. On the other hand, real GDP growth projection for 2019-20 was further revised downwards to 5.0 per cent, reflecting more than anticipated loss of momentum in domestic economic activity. The MPC felt it was prudent to carefully monitor incoming data to gain clarity on the inflation outlook and, therefore, paused while recognising that there was monetary policy space for future action. The MPC reiterated its commitment to continue with the accommodative stance as long as necessary to revive growth, while ensuring that inflation remained within the target.

III.11 In the run up to the sixth bi-monthly policy in February 2020, headline inflation had breached the upper inflation tolerance band around the target and surged to 7.4 per cent in December 2019 – the highest reading since July 2014 – as the unseasonal rains led to an unprecedented increase in onion prices and exacerbated price pressures in other vegetables. *Kharif* pulses, cereals and milk also exhibited price pressures, along with an increase in input costs for services. CPI inflation was projected to moderate from 6.5 per cent for Q4:2019-20 to 5.4-5.0 per cent for H1:2020-21 and to 3.2 per cent for Q3:2020-21. GDP growth for 2020-21 was projected at 6.0 per cent; the coronavirus outbreak was seen as impacting tourist arrivals and global trade. The MPC noted that the trajectory of inflation excluding food and fuel needed to be carefully monitored in view of the pass-through of remaining revisions in mobile phone charges, the increase in prices of drugs and pharmaceuticals and the impact of new emission norms. With economic activities remaining weak and the output gap negative, the MPC noted that the outlook for inflation was highly uncertain. Given the evolving growth-inflation dynamics, the MPC felt it appropriate to maintain *status quo* while recognising policy space for future action.

III.12 The COVID-19 pandemic and its increasingly adverse impact on both the global and domestic economy, amidst elevated volatility in financial markets necessitated an advancement in the MPC's meeting scheduled for March 31, April 1 and 3, 2020 to March 24, 26 and 27, 2020. Headline inflation had fallen by a full percentage point in February 2020 to 6.6 per cent, with the ebbing of onion and other food prices. The MPC noted that food prices could soften even further under the beneficial effects of record foodgrains and horticulture production. The collapse in crude prices was seen as working towards easing both fuel and core inflation pressures, depending on the level of the pass-through to retail prices. As a consequence of COVID-19, aggregate demand could weaken and ease core inflation further. Heightened volatility in financial markets could also have a bearing on inflation. On the growth outlook, the MPC observed that most sectors of the economy would be adversely impacted by the pandemic, depending upon its spread, intensity, and duration. The slump in international crude prices could, however, provide some relief in the form of terms of trade gains. The MPC took note of the several measures undertaken by the Reserve Bank to inject substantial liquidity in the system. It was of the view that macroeconomic risks, both on the demand and supply sides, brought on by the pandemic could be severe and there was a need to do whatever necessary to shield the domestic economy from the pandemic. The MPC, therefore, unanimously voted for a sizeable reduction in the policy repo rate, but with some differences in the view on quantum of reduction. With a 4-2 majority, the repo rate was cut by 75 bps to 4.40 per cent (2 members voted for a reduction of 50 bps). All members voted unanimously to continue with the accommodative stance as long as necessary to revive growth and mitigate the impact of COVID-19 on the economy, while ensuring that inflation remained within the target.

III.13 The subsequent releases of data indicated that the macroeconomic impact of the pandemic was more severe than initially anticipated and the MPC advanced its scheduled meeting of June 3-5, 2020 to May 20-22, 2020. On inflation, the MPC noted that it had softened for the second successive month in March as food inflation eased from its earlier double-digit levels. However, supply disruptions punctuated the softening and food prices spiked in April. The MPC expected food prices to moderate as supply lines get restored with gradual relaxations in lockdown. Given the forecast of a normal monsoon, the likelihood of international crude oil prices remaining low in view of the global demand-supply balance and deficient demand conditions, *inter alia*, the MPC expected headline inflation to fall below the target in Q3 and Q4 of 2020-21. The growth outlook, on the other hand, remained sombre and various sectors of the economy were seen as experiencing acute stress. Against this backdrop, the MPC decided to reduce the policy repo rate from 4.4 per cent to 4.0 per cent even while maintaining headroom to back up the revival of activity when it takes hold. The MPC also voted to maintain accommodative stance as long as necessary to revive growth and mitigate the impact of COVID-19, while ensuring that inflation remained within the target. Five members voted for a reduction in policy repo rate by 40 bps and one member voted for a reduction of 25 bps.

III.14 The MPC, since its inception, has faced a number of challenges and uncertainties, requiring it to continuously balance growth-inflation trade-offs (Box III.1).

Box III.1
Voting Diary of the Monetary Policy Committee, 2016-20

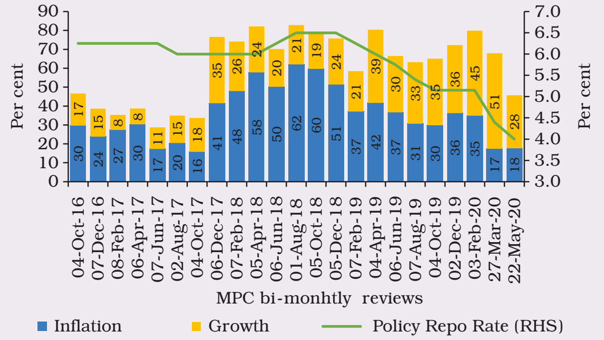
From September 2016, when a six-member monetary policy committee (MPC) was constituted to determine the policy rate to achieve the inflation target, the MPC met 23 times till May 2020. While the three external MPC members have remained unchanged over this period, the internal members, being *ex officio,* have changed. In all, eleven different members[1] have served on the MPC so far.

The minutes of the MPC, including individual statements of members, suggest that voting differences were typically confined to the size of the change in the policy rate rather than contesting the overarching policy stance (Patra, 2017). This pattern remained broadly unchanged in the subsequent two years as well. Thirteen of the 23 decisions of the MPC on the repo rate have been with unanimity in terms of direction of policy rate change. Within these thirteen decisions, however, there were four decisions where the MPC differed over the quantum of interest rate cut – in two such meetings, there was one dissent vote, while in another two meetings there were two dissent votes. These reflected differences in individual members' macroeconomic assessment and outlook, and policy preferences.

A word count analysis of MPC members' statements indicates that discussions on inflation were dominant – around 60 per cent of the MPC discussion universe – during August-October 2018. In the more recent period in March 2020, discussions on growth occupied more than 50 per cent of the MPC discussion space (Chart 1).

Parsing of the voting pattern of each MPC member suggests that among external members there were greater differences over direction and quantum of policy rate change. In all the meetings, the proposal of the chairman of the MPC (Governor) was carried through to the decision (Table 1).

Chart 1: Share of Inflation and Growth Discussions in MPC Members' Statements



Source: RBI staff estimates.

Table 1: MPC Voting Pattern

Internal/ External	MPC Member	Total Votes	Direction of Rate Change Compared to MPC Decision		Quantum of Rate Change Compared to MPC Decision		
			Same	Different	Same	Lower	Higher
1	2	3	4	5	6	7	8
External Members	Prof. Chetan Ghate	23	20	3	17	0	6
	Prof. Pami Dua	23	23	0	21	0	2
	Prof. Ravindra H. Dholakia	23	19	4	17	6	0
Internal Members	Dr. Urjit R. Patel	14	14	0	14	0	0
	Shri R. Gandhi	2	2	0	2	0	0
	Dr. Viral V. Acharya	15	13	2	13	0	2
	Shri Bibhu Prasad Kanungo	3	3	0	3	0	0
	Shri Shaktikanta Das	9	9	0	9	0	0
	Dr. Michael Debabrata Patra	23	20	3	20	0	3
	Dr. Janak Raj	3	3	0	3	0	0

Note: Blue highlighted names are MPC members as at end-June 2020.
Source: Monetary policy minutes, RBI.

Reference:

Patra, Michael Debabrata (2017), "One Year in the Life of India's Monetary Policy Committee", *Reserve Bank of India Bulletin,* December.

[1] Dr. Michael Debabrata Patra served the MPC in two capacities: (i) as 'an officer nominated by the Central Board' under Section 45ZB(2)(c) of the RBI Act from October 2016 to December 2019, and (ii) as 'Deputy Governor in charge of monetary policy' under Section 45ZB(2)(b) thereafter.

The Operating Framework: Liquidity Management

III.15 The operating framework of monetary policy aims at aligning the operating target – the weighted average call rate (WACR) – with the policy repo rate through proactive liquidity management, consistent with the stance of monetary policy. Amplifying reduction of 185 bps in the policy repo rate during 2019-20, the Reserve Bank undertook a number of liquidity measures, both conventional and unconventional, especially to mitigate the adverse impact of COVID-19 on the real economy.

III.16 Based on the recommendations of an Internal Working Group, the Reserve Bank revised the liquidity management framework to clearly communicate the objectives and the toolkit for liquidity management. The salient features of the revised framework, operationalised on February 14, 2020, are:

(i) A single 14-day term repo/reverse repo operation at a variable rate to coincide with the cash reserve ratio (CRR) maintenance cycle is the main liquidity management tool for managing frictional liquidity;

(ii) The main liquidity operation will be supported by fine-tuning operations, overnight and/or longer tenor up to 13-days; longer-term variable rate repo/ reverse repo operations beyond 14 days to be conducted, as required;

(iii) Daily fixed rate repo and four 14-day term repos are discontinued;

(iv) Liquidity management instruments will include fixed and variable rate repo/ reverse repo auctions, outright open market operations (OMOs), forex swaps and other instruments;

(v) Direct participation by standalone primary dealers (SPDs) is allowed in all overnight liquidity management operations;

(vi) Margin requirements under the liquidity adjustment facility (LAF) will be periodically reviewed;

(vii) Greater transparency in communication will be brought through: (a) dissemination of both the daily flow as well as the stock impact of the liquidity operations; and (b) publication of a quantitative assessment of durable liquidity conditions of the banking system with a fortnightly lag; and

(viii) Certain features of the erstwhile liquidity management framework such as (a) the WACR being the operating target; and (b) minimum daily maintenance of 90 per cent of the CRR requirement were retained.[2]

III.17 The revised liquidity management framework envisaged a symmetric LAF corridor of 50 bps. In view of the COVID-19 pandemic and its adverse impact on global and domestic financial markets and the significant increase in the banking system liquidity, however, the Reserve Bank made the policy interest rate corridor asymmetric on March 27, 2020, with the reverse repo rate 40 bps below the policy repo rate (from 25 bps) and the MSF rate 25 bps above the repo rate, thereby widening the corridor from 50 bps to 65 bps. The reverse repo rate was cut by another 25 bps on April 17, taking it 65 bps below the repo rate and widening the corridor to 90 bps. This was done to make it relatively unattractive for banks to passively park funds with the Reserve Bank and to encourage their deployment for on-lending to productive sectors of the economy. Furthermore,

[2] With effect from March 28, 2020, the minimum daily CRR requirement was reduced to 80 per cent.

taking cognisance of hardships faced by banks in terms of social distancing of staff and consequent strains on reporting requirements, the requirement of minimum daily CRR balance maintenance was reduced from 90 per cent to 80 per cent effective from the first day of the reporting fortnight beginning March 28, 2020 (as a one-time dispensation initially available up to June 26, 2020 and subsequently extended to September 25, 2020).

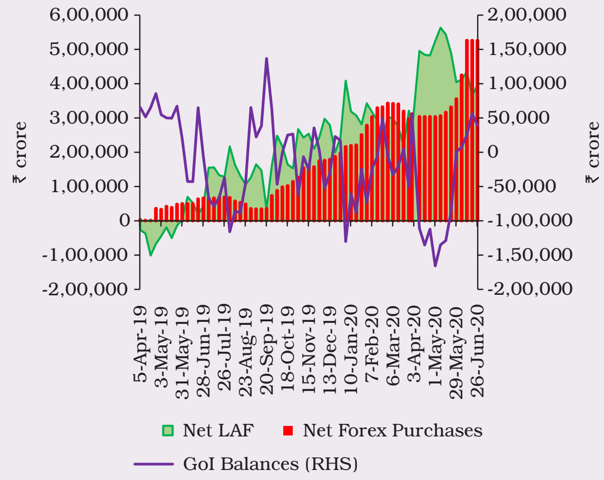
III.18 Scheduled commercial banks (SCBs) were allowed exemption from the maintenance of CRR on incremental credit to retail (automobiles and residential housing) and micro, small and medium enterprises (MSMEs) sectors disbursed by them between January 31 to July 31, 2020 to revitalise the flow of bank credit to productive sectors having multiplier effects on growth.

Drivers and Management of Liquidity

III.19 During 2019-20, liquidity conditions remained in surplus mode starting from June 2019. The Reserve Bank employed multiple tools to manage both frictional and durable liquidity. While liquidity amounting to ₹1.37 lakh crore was injected through variable rate repos of maturities ranging from overnight to 16 days in addition to the regular 14-day repos, surplus liquidity of ₹284.4 lakh crore was absorbed through reverse repos of maturities ranging from overnight to 63 days during 2019-20. The Reserve Bank also injected durable liquidity of ₹1.1 lakh crore through purchase of securities under OMOs during the year.

III.20 The Reserve Bank's forex operations and drawdown of Government of India (GoI) cash balances were the main drivers of liquidity expansion, which more than offset the leakage of liquidity due to currency demand during 2019-20. The surplus liquidity was mopped up through reverse repos of varying maturities under the LAF. With capital inflows gaining momentum during the second half of the year (except in the latter half of March), forex operations largely mirrored net LAF positions (Chart III.1).

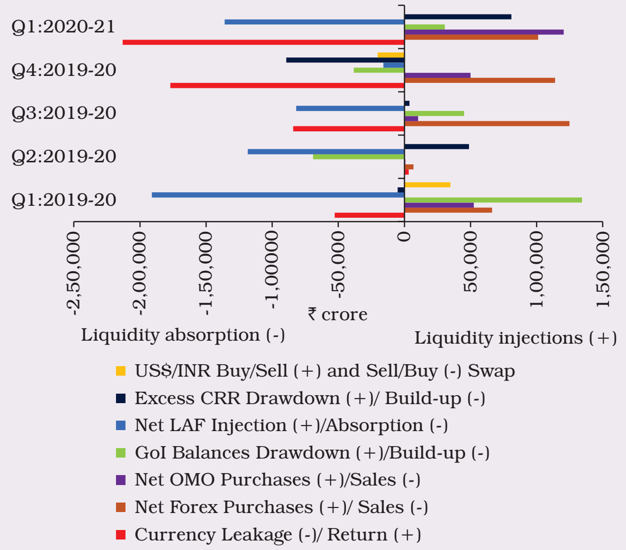
Chart III.1: Net Forex Purchases, GoI Balances and Net LAF



Note: 1. Positive value of Net LAF indicates absorption of liquidity.
2. Net forex purchases are cumulative from April 2019.
Source: RBI.

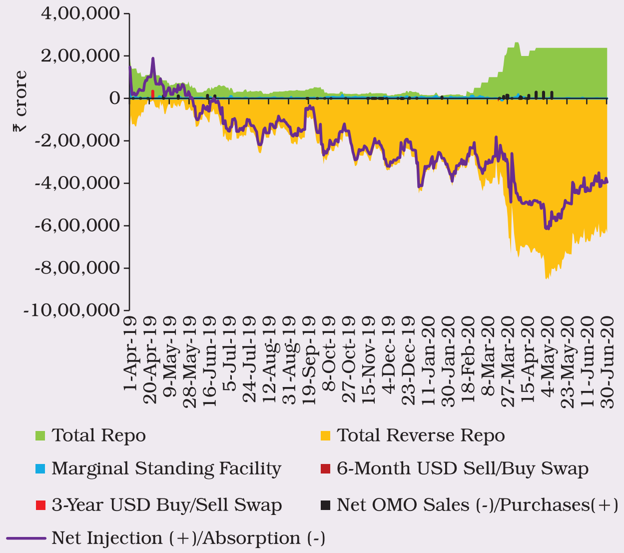
III.21 In the first two months of Q1:2019-20, *i.e.*, April and May 2019, liquidity conditions were in deficit on account of restrained government spending on the back of the model code of conduct in the run up to the general election and high demand for cash. The Reserve Bank conducted a USD/INR buy/sell swap auction of US$ 5 billion (₹34,874 crore) for a tenor of 3 years in April and two OMO purchase auctions in May amounting to ₹25,000 crore to inject durable liquidity into the system. It also injected liquidity of ₹51,403 crore on a daily net average basis under the LAF during these two months. The situation changed in June – along with the shift in policy stance to accommodative – when liquidity conditions turned into surplus due to increased spending after the government formation at the Centre, net forex purchases by the Reserve Bank and return of

Chart III.2: Liquidity - Drivers and Management



Source: RBI.

Chart III.3: Liquidity Management



Source: RBI.

currency to the banking system post-elections. The Reserve Bank also conducted two OMO purchase auctions amounting to ₹27,500 crore during the month (Chart III.2). Surplus liquidity of ₹51,710 crore (on a daily net average basis) was absorbed under the LAF in June.

III.22 Surplus liquidity conditions built up during Q2:2019-20 mainly on account of (i) drawdown of GoI cash balances; (ii) return of currency to the banking system; and (iii) the Reserve Bank's net forex purchase operations, especially in September 2019. The absorption of liquidity on a daily net average basis under the LAF soared to ₹1.31 lakh crore during Q2 in contrast to a net injection of ₹17,409 crore in Q1:2019-20. Simultaneously, transient liquidity needs were met through variable rate repos of smaller tenors (1-3 days) in addition to the regular 14-day term repos.

III.23 With the persistence of surplus liquidity conditions, the average daily net liquidity absorption under the LAF increased to ₹2.33 lakh crore in Q3:2019-20. Expecting the continuance of surplus liquidity, the Reserve Bank conducted four longer term reverse repo auctions in November – two of 21 days and one each of 42 days and 35 days tenor – thereby absorbing ₹78,934 crore. Forex operations coupled with the drawdown of GoI cash balances increased systemic liquidity. The Reserve Bank also conducted four simultaneous purchase and sale of securities under OMOs (special OMOs) between December 23, 2019 and January 23, 2020, which augmented net banking system liquidity by ₹11,724 crore (Chart III.3).[3]

III.24 With a view to reinforcing monetary transmission and augmenting credit flows to productive sectors, the Reserve Bank conducted five LTROs at fixed repo rate (one of one year and four of three years tenors) between February 17 and March 18, 2020, providing banks with durable liquidity of ₹1.25 lakh crore at reasonable

[3] While long-term paper amounting to ₹40,000 crore was purchased through these auctions, sale of short-term securities amounted to ₹28,276 crore.

cost relative to prevailing market rates. With the government continuing to rely on ways and means advances/overdraft (WMA/OD) almost entirely during the quarter, average absorption of surplus liquidity further increased to ₹3.06 lakh crore in Q4:2019-20. Net average absorption of surplus liquidity further soared to ₹4.72 lakh crore in Q1:2020-21, reflecting several liquidity augmenting measures and sustained government spending through higher average recourse to WMA/OD (of ₹0.61 lakh crore) during this period.[4]

III.25 Following the declaration of COVID-19 as a pandemic by the World Health Organisation (WHO) on March 11, global financial markets were gripped by bearish sentiments. Heightened global turbulence resulted in a significant tightening of financial conditions in domestic financial markets beginning March 11, 2020. The Reserve Bank undertook several conventional and unconventional measures in March to unfreeze financial market activity and revitalise financial institutions to function normally in the face of COVID-19 related dislocations. These measures, *inter alia*, included: (i) two 6-month USD/INR sell/buy swap auctions on March 16 and March 23, 2020 to meet the increased demand for US dollars, which cumulatively provided dollar liquidity of US $ 2.7 billion; (ii) three OMO purchases on March 20, 24 and 26, 2020 to inject ₹40,000 crore cumulatively; (iii) announcement of TLTRO auctions of up to three years' tenor of appropriate sizes for a total amount of up to ₹1 lakh crore on March 27, 2020 for investment in corporate bonds, commercial paper, and non-convertible debentures;[5] (iv) reduction in the CRR requirement of banks by 100 bps – from 4.0 per cent of net demand and time liabilities (NDTL) to 3.0 per cent – effective fortnight beginning March 28, 2020, for a period of one year ending March 26, 2021, augmenting primary liquidity in the banking system by about ₹1.37 lakh crore; and (v) raising banks' limit for borrowing overnight under the MSF by dipping into their Statutory Liquidity Ratio (SLR) to 3 per cent of NDTL from 2 per cent (effective up to June 30, 2020 and subsequently extended up to September 30, 2020), allowing the banking system to avail an additional ₹1,37,000 crore of liquidity.

III.26 In order to maintain adequate liquidity in the system and its constituents in the face of COVID-19 related dislocations, facilitate and incentivise bank credit flows, ease financial stress and enable the normal functioning of markets, the Reserve Bank took further liquidity injection measures on April 17, 2020 targeted at specific sectors and entities. These included: (i) TLTRO 2.0 auctions for an initial aggregate amount of ₹50,000 crore in tranches of appropriate sizes,[6] with funds to be invested in investment grade bonds, commercial paper, and non-convertible debentures of non-banking financial companies (NBFCs), with at least 50 per cent of the total amount availed going to small and mid-sized NBFCs and micro finance institutions (MFIs); (ii) special refinance facilities for a total amount of ₹50,000 crore at the policy repo rate to the National

[4] In consultation with the Government of India, the limit on Centre's WMA for H1:2020-21 was progressively raised to ₹2,00,000 crore from ₹75,000 crore in H1:2019-20.

[5] A TLTRO auction of 3 years maturity was held on March 27, 2020 injecting durable liquidity amounting to ₹25,009 crore; three more TLTRO auctions of 3 years maturity conducted on April 3, April 9 and April 17 further augmented durable liquidity by ₹75,041 crore.

[6] The first TLTRO 2.0 auction of 3 years maturity was conducted on April 23, 2020 augmenting durable liquidity by ₹12,850 crore.

Bank for Agriculture and Rural Development (NABARD), the Small Industries Development Bank of India (SIDBI) and the National Housing Bank (NHB). The *inter se* allocation of funds was ₹25,000 crore to NABARD for refinancing regional rural banks (RRBs), cooperative banks and MFIs; ₹15,000 crore to SIDBI for on-lending/refinancing; and ₹10,000 crore to NHB for supporting housing finance companies (HFCs). Furthermore, the Reserve Bank announced a special liquidity facility for mutual funds (SLF-MF) of ₹50,000 crore on April 27, 2020 to alleviate intensified liquidity pressures faced by them. Banks availed ₹2,430 crore under this facility. In order to enable Export-Import Bank of India (EXIM Bank) to meet its foreign currency resource requirements, the Reserve Bank extended a line of credit of ₹15,000 crore to the EXIM Bank on May 22, 2020 for a period of 90 days (with rollover up to one year) so as to enable it to avail a US dollar swap facility.

III.27 Following the monetary and liquidity measures announced on March 27, April 17 and May 22, 2020, financial conditions eased as reflected in the variation in spreads on money and bond market instruments (Table III.1). Corporate bond market activity revived, with several corporates making new issuances.

III.28 Overall, the Reserve Bank's various operations (including forex purchases, OMOs, LTROs and TLTROs) injected durable liquidity of ₹5.76 lakh crore in 2019-20 and ₹3.09 lakh crore in Q1:2020-21 (Chart III.4).

III.29 Given surplus liquidity conditions, fine-tuning operations through variable rate reverse repo auctions with maturities ranging from overnight to 3 days were extensively used for absorbing liquidity till February 14, 2020. As a pre-emptive measure to tide over any frictional liquidity requirements caused by dislocations due to COVID-19, three fine-tuning variable rate repo auctions of 12-16 days maturity were conducted on March 23, March 24, and March 26, 2020, injecting ₹89,517 crore (Table III.2).[7] As a special

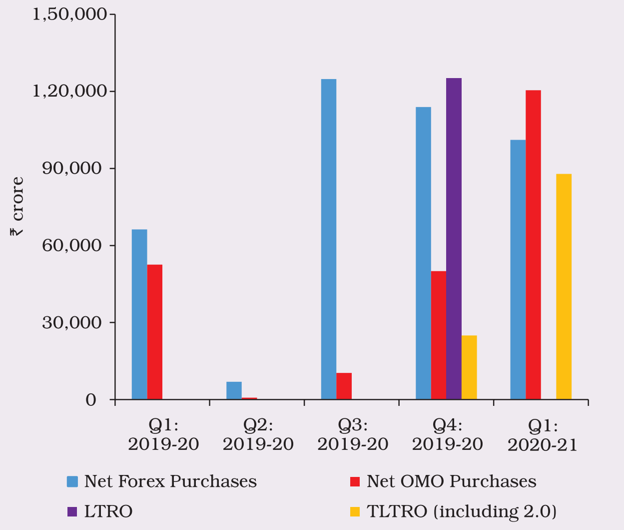
Table III.1: Variation in Spread of Financial Market Instruments over Policy Repo Rate

(Basis points)

Period		CP-3 Month	CD-3 Month	AAA Corporate Bond		
				1-Year	3-Year	5-Year
	1	2	3	4	5	6
(i)	March 10 - 26, 2020	128	272	45	55	68
(ii)	March 26 - April 16, 2020	106	-255	85	82	82
(iii)	April 16 - May 21, 2020	-165	-118	-61	-67	-83
(iv)	May 21 - June 30, 2020	-133	16	-50	-18	12
(v)	Change (ii-i)	-22	-527	40	27	14
(vi)	Change (iii-ii)	-271	137	-146	-150	-165
(vii)	Change (iv-iii)	32	134	11	49	95

Source: RBI, FBIL, Bloomberg and RBI staff estimates.

Chart III.4: Durable Liquidity Injections



Source: RBI.

[7] Two other fine-tuning operations through variable rate repo auctions of ₹25,000 crore each of 7 days and 3 days maturities held on March 13 and March 31, respectively, did not elicit any response from the market.

Table III.2: Fine-tuning Operations through Variable Rate Auctions during 2019-20

Maturity in Days	Frequency (number of operations)	Total Volume (₹ crore)	Average Volume (₹ crore)
1	2	3	4
Repo			
1-3	4	47,128	11,782
12	1	11,772	11,772
16	2	77,745	38,873
Reverse Repo			
1-3	222	2,71,84,097	1,22,451
4	6	6,11,686	1,01,948
7	33	4,31,458	13,074
14	1	550	550
21	2	28,923	14,462
28	2	35,665	17,833
29	1	11,500	11,500
31	1	12,790	12,790
35	1	25,004	25,004
42	2	30,507	15,254
63	4	65,833	16,458

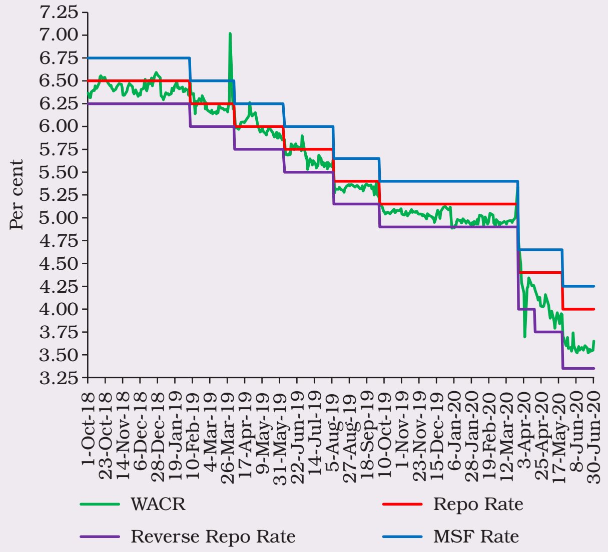
Source: RBI.

case, SPDs were allowed to participate in these auctions along with other eligible participants. Furthermore, the Reserve Bank temporarily enhanced liquidity available to SPDs under the Standing Liquidity Facility (SLF) from ₹2,800 crore to ₹10,000 crore in order to facilitate their year-end liquidity management.

Operating Target and Policy Rate

III.30 During 2019-20, the WACR – the operating target – remained within the corridor with a downward bias (9 bps below the repo rate on an average basis), reflecting sustained surplus liquidity (Chart III.5). The WACR spiked in the typical financial year-end phenomenon, accentuated by reduced market participation because of the COVID-19 induced nation-wide lockdown. With the LAF corridor becoming asymmetric and with the persistence of surplus liquidity, the WACR continued to trade below the repo rate in Q1:2020-21.

Chart III.5: Policy Corridor and WACR



Source: RBI.

Monetary Policy Transmission

III.31 Monetary transmission – changes in banks' deposit and lending rates in response to the changes in the policy repo rate – improved during 2019-20, especially in the second half of the year (Table III.3). This was catalysed by the mandated linking of the interest rates on new loans to certain sectors such as personal and MSE loans, effective October 2019, to an external benchmark, *viz.*, the policy repo rate, 3-month, 6-month T-bill rates or any other benchmark published by Financial Benchmark India Pvt. Ltd. (FBIL).[8]

[8] Effective April 1, 2020, interest rates on new loans to medium enterprises were also linked to an external benchmark.

Table III.3: Transmission to Deposit and Lending Interest Rates

(Basis points)

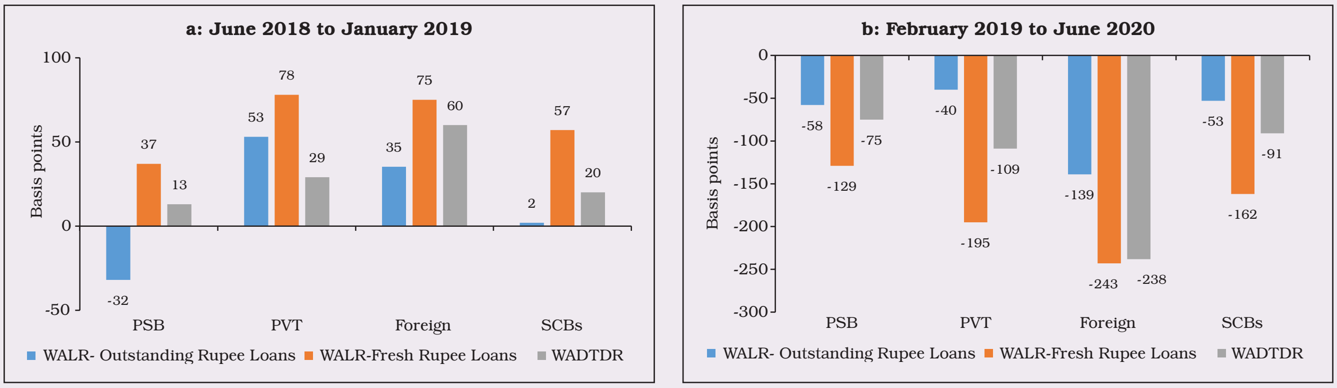
Period	Repo Rate	Term Deposit Rates		Lending Rates		
		Median Term Deposit Rate	WADTDR	1 - Year Median MCLR	WALR - Outstanding Rupee Loans	WALR - Fresh Rupee Loans
1	2	3	4	5	6	7
April 2018 to March 2019	25	5	22	45	0	39
April 2019 to March 2020	-185	-49	-51	-60	-25	-91
Tightening Phase:						
June 2018 to January 2019	50	0	20	35	2	57
Easing Phase:						
February 2019 to September 2019	-110	-9	-7	-30	2	-40
October 2019 to June 2020	-140	-124	-84	-80	-55	-122
February 2019 to June 2020	-250	-147	-91	-105	-53	-162

WADTDR: Weighted Average Domestic Term Deposit Rate. WALR: Weighted Average Lending Rate.
MCLR: Marginal Cost of Funds based Lending Rate.
Source: Special Monthly Return VIAB, RBI and banks' websites.

III.32 During the easing cycle since February 2019, transmission has been faster in respect of fresh rupee loans sanctioned by private sector banks *vis-à-vis* public sector banks. This was similar to the experience during the tightening cycle of June 2018-January 2019 when the transmission was quicker for private sector banks (Chart III.6).

III.33 The weighted average lending rate (WALR) on fresh rupee loans of private sector banks is usually higher than that of public sector banks, reflecting higher cost of funds and, hence, higher marginal cost of funds-based lending rate (MCLR) as also the higher median spread[9] (Chart III.7). The share of loans to sectors such

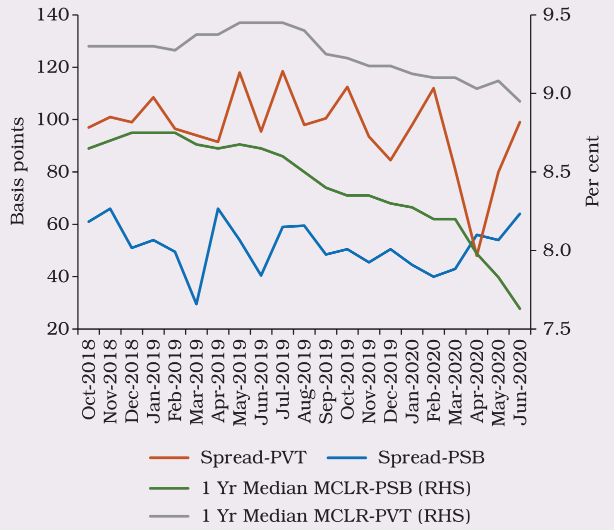
Chart III.6: Variation in Deposit and Lending Rates of SCBs



PSB: Public Sector Banks; PVT: Private Sector Banks; Foreign: Foreign Banks; SCBs: Scheduled Commercial Banks.
Source: RBI.

[9] Median spread of a bank group is arrived at from the spread (difference between WALR on fresh rupee loans and 1-year MCLR) of each bank within the group.

Chart III.7: Median Spread - WALR (Fresh Rupee Loans) over 1-Year MCLR



Source: RBI.

as agriculture, MSME, vehicle and credit card in total loans sanctioned by private sector banks was higher than that of public sector banks for the month of June 2020. The sectoral WALRs in respect of fresh rupee loans to these sectors were also higher than the respective WALRs of public sector banks.

Sectoral Lending Rates

III.34 Monetary transmission remained uneven across sectors due to idiosyncratic features. During the current easing cycle so far (February 2019-June 2020), interest rates on outstanding loans declined for majority of the sectors, including agriculture, industry (large), infrastructure, trade, housing and education (Table III.4).

Table III.4: 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	Infrastructure	Trade	Professional 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-18	10.69	10.70	11.23	10.90	10.97	10.65	9.48	10.64	11.36	38.74	11.56	10.04
Jan-19	10.70	10.57	11.02	10.98	10.59	10.59	9.54	10.60	11.40	37.97	11.59	9.92
Mar-19	10.56	10.41	11.42	10.70	10.86	10.72	9.41	10.48	11.35	38.91	12.20	9.51
Jun-19	10.48	10.20	11.26	10.68	9.98	10.42	9.44	10.45	11.34	38.63	12.39	9.73
Sep-19	10.58	10.28	10.94	10.49	9.84	10.37	9.46	10.57	11.14	38.61	12.56	9.78
Dec-19	10.39	10.03	10.91	10.22	10.17	10.43	9.30	10.70	11.03	38.39	12.16	9.01
Mar-20	10.56	9.66	11.29	10.05	9.75	10.24	9.15	10.57	10.78	37.90	12.37	8.94
June-20	10.40	9.53	10.84	9.62	9.35	10.17	8.94	10.53	10.47	38.35	12.35	8.62
Variation (Percentage Points)												
2019-20	0.00	-0.75	-0.13	-0.65	-1.11	-0.48	-0.26	0.09	-0.57	-1.01	0.17	-0.57
Easing Phase												
Feb-19 – Sep-19	-0.12	-0.29	-0.08	-0.49	-0.75	-0.22	-0.08	-0.03	-0.26	0.64	0.97	-0.14
Oct-19 – June 20	-0.18	-0.75	-0.10	-0.87	-0.49	-0.20	-0.52	-0.04	-0.67	-0.26	-0.21	-1.16
Feb-19 – June 20	-0.30	-1.04	-0.18	-1.36	-1.24	-0.42	-0.60	-0.07	-0.93	0.38	0.76	-1.30

$: Other than housing, vehicle, education and credit card loans.
Source: Special Monthly Return VIAB, RBI.

External Benchmark

III.35 Following the introduction of the external benchmark-based system of the pricing of loans as mentioned earlier, 36 out of 66 banks adopted the policy repo rate as the external benchmark for floating rate loans to the retail and MSME sectors (Table III.5). Seven banks have adopted sector-specific benchmarks.

III.36 The median spread in respect of fresh rupee loans linked to the policy repo rate (*i.e.*, median WALR over the repo rate) was the highest for other personal loans (Table III.6). Among the domestic bank-groups, private sector banks typically charged a higher spread *vis-à-vis* public sector banks.

III.37 The transmission to fresh rupee loans sanctioned has been better in respect of sectors, such as housing, other personal loans and MSME loans, where new floating rate loans have been linked to an external benchmark. During October 2019-June 2020, the WALRs of domestic (public and private sector) banks declined in respect of fresh rupee loans sanctioned for housing loans by 104 bps, vehicle loans by 102 bps, other personal loans by 115 bps and MSME loans by 198 bps (Chart III.8).

Table III.5: External Benchmarks of Commercial Banks - June 2020

Bank Group	Policy Repo	CD Rate	MIBOR	3-Month T-Bill Rate	Sector-specific Benchmark
1	2	3	4	5	6
Public Sector Banks (11)	11	-	-	-	-
Private Banks (21)	18	1	-	-	2
Foreign Banks (34)@	7	-	2	7	5
Commercial banks (66)@	**36**	**1**	**2**	**7**	**7**

@: 13 foreign banks did not have any exposure to retail loans and MSME loans segments.
Note: Figures in parentheses refer to the number of banks that submitted their return.
Source: RBI.

Table III.6: Loans Linked to the Policy Repo Rate - Median Spread (June 2020)

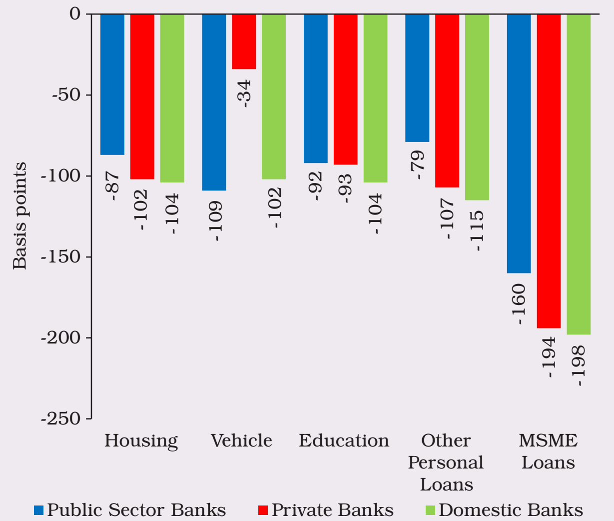
(Percentage points)

Bank Group	Personal Loans				Loans to MSME
	Housing	Vehicle	Education	Other Personal Loans	
1	2	3	4	5	6
Public Sector Banks	3.3	4.6	4.2	6.7	5.8
Private Sector Banks	5.0	6.7	7.0	6.7	7.0
Domestic Banks	**4.3**	**4.8**	**4.8**	**6.7**	**6.3**

Source: RBI.

III.38 A number of studies were undertaken during 2019-20 to strengthen the analytical inputs for the conduct of monetary policy and liquidity management. They included: refining the methodology of forecasting currency in circulation (a major item of leakage of liquidity from the banking system) at various frequencies for better

Chart III.8: WALR on Personal Loans and Loans to MSMEs-Variation (October 2019 - June 2020)



Source: RBI.

liquidity assessment; nowcasting food inflation with high frequency data; spatial dimensions of food inflation with special focus on transmission of vegetable price shocks; impact of asset quality of banks on monetary transmission through credit channel; behaviour of credit cycles; updated estimates of exchange rate pass through (ERPT), with a focus on asymmetry and non-linearity; an assessment of inflation forecasts; inflation forecast combination approaches for projections; transmission of international food price inflation to domestic inflation; drivers of private savings; and impediments to monetary policy transmission.

3. Agenda for 2020-21

III.39 Against the backdrop of COVID-19 pandemic induced volatility in domestic financial markets and the output losses, the Department would undertake the following:

- Strengthening nowcasting of inflation with wider information system, including commodity price monitoring (*Utkarsh*);
- Augmenting the external sector block of the quarterly projection model (QPM) by incorporating capital inflows dynamics for an improved analysis of the external spillovers and feedback mechanisms and recalibration of the QPM based on recent empirical estimates (*Utkarsh*);
- Analysis of MPC voting pattern (*Utkarsh*);
- An assessment of the efficacy of the conventional (OMO) and the unconventional (LTRO and TLTRO) monetary policy instruments; and
- Dynamics of banks' holdings of government securities and credit growth to assess the relative roles of crowding-out and portfolio re-balancing.

4. Conclusion

III.40 In sum, the COVID-19 pandemic continues to have unprecedented adverse impact on output in India as in other countries. Sizeable monetary policy and liquidity measures since February 2020 have been taken to address growth and liquidity concerns. On the inflation front, going forward, a more favourable food inflation outlook may emerge from the bumper *rabi* harvest, moderate increases in minimum support prices for *kharif* crops and prospects of normal south-west monsoon, while upside pressure in food may emanate from tight demand-supply balance in the case of pulses and weather related supply disruptions in the case of key vegetables. High taxes on petroleum products, rise in telecom charges and volatility in financial markets pose upside risks to non-food inflation. Overall, headline inflation may remain elevated in Q2:2020-21 but may moderate during H2:2020-21 aided by large favourable base effects. With significant downside risks to domestic growth remaining, monetary policy would continue, as the MPC has reiterated, to maintain accommodative stance as long as necessary to revive growth and mitigate the impact of COVID-19 on the economy, while ensuring that inflation remains within the target going forward. The Reserve Bank would continue to conduct liquidity operations to maintain adequate liquidity in the system to ensure conducive financial conditions and normalcy in the functioning of financial markets and institutions. The mandated linking of interest rates on new floating rate loans to external benchmark in respect of personal and MSME loans is leading to faster monetary transmission, although it remains uneven across sectors. The Reserve Bank would persevere with its initiatives to further improve monetary transmission.

IV CREDIT DELIVERY AND FINANCIAL INCLUSION

Initiatives for improving credit delivery and expanding the reach of financial inclusion during the year were catalysed by the release of the National Strategy for Financial Inclusion (NSFI) document for the period 2019-24, envisaging convergence of efforts of all stakeholders towards achieving the goals of financial inclusion. Efforts towards financial literacy were sustained by the development of a "Train the Trainers" module for capacity building of Business Correspondents (BCs), expanding the Centres for Financial Literacy to tribal blocks and deepening the digital payment ecosystem.

IV. 1 The Reserve Bank's mission is to improve the availability of formal financial services in unbanked areas with the goal of ensuring access to financial services for all. Agriculture and micro, small and medium enterprises (MSMEs) are key sectors for which the flow of institutional credit remains a top priority. Efforts towards achieving this objective are guided by the recommendations of the Expert Committee on MSMEs and an Internal Working Group (IWG) to review agricultural credit.

IV. 2 A National Strategy for Financial Inclusion (NSFI) document for the period 2019-24 has been prepared under the aegis of Financial Inclusion Advisory Committee (FIAC). This document was approved by the Financial Stability Development Council (FSDC) and it was released in January 2020.

IV. 3 In pursuance of the NSFI strategy, several initiatives were undertaken by the Reserve Bank during the year. First, Pilot Centres for Financial Literacy (CFLs) are being run by banks in collaboration with non-Government organisations (NGOs) to strengthen financial literacy in a structured and coordinated manner. Second, a two-tier Train the Trainers programme "Skill Upgradation for Performance of Resources-BCs" (SUPER-B) was rolled out to build the capacity and skills of Business Correspondents (BCs), for effectively delivering financial services at the grass-root level. Third, the Reserve Bank advised all State/Union Territory Level Bankers' Committees (SLBCs/UTLBCs) in October 2019 to identify one district in their jurisdictions and allot it to a member bank with a significant footprint, with a view to expanding and deepening of the digital payment ecosystem in the country. The endeavour is to make the district 100 per cent digitally enabled within one year.

IV. 4 Against this backdrop, the rest of the chapter is organised into three sections. The implementation status of the agenda for 2019-20 is presented in Section 2. It also covers the performance of credit flow to priority sectors and developments with respect to financial inclusion and financial literacy. The Agenda for 2020-21 is provided in Section 3. The chapter has been summarised at the end.

2. Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

IV. 5 In last year's Annual Report, the Department had set out the following goals under *Utkarsh*:

- Extension of the Pilot Centre for Financial Literacy (CFL) project to 20 tribal blocks of Rajasthan, Jharkhand and Madhya Pradesh, and will run for a period of two years (Para IV.6);

- The various recommendations made by the Expert Committee on MSME (Chair: Shri U. K. Sinha) will be examined for implementation (Para IV.7); and
- The Reserve Bank constituted an Internal Working Group (IWG) in January 2019 to review agricultural credit (Chair: Shri M. K Jain, Deputy Governor). The recommendations of the Working Group will be examined for implementation (Para IV.8).

Implementation Status of Goals

IV. 6 The Pilot Centre for Financial Literacy (CFL), which was set up across 80 blocks in 9 states as an initiative between the banks and NGOs to strengthen financial literacy in a structured and coordinated manner, was extended to 20 tribal blocks across the three states of Madhya Pradesh, Jharkhand and Rajasthan to strengthen financial literacy in tribal areas.

IV. 7 The Expert Committee on MSMEs had made 37 recommendations, of which 15 pertain to the Reserve Bank. Among them, video-based Know Your Customer (KYC) norms was implemented in January 2020.

IV. 8 The IWG made 29 recommendations, of which 10 pertain to the Reserve Bank, 13 to government, 4 to the National Bank for Agriculture and Rural Development (NABARD) and 2 to banks. Recommendations pertaining to introduction of suitable management information system (MIS) for monitoring purposes, short-term crop loans eligible for interest subvention through *Kisan* Credit Card (KCC), financial literacy awareness drives for small and marginal farmers, review of scale of finance for crop cultivation, financing farmer producer organisation (FPO) and collaborations with agri-tech companies/start-ups so as to provide access to credit in an integrated, timely and efficient manner to the farmers have been implemented so far.

CREDIT DELIVERY

Priority Sector

IV. 9 The performance of scheduled commercial banks (SCBs) in achievement of priority sector lending targets shows that though a growth was observed in credit in absolute terms, the lending to priority sector as a percentage of adjusted net bank credit (ANBC) or credit equivalent of off-balance sheet exposures (CEOBE) declined across bank groups *vis-à-vis* last year (Table IV.1).

IV. 10 Priority Sector Lending Certificates (PSLCs) and the platform to enable trading in these certificates on the core banking solution (CBS) portal (*e-Kuber*), indicates an active participation from all the eligible entities during 2019-20. Total trading volume recorded a robust growth of 43.1 per cent and stood at ₹4.68 lakh crore, on top of the growth of 77.6 per cent in the previous year. Among the four PSLC categories, the highest trading was observed in the case of PSLC-general and PSLC-small and marginal farmer with the transaction volumes being ₹1.70 lakh crore and ₹1.46 lakh crore, respectively, during the year.

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

(₹ Crore)

End-March	Public Sector Banks	Private Sector Banks	Foreign Banks
1	2	3	4
2018-19	23,05,978 (42.55)	10,18,994 (42.49)	1,54,337 (43.41)
2019-20*	23,14,242 (41.05)	12,72,745 (40.32)	1,67,108 (40.81)

***:** Provisional.
Note: Figures in parentheses are percentage to ANBC or CEOBE, whichever is higher.
Source: Priority Sector Returns submitted by SCBs.

Table IV.2: Targets and Achievements for Agricultural Credit

(₹ Crore)

Year	Commercial Banks		Rural Co-operative Banks		RRBs		Total	
	Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement
1	2	3	4	5	6	7	8	9
2018-19	792,000	954,823	165,000	152,340	143,000	149,667	1,100,000	1,256,830
2019-20*	972,000	1,061,215	202,500	149,694	175,500	162,857	1,350,000	1,373,766

*: Provisional.
Source: National Bank for Agriculture and Rural Development (NABARD).

Review of Priority Sector Guidelines

IV. 11 Bank credit to registered NBFCs (other than MFIs) for on-lending to agriculture (term loan component) up to ₹10 lakh per borrower, and to MSME up to ₹20 lakh per borrower was made eligible for classification as priority sector lending under the categories of agriculture and MSMEs. In respect of Housing Finance Companies (HFCs), the limit of on-lending was increased from ₹10 lakh to ₹20 lakh per borrower. The above guidelines came into effect from August 13, 2019. On-lending by NBFCs/HFCs is allowed up to five per cent of an individual bank's total priority sector lending on an average basis. These guidelines, after a review in March 2020, have been made applicable up to March 31, 2021 and will be reviewed thereafter.

IV. 12 Bank credit to the export sector is eligible for priority sector classification, subject to various limits. In order to provide a boost to the sector, the sanctioned limit for classification of export credit under priority sector lending (PSL) was increased from ₹25 crore to ₹40 crore per borrower and the existing criteria of units having turnover of up to ₹100 crore was dispensed with for all domestic SCBs and small finance banks (SFBs), with effect from September 20, 2019.

Flow of Credit to Agriculture

IV. 13 The Government of India (GoI) fixes the agricultural credit target every year for commercial banks, regional rural banks (RRBs) and rural co-operative banks. During 2019-20, against the target of ₹13.5 lakh crore, banks have achieved ₹13.7 lakh crore (101.8 per cent of the target), of which commercial banks, RRBs and rural co-operative banks achieved 109.2 per cent, 73.9 per cent and 92.8 per cent of their respective targets (Table IV.2).

IV. 14 The *Kisan* Credit Card (KCC) provides adequate and timely bank credit to farmers under a single window for cultivation and other needs, including for consumption, investment and insurance (Table IV.3).

Relief Measures for Natural Calamities

IV. 15 Currently, the National Disaster Management Framework of the Government of India covers 12 types of natural calamities under its ambit, *viz.,* cyclone; drought; earthquake; fire; floods; tsunami; hailstorm; landslide; avalanche; cloud burst; pest attack; and cold wave/frost. Accordingly, the Reserve Bank has mandated banks to provide relief where the crop loss

Table IV.3: *Kisan* Credit Card (KCC) Scheme

(Number in Lakh, Amount in ₹ Crore)

Year	Number of Operative KCCs	Outstanding Crop Loan	Outstanding Term Loan
1	2	3	4
2018-19	236.3	4,13,670.4	41,409.0
2019-20*	241.5	4,23,587.8	46,555.8

*: Provisional.
Source: Public Sector Banks and Private Sector Banks.

assessed was 33 per cent or more in the areas affected by these natural calamities. The relief measures by banks, *inter alia*, include restructuring/rescheduling existing loans and sanctioning fresh loans as per the emerging requirement of the eligible borrowers. During 2019-20, natural calamity/riots or disturbances was declared by six states, *viz*., Odisha, Maharashtra, Kerala, Karnataka, Jammu and Kashmir and Rajasthan. While Kerala and Karnataka witnessed crop losses due to floods in August 2019, Rajasthan was affected by drought during August-October 2019. Maharashtra also experienced excessive rainfall/flood during July-August 2019. Cyclone *Fani* in May 2019 caused widespread devastation in Odisha, while disturbance occurred in Jammu and Kashmir in August 2019. The fresh loan of ₹32,639 crore was provided by banks to affected persons during 2019-20, while loan of ₹13,296 crore was restructured/rescheduled by banks during the same period (Table IV.4).

Table IV.4: Relief Measures for Natural Calamities

(Number in Lakh, Amount in ₹ Crore)

Year	Loans Restructured/ Rescheduled		Fresh Finance/ Relending Provided	
	No. of Accounts	Amount	No. of Accounts	Amount
1	2	3	4	5
2018-19	3.90	10,349	5.50	10,983
2019-20*	9.04	13,296	10.06	32,639

*: Provisional.
Source: State Level Bankers Committees.

IV. 16 The IWG had recommended that in order to curb the misutilisation of interest subsidy, banks should provide crop loans to farmers eligible for interest subvention only through KCC mode (Box IV.1). Accordingly, banks were advised (in

Box IV.1

Report of the Internal Working Group to Review Agricultural Credit and Implications for Agriculture Sector

Agriculture plays a significant role in the development of the Indian economy in terms of its contribution to the overall GDP and employment generation. There are several issues and challenges that impact the sector's performance such as access to credit, regional disparity in availability of credit and issues related to credit culture due to loan waivers. The Reserve Bank announced the setting up of an 'Internal Working Group to Review Agricultural Credit' in the Sixth Bi-Monthly Monetary Policy Statement for 2018-19 (February 7, 2019) to address these issues.

The Working Group's report is available on the Reserve Bank's website. Its recommendations include digitisation of land records; adoption of a technology portal for improving credit delivery; review of priority sector lending guidelines and the process of allocation of rural infrastructure development funds (RIDF) by NABARD to address regional disparity; and, setting up separate targets for working capital and term loan towards allied activities under ground level credit. The IWG also recommended steps to curb misutilisation of the interest subvention scheme; increased extension of KCC to farmers engaged in allied activities; bringing efficiencies in fixing scale of finance for crop cultivation, animal husbandry and fisheries; strengthening farmer producer organisations through augmenting the corpus of the government guarantee fund; setting up a database; instituting a credit guarantee scheme for the agriculture sector; and addressing the consumption needs of farming households.

Out of 29 recommendations, six recommendations pertaining to introduction of suitable MIS for monitoring purposes, short-term crop loans eligible for interest subvention through KCC mode, financial literacy awareness drives for small and marginal farmers, review of scale of finance for crop cultivation, FPO financing models and collaborations with agri-tech companies/start-ups so as to provide access to credit in an integrated, timely and efficient manner to the farmers have been implemented during 2019-20.

Source: RBI

consultation with the Ministry of Agriculture and Farmers' Welfare, GoI) that all loans eligible for interest subvention and prompt repayment incentive (PRI) should be converted to KCCs by March 31, 2020, which was extended to June 30, 2020 due to COVID-19 pandemic.

Bank Credit to the MSME Sector

IV. 17 Scheduled commercial banks are the major source of formal credit for MSMEs. Increasing credit flow to the MSMEs has been a policy priority for the Reserve Bank and Government. However, along with general credit deceleration, the growth of bank credit to MSMEs also decelerated to 2.34 per cent in 2019-20 (14.08 per cent a year ago) [Table IV.5].

Progress in Implementation of Recommendations of Expert Committee on MSMEs

IV. 18 The Expert Committee on MSMEs made 37 recommendations. The major ones requiring implementation by the Government of India are introduction of comprehensive and holistic MSME code, creation of government-sponsored Distressed Asset Fund and Fund of Funds (FoF) to support Venture Capital/Private Equity firms investing in the MSME sector, reporting of invoices to Information Utility set up under Insolvency and Bankruptcy Board of India (IBBI) for close monitoring of delayed payment cases and creation of permenant account number (PAN) as unique identifier for non-corporate entity. Further, the Committee had recommended for increasing credit guarantee cover to the extent of 75 per cent of the amount in default (50 per cent at present), and also increase in the limit for collateral-free loans to ₹20 lakh for lending to MSEs and SHGs from ₹10 lakh at present. Both these recommendations, under the Scheme of Credit Guarantee Fund for Micro Units (CGFMU), were notified on April 16, 2020. Furthermore, the integration of three Trade Receivables Discounting System (TReDS) platforms with Government e-Marketplace (GEM) portal was done since February 2020 by the Government. Other recommendations are being considered by the Government of India. Major recommendations pertaining to the Reserve Bank are use of priority sector shortfall funds to create a low cost lending window for state governments for infrastructure projects in clusters, introduction of additional weightage for MSMEs credit in the aspirational districts under priority sector lending, introduction of MSME Lending Innovation Sandbox, video-based KYC, revision of limit for regulatory retail to ₹7.5 crore from ₹5.0 crore, increasing the limit for non-collateralised MSE loans to ₹20 lakh from ₹10 lakh at present. The recommendation relating to video-based KYC has been implemented in January 2020. Other recommendations are under consideration.

Table IV.5: Bank Credit to MSMEs

(Number in Lakh, Amount in ₹ Crore)

Year	Micro Enterprises		Small Enterprises		Medium Enterprises		MSMEs	
	No. of Accounts	Amount Outstanding	No. of Accounts	Amount Outstanding	No. of Accounts	Amount Outstanding	No. of Accounts	Amount Outstanding
1	2	3	4	5	6	7	8	9
2018-19	255.60	6,59,102.4	23.03	6,38,030.8	2.60	1,97,419.2	320.68	15,10,650.5
2019-20*	352.90	7,16,962.3	23.26	6,33,624.9	3.52	1,95,487.0	379.69	15,46,074.2

***:** Provisional.
Source: Priority Sector Returns submitted by SCBs.

Interest Subvention Scheme for MSMEs - Modifications in Guidelines

IV. 19 On November 2, 2018, the Government of India had announced a 2 per cent interest subvention for MSMEs on fresh or incremental loans up to ₹100 lakh extended by the banks during 2018-19 (*viz.,* November 2, 2018 to March 31, 2019) and 2019-20. Accordingly, the Reserve Bank had issued guidelines to SCBs in February 2019, under which, all MSMEs having valid *Udyog Aadhaar* Number (UAN) and GST Number are eligible under the scheme. The Government of India has relaxed the guidelines for availing interest subvention, *viz.,* permitting trading activities without UAN, acceptance of claims in multiple lots, submission of statutory auditor certificate by June 30, 2020, settling claims based on internal/concurrent auditor certificate, dispensing requirement of UAN for units eligible for GST. The revised guidelines in this regard were issued by the Reserve Bank on February 5, 2020.

FINANCIAL INCLUSION

Assignment of Lead Bank Responsibility

IV. 20 The assignment of lead bank responsibility to a designated bank in every district is done by the Reserve Bank. As at end-June 2020, 12 public sector banks and one private sector bank were assigned lead bank responsibility in 726 districts across the country.

Penetration of Banking Services in Unbanked Rural Centres

IV. 21 The use of information technology (IT) and intermediaries in the form of Information and Communication Technology (ICT) based models including BCs, ATMs and mobile vans has increased outreach, scale and depth of banking services at an affordable cost. Payments Banks have also been included under the Lead Bank Scheme (LBS). As on September 30, 2019 (as reported by SLBCs across the country), 4,87,496 (99.2 per cent) out of 4,91,490 identified villages across the country with population less than 2,000, have been provided with banking services. Out of the 8,687 identified villages with population more than 5,000; 8,200 (94.4 per cent) have been provided with banking services.

Deepening of Digital Payments Ecosystem

IV. 22 With a view to expanding and deepening of digital payments ecosystem in the country, the Reserve Bank advised all SLBCs/ UTLBCs in October 2019 to identify one district in their respective States/UTs and allot the same to a member bank having a significant footprint. The allotted bank will endeavour to make the district 100 per cent digitally enabled within one year. SLBCs/ UTLBCs were advised in January 2020 to devise a time-bound roadmap for all branches of member banks (public sector banks, private sector banks, regional rural banks, small finance banks and payments banks) located in the identified district(s) for on-boarding merchants/traders/ businesses/ utility service providers to facilitate full digital transactions by October 2020.

Constitution of Sub-Committee of SLBC/UTLBC on Digital Payments

IV. 23 As per the recommendation of the High-Level Committee on Deepening of Digital Payments (CDDP) constituted by the Reserve Bank (Chair: Shri Nandan Nilekani) in January 2019, all SLBC/UTLBC convener banks were advised in August 2019 to set up a Sub-Committee on Digital Payments. It will endeavour to encourage digitisation of payments and enhance financial inclusion through digitisation in their respective States/UTs by undertaking initiatives such as: (i) mapping of financial institutions and streamlining of bank accounts for facilitating direct benefit transfer; (ii) identification of shadow areas and realignment of banking correspondents; (iii) dedicated financial literacy initiatives to promote digital payments; (iv) leveraging of reach and technical expertise of payments banks to cover the gap of provision of basic banking facilities; (v) monitoring of person to person (P2P) points, debit card floats, Point of Sale (PoS) positioning to enhance effectiveness of digital financial architecture; (vi) ensuring availability of adequate digital infrastructure at all wholesale grain *mandis* and village *haats* so as to introduce digital transactions for the benefit of the rural customers; and (vii) monitoring of Government to Merchant (G2M), Government to Person (G2P), Person to Government (P2G) and Merchant to Government (M2G) transactions. The Sub-Committee will assess levels of digitisation and find solutions to increase penetration.

Financial Inclusion Plan

IV. 24 The Financial Inclusion Plans (FIPs) provide a structured and planned approach to financial inclusion with a commitment at the highest echelons within banks in terms of Board-approved FIPs. The Plan captures self-set targets of the banks on parameters such as number of outlets (branches and BCs), Basic Savings Bank Deposit Accounts (BSBDAs) opened by bank branches and BCs, overdraft facilities availed in those accounts, transactions in KCC, General Credit Card (GCC) accounts and transactions through the BC-ICT channel. The progress made on these parameters is reported to the Reserve Bank by banks on a monthly basis (Table IV.6).

Table IV.6: Financial Inclusion Plan: A Progress Report (End-March)

Particulars	2010	2019	2020*
1	2	3	4
Banking Outlets in Villages- Branches	33,378	52,489	54,561
Banking Outlets in Villages>2000-BCs	8,390	1,30,687	1,49,106
Banking Outlets in Villages<2000-BCs	25,784	4,10,442	3,92,069
Total Banking Outlets in Villages – BCs	34,174	5,41,129	5,41,175
Banking Outlets in Villages – Other Modes	142	3,537	3,481
Banking Outlets in Villages –Total	**67,694**	**5,97,155**	**5,99,217**
Urban Locations Covered Through BCs	447	4,47,170	6,35,046
BSBDA - Through Branches (No. in Lakh)	600	2,547	2,616
BSBDA - Through Branches (Amt. in Crore)	4,400	87,765	95,831
BSBDA - Through BCs (No. in Lakh)	130	3,195	3,388
BSBDA - Through BCs (Amt. in Crore)	1,100	53,195	72,581
BSBDA - Total (No. in Lakh)	**735**	**5,742**	**6,004**
BSBDA - Total (Amt. in Crore)	**5,500**	**1,40,960**	**1,68,412**
OD Facility Availed in BSBDAs (No. in Lakh)	2	59	64
OD Facility Availed in BSBDAs (Amt. in Crore)	10	443	529
KCC - Total (No. in Lakh)	240	491	475
KCC - Total (Amt. in Crore)	1,24,000	6,68,044	6,39,069
GCC - Total (No. in Lakh)	10	120	202
GCC - Total (Amt. in Crore)	3,500	1,74,514	1,94,048
ICT-A/Cs-BC-Total Transactions (No. in Lakh) #	270	21,019	32,318
ICT-A/Cs-BC-Total Transactions (Amt. in Crore) #	700	5,91,347	8,70,643

* Provisional. #: Transactions during the year.
Source: FIP returns submitted by banks.

Monitoring of Progress of Financial Inclusion (MPFI)

IV. 25 In order to align the Reserve Bank's policies with the vision outlined in the National Strategy for Financial Inclusion (NSFI) document for the period 2019-24, the FIP template has been revised and rechristened as "Monitoring Progress of Financial Inclusion (MPFI)" to capture more granular data and qualitative aspects on the ground level. Data under MPFI will be automated through Automated Data Extraction Project (ADEPT) of the Reserve Bank.

Recent Initiatives Undertaken for the BC Model

IV. 26 With a view to strengthening the BC framework and deepening financial inclusion, a framework for graded certification for BCs was issued to Indian Banks' Association (IBA) for further implementation. Accordingly, domestic SCBs, including SFBs, have been advised to complete the BC certification process being conducted by Indian Institute of Banking and Finance (IIBF) in a time-bound manner by December 31, 2020. Payment banks have been advised to complete the BC certification process on a staggered timeline, based on the number of BCs. As reported by IIBF, during the year 2019-20, more than ninety-five thousand BCs have been certified.

Train the Trainers Programme for Capacity Building of Business Correspondents

IV. 27 A two-tier Train the Trainers (ToT) programme titled 'Skill Up-gradation for Performance of Resources – Business Correspondents (SUPER-B)' for capacity building and skill upgradation of the BCs was designed to deliver financial inclusion effectively at the grass-root level. In the first tier held in three phases, trainers, officials/faculties of the SCBs and Lead District Officers (LDOs) from the regional offices of the Reserve Bank were trained. Banks have been advised to complete the tier-II of the programme, which entails training of rural branch managers who, in turn, will handhold and sensitise the BCs attached to their branches. As on July 31, 2020, nearly 39,000 rural branch managers were trained in the second leg of the programme.

FINANCIAL LITERACY

IV. 28 The mid-line survey[1] forming part of the impact assessment of the pilot project on CFL was completed during 2019-20. The observations/ findings of the mid-line survey are as under:

a. The mid-line survey suggests broader reach of the CFL programme and more substantive engagement of respondents;

b. "Active" participation, *viz.,* face-to-face meetings or trainings, yields better results both for financial literacy and for increasing use and uptake of products, notably savings bank accounts; and

c. The willingness to use the grievance redressal mechanisms and faith that these grievances will be quickly and satisfactorily resolved show marginal improvements, and is evident more specifically with those who have "active" exposure to the awareness programmes.

IV. 29 The survey has also suggested that financial literacy can be improved by broad-based exposure and leveraging network-based transmission of such information and knowledge. However, encouraging product use and uptake of financial products and services, needs more focused, targeted and sustained efforts with

[1] Mid-line survey means data collected midway to estimate the impact of phased randomisation.

handholding for greater impact.

Activities Conducted by Financial Literacy Centres (FLCs)

IV. 30 As at the end of March 2020, 1,467 Financial Literacy Centres (FLCs) were operational in the country. During 2019-20, 1,48,444 financial literacy related activities were conducted by the FLCs, up from 1,45,427 activities undertaken during the previous year.

Observing Financial Literacy Week 2020

IV. 31 The Financial Literacy Week (FLW) is an initiative of the Reserve Bank to promote awareness among masses/various sections of the population on key topics through a focused campaign every year. During 2019-20, FLW was observed during February 10-14, 2020 on the theme of MSMEs. Content in the form of posters/ leaflets and audio visuals on aspects relating to formalisation, collateral free loans, discounting of receivables, rehabilitation of stressed units and timely repayment were prepared, in order to build awareness and disseminate financial literacy messages on the MSME sector. Banks were advised to display the posters and content in their rural bank branches, FLCs, ATMs and websites. The Reserve Bank also undertook a centralised mass media campaign during February 2020 to disseminate essential financial awareness messages to MSME entrepreneurs.

The Second National Strategy for Financial Education (NSFE: 2020-25)

IV. 32 The National Strategy for Financial Education (NSFE) prepared under the aegis of the Technical Group on Financial Inclusion and Financial Literacy (TGFIFL) [Chair: Deputy Governor in charge of FIDD, RBI] with members from the Government of India and the Financial Sector Regulators (RBI, SEBI, IRDAI and PFRDA) was approved by the Sub-Committee of the Financial Stability and Development Council (FSDC-SC) chaired by Governor, RBI. The NSFE for period 2020-25 intends to realise the vision of a financially aware and empowered India by helping the people of the country to develop adequate knowledge, skills, attitudes and behaviour which are needed to manage their money better and to plan for the future. The strategy recommends adoption of a multi-stakeholder approach to achieve financial well-being of Indians. The recommendations laid down in the strategy will be implemented by the National Centre for Financial Education (NCFE) in consultation with various stakeholders and periodically monitored by the TGFIFL under the FSDC-SC during the period of the strategy (2020-25).

Impact of COVID-19 on Credit Delivery and Financial Inclusion

IV. 33 The challenges that beset progress of financial inclusion due to the outbreak of COVID-19 are unprecedented and necessitate a multipronged approach from all stakeholders concerned. The impact of the pandemic brought to the fore the crucial role played by the alternate delivery channel, particularly BC model, catering to the needs of vulnerable section of the society. Business Correspondents have been extending banking services to the last mile and with announcement of disbursing cash benefits to beneficiaries by Government of India under *Pradhan Mantri Garib Kalyan Yojana*, operations at BC points, particularly cash withdrawals have witnessed significant surge. Several steps were taken by banks to facilitate delivery of financial services at BC outlets by way of enhancing overdraft limit in settlement accounts, providing financial support to BCs for meeting cost towards hygiene, transportation, insurance cover and also regularly educating BCs on the precautionary guidelines.

IV. 34 In order to safeguard the interest of farmers, interest subvention and prompt repayment incentive for short-term loans have been continued to the extended period of moratorium. To incentivise banks, the funds availed by banks under the TLTRO 2.0 scheme which are deployed in specified securities issued by small and mid-size NBFCs and MFIs were exempted from ANBC for the purpose of determining priority sector targets/sub-targets. Similarly, under the special liquidity facility for mutual funds (SLF-MFs), the face value of securities acquired under the SLF-MF and kept under HTM category was allowed to be deducted while computing the ANBC.

3. Agenda for 2020-21

IV. 35 For the year, the Department would undertake the following measures towards enhancing credit delivery and financial inclusion:

- Review of Train the Trainer (TOT) programme for capacity building of BCs and Business Correspondent Registry (*Utkarsh)*;
- Develop on-line financial literacy modules for specific target audience (*Utkarsh)*;
- Complete the end-line impact assessment survey of the pilot project on CFL (*Utkarsh)*;
- Monitor implementation of the recommendations of the "Expert Committee on MSMEs" and "Internal Working Group to Review Agricultural Credit" (*Utkarsh)*;
- Monitor implementation of the National Strategy for Financial Education (NSFE); and
- Review of guidelines of priority sector lending.

4. Conclusion

IV. 36 In sum, the recommendations of the Expert Committee on MSMEs and the Internal Working Group on agriculture credit had set the agenda for the year, to undertake various measures to improve inclusiveness and also enhance flow of credit to these sectors. Initiatives, *viz.*, BC Registry, BC Certification and Train the Trainers would strengthen the BC model in the long-term. Further, the implementation of the strategy adopted under the NSFI document would, *inter alia*, strengthen financial literacy, expand and deepen digital payment system and improve MIS to monitor banks' progress in the financial inclusion sphere. Going ahead, while the focus will be to implement the remaining recommendations of the above-mentioned reports, a comprehensive review of the extant guidelines on priority sector lending will also be taken up in the ensuing year.

V FINANCIAL MARKETS AND FOREIGN EXCHANGE MANAGEMENT

The Reserve Bank developed and strengthened various segments of the financial markets by broadening participation, easing access and transaction norms, improving financial market infrastructure and pursuing rigorous surveillance to maintain market integrity. Management of liquidity conditions, accordingly, became a dominant objective during the year. The Reserve Bank used several unconventional instruments such as forex swaps, long-term repo, targeted long-term repo, short-term forex swaps and variable rate reverse repo. Several measures were undertaken during the year to streamline regulations relating to the foreign exchange markets to align them with the current business and economic environment.

V.1 During 2019-20, the Reserve Bank undertook several measures to develop the financial markets further in terms of broadening the participation base in various segments of the markets, easing access and transaction norms, expanding the range of financial products, simplifying procedures and improving financial market infrastructure, while maintaining rigorous surveillance to ensure market integrity. The Reserve Bank's liquidity management operations, in rupees and forex, were stepped up and unconventional instruments were also deployed to ensure adequate liquidity, the normal functioning of markets and the stability of the financial system in the face of the dislocation caused by COVID-19.

V.2 Against this backdrop, section 2 covers the measures undertaken to develop the financial markets. Section 3 presents liquidity management and foreign exchange market operations. Section 4 covers various initiatives undertaken to facilitate trade and payments while promoting orderly development of the foreign exchange market. The agenda for 2020-21 has been covered in each section. The chapter ends with conclusion.

2. FINANCIAL MARKETS REGULATION DEPARTMENT (FMRD)

V.3 The FMRD is entrusted with the development, regulation and surveillance of money, government securities (G-secs), foreign exchange and related derivatives markets. The Department undertook several measures in pursuance of this mandate to fulfil the objectives set for 2019-20.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

V.4 The Department had set out the following goals for 2019-20:

- To develop an IT-enabled Integrated Market Surveillance System (IMSS) for augmenting the surveillance capacities (*Utkarsh*) [Para V.5];
- To implement international settlement of central government securities through International Central Securities Depositories (ICSDs) to permit non-resident clients of ICSDs to transact in central government securities offshore (Para V.6); and

- Review and implementation of various financial market timings as recommended by the Internal Group set up in August 2018 (Para V.7).

Implementation Status of Goals

V.5 The Department is in the process of implementation of the Integrated Market Surveillance System. Expression of Interest (EoI) have been obtained from the interested vendors. Based on the evaluation of EoI, the Department shall be issuing the Request for Proposal (RFP) by end of August 2020.

V.6 As regards the implementation of international settlement of Indian G-sec through ICSDs, the draft scheme has been finalised in consultation with the government. There are, however, certain tax issues which have been referred to the government. Meanwhile, the operational details of the ICSD scheme are being chalked out, and will be finalised shortly.

V.7 As recommended by the Internal Group on market timings and the feedback received from the market participants, the revised market timings for various products have been finalised, and shall be implemented, once COVID-19 related dislocations stabilise.

Easing Access, and Broadening Participation in the Foreign Exchange Market

V.8 For the domestic foreign exchange market, the initiatives undertaken during the year focused on incentivising access, bridging the segmentation between onshore and offshore trading activity, and simplifying the hedging of foreign exchange risks, while safeguarding the interests of less sophisticated participants (Box V.1)

Box V.1
Foreign Exchange Market: Improving Access, Transparency and Pricing

During 2019-20, major initiatives were undertaken for improving access and pricing outcomes, especially for retail users in the foreign exchange market.

Simplified Regulatory Framework

The Regulation[1] and Direction[2] governing the foreign exchange market have been revised comprehensively. The revised Direction sets out a unified set of rules for accessing the foreign exchange markets for both residents and non-residents. The rules have been made simpler and principle-based.

Ease of Access

The simplified regulatory framework, *inter alia,* allows users to enter into deliverable foreign exchange derivative contracts equivalent of US$ 10 million and US$ 100 million in the over-the-counter (OTC) and exchange-traded market, respectively, without the need to establish the underlying exposure. Furthermore, Authorised Dealer (AD) banks have been permitted to offer quotes to their customers, resident and non-resident, at all times, including beyond usual market hours (9 AM - 5 PM).

Efficient Hedging

The new framework also facilitates booking of anticipated exposures and enables participants to freely cancel and rebook transactions. Gains, if any, on hedging of anticipated transactions will be passed on to the client only when the cash flows are sighted.

Removing Segmentation between Onshore and Offshore

In order to remove segmentation between the onshore and offshore markets and improve efficiency of price discovery, banks in India which operate International Financial Services Centre (IFSC) International Banking Units (IBUs) were permitted to offer non-deliverable derivative contracts (NDDCs) involving the Rupee, or otherwise, to persons not resident in India.

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[1] Foreign Exchange Management (Foreign Exchange Derivative Contracts) Regulation, 2000 as amended from time to time.

[2] Master Direction - Risk Management and Inter-bank Dealings, as amended from time to time.

Transparency in Trade Information

In order to enhance the transparency in transaction information along with its effective dissemination, all foreign exchange NDDCs (involving Rupee or otherwise) undertaken by banks in India were directed to be reported to CCIL's reporting platform with effect from June 1, 2020. Similarly, IBUs were directed to report all OTC foreign exchange, interest rate and credit derivative transactions – both inter-bank and client transactions – undertaken by them to CCIL's reporting platform with effect from June 1, 2020.

Consumer Protection

A new User Classification Framework has been introduced under which users are classified either as retail or non-retail user. While AD banks are permitted to offer any plain vanilla or structured derivative product to non-retail users (which include, *inter alia,* regulated financial institutions, corporates with turnover of ₹500 crore and above and non-residents other than individuals), they are permitted to offer only forwards, purchase of European call and put options, purchase of call and put spreads and swaps to retail users. The measure is aimed at protecting the interests of the unsophisticated user while at the same time promoting product innovation for larger market participants/more sophisticated entities.

Transparent and Fair Pricing

In order to ensure fair pricing and transparency in price discovery for the retail users, the revised Directions stipulate that all transactions with retail users will be executed by AD banks at the ongoing inter-bank/market rates. The time of execution will also be provided to the user. Applicable fees/ commissions/service charges related to the contract will be charged/indicated separately and shall not be part of the price.

Electronic Trading Platform

At the behest of the Reserve Bank, the CCIL has developed an electronic trading platform for retail segment, called FX-Retail. The platform commenced live operations on August 5, 2019. After registering and obtaining limits from their respective ADs, customers can access FX-Retail through internet and place orders which are anonymously matched with orders of other customers or ADs on price-time priority. The platform provides easy and flexible terms of registering, accessing the market, assessing market depth, placing orders, obtaining deal information and getting reports. Charges levied by the ADs are transparently displayed on the portal. Another important feature of this platform is aggregation wherein once the aggregated pending unmatched orders attain the inter-bank segment lot size, they are transferred to the FX-Clear platform, the inter-bank platform of CCIL, thereby ensuring sufficient liquidity. FX-Retail provides cash/tom/spot transactions in USD/INR pair. Forwards and other major currency pairs are to be introduced soon. So far, 1,895 customers have registered on the platform (as on June 30, 2020).

Source: RBI.

Non-Resident Investment in Domestic Debt Instruments

V.9 A separate route, *viz.*, Fully Accessible Route (FAR) for investment by non-residents in securities issued by the Government of India was introduced on March 30, 2020, in line with an announcement in the Union Budget 2020-21[3]. This will be the third route, in addition to investment under the medium-term framework and the voluntary retention route (VRR) for investment by non-residents in the debt segment. A list of five existing securities have been notified as eligible for investment under the FAR. In addition, all new issuances of government securities of 5-year, 10-year and 30-year tenors from 2020-21 will be eligible for investment under the FAR. While the tenors of new securities to be designated as 'specified securities' may be added/amended from time to time, a security, once designated as eligible for investment under the FAR, shall remain eligible till maturity.

V.10 Several measures were undertaken to further liberalise/facilitate the Foreign Portfolio Investors' (FPI) investments in debt instruments:

[3] The Union Budget 2020-21 announced that certain specified categories of central government securities would be opened fully for non-resident investors without any restrictions, apart from being available to domestic investors as well.

(a) the limit for investment by an FPI in short-term (up to one year) corporate bonds and government securities, including treasury bills and State Development Loans (SDLs), was revised on January 23, 2020, to 30 per cent from the existing 20 per cent of the total investment by that FPI in the respective category; (b) debt instruments issued by Asset Reconstruction Companies (ARC) or by entities under the Corporate Insolvency Resolution Process under the Insolvency and Bankruptcy Code, 2016 were exempted from the short-term investment limit; and (c) the limit for investment by FPIs in corporate bonds was raised to 15 per cent of outstanding stock with effect from April 1, 2020 (from 9 per cent), in line with an announcement in the Union Budget 2020-21.

V.11 The investment cap under the VRR was increased to ₹1,50,000 crore from the existing ₹75,000 crore on January 23, 2020 in order to encourage long-term portfolio investment in the Indian debt markets. FPIs, which were allotted investment limits under VRR, were permitted to transfer their investments made under the General Investment Limit to the VRR. Under the VRR scheme, FPIs were also allowed to invest in Exchange-Traded Funds (ETF) that invest only in debt instruments. Units of debt ETF were allowed as eligible securities for repo transactions on November 28, 2019 with a view to expanding the eligible collateral base in repo market and also to improve liquidity. In view of the disruptions caused by COVID-19, FPIs that were allotted limits under VRR between January 24, 2020 (the date of reopening of allotment of investment limits) and April 30, 2020, have been given an additional time of three months to invest 75 per cent of their Committed Portfolio Size (CPS). The retention period for the investments will be reset accordingly.

Improving Financial Market Infrastructure

V.12 A regulatory framework for financial benchmark administrators was introduced in June 2019 to improve the governance of the benchmark-setting processes in financial markets regulated by the Reserve Bank. Six benchmarks administered by Financial Benchmarks India Pvt. Ltd. (FBIL) were notified by the Reserve Bank as 'significant benchmarks' on January 1, 2020.

V.13 The Reserve Bank mandated the use of Legal Entity Identifier (LEI) for participation in non-derivative markets in November 2018. In the context of the difficulties expressed by market participants due to COVID-19, and with a view to enabling smoother implementation of the LEI system in non-derivative markets, the timeline for implementation of LEI was extended from March 31 till September 30, 2020.

Agenda for 2020-21

V.14 For the year 2020-21, the Department proposes to achieve the following goals:

- As announced in the Reserve Bank's Statement on Developmental and Regulatory Policies of February 6, 2020, and in line with G-20 recommendations, a framework for exchange of initial and variation margin for non-centrally cleared derivative contracts will be put in place. Such exchange of margin shall be facilitated by the adoption of the legislation for bilateral netting of qualified financial contracts as announced in the Union Budget 2020-21 (*Utkarsh*);
- Directions on Credit Default Swaps (CDS) will be reviewed with a view to broadening the base of CDS writers and simplifying operational guidelines so as to strengthen

the corporate bond market in the light of the proposed legislation on bilateral netting of qualified financial contracts (*Utkarsh*); and

- Review the Directions on Interest Rate Derivatives with a view to easing access, removing segmentation between onshore and offshore markets and improving transparency.

3. FINANCIAL MARKETS OPERATIONS DEPARTMENT (FMOD)

V.15 The Financial Markets Operations Department (FMOD) is entrusted with two primary responsibilities: first, conduct of liquidity management operations for maintaining an appropriate level of liquidity in the financial system for monetary policy transmission; and second, ensuring orderly conditions in the forex market through operations in the spot, forward and futures segments.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

V.16 During the year, the Department had set out the following goals:

- To monitor evolving liquidity conditions closely and to modulate operations to ensure alignment of the WACR with the policy repo rate (Para V.17);
- To conduct foreign exchange operations in an effective manner to curb undue volatility in the exchange rate (Para V.23); and
- To launch a "Public Register" in collaboration with India Foreign Exchange Committee as part of the adoption of principles of "FX Global Code" in the domestic forex market (*Utkarsh*) [Para V.24].

Implementation Status of Goals

Money Market and Liquidity Management

V.17 As system liquidity shifted from deficit during April-May 2019 to surplus from June 2019, the Reserve Bank actively managed evolving liquidity conditions through use of fine-tuning instruments under the Liquidity Adjustment Facility (LAF), Open Market Operations (OMOs) and variable rate reverse repo operations of both shorter and longer tenors.

V.18 Under the new liquidity management framework announced on February 6, 2020, the Reserve Bank deployed several new instruments tailored to the India-specific situations and drawing from the international experience (Box V.2).

V.19 On the basis of an assessment of the existing liquidity conditions, the daily fixed rate repo and four 14-day variable rate repos, being conducted earlier every fortnight, were withdrawn with effect from February 14, 2020. The daily MSF and fixed rate reverse repo were retained. Furthermore, as a part of the revised liquidity management framework, two new instruments, Long-Term Variable Rate Repo (LTR) and Long-Term Variable Rate Reverse Repo (LTRR), with tenors of more than 14 days, were also announced.

V.20 In view of the exceptionally high volatility in domestic financial markets which brought in phases of liquidity stress and to provide comfort to the banking system; on March 27, 2020, the borrowing limit of scheduled banks under the Marginal Standing Facility (MSF) scheme, by dipping into the prescribed Statutory Liquidity Ratio (SLR), was increased from 2 per cent to 3 per cent of their Net Demand and Time Liabilities (NDTL) outstanding at the end of the second preceding fortnight. This relaxation which was available up to June 30, 2020 was extended till September 30, 2020 on June 26, 2020.

Box V.2:
Unconventional Tools of Liquidity Management: The Recent RBI Experience

In the post global financial crisis period, several central banks introduced new policy instruments and made changes to their monetary policy frameworks. Often labelled as "unconventional monetary policy tools" (UMPTs), four broad categories are discernible in the cross-country experience: negative interest rate policy; expanded lending operations; asset purchase programmes; and forward guidance (BIS, 2019).

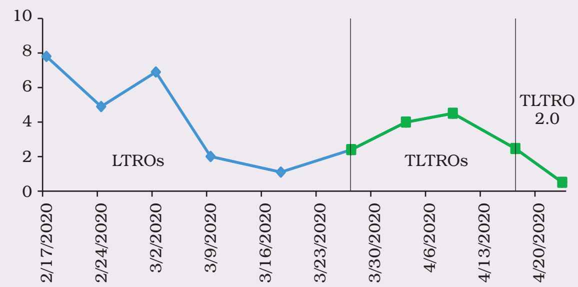
Another important element of unconventional monetary policy is provision of liquidity support to the banks on a large scale. For instance, the ECB shifted since October 2008 towards Long-term Refinancing Operations, which are mainly executed on a monthly basis for maturities ranging from six months to twelve months (Pattipeilohy, *et al.* 2013).

The circumstances under which central banks resort to unconventional monetary policy and liquidity management is a key issue. It is argued that when there is little or no room for a reduction in nominal interest rate/policy rate (zero lower bound), unconventional measures are to be taken in order to continue the supply of liquidity in the financial and banking system and various other sectors of the economy (IMF, 2013).

In India, the Reserve Bank undertook a bouquet of unconventional liquidity management measures in 2020 to ensure normal flow of finance into the economy, and enable better transmission of monetary policy impulses in the wake of the unprecedented situation created by the COVID-19 pandemic:

- From February 17, 2020 and up to March 18, 2020, the Reserve Bank conducted long-term repo operations (LTROs) of one-year and three-year tenors and allotted a total amount of ₹1,25,117 crore at the policy repo rate.
- The Reserve Bank introduced another unconventional liquidity management tool - Targeted Long-Term Repo Operations (TLTROs) under which liquidity availed by banks was to be deployed in investment grade corporate bonds, commercial paper and non-convertible debentures over and above the outstanding level of their investments in these bonds as on March 27, 2020. An amount of ₹1,00,050 crore was taken by the banks under TLTRO.
- On April 17, 2020, the Reserve Bank introduced Targeted Long-Term Repo Operations (TLTRO) 2.0 at the policy repo rate for tenors up to three years in order to provide liquidity to small and mid-sized corporates, non-bank financial companies (NBFCs) and microfinance institutions (MFIs). An amount of ₹12,850 crore was taken by the banks under TLTRO 2.0.
- In order to deal with the liquidity strains on mutual funds (MFs), and potential contagion effects therefrom, the Reserve Bank introduced a special liquidity facility (SLF-MF) of ₹50,000 crore targeted towards MFs for 90 days tenor at the fixed repo rate. Out of the total amount of ₹50,000 crore envisaged, a total amount of ₹2,430 crore was availed under SLF-MF.
- The LTRO received an overwhelming response, with average bid-cover ratio of 4.5 for the five auctions. Auctions under the TLTRO also received a positive response from market participants, with average bid-cover ratio of 3.3 over the first four auctions. However, the first tranche of TLTRO 2.0 received lower than anticipated response at just 51 per cent of the notified amount of ₹25,000 crore that was auctioned on April 23, 2020 (Chart 1). The total amount injected through LTRO, TLTRO and TLTRO 2.0 stood at ₹2,38,017 crore.

Chart 1: LTRO and TLTRO : Bid-Cover Ratio



Source: RBI.

- Public sector banks, followed by private sector banks, were the major groups of participants in the LTRO auctions, altogether accounting for an average share of 89 per cent of the total allotted amount. Barring the last auction of March 18, 2020, foreign banks and cooperative banks also had a fair share in the total allotted amount of LTRO (Chart 2). In case of TLTROs, the average percentage share of public sector banks and private sector banks hovered around 99 per cent, with the former remaining the major group of borrowers (Chart 3). The Reserve Bank has thus used an armoury of unconventional tools to manage liquidity in the banking and financial system.

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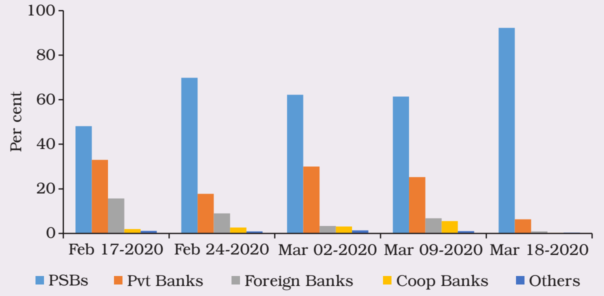
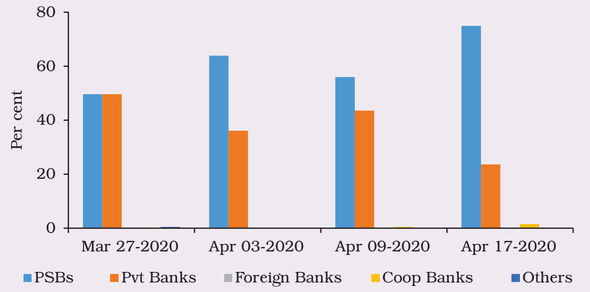
Chart 2: Share of Participants in LTROs



Source: RBI staff calculations.

Chart 3: Share of Participants in TLTROs



Source: RBI staff calculations.

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V.21 With regard to durable liquidity, the frequency and quantum of OMOs were increased during H2:2019-20. For the year as a whole (April-March 2019-20), the Reserve Bank conducted OMO purchases (including NDS-OM) to the tune of ₹1,45,690 crore, and OMO sales (including NDS-OM) to the tune of ₹32,121 crore, of which, ₹92,385 crore of OMO purchases and ₹32,111 crore of OMO sales were conducted in H2 alone. This included five simultaneous purchase of long-term and sale of short-term government securities under OMOs (December 23 and 30, 2019, January 6 and 23, 2020, and April 27, 2020). During April-May 2020, OMO purchases and sales (including NDS-OM) to the tune of ₹1,30,474 crore and ₹10,000 crore were conducted respectively. Subsequently, on July 2, 2020, the Reserve Bank conducted another simultaneous purchase of long-term and sale of short-term government securities under OMOs. Reflecting these operations, the 10-year G-sec generic yield softened cumulatively by 15 basis points (bps) between December 19, 2019 and January 31, 2020.

V.22 FX swap auctions were actively used as an instrument to manage liquidity in the foreign exchange market in 2019-20. The first USD/INR sell/buy swap auction, amounting USD 2 billion for a period of 6 months, was conducted on March 16, 2020. The Reserve Bank also conducted another 6-month USD/INR sell/buy swap auction of amount USD 2 billion on March 23, 2020 to provide liquidity in the foreign exchange market. Further, in May 2020, the Reserve Bank decided to extend a line of credit of ₹15,000 crore to the Export Import (EXIM) Bank for a period of 90 days from the date of availment with rollover up to a maximum period of one year so as to enable it to avail a US dollar swap facility to meet its foreign exchange requirements in the backdrop of the COVID-19 pandemic.

Foreign Exchange Market

V.23 Orderly conditions were maintained in the forex market during the year through operations in the OTC and Exchange Traded Currency Derivatives (ETCD) segments.

V.24 As part of the Reserve Bank's commitment for adoption of the principles of 'FX Global Code' in the domestic forex market, the Department [in coordination with India Foreign Exchange Committee (IFXC)] launched a "Public Register", hosted on the website of the Foreign Exchange Dealers Association of India (FEDAI). It provides the Statement of Commitment of all AD Category-I banks operating in the Indian forex market as well as corporates demonstrating their recognition of, and commitment to adopt the good practices set forth in the FX Global Code. The register is already linked with the global public register hosted by Global Foreign Exchange Committee (GFXC). The "Public Register" acts as a repository of information to facilitate market participants to publicise their Statements of Commitment to the FX Global Code and also to assist interested parties in identifying market participants. The Reserve Bank has hosted its own Statement of Commitment in the Central Bank Public Registry maintained by the Bank for International Settlements (BIS).

Agenda for 2020-21

V.25 During the year, the Department plans to focus on the following:

- To carry out liquidity management operations effectively, including through additional liquidity management tools, in line with the stance of monetary policy (*Utkarsh)*;
- To monitor evolving liquidity conditions closely and to modulate operations to ensure alignment of the WACR with the policy repo rate;
- To conduct foreign exchange operations in an effective manner to curb undue volatility in the exchange rate; and
- To continue policy-oriented research on financial markets.

4. FOREIGN EXCHANGE DEPARTMENT (FED)

V.26 During the year, the Department engaged in carrying forward rationalisation of regulations with a view to moving towards a more principles-based regulatory framework. The Department also undertook several steps for enhancing ease of doing business, including aligning the regulatory framework to respond to needs of the current business and economic environment, in order to facilitate external trade and payments.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

V.27 The Department had set out specific deliverables for 2019-20 in pursuit of its mission:

- Creation of a detailed framework for enhancing FEMA awareness (*Utkarsh*) [Para V.28];
- Developing internal frameworks for granting approvals (*Utkarsh*) [Para V.29];
- Building a fee structure for minor violations of FEMA (*Utkarsh*) [Para V.30];
- Review and rationalisation of entry norms for being licensed as Full-Fledged Money Changers (FFMCs) [Para V.31];
- Rationalisation of guidelines relating to merchanting trade transactions (Para V.36);
- Enhancing the scope of Special Non-Resident Rupee (SNRR) Account (Para V.39);

- Relaxing the end-use of external commercial borrowings (ECBs) [Para V.40]; and
- Notification of Non-Debt Rules under the FEMA (Para V.42).

Implementation Status of Goals

V.28 Alongside efforts to simplify regulations, regional offices (ROs) of the Foreign Exchange Department have also been active in disseminating information by organising various conferences, seminars, exhibitions and financial literacy programmes for different target groups. ROs have also been an important channel of securing constructive feedback from the actual users of foreign exchange, *viz.*, Authorised Persons (APs) and Exporters/Importers. With the objective of streamlining various FEMA related events, a detailed framework was issued to the ROs for conducting such events.

V.29 The Department developed internal frameworks for granting approvals in areas such as Liberalised Remittance Scheme (LRS) and Overseas Direct Investment (ODI)-Foreign Direct Investment (FDI) structures.

V.30 Late Submission Fee (LSF) was introduced, in lieu of compounding process, for certain reporting violations under FEMA in respect of ECBs. The fees can be collected and remitted by Authorised Dealers (ADs) for regularising such violations.

Authorised Persons and Remittances

V.31 The guidelines on money changing and merchanting activities were rationalised. Definitions of categories of authorised persons licensed by the Reserve Bank under FEMA were incorporated in the guidelines. The prescription on age of directors of FFMCs was aligned with the provisions of the Companies Act, 2013. Companies registered under the Registration of Companies (Sikkim) Act, 1961 were made eligible to apply for FFMC license.

V.32 A comprehensive review was undertaken for simplification of reporting requirements of regulated entities and enhancing the role of APs, with a view to reducing transaction costs. An online package for FFMCs/upgraded FFMCs (AD Category II) relating to licensing, renewal, reporting, cancellation and inspection is being developed by the Reserve Bank Information Technology Pvt. Ltd. (ReBIT) which will rationalise reporting and reduce manual handling of other work processes.

Trade Guidelines - Liberalisation and Rationalisation

V.33 An auto-emailing feature was developed in the Import Data Processing and Monitoring System (IDPMS) and the Export Data Processing and Monitoring System (EDPMS), with a view to enabling self-monitoring by importer/exporter of import/export transactions pending reconciliation. System-generated e-mails are sent to all importers/exporters at regular intervals, giving details of their shipping bills, bills of entry and outward/inward remittances remaining outstanding beyond prescribed due dates.

V.34 With effect from November 22, 2019, the guidelines on re-export of unsold rough diamonds from Special Notified Zone of Customs were modified. In terms of revised instructions, the Bill of Entry shall be filed by the buyer for the lot(s) of imported rough diamonds meant to be traded by diamond mining companies. These are to be cleared at the centre(s), which are duly notified under Customs Act, 1962/specified by the Central Board of Indirect Taxes & Customs, Department of Revenue, Ministry of Finance, Government of India. AD banks may permit such import payments after being satisfied with the *bonafides* of the transaction. AD banks are also required to maintain a record of such transactions.

V.35 In order to smoothen the process of obtaining permission of the Reserve Bank for re-exporting of leased aircraft/helicopter and/ or engines/auxiliary power units (APUs) re-possessed by the overseas lessor, they were exempted from submission of Export Declaration Form (EDF).

V.36 In January 2020, a comprehensive review of the Merchanting Trade Transactions (MTT) was undertaken and revised guidelines were issued. The key highlights are: (i) allowing transformation of 'state of goods'; (ii) online verification of documents on the website of the International Maritime Bureau or respective airlines; (iii) write-off of export leg receivables in certain circumstances, which are beyond the control of merchanting trader; (iv) payment of agency commission under certain conditions, which might necessitate payment of agency commission after the MTT has been initiated; (v) enhancement in limit of the import advance without Stand-by Letter of Credit (SBLC)/bank guarantee to USD 5 lakh; (vi) specifically prohibiting third party payments; (vii) prohibiting issue of Letters of Undertaking (LoU)/ Letters of Credit (LoC) for supplier's/ buyer's credit; (viii) earmarking the export advance received for the purpose of import leg payment; and (ix) clarification on parking of export proceeds in exchange earners' foreign currency (EEFC) account.

V.37 The Foreign Exchange Management (Manner of Receipt and Payment) Regulations, 2016 were amended in March 2020 to include Japanese Yen as a currency of settlement under Asian Clearing Union (ACU) mechanism.

V.38 In view of the outbreak of COVID-19, the period of realisation and repatriation to India of the amount representing the full export value of goods or software or services exported up to July 31, 2020 was increased from nine months to fifteen months from the date of export. Similarly, the time period for completion of remittances against normal imports (*i.e.,* excluding import of gold/diamonds and precious stones/jewellery) was extended from six months to twelve months from the date of shipment for such imports made on or before July 31, 2020 (except in cases where amounts are withheld towards guarantee of performance).

Non-Resident Rupee Account - A Review of Policy

V.39 The scope of Special Non-Resident Rupee (SNRR) Account was enhanced by permitting persons resident outside India to open non-interest-bearing SNRR accounts for transactions in INR pertaining to ECBs, trade/trade credits and business-related transactions by International Financial Service Centre (IFSC) Units at Gujarat International Finance Tec (GIFT) City. Restriction on the tenure of SNRR Account - 7 years at present - was also removed for the aforesaid purposes.

External Commercial Borrowings Framework - Policy and System Changes

V.40 The Reserve Bank, in consultation with the Government of India, relaxed the end-use restrictions relating to ECBs for working capital requirements, general corporate purposes and repayment of rupee loans. Eligible borrowers are now allowed to raise ECBs for the afore-mentioned purposes from recognised lenders, except foreign branches/overseas subsidiaries of Indian banks, subject to maintaining the defined average maturity period. Relaxations also include permitting eligible borrowers to avail ECBs for repayment/assignment of rupee loans, classified as SMA-2 or NPA, subject to meeting certain conditions.

V.41 Work on implementing a Software Platform for External Commercial Borrowings and Trade Credits Reporting and Approval (SPECTRA) encompassing the whole lifecycle from receipt of application to communication of decision and reporting of transactions is underway with NSEIT Limited being awarded the work order in November 2019.

Notification of Non-Debt Instrument Rules

V.42 Amendments were made to the FEMA, 1999 through the Finance Act, 2015. In terms of the amended provisions of the Act, the Government of India has been given the powers to frame rules for any class or classes of capital account transactions not involving debt instruments, while the powers to regulate capital account transactions involving debt instruments will continue to be with the Reserve Bank. Furthermore, the government will make rules which lay down the instruments to be determined as debt instruments. Central government notified the amendments *vide* notification dated October 15, 2019. Non-Debt Instrument (NDI) rules were notified with effect from October 17, 2019.

FEMA Related Events – Dissemination of Information and Feedback

V.43 The Department is continuously striving to upgrade skills and disseminate knowledge by organising meetings/conferences with in-charges of the ROs with a view to resolving their queries and also gauging the grassroots requirement in the area of foreign exchange management in order to address their issues promptly. The Department has also conducted various knowledge-sharing sessions for the benefit of staff attached to the Central Office and across all the ROs. The various guidelines/instructions are also disseminated by way of regular updation of master directions, training modules and frequently asked questions (FAQs).

Agenda for 2020-21

V.44 The Department's strategy for 2020-21 is to focus on consolidating and carrying forward all the initiatives which were undertaken in the previous year. The emphasis will remain on ensuring that the FEMA operating framework is in sync with the needs of the evolving macroeconomic environment. Accordingly, the Department has formulated the following strategic action plan for 2020-21:

- Undertaking a complete review of the reporting requirements under various regulations in order to make the reporting aligned with specific requirements and make the process simple and efficient (*Utkarsh*);
- Introduction of late submission fee for delayed reporting of Overseas Direct Investment (ODI) by Indian Parties/ Resident Indians (*Utkarsh*);
- Rationalisation of ODI regulations to make them simpler and more principles-based (*Utkarsh*);
- Conducting awareness programmes and creation of digital content on an ongoing basis (*Utkarsh*); and
- Rationalisation of various provisions on foreign exchange and currency under Foreign Exchange Management Regulations, 2015, such as export and import of currency; realisation,

repatriation and surrender of foreign exchange; possession; and retention of foreign currency. These provisions, which are currently covered in four different notifications under the FEMA, would be unified under a single regulation.

5. Conclusion

V.45 In sum, during the year, the Reserve Bank has taken several steps to develop the financial markets in terms of broadening the participation base, easing access and transaction costs, diversifying the array of products, and instruments, simplifying of procedures, and improving financial market infrastructure and also augmented its liquidity management framework. The broad policy approach has been re-oriented towards a principle-based regulatory framework with emphasis on market surveillance and intelligence to ensure that financial markets operate in fair, efficient and transparent manner. In the wake of the COVID-19, the Reserve Bank went beyond its conventional policies and introduced unconventional monetary policy tools in terms of LTRO, TLTRO, TLTRO 2.0; opening lines of credit to all-India financial institutions to ensure sufficient liquidity in the system and in the specific sector arising because of the pandemic, in addition to both kinds of FX swaps to inject rupee and forex liquidity to contain volatility. In the process of rationalisation of FEMA and to make them user friendly for monitoring and reporting purposes, the scope of SNRR account has been enhanced, auto emailing features in IDPMS and EDPMS has been added. The endeavour of the Reserve Bank has been to build a principle-based regulatory framework and ensuring mandate under FEMA along with orderly conditions in the financial markets with international best practices and market infrastructure.

VI REGULATION, SUPERVISION AND FINANCIAL STABILITY

In a deteriorating macroeconomic environment during 2019-20, policy attention came to be focused on improving the supply of credit sectorally. The introduction of external benchmarks for bank lending rates strengthened the transmission of monetary policy. The banking sector went through a structural transformation with consolidation in the form of mergers and amalgamation. The regulatory and supervisory framework was unified across regulated entities and strengthened in alignment with global best practices. Harnessing technology for customer services, strengthening fraud detection, and consumer protection were concurrent objectives during the year.

VI.1 The chapter discusses regulatory and supervisory measures undertaken during the year to strengthen the financial system and preserve financial stability. As part of the overall objective of aligning the regulatory framework with global best practices, steps were taken in the areas of corporate governance and risk management. Operationalisation of regulatory sandbox, enabling video-based know-your-customer (KYC) processing, Regulatory Technology (RegTech)/ Supervisory Technology (SupTech) initiatives and cyber security measures marked the rising importance of FinTech in the regulatory and supervisory functions. Steps towards development of an active secondary market for corporate loans, lending to Infrastructure Investment Trusts (InvITs) and linking pricing of bank loans to external benchmarks were undertaken in order to deleverage the banks' balance sheets and to improve the flow of credit to critical sectors of the economy in which credit demand remained supported. In response to the COVID-19 pandemic, measures were taken for mitigating the burden of debt servicing by borrowers and ensuring the continuity of viable businesses.

VI.2 In other areas, the asset-liability management (ALM) framework of Non-Banking Financial Companies (NBFCs) was strengthened while the overall liquidity risk management system was aligned with that of the banking sector. Regulation of Housing Finance Companies (HFCs) was brought under the Reserve Bank's purview, and wider supervisory powers over NBFCs were vested with it.

VI.3 In the cooperative banking space, progress was made in the process of establishing the Umbrella Organisation for Urban Cooperative Banks (UCBs). The Supervisory Action Framework (SAF) was reviewed and reporting of large exposures to Central Repository of Information on Large Credits (CRILC) was implemented during the year. Other major developments include issuance of guidelines on constitution of Board of Management (BoM) and developing a Central Fraud Registry (CFR) as well as a comprehensive cyber security framework for UCBs. A major policy drive during the year was towards amalgamation and consolidation of cooperative banks.

VI.4 The rest of this chapter is divided into six sections. Section 2 deals with the mandate and functions of the Financial Stability Unit (FSU). Section 3 addresses various regulatory measures undertaken by the Department of Regulation (DoR). Section 4 covers several supervisory measures undertaken by the Department of

Supervision (DoS), and enforcement actions carried out by the Enforcement Department during the year. Section 5 highlights the role played by the Consumer Education and Protection Department (CEPD) and the Deposit Insurance and Credit Guarantee Corporation (DICGC) in protecting consumer interests, spreading awareness and upholding consumer confidence. These departments have also set out agenda for 2020-21 in their respective sections. The chapter ends with a conclusion.

2. FINANCIAL STABILITY UNIT (FSU)

VI.5 The mandate of the Financial Stability Unit (FSU) is to monitor the stability and soundness of the financial system by examining risks to financial stability, undertaking macro-prudential surveillance through systemic stress tests, financial network analysis and by disseminating information and analysis through the Financial Stability Report (FSR). It also functions as a secretariat to the Sub-Committee of the Financial Stability and Development Council (FSDC), an institutional mechanism of regulators for maintaining financial stability and monitoring macro-prudential regulation in the country.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

VI.6 The Department had set out the following goals for 2019-20:

- To strengthen the current stress testing framework/methodology to adopt evolving best practices (*Utkarsh)* [Para VI.7]; and
- To continue the publication of the FSR and conducting meetings of the FSDC Sub-Committee as well as to undertake macro-prudential surveillance (Para VI.8 - VI.10).

Implementation Status of Goals

VI.7 A framework for estimation of sectoral probability of default of private listed firms was developed and is being tested using alternate data sources for incorporation in the stress testing framework of the Department. However, this work has partly been affected by disruptions caused by the COVID-19 pandemic.

VI.8 The FSRs were published in December 2019 and July 2020. These editions reflected the collective assessment of the Sub-Committee of FSDC on the balance of risks around financial stability. The December 2019 edition of FSR highlighted that the economic prospects, both global and domestic, are being weighed down by uncertainties which are affecting consumption and business investment. The report underscored the resilience of Indian financial institutions, even as it projected a rise in gross non-performing assets (GNPA) ratio driven by weakening macroeconomic scenario and consequent slackening of credit growth as also marginal increase in slippages. The July 2020 edition of FSR highlighted the impact of disruptions arising from the COVID-19 pandemic-induced lockdown on near-term domestic economic prospects. The report also underscored the policy measures adopted by the financial sector regulators and the Government of India, spanning monetary stimulus and regulatory relief, to offset the impact of the pandemic and to ensure normalcy of financial intermediation functions. It also examined the credit allocation dynamics in the wake of the pandemic-induced uncertainty. Financial sector assessment emphasised the resilience of the Indian financial system, even though stress tests projected a rise in scheduled commercial banks' (SCBs') GNPA ratio due to the stressed macroeconomic environment. Network analysis revealed reduction in contagion losses to the banking system under various scenarios, in relation to a year ago.

VI.9 The FSDC Sub-Committee held two meetings in 2019-20, both of which were held under distinct economic conditions. In the meeting held in September 2019, the forum discussed various issues impinging on financial stability, including concerns regarding NBFCs, UCBs, and debt mutual funds. The regulatory framework of credit rating agencies (CRAs) and creation of a Central KYC registry also engaged the Sub-Committee. Steps taken for resolution and prevention of contagion effect of the Infrastructure Leasing & Financial Services Ltd. (IL&FS) crisis, operationalising individual insolvency and promotion of financial inclusion through insurance marketing firms were also discussed in the meeting.

VI.10 In the meeting held in June 2020, the Sub Committee reviewed the major developments in global and domestic economy, and financial markets that impinge upon financial stability. Amongst other things, the Sub-Committee also discussed about the proposal of setting up of an Inter Regulatory Technical Group on FinTech (IRTG-FinTech), the importance of cyber security across the financial system and the National Strategy on Financial Education (NSFE) 2020-25. It also deliberated upon the status and developments under the Insolvency and Bankruptcy Code (IBC), 2016 and the working of CRAs.

Impact of COVID-19 Pandemic

VI.11 The Department's functions have not been significantly impacted by the COVID-19 pandemic-induced disruptions. The FSDC and FSDC-Sub Committee meetings were held through video conferencing during the period. However, the 21st issue of the FSR was published in July due to delay in the receipt of some primary data.

Agenda for 2020-21

VI.12 In the year ahead, FSU will focus on the following:

- Strengthen the stress testing framework/ methodology by incorporating evolving best practices (*Utkarsh);*
- Conduct macro-prudential surveillance;
- Publish the FSR; and
- Conduct meetings of the FSDC Sub-Committee.

3. REGULATION OF FINANCIAL INTERMEDIARIES

Department of Regulation (DoR)

Commercial Banks

VI.13 The Department of Regulation - Banks (DoR - Banks) is the nodal Department for regulation of commercial banks for ensuring a healthy and competitive banking system, which provides cost effective and inclusive banking services. The regulatory framework is fine-tuned as per the requirements of the Indian economy while adapting to international best practices.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

VI.14 The Department had set out the following goals for regulation of commercial banks in 2019-20:

- To work towards aligning the prudential regulatory framework with global standards/practices including convergence of accounting standards for banks in India with International Financial Reporting Standards (IFRS) (*Utkarsh)* [Para VI.15];

- To facilitate digital onboarding of customers, enabling video-based KYC for individuals under the provisions of Prevention of Money Laundering (PML) Rules (Para VI.17);
- Finalisation of regulatory framework for securitisation (*Utkarsh)* [Para VI.42];
- Issuance of final prudential regulations for All India Financial Institutions (AIFIs) (*Utkarsh)* [Para VI.42];
- Operationalisation of Regulatory Sandbox (*Utkarsh)* [Para VI.42];
- Synchronising the implementation of Indian Accounting Standards (Ind AS) for AIFIs with the implementation of the same for the SCBs (Para VI.42); and
- Releasing a discussion paper on implementation of macro-prudential policies for addressing incipient credit risk in the system (Para VI.42).

Implementation Status of Goals

Aligning the Prudential Regulatory Framework with Global Standards/Practices

VI.15 With the Basel Committee on Banking Supervision (BCBS) deferring the implementation of Basel III reforms by one year, from January 1, 2022 to January 1, 2023, on account of the COVID-19 pandemic, the milestones for issue of - (i) draft guidelines on minimum capital requirements for operational risk, and (ii) draft and final guidelines for standardised approach for credit risk - have also been deferred. The adoption of Ind AS was also deferred, pending necessary legislative amendments. Further, the implementation of the Net Stable Funding Ratio (NSFR) has been deferred for six months, from April 1, 2020 to October 1, 2020, as also, the deadline for meeting the last tranche of capital conservation buffer has been extended by six months, *i.e.,* from March 31, 2020 to September 30, 2020.

Development of an Active Secondary Market for Corporate Loans

VI.16 As part of the initiatives to develop an active secondary market for corporate loans in line with the international practices, a task force constituted for this purpose has made important recommendations (Box VI.1).

Digital Onboarding of Customers and Video-based KYC

VI.17 A circular has been issued on January 9, 2020 amending master direction on KYC, permitting Video-based Customer Identification Process (V-CIP) and digital KYC for customer on-boarding. Further, equivalent e-documents, including documents issued to the digital locker account of the customer, with valid digital signature of the issuing authority have been allowed for Customer Due Diligence (CDD) purpose.

Projects under Implementation in Commercial Real Estate (CRE) Sector

VI.18 Project loans in the CRE sector have been permitted to be restructured without a downgrade in the asset classification, by way of revision of date of commencement of commercial operation (DCCO) up to one additional year (*i.e.,* total 2 years extension from the original DCCO), as in the case of projects in non-infrastructure sectors, with a view to harmonising the guidelines for projects under implementation in non-infrastructure and CRE sectors.

Box VI.1
Secondary Market for Corporate Loans

The Reserve Bank constituted a Task Force (Chairman: Shri T. N. Manoharan) on May 29, 2019 to review the existing state of development of the market for loan sale/transfer in India, and the international experience in loan trading to make recommendations for the development of a secondary market for corporate loans in India.

The Task Force has made several recommendations to promote the development of the secondary market for corporate loans in India:

- Setting up of a Self-Regulatory Body (SRB) of participants which will finalise detailed modalities and formulate guidelines for various market participants;
- Standardisation of documentation;
- Setting up a Central Loan Contract Registry; and
- Amendments in regulations of the Securities and Exchange Board of India (SEBI), the Insurance Regulatory and Development Authority of India (IRDAI) and the Pension Fund Regulatory and Development Authority (PFRDA) to enable broad-basing the market with effective participation of non-banking entities such as Foreign Portfolio Investors (FPIs), Alternate Investment Funds (AIFs), mutual funds, insurance firms and pension funds.

As a first step towards the development of the secondary market for corporate loans, the Reserve Bank announced in its Statement on Developmental and Regulatory Policies of December 5, 2019 that it will facilitate the setting up of the SRB. Accordingly, a Core Group of select banks had been constituted to establish the SRB. The registration process of SRB is underway.

Source: RBI.

Restructuring Scheme for Micro, Small and Medium (MSME) Advances

VI.19 The scheme of restructuring of accounts, which was allowed for stressed MSME accounts as on January 1, 2019, was extended to the accounts that were in default but 'standard' as on January 1, 2020 and continue to be classified as a 'standard asset' till the date of implementation of the restructuring. The restructuring under this scheme has to be implemented by December 31, 2020. The detailed guidelines were issued on February 11, 2020.

Large Exposures Framework (LEF)

VI.20 On September 12, 2019, the exposure limit of banks to a single NBFC (excluding gold loan companies) was harmonised by increasing the general single counterparty limit under the LEF from 15 per cent to 20 per cent of bank's eligible capital base. On March 23, 2020, a clarification was issued to the banks that exposure can be shifted from Credit Risk Mitigation (CRM) provider to the original counterparty, even if the counterparty was a person resident outside India, if CRM benefits like shifting of exposure/risk weights are not derived. Exposures thus shifted to a person resident outside India will attract a minimum risk weight of 150 per cent. The date of applicability of the LEF guidelines to non-centrally cleared derivatives exposures was deferred by one year, *i.e.,* to April 1, 2021. On account of COVID-19 pandemic, with a view to facilitate greater flow of resources to corporates, as a one-time measure, the limit for bank's exposure to a group of connected counterparties was increased from 25 per cent to 30 per cent of the eligible capital base of the bank till June 30, 2021.

International Financial Services Centre (IFSC) Banking Units (IBUs)

VI.21 During 2019-20, the scheme for setting up of IBUs was amended permitting IBUs: (a) to open current accounts (including escrow accounts) for their corporate borrowers subject to compliance with provisions of Foreign Exchange Management Act (FEMA) 1999; (b) to accept fixed deposits in foreign currency of tenor less than one year from non-bank entities and also repay fixed deposits prematurely without any time restrictions, and (c) to participate in exchange traded currency derivatives on Rupee (with settlement in foreign currency) listed on stock exchanges set up at IFSCs.

Regional Rural Banks (RRBs) – Perpetual Debt Instruments (PDIs) and Merchant Acquiring Business

VI.22 During 2019-20, RRBs were permitted to issue PDIs eligible for inclusion as Tier 1 capital, thus providing them an additional option for augmenting regulatory capital funds. They were also allowed to act as merchant acquiring banks using *Aadhaar* Pay-BHIM App and POS terminals.

External Benchmarking of Loans

VI.23 All new floating rate personal or retail loans (housing, auto, *etc.*) and floating rate loans extended by banks to Micro and Small Enterprises from October 1, 2019 and floating rate loans to Medium Enterprises from April 1, 2020, were linked to external benchmarks with the freedom to choose from any of several indicated benchmarks. The banks were also free to choose their spread over the benchmark rate, subject to the condition that the credit risk premium may undergo change only when the borrower's credit assessment undergoes a substantial change, as agreed upon in the loan contract.

Fit and Proper Criteria for Public Sector Banks' (PSBs') Shareholder Directors

VI.24 Revised guidelines on 'fit and proper' criteria for shareholder directors in the PSBs were issued in August 2019, thereby aligning them with the eligibility requirements applicable for other directors.

Compensation of Whole Time Directors/CEOs/ Material Risk Takers and Control Function Staff

VI.25 The Reserve Bank issued revised compensation guidelines for whole time directors, CEOs, material risk takers and control function staff of all private sector banks, effective April 1, 2020. These guidelines are in alignment with the principles of the Financial Stability Board (FSB) for sound compensation practices.

Merger of PSBs

VI.26 In line with the Government of India scheme of amalgamation dated March 4, 2020, ten PSBs were merged to form four PSBs with effect from April 1, 2020 (Table VI.1). Accordingly, the bank(s) that merged into another bank ceased to carry on banking business and were excluded from the Second Schedule of the Reserve Bank of India (RBI) Act, 1934.

Doorstep Banking Services for Senior Citizens and Differently Abled Persons

VI.27 Banks were advised to offer doorstep banking services to senior citizens and differently abled persons on pan India basis, by updating the list of branches offering such services on websites regularly and by giving adequate publicity on the

Table VI.1: Merger of Some PSBs

Bank(s) that Merged (Transferor Banks)	Bank into which Merged (Transferee Bank)
1	2
Allahabad Bank	Indian Bank
Oriental Bank of Commerce and United Bank of India	Punjab National Bank
Andhra Bank and Corporation Bank	Union Bank of India
Syndicate Bank	Canara Bank

Source: Government of India.

availability of such services in their public awareness campaigns, including policy and charges.

COVID-19 Pandemic Measures

VI.28 In response to COVID-19 pandemic, the Reserve Bank instituted a number of measures to mitigate the burden of debt servicing by borrowers, ensure the continuity of viable businesses, maintain adequate liquidity in the system, facilitate and incentivise bank credit flows, ease financial stress and enable the normal functioning of financial markets.

VI.29 In respect of all term loans (including agricultural term loans, retail and crop loans) outstanding as on March 1, 2020, all lending institutions [Commercial Banks including Small Finance Banks (SFBs), Local Area Banks (LABs), RRBs, UCBs/ State Co-operative Banks (StCBs)/ District Central Co-operative Banks (DCCBs), AIFIs and NBFCs including HFCs] were permitted to grant a moratorium of six months on payment of all instalments falling due between March 1, 2020 and August 31, 2020. Likewise, in respect of working capital facilities sanctioned in the form of cash credit/overdraft (CC/OD), lending institutions were permitted to defer the recovery of interest applied in respect of all such facilities during March 1, 2020 to August 31, 2020. Lending institutions were also permitted, at their discretion, to convert the accumulated interest in case of CC/OD for the deferment period up to August 31, 2020, into a funded interest term loan (FITL) which shall be repayable not later than March 31, 2021.

VI.30 In respect of working capital facilities sanctioned in the form of CC/OD to borrowers facing stress on account of the pandemic, lending institutions were permitted to recalculate the drawing power by reducing the margins till August 31, 2020, as a one-time measure, such that the margins are restored by March 31, 2021, and / or review the working capital sanctioned limits up to March 31, 2021, based on a reassessment of the working capital cycle.

VI.31 These measures will not result in asset classification downgrade of the respective facilities and will not be treated as a default for supervisory reporting and reporting to credit information companies. Lending institutions were advised to frame Board-approved polici.es for providing these reliefs to all eligible borrowers with full public disclosure.

VI.32 The lending institutions were advised that in respect of all accounts classified as standard as on February 29, 2020, where moratorium or deferment is granted, the 90-day NPA norm shall exclude the moratorium period, *i.e.,* there would be an asset classification standstill for all such accounts from March 1, 2020 to August 31, 2020. Lending institutions were advised that in respect of accounts which have availed the relief provided by the Reserve Bank on March 27, 2020, they are required to make general provisions of not less than 10 per cent of the total outstanding of such accounts in a phased manner in two quarters, *viz.,* not less than 5 per cent each, in quarters ended March 31, 2020 and June 30, 2020. Lending institutions were also advised that: (a) they are permitted to adjust these provisions against the actual provisioning requirements for slippages from the accounts reckoned for such provisions; (b) the residual provisions at the end of the financial year can be written back or adjusted against the provisions required for all other accounts; (c) till such adjustments, these provisions shall not be netted from gross advances but are to be shown separately in the balance sheet, as appropriate; and (d) all other provisions required to be maintained by lending institutions, including the provisions for accounts already classified as NPA as on February 29, 2020 as well as subsequent ageing in these accounts, shall continue to be made in the usual manner.

VI.33 Under the Reserve Bank's Prudential Framework for Resolution of Stressed Assets dated June 7, 2019, SCBs (excluding RRBs), AIFIs, Systemically Important Non-Deposit taking Non-Banking Financial Companies (NBFCs-ND-SI), and Deposit taking Non-Banking Financial Companies (NBFCs-D) are required to hold an additional provision of 20 per cent in the case of large accounts under default, if a resolution plan has not been implemented within 210 days from the date of such default. Recognising the challenges to resolution of stressed assets in the current volatile environment, the above lenders were advised that the period from March 1, 2020 to August 31, 2020 may be excluded from the review period or, in cases where review period is over, the resolution period during which resolution may be implemented without any additional provisions.

VI.34 The Liquidity Coverage Ratio (LCR) requirement for SCBs was brought down from 100 per cent to 80 per cent, with effect from April 17, 2020, to ease the liquidity position at the level of individual institutions. The requirement shall be gradually restored back in two phases – 90 per cent by October 1, 2020 and 100 per cent by April 1, 2021. Further, entire SLR-eligible assets held by banks have now been permitted to be reckoned as high-quality liquid assets (HQLAs) for meeting LCR. The implementation of NSFR guidelines, which were to come into effect from April 1, 2020 onwards, was deferred by six months to October 1, 2020.

VI.35 The implementation of the last tranche of 0.625 per cent of Capital Conservation Buffer (CCB) was deferred from March 31, 2020 to September 30, 2020. The activation of Counter-cyclical Capital Buffer (CCyB) was not found to be necessary.

VI.36 At the same time, banks were advised that they shall not make any further dividend payouts from profits pertaining to the financial year ended March 31, 2020 to conserve capital and absorb losses in an environment of heightened uncertainty. This restriction will be reviewed on the basis of the financial position of banks for the quarter ending September 30, 2020.

VI.37 The maximum permissible period of pre-shipment and post-shipment export credit sanctioned by banks has also been increased from one year to 15 months, for disbursements made up to July 31, 2020, in line with the permitted increase in time period for realisation and repatriation of the export proceeds to India.

VI.38 As an additional measure to support the MSME sector in these uncertain times, banks were permitted to reckon the funds infused by the promoters in their MSME units, through loans availed under the Credit Guarantee Scheme for Subordinate Debt for stressed MSMEs issued by the Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE), as equity/quasi equity from the promoters for debt-equity computation.

VI.39 To mitigate the difficulties in timely submission of various regulatory returns to DoR, the Reserve Bank, due to disruptions caused by COVID-19 pandemic, all the regulated entities (REs) were advised that such returns (required to be submitted up to June 30, 2020) can be submitted with a delay of a maximum of 30 days from the due date. However, extension was not permitted for submission of statutory returns, *i.e.,* returns prescribed under the Banking Regulation (BR) Act 1949, RBI Act 1934, or any other Acts [for instance, returns related to cash reserve ratio (CRR)/statutory liquidity ratio (SLR)].

VI.40 Due to strains on reporting requirements caused by COVID-19 pandemic, the relaxation of the minimum daily maintenance of the CRR of 80 per cent, effective from the fortnight beginning March 28, 2020 till June 26, 2020, was extended for a further period of three months, *i.e.,* up to September 25, 2020.

VI.41 Master Direction on KYC was amended, in alignment with PML rules of the Government of India, pertaining to small accounts [opened for those customers who are not able to furnish Officially Valid Document (OVDs) to the banks] that remained operational initially for a period of twelve months, which could be extended for a further period of twelve months provided the account holder applied for any of the OVDs during the first twelve months. Post this amendment, the small accounts shall remain operational between April 1, 2020 and June 30, 2020 and such other periods as may be notified by the Government of India, notwithstanding the conditions stipulated. The amendment was carried out to enable the Direct Benefit Transfer (DBT) to the beneficiaries' accounts and allow the beneficiaries to withdraw the amount for their needs in the current situation due to COVID-19 pandemic, without causing any hardships due to the KYC requirements.

Other Initiatives

VI.42 Some of the other initiatives during 2019-20 were as follows:

- Draft framework for Securitisation of Standard Assets was placed on the Bank's website on June 8, 2020, for public comments. The draft guidelines on securitisation will also take into account the recommendations of the Committee on Housing Finance Securitisation (Chairman: Dr. Harsh Vardhan), which submitted its Report during the year.
- The guidelines on prudential regulations for AIFIs covering, *inter alia*, Basel III capital framework have been prepared and are being fine-tuned. Final guidelines shall be issued to the AIFIs, *viz*., National Bank for Agriculture and Rural Development (NABARD), Small Industries Development Bank of India (SIDBI), Export-Import Bank of India (EXIM Bank) and National Housing Bank (NHB).
- Final Enabling Framework for Regulatory Sandbox was placed on the website on August 13, 2019, followed by announcement of "Retail Payments" as the theme of first cohort. Although, the test design for products of applicants which were selected in the preliminary scrutiny has been completed, testing in live environment has not yet commenced due to COVID-19 pandemic, since the testing process requires on-boarding of merchants and customers through personal interaction.
- It has been decided to converge the implementation of Ind AS for AIFIs with that of SCBs.
- Draft discussion paper on implementation of macro-prudential policies for addressing incipient credit risk in the system is under process.

- The risk weight for consumer credit, including personal loans, but excluding credit card receivables, was reduced to 100 per cent from 125 per cent in view of the lower stress in banks' consumer credit portfolio.
- Banks, which have been allowed to invest in units of Infrastructure Investment Trusts (InvITs), were permitted to also lend to InvITs.
- Certain instructions issued in the past, on completing the process of appointment of Managing Director and Chief Executive Officer (MD & CEO)/CEO/Part-time Chairperson (PTC) in the private sector banks and foreign banks in a timely manner, were reviewed and the 'Declaration and Undertaking' to be obtained from candidate and specimen of application by bank for amendment in its appointment related provisions as well as for approval of appointment/re-appointment were revised *vide* guidelines issued on March 31, 2020. Further, banks were also advised of the following two changes: (a) For re-appointment of MD & CEO, banks will now have to submit the application to the Reserve Bank at least six months, as against currently four months, before the expiry of the term of office of the current incumbent; and (b) Proposals for appointment of a new MD & CEO should invariably contain a panel of at least two names, as against currently three names, in the order of preference and should be submitted at least four months before the expiry of the term of office of the current incumbent.
- In order to alleviate genuine difficulties being faced by exporters in their production and realisation cycles, the maximum permissible period of pre-shipment and post-shipment export credit sanctioned by banks was increased from one year to 15 months, for disbursements made up to July 31, 2020. This is in line with the permission already granted for increase in the period of realisation and repatriation of the export proceeds to India from nine months to 15 months from the date of export in respect of exports made up to July 31, 2020. Banks were also advised regarding the extension of Interest Equalisation Scheme on pre- and post-shipment Rupee export credit for one year, *i.e.,* up to March 31, 2021, as per instructions of Government of India.
- On a review, the enhanced borrowing limit of scheduled banks under the Marginal Standing Facility (MSF) scheme by dipping into the prescribed SLR increased to 3 per cent of their net demand and time liabilities (NDTL) and available to banks till June 30, 2020, was extended till September 30, 2020 and banks were permitted to continue to access overnight funds under the MSF against their excess SLR holding as per the extant guidelines.
- REs have been mandated, *vide* circular issued on April 20, 2020, to carry out 'Money Laundering (ML) and Terrorist Financing (TF) Risk Assessment' exercise periodically to identify, assess and take effective measures to mitigate its ML/TF risks for clients, countries/ geographic areas, products, services, transactions and delivery channels.

- A circular was issued on April 23, 2020 permitting banks to issue electronic cards to natural persons having Overdraft Accounts that are in the nature of personal loan without any specific end-use restrictions, only for domestic online/non-cash transactions, subject to certain conditions.
- Draft Comprehensive Framework for Sale of Loan Exposures has been placed on the Bank's website for public comments on June 8, 2020.
- On June 11, 2020, a Discussion Paper on "Governance in Commercial Banks in India" was released by the Reserve Bank for public comments/suggestions, to be received latest by July 15, 2020 and final guidelines/directions will be issued after considering the feedback received.
- On June 21, 2020, all member lending institutions have been permitted to assign zero per cent risk weight on credit facilities extended under Emergency Credit Line Guarantee Scheme. The scheme was announced by Government of India for MSME borrowers. The guarantee is provided by National Credit Guarantee Trustee Company Ltd. (NCGTC) and is backed by an unconditional and irrevocable guarantee provided by Government of India.
- On account of inclusion of affordable housing under the harmonised master list (HML) for infrastructure sub-sectors by Government of India, the definition of lending to affordable housing was re-aligned with that provided in the HML. Accordingly, for the purpose of issue of long-term bonds, the revised definition would include housing loans, eligible to be classified under priority sector lending (as updated from time to time) and to individuals for acquiring dwelling units within the prescribed threshold under the affordable housing definition in the HML.

Agenda for 2020-21

VI.43 For the year ahead, the Department will focus on the following key deliverables in respect of the commercial banks under *Utkarsh*:

- *Convergence of the Reserve Bank's regulations with Basel III Standards:* Draft guidelines on credit risk and market risk would be issued, in conformity with Basel III standards, along with the final guidelines on Interest Rate Risk in Banking Book (IRRBB); draft guidelines on minimum capital requirements for operational risk under Basel III Standardised Approach (SA) will also be issued. However, to free up banks and supervisors to respond to economic impact of COVID-19 pandemic, the BCBS has deferred the implementation of Basel III Standards by one year to January 1, 2023;
- *Visibility in International Banking Regulation Forums:* Representation to various Basel Working Groups would be enhanced, alongside more of their meetings being hosted in India by March 2021;
- *Greater Engagement with Emerging Market (EM) Central Banks and Supervisors:* India's footprints as a large EM will be expanded by way of increasing engagement with peer central banks, conferences in India and participating in

events hosted by other EM central banks; and

- *RegTech Solutions for Effective and Focused Regulations:* RegTech being a specialised and an emerging FinTech product, the proposal is to augment the capabilities in this area with support from International Finance Corporation (IFC)/ World Bank Group (WBG). Engagement with stakeholders to assess the level of adoption of RegTech tools in the financial sector is being proposed. Further, it is planned to frame and issue broad guidelines/principles to encourage adoption of RegTech tools by REs to automate and integrate their regulatory reporting requirements using Artificial Intelligence/Machine Learning (AI/ML) and data analytics.

Cooperative Banks

VI.44 The Reserve Bank continues to play a key role in strengthening the cooperative banking sector by fortifying the regulatory and supervisory framework. In this context, the DoR - Cooperative Banks, which is in charge of prudential regulations of cooperative banks, took several initiatives in 2019-20 in pursuance of the agenda set in the beginning of the year.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

VI.45 The Department had set out the following goals for cooperative banks in 2019-20:

- Establishment of an Umbrella Organisation (UO) for UCBs and formulation of policy framework for promoting consolidation in UCB sector (*Utkarsh)* [Para VI.46 and Para VI.56];
- Issuance of revised guidelines on SAF for UCBs (Para VI.47); and
- Implementation of Board of Management (BoM) for UCBs (Para VI.48).

Implementation Status of Goals

Establishment of UO for UCBs

VI.46 The National Federation of Urban Cooperative Banks and Credit Societies Ltd. (NAFCUB) is setting up the UO for UCBs for which regulatory approval was accorded on June 6, 2019.

Review of SAF for UCBs to Deal with Stress at an Early Stage

VI.47 Under the revised guidelines on SAF for UCBs, issued on January 6, 2020, initiation of corrective action by the UCBs and/or supervisory action by the Reserve Bank is envisaged on breach of specified thresholds (triggers) in respect of specified financial parameters/indicators. The guidelines intend to make SAF more effective in bringing about improvement in weak but viable UCBs and resolving non-viable UCBs in an expeditious manner.

Guidelines Issued to UCBs on BoM

VI.48 Under the extant legal framework, the Board of Directors (BoD) of UCBs perform both executive and supervisory roles, with the responsibility to oversee the functioning of the UCBs as a cooperative society as well as a bank. UCBs with deposits of ₹100 crore and above have been advised to constitute BoM comprising of members with special knowledge and practical experience in banking so as to facilitate professional management, improve corporate governance and protect the interests of depositors (Box VI.2).

Box VI.2
Governance in Primary (Urban) Cooperative Banks (UCBs)

Problems faced by UCBs are mainly due to weak corporate governance and management issues which stem from the very nature of the institution, *i.e.,* the Board of Directors (BoD) where "fit and proper" criteria could not be enforced under the existing statutes. Since UCBs also accept public deposits, the Expert Committee on Licensing of New Urban Cooperative Banks, 2011 (Chairman: Shri Y. H. Malegam) had recommended, *inter alia*, constitution of a body of professionals in the form of Board of Management (BoM) in addition to the BoD, which is an elected body in UCBs. This recommendation was again reiterated by the High-Powered Committee on Urban Cooperative Banks, 2015 (Chairman: Shri R. Gandhi).

Accordingly, UCBs with deposit size of ₹100 crore and above have been advised to constitute a BoM consisting of members with special knowledge and practical experience in banking to facilitate professional management and focused attention to banking related activities of UCBs by making suitable amendments to their bye-laws. Although UCBs with a deposit size less than ₹100 crore and the Salary Earners' Banks are exempted from constituting BoM, such banks may also constitute BoM, if they so desire, for ensuring good governance practices.

The BoM will exercise oversight over the banking related functions of the UCBs, assist the BoD on formulation of policy and any other matters specifically delegated to it by the BoD. The members of BoM shall meet the 'fit and proper' criteria prescribed by the Reserve Bank. The tenure of BoM shall be co-terminus with the tenure of BoD. For the UCBs with deposit size of ₹100 crore and above, it will also be mandatory to obtain prior approval of the Reserve Bank for appointment of their Chief Executive Officer (CEO).

Source: RBI.

Guidelines Issued to UCBs on Reporting of Large Exposures to CRILC

VI.49 SCBs, SFBs, AIFIs, NBFCs-ND-SI, NBFCs-D and Non-Banking Financial Company in Factoring Services (NBFC-Factors) are currently required to report credit exposures of ₹5 crore and above on CRILC. UCBs with assets of ₹500 crore and above were brought under the CRILC reporting framework from the quarter ending December 31, 2019 in order to bring transparency and ensure early detection of stress in large exposures.

'In Principle' Approval for SFB License

VI.50 Guidelines for voluntary transition of UCBs into SFBs were issued on September 27, 2018. Shivalik Mercantile Cooperative Bank Ltd. became the first UCB to receive 'in-principle' approval on January 6, 2020.

Exposure to Single Borrower/Party and Group of Borrowers/Parties, Large Exposures and Priority Sector Lending

VI.51 The exposure limits for single borrower/ party and group of borrowers/parties of UCBs were reduced from the existing 15 per cent and 40 per cent of the capital funds to 15 per cent and 25 per cent of the tier-I capital, respectively, on March 13, 2020. Moreover, 50 per cent of the loan portfolio of UCBs should comprise loans up to ₹25 lakh or 0.2 per cent of Tier I capital, whichever is higher, subject to a maximum of ₹1 crore per borrower/party. The target for lending to priority sector was increased from the existing 40 per cent to 75 per cent of adjusted net bank credit (ANBC) or credit equivalent amount of off-balance sheet exposure (CEOBSE), whichever is higher, in order to further strengthen the role of UCBs in financial inclusion. Further, UCBs will be required to contribute to Rural Infrastructure Development Fund (RIDF) with NABARD and other funds with NABARD/NHB/SIDBI/Micro Units Development and Refinance Agency (MUDRA) Bank against the shortfall in their achievement of the priority sector lending targets with effect from March 31, 2021, thereby harmonising the guidelines in this regard with those for SCBs.

Amendments to the BR Act, 1949 (As Applicable to Cooperative Societies)

VI.52 With a view to improving the quality of management and governance in co-operative banks and to ensure more effective regulation, thereof, by the Reserve Bank, Government of India has promulgated the BR (Amendment) Ordinance, 2020 on June 26, 2020, amending certain sections of the BR Act, 1949, thereby bringing additional areas of functioning of cooperative banks under the regulatory purview of the Reserve Bank. The major provisions amended through the ordinance pertain to areas such as non-applicability of the Act to certain types of co-operative societies, governance/ management of cooperative banks including certain restrictions on whole-time directors, approval of appointment/ removal of statutory auditors (SAs), time allowed for disposal of non-banking assets, providing additional avenues for raising capital, voluntary/ compulsory amalgamation, preparation of scheme of reconstruction and winding up by the concerned High Court at the instance of the Reserve Bank. The Ordinance has come into force presently for UCBs by notification in the official Gazette on June 29, 2020.

Scheduling and Licensing of Cooperative Banks

VI.53 The Meghalaya Cooperative Apex Bank Ltd. was included in the Second Schedule of the RBI Act, 1934 on August 30, 2019. Banking license was issued to Supaul District Central Cooperative Bank, Supaul, Bihar on December 19, 2019.

Amalgamation of DCCBs

VI.54 The short-term rural cooperative credit structure in India consists of a three-tier structure, with State Co-operative Banks (StCBs) as the apex institution in each state, DCCBs operating at the intermediate (district) level and Primary Agricultural Credit Societies (PACS) at the base (village) level. The structure, however, varies from state to state, with some states having a two-tier co-operative credit structure comprising only StCBs and PACS. Based on the recommendations of the Expert Committee constituted by the Reserve Bank in 2012 (Chairman: Shri Prakash Bakshi), some state governments have found a two-tier structure more effective. In August 2017, the government of Kerala had proposed for amalgamation of its fourteen DCCBs with Kerala State Cooperative Bank (KStCB) and on October 3, 2018, the Reserve Bank had accorded in-principle approval for the amalgamation, contingent to fulfilment of conditions stipulated by it and additional conditions imposed by NABARD. The final approval for the amalgamation (except Malappuram DCCB) was given by the Reserve Bank on October 7, 2019, subject to approval by the Hon’ble High Court of Kerala and infusion of additional capital by the government of Kerala, to ensure a capital to risk-weighted assets ratio (CRAR) of 9 per cent on an ongoing basis. Accordingly, thirteen DCCBs were amalgamated with the KStCB on November 29, 2019.

VI.55 ‘In-principle’ approval has also been granted on June 8, 2020 to the government of Punjab for amalgamation of DCCBs in the state with the Punjab State Cooperative Bank, subject to fulfilment of the conditions stipulated by the Reserve Bank and additional conditions, if any, imposed by NABARD.

Other Initiatives

VI.56 It is envisaged to bring out a Discussion Paper on Formulation of Policy Framework for promoting consolidation in the UCB sector, which is presently under process.

Agenda for 2020-21

VI.57 The agenda for cooperative banks in 2020-21 would include the following:

- Refinement of the regulatory framework for cooperative banks with a view to strengthening the sector and protecting the interest of the depositors and borrowers;
- Bringing out a discussion paper on strengthening the regulatory framework for capital adequacy in UCBs;
- Putting in place a SAF for the StCBs and DCCBs; and
- Faster resolution of weak UCBs which are under All-Inclusive Directions.

Non-Banking Financial Companies (NBFCs)

VI.58 NBFCs play an important role in providing credit by complementing the efforts of commercial banks, providing last mile financial intermediation and catering to niche sectors. The DoR - NBFC is entrusted with the responsibility of regulating the NBFC sector.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

VI.59 The Department had set out the following goals in respect of NBFCs in 2019-20:

- Harmonisation of NBFC categories (*Utkarsh*) [Para VI.60]; and
- Issuance of Fair Practices Code (FPC) for Asset Reconstruction Companies (ARCs) [ParaVI.61].

Implementation Status of Goals

Harmonisation of NBFC Categories

VI.60 Three categories of NBFCs, *viz.,* Asset Finance Companies (AFCs), Loan Companies (LCs) and Investment Companies (ICs), were merged into a new category called NBFC-Investment and Credit Company (NBFC-ICC). Feasibility of merging other categories of NBFCs was also examined and it was decided to continue with the *status quo* for now.

Issuance of FPC for ARCs

VI.61 With the objective of ensuring transparency and fairness in the operations of ARCs, FPC providing minimum regulatory expectations has been issued while allowing ARCs' Board to enhance its scope and coverage. The FPC, *inter alia,* covers transparent and non-discriminatory practices for acquisition as well as sale of assets, reasonableness of fees and grievance redressal mechanism.

Liquidity Risk Management Framework

VI.62 The Reserve Bank revised the guidelines on liquidity risk management to strengthen the asset-liability management (ALM) framework of NBFCs, including core investment companies (CICs). The revised guidelines specify granular maturity buckets and tolerance limits, and adoption of liquidity risk monitoring tools. NBFCs are required to monitor liquidity by employing the stock approach, in addition to the measurement of structural and dynamic liquidity while adopting the principles of sound liquidity risk management, stress testing and measures for diversification of funding. The framework requires maintenance of a liquidity buffer in terms of LCR starting at 50 per cent for all NBFCs-D and NBFCs-ND with an asset size of ₹10,000 crore and above, and 30 per cent for NBFCs-ND with an asset size of ₹5,000 crore and above, but less than ₹10,000 crore, from December 1, 2020 to reach 100 per cent by December 1, 2024.

Review of Household Income and Lending Limits for Non-Banking Financial Company – Micro Finance Institutions (NBFC-MFIs)

VI.63 NBFC-MFIs play a key role in delivering credit to those at the bottom of the economic pyramid. In view of their importance in a growing economy, the household income limits for borrowers of NBFC-MFIs were raised from the current level of ₹1,00,000 for rural areas and ₹1,60,000 for urban/semi urban areas to ₹1,25,000 and ₹2,00,000, respectively. Moreover, lending limit for NBFC-MFIs was increased from ₹1,00,000 to ₹1,25,000 per eligible borrower.

Technical Specifications for all Participants of the Account Aggregator (AA) Ecosystem

VI.64 The Non-Banking Financial Company - Account Aggregator (NBFC-AA) consolidates financial information of a customer held with different financial entities spread across financial sector regulators and using different information technology (IT) systems and interfaces. A set of core technical specifications based on Application Programme Interface (API) framed by the Reserve Bank Information Technology Private Ltd. (ReBIT) has been prescribed for the participants of the AA ecosystem regulated by the Reserve Bank, namely NBFC-AA, financial information providers and financial information users, in order to ensure secured, authorised and seamless movement of data. The open API based specifications framed for movement of data and consent architecture will go a long way in realising the full potential of the AA ecosystem.

Review of Limits for Lenders on Non-Banking Financial Company - Peer to Peer Lending Platform (NBFC-P2P)

VI.65 The aggregate exposure of a lender to all borrowers at any point of time across all Peer to Peer Lending (P2P) platforms was increased from ₹10,00,000 to ₹50,00,000. Escrow accounts to be operated by bank-promoted trustee(s) for transfer of funds need not be mandatorily maintained with the bank which has promoted the trustee.

Temporary Relaxation of Minimum Holding Period (MHP) Requirement

VI.66 MHP requirement for originating NBFCs was relaxed in November 2018 in respect of loans of original maturity above 5 years, in order to encourage NBFCs to securitise/assign their eligible assets. This dispensation, given initially for a period of six months, *i.e.,* up to May 2019, was extended till December 31, 2019 and further till June 30, 2020.

Implementation of Ind AS

VI.67 Implementation guidelines on specific prudential aspects of Ind AS for NBFCs and ARCs have been issued, in order to promote a high quality and consistent implementation as also to facilitate comparison and better supervision. The implementation guidelines cover governance framework, prudential floor for expected credit losses including impairment reserve, certain principles for computation of regulatory capital and regulatory ratios, *etc.*

Regulation of HFCs

VI.68 Under the provisions of the NHB Act, 1987, HFCs have been regulated and supervised by the

NHB. Over time, the mandate of the NHB widened and it assumed the role of refinancer and lender to the sector. Recognising the conflicting aspects of the mandate, the Union Budget 2019-20 returned regulatory authority over the housing finance sector to the Reserve Bank on August 9, 2019, with supervision and grievance redressal mechanisms retained with the NHB.

Income Recognition, Asset Classification and Provisioning Norms

VI.69 On February 7, 2020, it was decided to harmonise the guidelines for deferment of DCCO for projects of CRE sectors with those of non-infrastructure sector exposures held by SCBs (excluding RRBs) and SFBs. These guidelines were extended *mutatis mutandis* to NBFCs.

Insolvency Resolution and Liquidation Proceedings of NBFCs

VI.70 Government of India, *vide* its notification dated November 15, 2019, has expanded the applicability of Insolvency and Bankruptcy Code (IBC) to cover systemically important Financial Service Providers (FSPs) other than banks. This special framework under IBC is essentially aimed at serving as an interim mechanism to deal with any exigency, pending introduction of a full-fledged enactment to deal with financial resolution of banks and other systemically important FSPs. Subsequently, the Government of India, *vide* notification dated November 18, 2019, has empowered the Reserve Bank to initiate the Corporate Insolvency Resolution Process (CIRP) against NBFCs including HFCs with asset size of Rs.500 crore or more. In December 2019, the Reserve Bank initiated CIRP against one problematic HFC under this framework.

Loans Sourced by Banks and NBFCs over Digital Lending Platforms: Adherence to FPC and Outsourcing Guidelines

VI.71 It has been observed that many digital platforms have emerged in the financial sector claiming to offer hassle free loans to retail individuals, small traders, and other borrowers. Banks and NBFCs are also seen to be engaging digital platforms to provide loans to their customers. In addition, some NBFCs have been registered with Reserve Bank as 'digital-only' lending entities while some NBFCs are registered to work both on digital and brick-mortar channels of credit delivery. Thus, banks and NBFCs are observed to lend either directly through their own digital platforms or through a digital lending platform under an outsourcing arrangement. The lending platforms tend to portray themselves as lenders without disclosing the name of the bank/ NBFC at the backend, as a consequence of which, customers are not able to access grievance redressal avenues available under the regulatory framework. In order to address the concerns emanating from non-transparency of transactions and violation of extant guidelines on outsourcing of financial services and FPC issued to banks and NBFCs, the Reserve Bank has reiterated the need to adhere to the guidelines in this regard in letter and spirit.

Other Initiatives

VI.72 Some of the other initiatives during 2019-20 were as follows:

- The Reserve Bank clarified that NBFCs shall not charge foreclosure charges/pre-payment penalties on any floating rate term loan sanctioned to individual borrowers for purposes other than business, with or without co-obligant(s).

- NBFCs have been permitted to pool gold jewellery from various branches in a district and auction it at any location within the district, if the first auction has failed.
- Exemption granted to Housing Finance Institutions from the provisions of Chapter IIIB of the RBI Act (except Section 45-IA) has been withdrawn with effect from November 11, 2019.
- In order to address the concerns related to transparency in bilateral transactions and also for better price discovery, ARCs have been advised that acquisition of financial assets from their lenders, sponsors or group entities should be done through auctions, which are conducted in a transparent manner, on arm's length basis and at prices determined by market forces.

Agenda for 2020-21

VI.73 During 2020-21, the Department will pursue the following goals in respect of NBFCs:

- *Review of Regulatory Arbitrage between* Banks *and NBFCs* - with a view to harmonise the regulations of NBFCs with those of banks (*Utkarsh);*
- *Scale-based Approach to Regulation of NBFCs* - with a view to identify a small set of 'systemically significant' NBFCs, which can potentially impact financial stability as also to adopt a graded regulatory framework for the NBFCs;
- *Issuance of Master Directions for HFCs* - proposals for defining the term housing finance, introduction of principal business criteria, qualifying assets for HFCs and classification of HFCs as systemically important, *etc.,* were placed on the Bank's website on June 17, 2020 for public comments and, the revised regulations will be issued after receipt of such comments; and
- *Comprehensive Review of CIC Guidelines*- in view of the recent failure of a CIC and its adverse impact on the non-banking financial sector, the Reserve Bank constituted a Working Group (WG) to review the regulatory and supervisory framework of CICs, whose recommendations are set to shape the overall policy approach to CICs (Box VI.3).

Box VI.3
Core Investment Companies (CICs)

Recent developments have focused attention on the organisational structure of CICs, existence of multiple CICs in a group and overleveraging. The Working Group (WG) constituted on July 3, 2019 to review the regulatory and supervisory framework of CICs (Chairman: Shri Tapan Ray) has made the following recommendations:

- Capital contribution made by one CIC into any other CIC is to be excluded from the calculation of adjusted net worth (ANW) of the investing CIC to address the issue of over-leveraging.
- The number of layers of CICs in a group, including the parent CIC, could be limited to two only.
- Setting up of a Group Risk Management Committee (GRMC) so that risks emanating across multiple business lines are assessed in a formal and structured manner.
- CICs would prepare a consolidated financial statement for the group, and subject the same to a limited review by statutory auditors.
- Independent directors may be appointed on the CICs' Board for un-biased decision making; CICs should constitute Audit Committee of the Board (ACB) and Nomination and Remuneration Committee (NRC).

In essence, the recommendations seek to strike a balance between business requirements and the need for a responsible governance framework.

Source: RBI.

4. SUPERVISION OF FINANCIAL INTERMEDIARIES

Department of Supervision (DoS)

Commercial Banks

VI.74 In the banking area, a number of measures were taken by DoS - Banks to sharpen the supervisory oversight of SCBs (excluding RRBs), LABs, Payments Banks (PBs), SFBs, Credit Information Companies and AIFIs during the year.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

VI.75 The Department had set out the following goals for supervision of SCBs during 2019-20 under *Utkarsh*:

- Effective risk discovery and proactive off-site supervision mechanism (Para VI.76 – VI.77);
- Improved audit system in banks (Para VI.78 – VI.80); and
- Enhanced fraud risk management (Para VI.81 – VI.84).

Implementation Status of Goals

Off-site Surveillance Mechanism

VI.76 A system-wide analysis of the banking system, capturing major risk patterns, was strengthened during 2019-20. The Department started carrying out a detailed "Quarterly Off-site Surveillance with Sharper Focus and Pro-active Indicators" for banks from September 2019, on identification of outliers for deeper examination, which was replicated for other SEs too.

VI.77 During the year, the frequency of data collected as part of CRILC was increased to monthly from quarterly, with data on defaults being collected on a weekly basis. Interactive dashboards, summary dossiers, entity-level reports and technological solutions are envisaged to be part of the revamped data warehouse system of the Reserve Bank – the Centralised Information and Management System (CIMS).

Process Audit

VI.78 As part of continuous monitoring framework, process audit of critical processes in the banks has been embedded into existing systems.

Concurrent and Statutory Audit System

VI.79 The guidelines on concurrent audit system were amended giving discretion to banks to determine the scope and coverage of concurrent audit within the broad prescribed parameters. This was necessitated considering the differing levels of centralisation in banks, the diverse nature of activities undertaken by banks and commencement of operations by SFBs and PBs.

VI.80 A web-based Auditor Allocation System for appointment of statutory branch auditors of PSBs was put in place. This application is expected to reduce the turnaround time in branch auditors' appointments.

Frauds Analysis

VI.81 The total cases of frauds (involving ₹1 lakh and above) reported by banks/FIs increased by 28 per cent by volume and 159 per cent by value during 2019-20 (Table VI.2). The date of occurrence of these frauds are, however, spread over several previous years.

VI.82 Frauds have been predominantly occurring in the loan portfolio (advances category), both in terms of number and value. There was a concentration of large value frauds, with the top fifty credit-related frauds constituting 76 per cent

Table VI.2: Fraud Cases – Bank Group-wise

(Amount in ₹ crore)

Bank Group/Institution	2018-19		2019-20		April-June 2019		April-June 2020	
	Number of Frauds	Amount Involved	Number of Frauds	Amount Involved	Number of Frauds	Amount Involved	Number of Frauds	Amount Involved
1	2	3	4	5	6	7	8	9
Public Sector Banks	3,568 *(52.5)*	63,283 *(88.5)*	4,413 *(50.7)*	1,48,400 *(79.9)*	1,133 *(56.0)*	31,894 *(75.5)*	745 *(47.8)*	19,958 *(69.2)*
Private Sector Banks	2,286 *(33.6)*	6,742 *(9.4)*	3,066 *(35.2)*	34,211 *(18.4)*	601 *(29.7)*	8,593 *(20.3)*	664 *(42.6)*	8,009 *(27.8)*
Foreign Banks	762 *(11.2)*	955 *(1.3)*	1026 *(11.8)*	972 *(0.5)*	250 *(12.4)*	429 *(1.0)*	127 *(8.2)*	328 *(1.1)*
Financial Institutions	28 *(0.4)*	553 *(0.8)*	15 *(0.2)*	2,048 *(1.1)*	4 *(0.2)*	1,311 *(3.1)*	3 *(0.2)*	546 *(1.9)*
Small Finance Banks	115 *(1.7)*	8 *(0.0)*	147 *(1.7)*	11 *(0.0)*	25 *(1.2)*	1 *(0.0)*	16 *(1.0)*	2 *(0.0)*
Payments Banks	39 *(0.6)*	2 *(0.0)*	38 *(0.4)*	2 *(0.0)*	10 *(0.5)*	0 *(0.0)*	3 *(0.2)*	0 *(0.0)*
Local Area Banks	1 *(0.0)*	0.02 *(0.0)*	2 *(0.0)*	0.43 *(0.0)*	1 *(0.0)*	0 *(0.0)*	0 *(0.0)*	0 *(0.0)*
Total	**6,799** ***(100.0)***	**71,543** ***(100.0)***	**8,707** ***(100.0)***	**1,85,644** ***(100.0)***	**2,024** ***(100.0)***	**42,228** ***(100.0)***	**1,558** ***(100.0)***	**28,843** ***(100.0)***

Note: 1. Figures in parentheses represent shares in total (in per cent).
2. The figures reported by banks & FIs are subject to change based on revisions filed by them.
3. Amounts involved do not reflect the amount of loss incurred. Depending on recoveries, the loss incurred gets reduced. Furthermore, the entire amount involved is not necessarily diverted.

Source: RBI Supervisory Returns.

of the total amount reported as frauds during 2019-20. Incidents relating to other areas of banking, *viz.*, off-balance sheet and forex transactions, fell in 2019-20 *vis-à-vis* the previous year (Table VI.3).

VI.83 While the frauds framework focuses on prevention, early detection and prompt reporting, the average lag in detection of frauds remains long. The average lag between the date of occurrence of frauds and their detection by banks/ FIs was 24 months during 2019-20. In large frauds, *i.e.,* ₹100 crore and above, however, the average lag was 63 months. The sanction of the credit facility in many of these accounts was much older. Weak implementation of Early Warning Signals (EWS) by banks, non-detection of EWS during internal audits, non-cooperation of borrowers during forensic audits, inconclusive audit reports and lack of decision making in Joint Lenders' meetings account for delay in detection of frauds. The EWS mechanism is getting revamped alongside strengthening of the concurrent audit function, with timely and conclusive forensic audits of borrower accounts under scrutiny.

Advisory Board for Banking Frauds (ABBF)

VI.84 The ABBF was created in consultation with the Central Vigilance Commission (CVC). The ABBF functions as the first level of examination of all large value fraud cases before recommendations/references are made to the investigating agencies by PSBs. The jurisdiction of ABBF would be confined to those cases involving the level of General Manager (GM) of banks and above.

Table VI.3: Fraud Cases – Area of Operations

(Amount in ₹ crore)

Area of Operation	2018-19		2019-20		April-June 2019		April-June 2020	
	Number of Frauds	Amount Involved	Number of Frauds	Amount Involved	Number of Frauds	Amount Involved	Number of Frauds	Amount Involved
1	2	3	4	5	6	7	8	9
Advances	3,604 *(53.0)*	64,548 *(90.2)*	4,610 *(52.9)*	1,82,051 *(98.1)*	1,157 *(57.2)*	40,373 *(95.6)*	787 *(50.5)*	28,545 *(99.0)*
Off-balance Sheet	33 *(0.5)*	5538 *(7.7)*	34 *(0.4)*	2445 *(1.3)*	9 *(0.5)*	1,739 *(4.1)*	4 *(0.3)*	105 *(0.4)*
Forex Transactions	13 *(0.2)*	695 *(1.0)*	8 *(0.1)*	54 *(0.0)*	0 *(0.0)*	0 *(0.0)*	1 *(0.1)*	0 *(0.0)*
Card/Internet	1,866 *(27.5)*	71 *(0.1)*	2,678 *(30.8)*	195 *(0.1)*	555 *(27.4)*	29 *(0.1)*	530 *(34.0)*	27 *(0.1)*
Deposits	593 *(8.7)*	148 *(0.2)*	530 *(6.1)*	616 *(0.3)*	127 *(6.3)*	66 *(0.2)*	115 *(7.4)*	107 *(0.4)*
Inter-Branch Accounts	3 *(0.0)*	0 *(0.0)*	2 *(0.0)*	0 *(0.0)*	0 *(0.0)*	0 *(0.0)*	2 *(0.1)*	0 *(0.0)*
Cash	274 *(4.0)*	56 *(0.1)*	371 *(4.3)*	63 *(0.0)*	75 *(3.7)*	4 *(0.0)*	52 *(3.3)*	15 *(0.0)*
Cheques/DDs, *etc.*	189 *(2.8)*	34 *(0.1)*	202 *(2.3)*	39 *(0.0)*	47 *(2.3)*	5 *(0.0)*	27 *(1.7)*	32 *(0.1)*
Clearing Accounts, *etc.*	24 *(0.4)*	209 *(0.3)*	22 *(0.2)*	7 *(0.0)*	11 *(0.5)*	6 *(0.0)*	0 *(0.0)*	0 *(0.0)*
Others	200 *(2.9)*	244 *(0.3)*	250 *(2.9)*	174 *(0.1)*	43 *(2.1)*	6 *(0.0)*	40 *(2.6)*	12 *(0.0)*
Total	**6,799** ***(100.0)***	**71,543** ***(100.0)***	**8,707** ***(100.0)***	**1,85,644** ***(100.0)***	**2,024** ***(100.0)***	**42,228** ***(100.0)***	**1,558** ***(100.0)***	**28,843** ***(100.0)***

DDs: Demand drafts.

Note: 1. Figures in parentheses represent shares in total (in per cent).

2. The above data is in respect of frauds of ₹1 lakh and above reported during the period.

Source: RBI Supervisory Returns.

Other Initiatives

VI.85 Some of the other initiatives during 2019-20 were as follows:

- A standing committee on analytics comprising experts from eminent institutions such as Indian Institute of Technology (IIT), Indian Institute of Management (IIM), Indian Statistical Institute (ISI) and Institute for Development and Research in Banking Technology (IDRBT) was set up to engage in adopting industry standards in SupTech, best practices in business intelligence and data analytics for risk modelling that would deliver improved inputs to supervisory managers.
- Apart from governance, the macroeconomic, environmental and socio-economic factors can impact the health of financial system. Hence, inclusion of disclosures based on Environment, Social and Governance (ESG) principles in the integrated supervisory framework would greatly facilitate consolidated supervision of financial conglomerates (Box VI.4).

Box VI.4
Environment, Social and Governance (ESG) Policy

The origin of ESG policy can be traced to the United Nations (UN) inviting chief executive officers (CEOs) of major financial institutions in 2004 to participate in an initiative to integrate ESG factors into capital markets. In 2006, the UN launched six Principles of Responsible Investment (PRI), encouraging investors to embed ESG factors in their investment practices and create a sustainable global financial system. In more recent times, ESG-based investment is seen as responsible investment, and ESG principles are being factored into mainstream investment decisions.

At the basic level, ESG factors ascertain the long-term sustainability of firms in the face of environmental vulnerabilities such as climate change risks that negatively impact the financial sector through two broad channels, *viz.,* physical risks (arising from specific weather events and long-term climate change) and transition risks (emanating from the efforts taken to address the climate change). The fallout could include significant deterioration of asset quality of borrowers in affected geographical zones; the impact on business models due to governmental/ societal response to climate change; increase in claims due to natural calamities, with implications for the profitability of insurance firms; and long-term liquidity effects.

Governments, central banks and other regulators across many countries have undertaken the adoption and disclosures of ESG principles for their financial and non-financial entities. In December 2015, the Financial Stability Board established a Task Force on Climate-related Financial Disclosures (TCFD) with the objective of developing a climate-related financial risk disclosure framework for corporates. The United Kingdom's (UK's) Prudential Regulation Authority (PRA) has issued guidelines asking financial institutions to comply with the TCFD guidelines on a voluntary basis. The 'Central Banks and Supervisors Network for Greening the Financial System' (NGFS) was established in December 2017. As on July 24, 2020, 69 central banks and regulators have joined the NGFS. Six recommendations have been made by the network for central banks, supervisors, policy makers and financial institutions to enhance their role in the greening of the financial system and the managing of environment and climate-related risks. In 2018, the European Commission came up with an action plan to promote sustainable growth which included fostering sustainable finance, strengthening financial stability by embedding ESG principles in investment decision models, incorporating sustainability metrics in credit ratings and research, strengthening disclosure norms by corporates on ESG factors, and strengthening corporate governance. China Securities Regulatory Commission (CSRC) has directed listed companies to assess and disclose ESG risks by 2020.

Initiatives in India

In India, the Reserve Bank took the lead in 2007 by issuing guidelines on Corporate Social Responsibility, Sustainable Development and Non-financial Reporting (Chakrabarty, 2011). In 2009, the Ministry of Corporate Affairs (MCA) recommended that all corporates formulate a Corporate Social Responsibility (CSR) policy consistent with National Voluntary Guidelines on Environment, Social and Economic responsibilities of corporates. Initiatives by the Securities and Exchange Board of India (SEBI) based on recommendations of the Committee on Corporate Governance (Chairman: Shri Uday Kotak) have also contributed to fostering the culture of ESG investing in India. A few other initiatives include launch of Morgan Stanley Capital International (MSCI) India, the ESG Leaders Index in 2013 and Bombay Stock Exchange (BSE) and National Stock Exchange (NSE) becoming a part of UN Sustainable Stock Exchanges Initiative.

The Way Forward

The lack of consistent methodologies, high cost of reporting and complicated review procedures make it challenging for corporates to incorporate ESG criteria in their business models. Given that the impact of climate change on India is expected to be one of the severest globally, the need for an appropriate framework to identify, assess and manage financial risks arising out of climate risk has become an imperative. Central banks and regulators need to provide leadership in the propagation of the ESG principles through the standardisation of the ESG investment terminology, design of a standard disclosures format for firms, and by incorporating ESG principles in financial stability assessments.

References:

1. NGFS (2018), 'A Call for Action – Climate Change as a Source of Financial Risk.'
2. Chakrabarty, K. C. (2011), 'Non-financial Reporting – What, Why and How – Indian Perspective.'
3. Financial Times (2019), 'Central Banks Tune into Climate Change', October 18.

Agenda for 2020-21

VI.86 The Department has identified the following goals for supervision of SCBs in 2020-21:

- A detailed prescriptive framework will be introduced, covering the roles and authority of the Chief Compliance Officer (CCO) of a bank, to bring uniformity in approach besides aligning the expectations on CCO with best practices (*Utkarsh)*;
- Assessment of risk and compliance culture and business strategy of SCBs to strengthen the health of the financial system, with special attention to the unique risks posed by climate change and implications for the supervisory framework (*Utkarsh*); and
- The Department will further strengthen the process of collecting supervisory data relating to KYC/anti money laundering (AML), which would facilitate better risk discovery, risk assessment and Risk Based Supervision (RBS) processes in respect of KYC/AML supervision, and the preparation of a model to risk profile the banks for carrying out risk-based KYC/AML inspection.

Urban Cooperative Banks (UCBs)

VI.87 In the cooperative institutions space, DoS - Cooperative Banks undertook periodic on-site and continuous off-site monitoring of UCBs during the year to ensure the development of a safe and well-managed cooperative banking sector.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

VI.88 The Department had set out the following goals for supervision of UCBs in 2019-20 under *Utkarsh*:

- Development of high frequency reports for early assessment of deficiencies and timely supervisory action (Para VI.89);
- Making UCBs core banking solutions (CBS) compliant (Para VI.90);
- Implementation of CFR (Para VI.91); and
- Strengthening the Cyber Security Monitoring Mechanism and cyber security related supervision of cooperative banks (Para VI.92).

Implementation Status of Goals

Early Assessments of Deficiencies and Timely Supervisory Action

VI.89 A model was developed for early assessment of deficiencies in the cooperative banking sector based on application of stress to selective financial parameters. The banks indicating weaknesses were identified and pre-emptive measures were taken to address the weakness in a timely manner.

Making UCBs CBS Compliant

VI.90 As on June 30, 2020, 1,529 (99.4 per cent) out of 1,538 UCBs, had implemented CBS. 3 out of the remaining 9 UCBs are under All-Inclusive Directions (negative net worth). Only 6 banks with positive net worth remain, that need to complete CBS implementation.

CFR for UCBs

VI.91 A CFR for UCBs was developed in 2019-20 and the User Approval Test (UAT) was completed. Workshops on Fraud Risk Management (FRM) and reporting by banks with a focus on improving the reporting quality and effective usage of CFR were conducted in Mumbai, New Delhi, Kolkata, Chennai, Bengaluru, and Thiruvananthapuram. A separate workshop for scheduled cooperative banks on reporting issues was also conducted in the College of Agricultural Banking (CAB), Pune.

Cyber Security Related Measures

VI.92 A comprehensive Cyber Security Framework for UCBs was formulated in December 2019, based on a graded approach. The UCBs have been categorised into four levels, based on their digital depth and interconnectedness in the payment systems landscape, digital products offered by them and assessment of cyber security risk.

Other Initiatives

VI.93 Some of the other initiatives during 2019-20 were as follows:

- The CRILC has been a key component of big supervisory data in the Reserve Bank. A separate CRILC platform was created to cover large-sized UCBs (with assets of ₹500 crore and above), effective from the quarter ended December 2019.
- The returns submitted by UCBs through the eXtensible Business Reporting Language (XBRL) system were brought under centralised manner of monitoring from April 1, 2019 to enhance data analytic assessments.
- As part of the handholding exercise, the Department initiated the process of holding meetings/interactive sessions with Chairman/CEOs/Directors of weak and vulnerable UCBs so as to discuss identified vulnerabilities/ weaknesses/ supervisory concerns and action to be initiated by the banks to address these issues. These Banks were given calibrated time-bound action plans/targets which are monitored closely.

Agenda for 2020-21

VI.94 The Department has identified the following goals for supervision of UCBs in 2020-21:

- Introduction of a differentiated supervision mechanism for select UCBs (*Utkarsh);*
- Integration of CBS modules of UCBs for all core functions; modules to be automated for effective supervision *(Utkarsh)*;
- Utilising CRILC reporting for the UCB sector for enhanced supervisory examination *(Utkarsh);* and
- Adapting the inspection process of UCBs to the changing needs of the sector focusing on size and periodicity.

Non-Banking Financial Companies (NBFCs)

VI.95 With regard to NBFCs, DoS - NBFCs monitored the entities (excluding HFCs) registered with the Reserve Bank with the objective of protecting the interests of depositors and customers, while ensuring financial stability.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

VI.96 The Department had set out the following goals for supervision of NBFCs for 2019-20 under *Utkarsh*:

- Integrated off-site monitoring system for NBFCs (Para VI.100 - VI.101);
- Interaction with other stakeholders (Para VI.102); and
- Direct submission of Annual Reports by SAs to the Reserve Bank's database (Para VI.104).

Implementation Status of Goals

Strengthening On-Site Supervision

VI.97 Strengthening on-site supervision of NBFCs during the year included greater coverage of CICs and government owned companies; and incisive on-site supervision of smaller NBFCs with an event-based approach. This led to initiation of enforcement action against several non-compliant NBFCs and cancellation of Certificates of Registration of 120 NBFCs during 2019-20.

VI.98 The top 50 NBFCs (representing 76 per cent of the asset size of the NBFCs) are closely and intensively monitored by the Reserve Bank, including through deep dives into their books of accounts and avoiding slippages.

Supervisory Structure and Processes

VI.99 The Reserve Bank has been empowered to remove the Directors of NBFCs, other than government-owned entities, to supersede their boards and appoint administrators through insertion of new sections 45-ID and 45-IE in the RBI Act, 1934 and through the new section 45MAA, to remove or debar an auditor for a maximum period of three years with a view to strengthening the governance of NBFCs. The Reserve Bank may also frame schemes for amalgamation, reconstruction and splitting of NBFCs into different units. Monitoring of related parties of NBFCs has been strengthened by inserting section 45 NAA in the RBI Act, 1934, directing group companies of NBFCs to furnish financial statements. The quantum of penalties applicable on NBFCs has been raised substantially too.

Data Quality and Consistency

VI.100 The submission of returns by NBFCs using the XBRL platform was formalised. This will make available data received from on-site inspection, off-site surveillance and SAs on an integrated platform. Consistent data quality enables the identification of early warning signals of stress in the SEs.

VI.101 A new XBRL software has been developed to improve data quality through in-form and cross-form validations, provisions for auto calculation of sub-totals and totals to obviate human error in reporting, and the generation of variance reports to check data consistency across time as well as between returns. All returns for NBFCs have been revised and rationalised from the present 21 to 19 in order to deepen and widen the information being obtained. The Department also developed on-going surveillance frameworks which extensively use data available under off-site supervision. The frequent usage of such data (Use Test) will help in improving data quality further.

Engagement with Stakeholders

VI.102 Engagement with stakeholders of the NBFC sector, including their SAs, CRAs, other regulators, banks and mutual funds facilitated the early identification of emerging risks in the sector to enable prompt supervisory intervention.

VI.103 The *Sachet* portal, which facilitates lodging of complaints related to deposits/schemes of various companies and serves as a source of market intelligence (MI), was made available in 11 regional languages, in addition to Hindi and English. This has widened the coverage for receipt of information on *Ponzi* schemes and deposit collection by unauthorised bodies.

Other Initiatives

VI.104 A template designed for SAs that enables them to directly upload the audited data to the Reserve Bank's database through XBRL platform, will be activated for submission of audited data from the financial year 2020-21 onwards. The initiative is expected to facilitate benchmarking of financials of various NBFCs.

Agenda for 2020-21

VI.105 The Department has identified the following goal for supervision of NBFCs in 2020-21 under *Utkarsh:*

- Steps will be taken to improve effectiveness of the supervision and monitoring of NBFCs by (i) ascertaining the quality of implementation of Ind-AS and subsequent regulatory guidance/directions; (ii) strengthening MI on NBFCs to assess the movement of financial parameters/market outlook of NBFCs and related parties on an ongoing basis; (iii) promoting a strong compliance and risk culture amongst NBFCs, and (iv) weeding out NBFCs not compliant with the Reserve Bank's directions with respect to maintenance of adequate net owned funds (NOF) and returns filing.

Supervisory Measures for All Supervised Entities (SEs)

VI.106 A unified DoS has been operationalised in which the supervision of banks, UCBs and NBFCs are undertaken in a holistic manner under one umbrella Department. This is intended to address inter-institutional issues on regulatory/supervisory arbitrage, information asymmetry and interconnectedness. A number of measures were taken to sharpen the intensity of on-site examinations while developing a proactive off-site surveillance framework for the SEs taken together.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

VI.107 The Department had set out the following supervisory goals for all SEs in 2019-20 under *Utkarsh:*

- Integration of supervisory departments and institution of a dedicated and specialised cadre of officers for ensuring a state-of-the-art supervisory framework (Para VI.108 - VI.109);
- Strengthening on-site supervision, off-site surveillance and MI (Para VI.111 - VI.112);
- Development of an Integrated Compliance Management and Tracking System (ICMTS) [Para VI.116]; and
- Strengthening Cyber Security Monitoring Mechanism (Para VI.117 - VI.118).

Implementation Status of Goals

Unification of Supervisory Departments

VI.108 The supervision function was integrated under a unified DoS with effect from November 1, 2019, by merging all supervisory departments, *viz.,* Department of Banking Supervision (DBS), Department of Co-operative Banking Supervision (DCBS) and Department of Non-Banking Supervision (DNBS), into one Department. The objective is to develop a holistic approach for the supervision of REs so as to address growing complexities, including size and inter-connectedness, as also to deal more effectively with potential systemic risks from supervisory arbitrage and information asymmetry. This redesigning will establish a graded supervisory approach and a more effective consolidated supervision of financial conglomerates.

Supervisory Structure and Processes

VI.109 A horizontal Risk Specialist Division was created in the Department to create a specialised wing to support risk discovery in an SE and to strengthen off-site supervisory bandwidth. A virtual College of Supervisors (COS) was set up under the aegis of the RBI Academy for capacity building among supervisory examiners. Its first online course was held on May 22, 2020. Areas of focus include research and modelling for supervision; microdata analytics for improved transaction testing; KYC/AML for better compliance by the SEs; risk and compliance culture and business strategy for improved governance practices in the SEs; and extension of the concept of a designated Senior Supervisory Manager (SSM), which started from banks with implementation of RBS, to all SEs.

Separate Structure for KYC/AML Risk

VI.110 A separate and specialised structure for KYC/AML risk based supervision has been created to supervise all SEs.

Proactive Off-site Supervision Mechanism

VI.111 The objective of an effective proactive off-site surveillance system is to be able to 'smell distress' early and initiate pre-emptive actions. This requires use of MI inputs, on-going engagement with the top management of the SEs on the alerts on potential vulnerabilities and selective bilateral engagements with the CEOs. In order to achieve this objective, the Department put in place a system for identification of vulnerable SEs for timely and proactive action to address these vulnerabilities. This involves both direct and indirect methodologies towards assessment of vulnerabilities in SCBs, NBFCs, SFBs and UCBs.

VI.112 Quarterly proactive off-site vulnerability assessment exercises were carried out for banks, NBFCs, SFBs and UCBs using data analytics, early warning systems, identification of vulnerable borrowers, stress testing, vulnerability on cyber security parameters and through different thematic analyses. All these together are targeted to guide towards better awareness about the risks in the group; cognition gap, if any; 'smell distress' early; and take timely proactive action.

Macro-Stress Tests

VI.113 The Department has been conducting supervisory stress tests since 2013 to assess the impact of shocks to the portfolios of banks under adverse scenarios, while also factoring in supervisory heuristics. In 2018, a revised top-down stress-testing model was developed in collaboration with the World Bank. Further improvements include a revised credit-risk stress test incorporating a set of three panel-data econometric models linking the real and financial sectors; reverse stress tests to assess liquidity risk; a new stress test to analyse large exposures at the system level; and a new duration-based stress test for interest-rate risk (IRR) that incorporates stress to the loan book as well as the trading book.

EWS Framework

VI.114 EWS was introduced as part of the off-site surveillance framework to streamline the process of risk discovery and capture potential vulnerabilities by leveraging on off-site analysis of data and predictive supervisory assessments, based on empirical data combined with scenario-based analysis. A pool of indicators including macro-economic variables, market indicators and balance sheet indicators is used from which statistically significant variables are chosen as Early Warning Indicators (EWIs) [credit growth, deposit growth, weighted average lending rate, net interest margin, capital to risk-weighted assets ratio, tier-I capital ratio and off-balance sheet exposure to total assets ratio]. The focus is to diagnose and detect vulnerability proactively, identify stress in the all SEs, *viz.,* banks, NBFCs and UCBs, and take corrective measures, as required.

Measuring Interconnectedness

VI.115 In view of the significant increase in the intermediation between banks and NBFCs and the stress faced by some NBFCs in the recent period, a Bank-NBFC Intermediation Index (BNII) was created to quantify inter-linkages. Similarly, an Asset Quality Index (AQI) was created to track the changes in asset quality of a bank's exposure to NBFCs.

Integrated Compliance Management and Tracking System (ICMTS)

VI.116 A web-based online application, ICMTS has been envisaged with an apt automated approach to manage the inspection lifecycle of SEs, supported by robust complaints and compliance management system. The application will act as a centralised repository of inspection reports/scrutiny reports/ instructions/guidelines/ circulars/complaints and their compliance with the documents/evidences submitted by SEs. The application is being designed in such a way that it will be capable of capturing/monitoring the end-to-end compliance life cycle. The application will help in improving the on-site/off-site monitoring process and response mechanism.

Cyber Security Measures

VI.117 During 2019-20, thirty-nine banks were subjected to IT examinations to assess their level of cyber security preparedness and degree of compliance with the circulars, advisories and alerts issued by the Reserve Bank from time to time. Thematic studies on select application service providers (ASPs) of the banking sector were undertaken during the year. A joint cyber security exercise was conducted by the Reserve Bank and Indian Computer Emergency Response Team (CERT-In) on February 12, 2020 and February 13, 2020 in which 70 select UCBs participated.

VI.118 Considering the dependency of SEs on the third-party ASPs for ATM Switch applications, adherence to the baseline cyber security controls by the ASPs was mandated, with access allowed to the Reserve Bank for on-site/off-site supervision of these entities, through contractual agreements with SEs.

Graded SAF

VI.119 A SAF for all SEs has been put in place with a structured escalation matrix for supervisory actions which would act as a tool for early supervisory interventions mostly prior to enforcement action. The objective is to bring consistency, reasonableness and transparency in supervisory actions and to ensure compliance with the Reserve Bank's guidelines, including KYC/AML, and more generally to improve the quality and timeliness of submission of supervisory returns.

Other Initiatives

VI.120 Some of the other initiatives during 2019-20 were as follows:

- The Department is working on a number of other initiatives to further strengthen identification of vulnerable SEs and ensure immediate follow-up on the identified vulnerabilities. These include use of AI/ML, centralised monitoring of complaints and compliance, and measuring interconnectedness.
- Towards its endeavour to adopt new technologies, the Reserve Bank will be leveraging on using AI/ML backed by the data analytics tools for data quality check across various supervisory and statutory data submissions of the SEs, capturing emerging risk signals to identify vulnerable banks and analysis of bulk data (select

business/transaction data) of the SEs to identify exceptions and enrich risk assessment process of the Department. Some of the specific areas in which AI can be used by the Reserve Bank are: (a) communication and display of pertinent indicators through interactive dashboards; (b) prediction of vulnerable sectors/ borrowers on the basis of their credit worthiness/fraud detection by use of ML algorithms; and (c) determining interconnectedness between the various entities by examining parameters like inter-bank lending, derivative exposures, and credit exposures by use of network analysis.

Impact of COVID-19 Pandemic and the Mitigating Measures

VI.121 With the spread of COVID-19 pandemic, supervisory measures initiated by the Reserve Bank were aimed at operational issues which included ensuring business continuity, cyber security and unhindered operations of the financial market infrastructure, while moderating the compliance burden on banks. The Reserve Bank not only ensured continuity of its own operations, but also enhanced its supervisory monitoring to ensure that any threat to financial stability is identified early and acted upon without delay. Through the pandemic, the financial system of the country, including all the payment systems, is functioning without any hindrance. To ensure that resilience of SEs is not affected materially, the Reserve Bank has also directed the SEs to assess the impact of the pandemic on their solvency and liquidity positions and to enhance their resilience by raising additional capital, if required. Cyber risk is being mitigated through issue of advisories, including from CERT-IN, regulatory reporting and periodic meetings with the top management of the SEs.

VI.122 An assessment of the relief extended by SEs so far indicated that for the system as a whole, 48.6 per cent of total customers availed benefit of the Reserve Bank's COVID-19 pandemic relief measures that constitute 50.1 per cent of the total outstanding amount up to April 2020. In the case of SCBs, 55.1 per cent of total customers availed of the Reserve Bank's COVID-19 pandemic relief measures and constituted nearly 50.0 per cent of total outstanding amount. In case of NBFCs and UCBs, 29.0 per cent and 56.5 per cent of total customers availed the Reserve Bank's relief measures, which constituted nearly 49.0 per cent and 64.5 per cent of the total outstanding amount, respectively.

Agenda for 2020-21

VI.123 The Department has identified the following supervisory goals for all SEs in 2020-21:

- Under the aegis of the standing committee on cyber security, a pro-active cyber immunity surveillance framework will be introduced for SEs to automate data flow from the SEs to the Reserve Bank for better analysis, cyber simulation/ assessment exercises in collaboration with ReBIT and the industry, prompt supervisory/regulatory intervention, besides prescribing certain baseline requirements for various other critical service providers (CSPs), master directions on IT practices (governance and related) and digital banking security expectations for the banking sector;
- A study on the large value frauds with the involvement of select banks, NBFCs, UCBs and domain experts will be undertaken for recognising the causes for delay in identifying frauds by SEs and suggest measures for early detection and

timely mitigation of the risks arising out of frauds;

- Implementation of ICMTS; and
- The Reserve Bank is engaged in interlinking various databases and information systems to improve fraud monitoring and detection. Online reporting of frauds by NBFCs and the CFR portal of SCBs, augmented with new features, are likely to be operational by January 2021.

Enforcement Department (EFD)

VI.124 The Enforcement Department (EFD) was set up in April 2017 to enforce regulations uniformly across banks, with the objective of engendering compliance by REs, within the overarching principles of ensuring financial stability, public interest and consumer protection. The enforcement policy and framework approved by the Board for Financial Supervision (BFS) emphasises the need to be objective, consistent and non-partisan in undertaking enforcement. Enforcement in respect of cooperative banks and NBFCs was also brought under the scope of operations of the Department with effect from October 3, 2018.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

VI.125 The Department had set out the following goals for 2019-20 under *Utkarsh:*

- Revision of Enforcement Policy and Framework in the light of the extension of the Department's mandate to undertake enforcement action against cooperative banks and NBFCs and accordingly, strengthening the Regional Offices (ROs) with sufficient manpower (Para VI.126); and
- Designing a database management system to capture violations, record enforcement action and compliance, and generate Management Information System (MIS) [Para VI.129].

Implementation Status of Goals

VI.126 During the year, in furtherance to the goal set out in *Utkarsh*, the enforcement policy and framework was reviewed and updated to include cooperative banks and NBFCs. In view of their relatively large number, decentralisation of enforcement work related to these entities was envisaged by setting up ROs of EFD at six centres, *viz.,* Ahmedabad, Chennai, Kolkata, Mumbai, Nagpur and New Delhi, to ensure operational efficiency and facilitate focused enforcement. Pursuant to the creation of ROs of EFD, approval for staffing them with requisite manpower was obtained.

VI.127 During July 2019-June 2020, the Department undertook enforcement action against 41 REs and imposed an aggregate penalty of ₹61.15 crore (Table VI.4) for non-submission of compliance to Risk Assessment Reports' (RAR) findings; non-compliance with/contravention of directions on fraud classification and reporting; not adhering to discipline while opening current

Table VI.4: Enforcement Actions (July 2019 - June 2020)

Regulated Entity	No. of Penalties	Total Penalty (₹ Crore)
1	2	3
Public Sector Banks	26	38.35
Private Sector Banks	8	8.55
Cooperative Banks	13	9.18
Foreign Banks	2	5.00
Payments Banks	-	-
Small Finance Banks	-	-
NBFCs	2	0.07
Total	**51**	**61.15**

-: Nil
Source: RBI.

accounts and granting non-fund based facilities to non-constituent borrowers; not reporting to CRILC platform under RBS; violations of directions/ guidelines issued by the Reserve Bank on KYC/ Income Recognition and Asset Classification (IRAC) norms; non-compliance with the directions on cyber security framework and time-bound implementation and strengthening of Society for Worldwide Interbank Financial Telecommunication (SWIFT) related operational controls. Enforcement actions were also undertaken against contravention of the directions pertaining to third party account payee cheques; non-compliance with directions contained in risk mitigation plan (RMP); non-compliance with Prudential Norms for classification, valuation and operation of investment portfolio by banks; non-compliance with directions on window-dressing of balance sheet; contravention of the directions on 'Loans and Advances to Directors, Relatives and Firms/Concerns in which they are interested'; non-compliance with the guidelines on promoter holding contained in 'Guidelines for Licensing of New Banks in Private Sector'; and, failure to comply with the provisions of section 10B of the BR Act, 1949.

Impact of COVID-19 Pandemic

VI.128 The substantial source material for the Department's functions being available in soft form, there was no significant impact of the pandemic induced lockdown on the initial processing of the cases and obtaining approvals for initiating enforcement action. The lockdown, however, impacted the conduct of personal hearings for the REs, which in turn caused some delay in bringing the cases to a logical conclusion within a reasonable time period. With the gradual withdrawal of lockdown, complemented by use of appropriate information and communication technology, the adverse bearing of COVID-19 pandemic on completion of enforcement process was sought to be minimised.

VI.129 Some impact of the disruptions due to lockdown was also felt on the development of the software application for automating enforcement process flow as per the timelines originally envisaged.

Agenda for 2020-21

VI.130 During the year ahead, the Department proposes to achieve the following goals:

- A formal feedback process for DoS on areas most prone to violations to facilitate effective compliance testing would be put in place (*Utkarsh).* For this purpose, based on the experience gained since its inception, the Department proposes to carry out an analysis of the violations and their *modus operandi.*
- The enforcement policy and process would be reviewed in the wake of reorganisation of regulatory and supervisory departments, including work processes at ROs to ensure consistency in enforcement action (*Utkarsh)*; and
- The enforcement work pertaining to imposition of monetary penalties on HFCs by the Reserve Bank, to the extent provided for under the NHB Act, 1987, would be brought under EFD in a phased manner.

5. CONSUMER EDUCATION AND PROTECTION

Consumer Education and Protection Department (CEPD)

VI.131 The Consumer Education and Protection Department (CEPD) frames policy guidelines to ensure protection of the interest of customers of REs in line with global best practices (Box VI.5),

Box VI.5
Benchmarking to G20 High Level Principles on Financial Consumer Protection

The Reserve Bank and its regulated entities (REs) maintain material compliance with the 10 voluntary High-Level Principles (HLPs) on Financial Consumer Protection (FCP), adopted by the G20 Finance Ministers and Central Bank Governors in their meetings during October 14-15, 2011.

Principle	Status of Implementation
1. Appropriate legal, regulatory and supervisory framework to be in place for FCP.	The Reserve Bank derives powers for FCP under Section 35A of the Banking Regulation Act, 1949, Section 45L of the RBI Act, 1934, and Section 18 of the Payment and Settlement Systems Act, 2007, which have been used to institute the Ombudsman Schemes for banks, NBFCs, and non-bank system participants, respectively.
2. Role of oversight bodies explicitly responsible for FCP - cooperation with other oversight authorities.	FCP oversight is centralised at CEPD, which monitors the functioning of the offices of Ombudsmen and Consumer Education and Protection (CEP) cells across India, which report to CEPD through a periodic feedback mechanism. Important systemic risks are flagged through the Financial Stability Reports.
3. Equitable and fair treatment of consumers - special attention to be dedicated to the needs of vulnerable groups.	The 'Right to Fair Treatment' is enshrined in the Charter of Customer Rights (CoCR) issued by the Reserve Bank in December, 2014. Instructions have been issued to banks for providing special assistance, including facilities at branches, door-step delivery of service, provision of braille/talking ATMs and ramps at access points to senior citizens and differently abled persons.
4. Disclosure and transparency – providing consumers with key information.	The 'Right to Transparency, Fair and Honest Dealing' is incorporated in the CoCR. REs are required to provide consumers with key information relating to the most important terms, benefits and risks of the product/service sold.
5. Financial education and awareness to be promoted by all stakeholders.	The Reserve Bank as well as the Financial Service Providers (FSPs) engage in financial education activities. The offices of Ombudsmen undertake 'Town Hall' events to increase awareness regarding the avenues for grievance redressal, safe banking practices, as well as extant regulations on customer service.
6. Responsible business conduct of FSPs and Authorised Agents.	Regulatory instructions have been issued for REs to have policies with regard to customer service and business conduct. REs (banks and NBFCs) are permitted to deploy the services of agents and they have to remain responsible for the actions of their agents. CoCR also extends the 'Right to Suitability' to customers of banks.
7. Protection of consumer assets against fraud and misuse.	Mechanisms for protection of customer's assets against fraud and misuse include elaborate guidelines for service providers for ensuring security of transactions, including digital transactions. In the case of fraudulent digital transactions, the liability of customers has been limited by regulation.
8. Protection of consumer data and privacy.	The 'Right to Privacy' is included in CoCR. Entities are required to maintain customer confidentiality and not divulge customer information to third parties, except under circumstances which are well-defined.
9. Consumers to have access to adequate complaints handling and redress mechanisms that are accessible, affordable, independent, fair, accountable, timely and efficient.	Regulatory guidelines on grievance redressal mechanism in REs have long been in place. Customers who are not satisfied with the redressal provided by the RE can approach Ombudsmen/CEP cells of the Reserve Bank. The process of lodging a complaint has been made smoother with the launch of the state-of-the-art Complaint Management System (CMS). All avenues for redressal of customer grievances are free of charge for the customer as well as the RE.
10. Nationally and internationally competitive markets to be promoted to provide consumers with greater choice in financial services.	The Indian financial sector comprises a variety of institutions, including public sector banks, private sector banks, foreign banks, co-operative banks, regional rural banks, small finance banks, payment banks, NBFCs, and non-bank payment system providers operating pre-paid cards/e-wallets. Together, the entities provide consumers with extensive choice in financial products and services.

Source: RBI.

undertakes oversight of the functioning of the Ombudsman Schemes of the Reserve Bank and creates public awareness on safe banking practices, extant regulations on customer service and protection and avenues for redressal of customer complaints.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

VI.132 The Department had set out the following goals for 2019-20:

- Strengthening the Grievance Redressal System based on Root Cause Analysis (RCA) of major areas of complaints (*Utkarsh)* [Para VI.133];
- Review of the Internal Ombudsman (IO) Scheme for extension to NBFCs (*Utkarsh)* [Para VI.134];
- Review of the Ombudsman Schemes of the Reserve Bank for updation and effective implementation (*Utkarsh)* [Para VI.135];
- Review of the Consumer Education and Protection (CEP) cells to empower them on the lines of Banking Ombudsmen (*Utkarsh)* [Para VI.136];
- Operationalise the Interactive Voice Response System (IVRS) for online support to the complainant (*Utkarsh)* [Para VI.137];
- Launching the Internal Ombudsman (IO) Scheme for Non-Bank System Participants (Para VI.138);
- Conducting survey of customer satisfaction from the Offices of Banking Ombudsmen (OBOs) [Para VI.139];
- Dissolution of the Banking Codes and Standards Board of India (BCSBI) [Para VI.140]; and
- Promoting consumer awareness (Para VI.141).

Implementation Status of Goals

Strengthening the Grievance Redressal System based on RCA

VI.133 RCA of the major areas of complaints received in the offices of Ombudsmen, CEP cells and select banks was undertaken. Root causes of the complaints were identified at the level of customers and REs, on account of gaps in regulatory guidelines and from external threats. Issues relating to gaps in regulatory guidelines have been referred to the regulatory and supervisory departments. Issues to be addressed in coordination with other regulators are being followed up. In addition, banks and offices of Ombudsmen have been advised to intensify efforts to create awareness among bank customers and members of public for adopting safe banking practices. Going forward, RCA will be undertaken on a regular basis.

Review of the IO Scheme for Extension to NBFCs

VI.134 The proposal to extend the IO Scheme to all NBFCs covered under the Ombudsman Scheme for NBFCs - 2018, was examined. Considering the diversity in the size and business profile of NBFCs, the number of complaints received and customer interface, the implementation of the IO Scheme for NBFCs is under review for roll-out on the basis of selective applicability.

Review of the Ombudsman Schemes for Updation and Effective Implementation

VI.135 An In-house Committee was set up to examine, *inter alia*, issues relating to the convergence of the three schemes - the Banking Ombudsman Scheme, 2006 (BOS), the

Ombudsman Scheme for NBFCs, 2018 (NBFC-OS) and the Ombudsman Scheme for Digital Transactions, 2019 (OSDT) - into an Integrated Ombudsman Scheme, and suggest measures for improving the effectiveness of the Ombudsman mechanism. The Committee has submitted its report and the proposals are being examined.

Review of CEP cells

VI.136 CEP cells redress complaints not covered by the Ombudsman Schemes. Amidst the challenges that affect grievance redressal by CEP cells, in particular the lack of *quasi*-judicial powers, the issue of strengthening CEP cells on the lines of the Ombudsmen has been examined by an internal working group. The recommendations of the internal working group have been reviewed by the in-house Committee studying the issues relating to the convergence of the Ombudsman schemes. The Committee has included recommendations on CEP cells in its report, which are being examined.

IVRS for Online Support to the Complainant

VI.137 Information on the Reserve Bank's Complaint Management System (CMS) is made available on IVRS. Any person can dial 14440 and obtain basic guidance on CMS, the Banking Ombudsman Scheme, consumer protection regulations such as the limited liability of a customer in fraudulent electronic banking transactions, *etc.* Going forward, the IVRS will serve as an on-tap source of information on important aspects of customer service and grievance redressal for consumers of financial services.

Launching the IO Scheme for Non-Bank System Participants

VI.138 Launched in October 2019, the IO Scheme for Non-Bank System Participants is applicable to non-bank issuers of pre-paid payment instruments (PPIs) with more than one crore outstanding PPIs as on March 31, 2019. Customer complaints that are partly or wholly rejected by the non-bank issuer of PPI must be referred to the IO, an internal, independent authority at the apex of the internal grievance redressal mechanism, for a final decision.

Satisfaction Survey of Customers

VI.139 A third-party satisfaction survey of customers was undertaken by the Reserve Bank during the year (Box VI.6). The findings of the survey are also available on the Reserve Bank's website (Annual Report on Banking Ombudsman Scheme, 2018-19).

Dissolution of the Banking Codes and Standards Board of India (BCSBI)

VI.140 The BCSBI was set up by the Reserve Bank in February 2006 as an independent and autonomous body, assigned to formulate codes of conduct to be adopted by banks voluntarily for ensuring fair treatment of customers. The Reserve Bank has since set up CEPD, issued the Charter of Customer Rights (CoCR) and considerably strengthened the Ombudsman mechanism to enhance consumer protection. It was accordingly decided to dissolve BCSBI, which is now in an advanced stage of completing its dissolution process.

Consumer Awareness

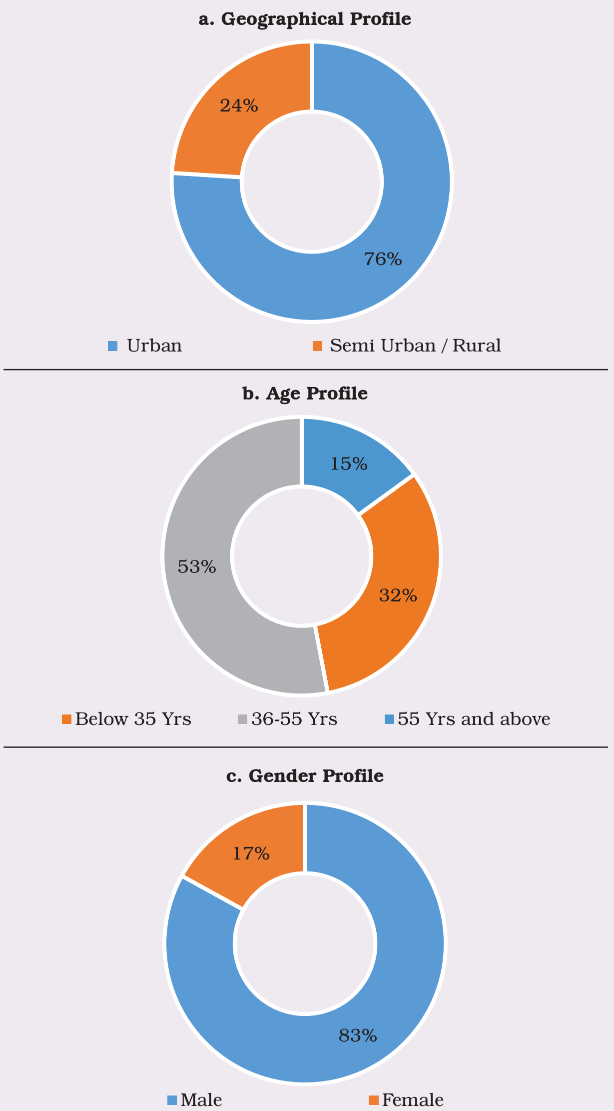
VI.141 During 2019-20, the Reserve Bank conducted country-wide awareness campaigns in coordination with its Department of Communication (DoC) through print and electronic media on various topics such as Ombudsman Schemes, Basic Savings Bank Deposit Account, banking facilities for senior citizens and differently abled

Box VI.6
Survey of Customer Satisfaction from the Offices of Banking Ombudsmen (OBOs)

In 2019-20, the Reserve Bank conducted a third-party survey of customers, who had lodged complaints with various OBOs during July 1, 2017 to June 30, 2019, to assess the level of their satisfaction.

The survey was conducted pan-India with a sample size of 3,010 respondents residing in 18 cities covering all sections of the society (Chart 1).

Chart 1: Profile of Respondents

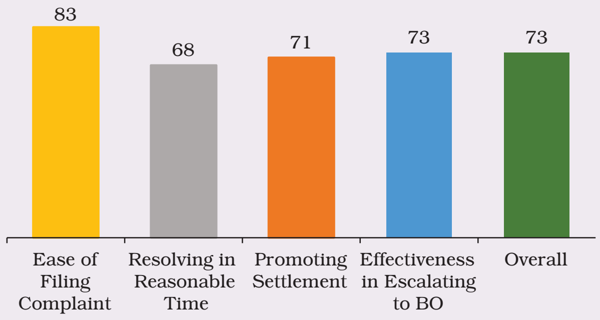


Source: Customer Satisfaction Survey for OBO, 2019.

The survey required respondents to indicate their level of satisfaction with the OBO in terms of the following parameters: i) ease of lodging a complaint; ii) time taken to resolve the complaint; iii) effort in promoting a settlement between the complainant and his/her bank; iv) escalation of the complaint to the OBO driving the service provider to redress the complaint immediately; and v) overall satisfaction with the OBO mechanism.

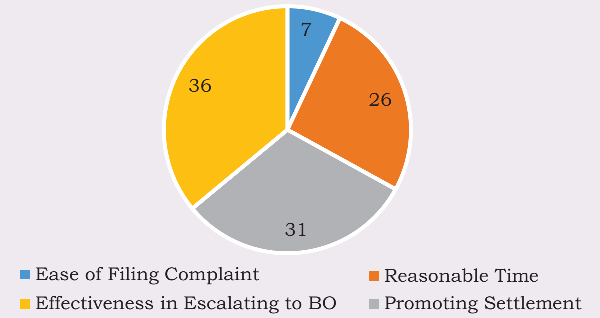
The survey revealed that 73 per cent of the respondents were satisfied overall with the disposal of their complaints under the Banking Ombudsman (BO) Scheme (Charts 2 and 3). The time taken for resolution of complaints (turnaround time) was considered by most of the respondents as a major issue to be addressed, going forward. Efforts by the BO in promoting a settlement between the complainant and the bank was also cited as an area for improvement. 'Word of mouth' and internet were the two most prominent sources of information regarding the BO Scheme. The feedback and insights from the survey are being used to identify actions required to further strengthen the Ombudsman mechanism.

Chart 2: Satisfaction Levels for Parameters (Per cent)



Source: Customer Satisfaction Survey for OBO, 2019.

Chart 3: Drivers of Overall Satisfaction Level (Per cent)



Source: Customer Satisfaction Survey for OBO, 2019.

persons, and safe digital banking. The Reserve Bank's SMS handle 'RBISAY' was also used extensively for sending text messages on these issues. The IVRS further strengthened the Reserve Bank's awareness generation efforts. The offices of Ombudsmen conducted 26 town hall events and 113 awareness/outreach programs, mainly in Tier II cities to create awareness regarding the Ombudsman Schemes.

Impact of COVID-19 Pandemic

VI.142 The grievance redressal function was carried out uninterrupted amidst the COVID-19 pandemic. The CMS, which brings all stakeholders *viz.,* the Reserve Bank, REs and customers on a single platform, and has a system-driven workflow process, ensured continued and effective grievance redressal even during the lockdown. REs were advised to ensure redressal of all COVID-19 pandemic related customer complaints on priority.

Agenda for 2020-21

VI.143 The Department proposes the following agenda for 2020-21:

- Strengthening financial education and awareness for the public (*Utkarsh*);
- Implementing the IO Scheme for select NBFCs (*Utkarsh*);
- Examining, for implementation, the recommendations of the in-house Committee on convergence of the Ombudsman Schemes, including the role of CEP cells (*Utkarsh*);
- Using AI to enhance the efficacy of the CMS of the Reserve Bank; and
- Instituting a disincentive cum incentive framework to encourage banks to improve their grievance redressal mechanism.

Deposit Insurance and Credit Guarantee Corporation (DICGC)

VI.144 Deposit insurance system plays an important role in maintaining the stability of the financial system, particularly in assuring the protection of interests of small depositors and, thereby, ensuring public confidence. Deposit Insurance and Credit Guarantee Corporation (DICGC) is a wholly owned subsidiary of the Reserve Bank constituted under the DICGC Act, 1961. The deposit insurance extended by DICGC covers all commercial banks including LABs, PBs, SFBs, RRBs and co-operative banks.

VI.145 The number of registered insured banks as on March 31, 2020 stood at 2,067 comprising 144 commercial banks (including 45 RRBs, 3 LABs, 6 PBs and 10 SFBs) and 1,923 co-operative banks (33 StCBs, 352 DCCBs and 1,538 UCBs). The DICGC raised the limit of insurance cover for depositors in banks to ₹5 lakh per depositor with effect from February 4, 2020 from the earlier level of ₹1 lakh with the approval of Government of India, with a view to providing a greater measure of protection to depositors in banks. The premium was also raised to 12 paise from 10 paise per ₹100 of assessable deposits per annum from the half year beginning April 1, 2020, in order to maintain an adequate level of the deposit insurance fund. With the present limit of deposit insurance in India at ₹5 lakh, the number of fully protected accounts (231 crore) as at end-March 2020 constituted 98.3 per cent of the total number of accounts (235 crore) as against the international benchmark[1] of 80 per cent. In terms of amount,

[1] International Association of Deposit Insurers (2013), "Enhanced Guidance for Effective Deposit Insurance Systems: Deposit Insurance Coverage", Guidance Paper, March.

the total insured deposits of ₹68,71,500 crore as at end-March 2020 constituted 50.9 per cent of assessable deposits of ₹1,34,88,888 crore as against the international benchmark of 20 to 30 per cent. At the current level, the insurance cover works out to be 4.0 times per capita income for 2019-20.

VI.146 DICGC builds up its Deposit Insurance Fund (DIF) through transfer of its surplus, *i.e.,* excess of income (mainly comprising premium received from insured banks, interest income from investments and cash recovery out of assets of failed banks) over expenditure (payment of claims of depositors and related expenses) each year, net of taxes. This Fund is available for settlement of claims of depositors of banks taken into liquidation/amalgamation. During April 2019 - March 2020, the Corporation sanctioned total claims of ₹80.7 crore as against claims aggregating ₹40 crore during the preceding year. The size of the DIF stood at ₹1,10,380 crore as on March 31, 2020, resulting in a reserve ratio of 1.61 per cent (Box VI.7).

Box VI.7
The Significance of Reserve Ratio in Deposit Insurance (DI): A Cross-Country Perspective

The principal public policy objectives of deposit insurance systems are to contribute to financial stability by protecting the financial system against bank runs and to ensure the safety and liquidity of the deposits of depositors up to certain coverage amount. In order to fulfil this mandate, it is necessary that the deposit insurer either has adequate financial resources or a funding mechanism whereby the required funds can be readily obtained. One indicator for assessing the sufficiency of funds for reimbursement to depositors is the reserve ratio (RR) - also known as the target ratio – which is defined as the ratio of deposit insurance fund (DIF) to insured deposits. In some jurisdictions the RR is fixed in the respective statutes.

A cross-country survey conducted in 2018 to gather information on prevailing policies suggests that of the 69 respondents, 64 use *ex ante* funding arrangements, and 44 (69 per cent) of respondents have fund targets. While there are 20 deposit insurance agencies (DIAs) that do not have fund targets, 19 of them have plans to set the target. Further, of the 44 DIAs that have a fund target, two countries, namely, Bahamas and Japan, use a target amount as the fund target. The target is statutorily set (28 DIAs) or prescribed by the governing body (16 DIAs). Some jurisdictions such as Jamaica, Kosovo, Malaysia and South Korea also prescribe the target ratio as a range.

The factors that predominantly determine the setting of a target fund are: structure of the financial system and its characteristics; legal framework; prudential regulation, supervision and resolution regime; macroeconomic conditions; availability and accessibility of emergency/ backup funding; and, state of accounting and disclosure regime. There are different approaches in setting the target fund size, *viz.*, discretionary method, statistical method of estimation of the DIA's loss distribution and combination of both.

The reserve ratios of various DIAs ranged between 0.20 per cent in Hungary to 6.11 per cent in Philippines. In India, the reserve ratio stood at 1.61 per cent on March 31, 2020 (Table 1).

Table 1: Reserve Ratio in Select Countries (end-December 2018)

Country	Reserve Ratio
1	2
United States (September 2019)	1.41
Canada (March 2019)	0.62
Germany	0.38
United Kingdom	0.71
France	0.35
Chinese Taipei	0.41
Japan	0.35
Czech Republic	1.29
Poland- Banks	1.80
Poland- Credit Unions	0.10
Malaysia	0.30
Slovenia	0.28
Portugal	1.16
India (end-March 2020)	**1.61**
Italy	0.27
Spain	0.28
Bulgaria	1.18
Sweden	2.57
Philippines (December 2017)	6.11
Hungary	0.20
Romania	3.01
Norway	2.75
Greece	1.43

Source: Annual Reports and Websites of respective jurisdictions.

References:

1. IADI (2014), 'Core Principles for Effective Deposit Insurance Systems', November.
2. IADI (2018), 'Deposit Insurance Fund Target Ratio', Research paper, January.

6. CONCLUSION

VI.147 In sum, amidst the concerns related to COVID-19 pandemic and economic growth, decisive measures were undertaken to remove impediments in supply of credit to sectors such as MSMEs and NBFCs. To smoothen the transmission of interest rates, linking of bank lending rates with external benchmarks was introduced. Banking sector witnessed consolidation in the form of mergers of some PSBs and amalgamation of certain DCCBs. Measures were also undertaken to strengthen regulatory and supervisory framework of SCBs, cooperative banks and NBFCs in line with the global best practices, and also with an objective to bring them under uniform enforcement framework to minimise the policy arbitrage. Measures to harness technology for efficient customer services and effective fraud detection were also put in place. Promoting doorstep banking services for the needy, extending the IO Scheme for Non-Bank System Participants and review of Ombudsman Schemes of the Reserve Bank were some of the major strides taken towards ensuring effective consumer protection.

VII PUBLIC DEBT MANAGEMENT

In the face of heightened uncertainty, both domestic and global, the market borrowing programme of the centre and the states for 2019-20 was conducted by the Reserve Bank in pursuance of the objectives of cost minimisation, risk mitigation and market development.

VII.1 The Internal Debt Management Department (IDMD) of the Reserve Bank is entrusted with managing the domestic debt of the central government *vide* Sections 20 and 21 of the RBI Act, 1934, and of 28 state governments and two Union Territories (UTs) in accordance with bilateral agreements as provided in Section 21A of the Act. Further, there is a provision for providing short-term credit up to three months to central government, state governments and UTs in the form of Ways and Means Advances (WMA) to bridge temporary mismatches in cash flows, as laid down in Section 17(5) of the RBI Act, 1934.

VII.2 The rest of the chapter is arranged in three sections. The immediately following section presents the implementation status in respect of the agenda for 2019-20. Section 3 covers major initiatives to be undertaken in the agenda for 2020-21 on debt management for central and state governments. The chapter has been summarised at the end.

2. Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

VII.3 Last year, the Department had set out the following goals:

- Overall liquidity enhancement in Government of India (GoI) securities (G-sec) market by consolidation of debt through a calendar of auction based switches and buyback operations (*Utkarsh)* [Para VII.5 - VII.6];
- Issuance of GoI benchmark securities of 2, 5, 7 and 10 year tenor (Para VII.7);
- Expansion of investor base by greater participation of multilateral financial institutions and multilateral development banks, apart from Foreign Central Banks (FCBs) in the G-sec market (*Utkarsh)* [Para VII.8];
- Revision of retail and mid-segment turnover targets for Primary Dealers (PDs) (Para VII.9);
- Diversifying the investor base for State Development Loans (SDLs) [Para VII.10];
- Exploration of various investment avenues for state governments (Para VII.11);
- Examination of the revision of the WMA limit for state governments (Para VII.12);
- Organising capacity building programmes to sensitise state governments about the prudent measures of cash and debt management (Para VII.13); and
- Improvement in information management system (Para VII.14).

Implementation Status of Goals

VII.4 During 2019-20, the market borrowing programme was conducted following the debt management strategy of minimising cost, risk mitigation and market development. Amidst heightened uncertainty characterising domestic and global economic and financial conditions, the Reserve Bank successfully managed the combined gross market borrowings of the central and the state governments, which increased by 28.1 per cent to ₹13,44,521 crore during the year.

VII.5 The Reserve Bank continued its policy of passive consolidation by way of reissuances and active consolidation through buyback/switches. During 2019-20, 185 out of 194 issuances of G-sec were re-issuances as compared with 206 re-issuances out of 212 issuances in the previous year.

VII.6 Switch auction for conversion of G-sec is generally conducted on every third Monday of the month, for which a specific press release, indicating the securities to be switched, is announced before the switch auction date. Accordingly, switch operations of G-sec amounting to ₹1,64,803 crore were completed during 2019-20 as against ₹28,059 crore in the previous year. Like last year, the budget for buyback operations was kept zero for the year.

VII.7 Following the discontinuation of old 2-year and 5-year G-sec, issuance of new G-sec in these maturities was undertaken, including a new 7-year security (7.27% GS 2026). Floating Rate Bonds (FRBs) were also issued during the year in order to broaden the investor base. The share of FRBs in total issuances during 2019-20 was 8.5 per cent, lower than 9.1 per cent in the previous year.

VII.8 Under the Foreign Central Bank (FCB) scheme, the Department invests in Indian G-sec on behalf of select FCBs and multilateral development institutions in the secondary market. In consultation with the central government, the scheme has been extended to multilateral financial institutions and multilateral development banks. Further, Treasury Bills (T-Bills) were also included as eligible instruments under the scheme. Total volumes (purchase and sell) transacted on behalf of FCBs stood at ₹4,500 crore (face value) during 2019-20, up from ₹1,297 crore in the previous year. During 2019-20, 180 Gilt Account Holders (GAHs) accessed the NDS-OM-Web and undertook 93,697 trades worth ₹11.54 lakh crore as compared with 72,229 trades worth ₹6.97 lakh crore in the previous year.

VII.9 The guidelines for PDs are under review to, *inter alia*, achieve the objectives of Market Making Scheme and to ensure better retailing of G-sec by PDs.

VII.10 Various measures have been taken to diversify the investor base for SDLs. Among them are steps taken to encourage participation of retail investors in SDL market, including introduction of non-competitive bidding in primary auctions. In this direction, Specified Stock Exchanges (besides scheduled banks and primary dealers) have been permitted to act as Aggregators/Facilitators to consolidate the bids of their stockbrokers/other retail participants and submit a single bid under the non-competitive segment of the primary auction of the SDLs, following an announcement through circular dated November 7, 2019. A stripping/reconstitution facility for SDLs, similar to the one for central government securities was announced in the Reserve Bank's Statement on Developmental and Regulatory Policies of August 7, 2019. This measure will be implemented in consultation with the state governments.

VII.11 A proposal to explore various investment avenues for state governments including the review of the Consolidated Sinking Fund (CSF) / Guarantee Redemption Fund (GRF) scheme is in progress. In this regard, a Discussion Paper has already been submitted to the Executive Committee (EC) to State Finance Secretaries (SFS).

VII.12 In 2016, the Advisory Committee on WMA scheme for state governments (Chairman: Shri Sumit Bose) had recommended that the WMA limits be revised to ₹32,225 crore for all states/ UTs together and Committee-based next revision of WMA may be effected in 2020-21, taking into account the roadmap laid by the Report of the Fifteenth Finance Commision. Currently, a new Committee (Chairman: Shri Sudhir Shrivastava) is examining these limits. The Committee is yet to submit its report to the Reserve Bank.

VII.13 Capacity building programmes for sensitising state governments about the prudent measures of cash and debt management were conducted in five states (*viz.,* Rajasthan, Bihar, Assam, Karnataka and Odisha). Meetings between states and investors were also facilitated during the year.

VII.14 In order to improve data dissemination, dashboards were created and made available to the public through Database on Indian Economy (DBIE). It provides current information related to auctions, gross and net market borrowings of the central and state governments and secondary market yield movements.

Debt Management of the Central Government

VII.15 During 2019-20, the gross market borrowings through dated G-sec were higher by 24.3 per cent than a year ago. Net market borrowing through dated G-sec also increased by 12.1 per cent on account of higher borrowings during the year. Net market borrowing through dated G-sec financed 61.8 per cent of the centre's gross fiscal deficit (GFD) as against 65.1 per cent in the previous year. The net market borrowing through dated securities and T-Bills taken together also increased in 2019-20 (Table VII.1).

Debt Management Operations

VII.16 The weighted average yield (WAY) on GoI dated securities issued during 2019-20 declined by 93 basis points (bps) on a year-on-year basis. The weighted average coupon on dated securities on the entire debt stock also decreased *albeit* marginally. Consequent upon the decision by the GoI to undertake more borrowings in the maturity bucket of over 15 years, the weighted average maturity (WAM) of issuances increased during 2019-20, resulting in a marginal increase in WAM on the outstanding debt (Table VII.2).

VII.17 During 2019-20, G-sec yields softened considerably with 10-year benchmark yield moderating by 121 basis points (bps) from 7.35 per cent to 6.14 per cent, attributed to cumulative reduction in repo rate by 185 bps during the year, coupled with accommodative policy stance and

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

(Amount in ₹ crore)

Item	2017-18	2018-19	2019-20	2020-21*
1	2	3	4	5
Net Borrowing (i to iv)	4,98,891	4,58,337	5,11,500	5,58,381
(i) Dated Securities@	4,48,410	4,22,737	4,73,972	2,15,428
(ii) 91-day T-Bills	31,886	-46,542	-9,600	1,17,013
(iii) 182-day T-Bills	1,436	32,931	38,354	1,23,480
(iv) 364-day T-Bills	17,159	49,211	8,774	1,02,460

*: Up to June 30, 2020.
@: Without adjusting for buyback and switches. After adjusting for buyback and switches, net borrowings through dated securities during 2019-20 stood at ₹ 4,73,990 crore as against ₹4,23,269 crore in 2018-19.
Source: RBI.

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

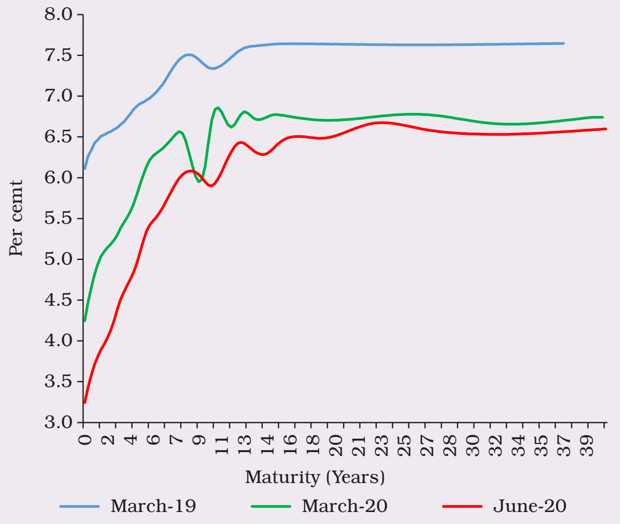
(Yield in per cent/Maturity in years)

Years	Range of YTMs in 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
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	6.85-7.46	6.13-7.61	6.46-7.87	7.16	5-38	14.76	10.65	7.99
2017-18	7.23-7.27	6.42-7.48	6.68-7.67	6.97	5-38	14.13	10.62	7.76
2018-19	6.56-8.12	6.84-8.28	7.26-8.41	7.78	1-37	14.73	10.40	7.81
2019-20	5.56-7.38	6.18-7.44	5.96-7.77	6.85	1-40	16.15	10.72	7.71
2020-21**	4.04-5.55	5.22-6.52	4.65-7.19	5.87	2-40	14.61	11.02	7.59

YTM: Yield to Maturity. -: Not applicable. @: Residual maturity of issuances and figures are rounded off.
*: Excluding special securities and buyback/switch in GoI securities. **: Up to June 30, 2020.
Source: RBI.

OMO purchases. A new 10-year G-sec paper (6.45% GS 2029) was also issued on October 7, 2019 with a coupon considerably lower than that of the previous issuance (7.26% GS 2029 issued on January 8, 2019). Further, the Reserve Bank announced various other monetary easing measures which impacted the yield curve. Specifically, special OMOs of ₹40,000 crore were conducted in December 2019 and January 2020, wherein the Reserve Bank bought long-term securities and sold short-term securities simultaneously. The Reserve Bank also conducted Long Term Repo Operations (LTROs) for 1-year and 3-year tenors at policy repo rate for ₹1,25,000 crore in February and March 2020 to provide durable liquidity to the system at reasonable cost. Since the credit offtake in the system remains muted, the LTROs resulted in significant softening in G-sec yields for short-tenor papers. These developments led to increase in spreads between short-term and long-term G-sec yields, steepening the yield curve towards the end of March 2020. A downward kink was observed in the G-sec yield curve around the 10-year tenor, partly explained by the high liquidity premium in the 10-year benchmark paper and also on account of the special OMOs conducted by the Reserve Bank, which brought down yields of the 10-year paper more than the adjacent tenors. The yield curve remained flat beyond 14-year G-sec papers and took a roughly parallel shift downward relative to the previous year (Chart VII.1).

Chart VII.1: FBIL Par Yield Curve



FBIL: Financial Benchmark India Private Ltd.
Source: RBI.

VII.18 During 2019-20, about 54.2 per cent of the market borrowing were raised through issuance of dated securities with a residual maturity of 10 years and above, as compared with 53.5 per cent in the previous year, resulting in a marginal decrease in the share of securities with maturity less than 10 years during the year. Further, 30-year and 40-year tenor papers were issued/reissued during the year with the objective of catering to the demand for long-term investors such as insurance companies and pension funds (Table VII.3).

Issuance of Special GoI Securities

VII.19 Special GoI securties (non-transferable) for the purpose of recapitalisation were issued to 13 public sector banks (PSBs), EXIM Bank, IDBI Bank and Indian Infrastructure Finance Company Ltd. (IIFCL) for a total amount of ₹75,847.60 crore in 7 tranches on a cash-neutral basis. Coupons on those securities ranged between 6.13 - 6.79 per cent.

Treasury Bills

VII.20 Short-term cash requirements of the government are met through issuance of T-Bills. The net short-term market borrowing of the government through T-Bills (91, 182 and 364 days) marginally increased to ₹37,528 crore during 2019-20 as against ₹35,600 crore in the previous year.

Ownership of Securities

VII.21 Commercial banks and cooperative banks taken together remained the largest holders of G-sec accounting for 41.9 per cent as at end-March 2020, followed by insurance companies (26.2 per cent) and provident funds (10 per cent). The share of the Reserve Bank was 9.5 per cent and the share of FPIs was 1.5 per cent. The other holders of G-sec are pension funds, mutual funds, state governments, financial institutions (FIs) and corporates.

Primary Dealers and Devolvement

VII.22 The number of primary dealers (PDs) stood at 21 [14 Bank-PDs and 7 Standalone PDs (SPDs)] at end-March 2020. All the PDs maintained capital to risk-weighted assets ratio (CRAR) above the minimum requirement of 15 per cent during the year. The mandate of underwriting primary auctions of dated G-sec has been given to PDs with a target of achieving bidding

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

(Amount in ₹ crore)

Residual Maturity	2018-19		2019-20		2020-21*	
	Amount Raised	Percentage to Total	Amount Raised	Percentage to Total	Amount Raised	Percentage to Total
1	2	3	4	5	6	7
Less than 5 Years	1,08,899	19.1	1,46,000	20.6	86,000	24.9
5 -9.99 Years	1,57,000	27.5	1,79,000	25.2	89,000	25.7
10-14.99 Years	98,000	17.2	1,37,000	19.3	93,000	26.9
15 -19.99 Years	71,101	12.5	15,000	2.1	-	-
20 Years & Above	1,36,000	23.8	2,33,000	32.8	78,000	22.5
Total	**5,71,000**	**100.0**	**7,10,000**	**100.0**	**3,46,000**	**100.0**

*: Up to June 30, 2020. -: Nil.
Note: Figures in the columns might not add up to the total due to rounding off of numbers.
Source: RBI.

commitment/success ratio in respect of Treasury Bills (T-Bills)/cash management bills (CMBs). The PDs individually achieved the stipulated minimum success ratio of 40 per cent, with an average of 62.78 per cent in H1: 2019-20 and 60.62 per cent in H2. The share of PDs in auctions of T-Bills/CMBs was 71.67 per cent during 2019-20 as compared with 71.44 per cent in the previous year. The underwriting commission paid to PDs during 2019-20 was ₹41.04 crore as compared with ₹139.86 crore in the previous year, reflecting reduced domestic market volatility relative to previous year.

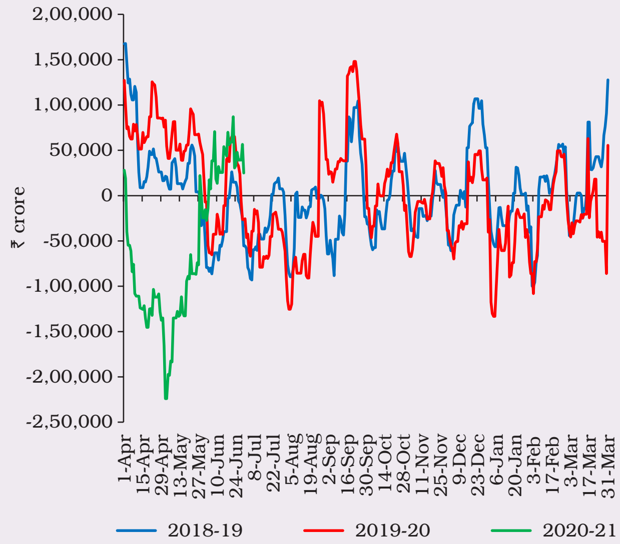
Sovereign Gold Bonds Scheme

VII.23 In consultation with the Government of India, the Reserve Bank issued 10 tranches of Sovereign Gold Bonds (SGBs) for an aggregate amount of ₹2,316.37 crore (6.13 tonnes) during 2019-20. Under the SGB scheme, bonds are denominated in units of one gram of gold and multiples thereof. The minimum annual investment is one gram with a maximum limit of 4 kg per individual, 4 kg per Hindu Undivided Family (HUF) and 20 kg for trusts and similar entities notified by the government from time to time. A total of ₹9,652.78 crore (30.98 tonnes) has been raised through the scheme (37 tranches) since its inception in November 2015.

Cash Management of the Central Government

VII.24 The central government started the year 2019-20 with a cash balance of ₹1,27,693 crore. The WMA limits for the first and second half of the year were ₹75,000 crore and ₹35,000 crore, respectively. The central government resorted to WMA for 189 days during 2019-20 *vis-à-vis* 173 days in the previous year and went into overdraft (OD) for 52 days *vis-à-vis* 50 days during the same period. The highest amount of WMA/OD resorted to was ₹1,33,188 crore on January 4, 2020. The central government issued CMBs of ₹3,00,000 crore, with tenors ranging between 10 to 84 days to tide over short-term mismatches in cash flows during 2019-20. The year ended with central government's cash balance at ₹ 55,573 crore (Chart VII.2).

Chart VII.2: GoI Cash Balance



Source: RBI.

Debt Management of State Governments

VII.25 Following the recommendation of the 14th Finance Commission (FC) to exclude states from the National Small Savings Fund (NSSF) financing facility (barring Delhi, Madhya Pradesh, Kerala and Arunachal Pradesh), market borrowings of states have been increasing over the last few years. The share of market borrowing in financing GFD consequently rose to 87.9 per cent in 2019-20 (BE) from 84.0 per cent in 2017-18.

VII.26 Both gross and net market borrowing of states were higher during 2019-20 than a year ago. Gross market borrowing increased by 32.7 per cent, while the net borrowing increased by 39.8 per cent, reflecting lower growth (y-o-y) in

Table VII.4: Market Borrowing of States through SDLs

(Amount in ₹ crore)

Item	2017-18	2018-19	2019-20	2020-21*
1	2	3	4	5
Maturities during the Year	78,819	1,29,680	1,47,067	28,167
Gross Sanction under Article 293(3)	4,82,475	5,50,071	7,12,744	5,11,189
Gross Amount Raised during the Year	4,19,100	4,78,323	6,34,521	1,67,276
Net Amount Raised during the Year	3,40,281	3,48,643	4,87,454	1,39,109
Amount Raised during the Year to Total Sanctions (per cent)	86.9	87.0	89.0	32.7
Outstanding Liabilities (at the end of period) #	24,29,892	27,78,536	32,65,989	33,93,098

*: As on June 30, 2020. #: Including UDAY and other special securities.
Source: RBI.

redemptions during the year (Table VII.4). There were 636 issuances in 2019-20, of which 114 were re-issuances (467 issuances in 2018-19, of which 59 were re-issuances), reflecting the efforts of state governments towards debt consolidation.

VII.27 The weighted average yield (WAY) of cut-off yield for State Development Loans (SDLs) issued during 2019-20 was lower at 7.24 per cent than 8.32 per cent in the previous year. Accordingly, the weighted average spread (WAS) of SDL issuances over comparable central government securities was 55.02 bps in 2019-20 as compared with 64.66 bps in the previous year. In 2019-20, seventeen states and one union territory issued non-standard securities of tenors ranging from 2 to 40 years. As a strategic response to higher spreads, 9 states rejected all the bids in some of the auctions. Following the policy of passive consolidation, 11 states (*viz.,* Bihar, Gujarat, Haryana, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Tamil Nadu and Telangana) undertook re-issuances during 2019-20, which helped in creating liquidity for their securities in the secondary market. The average inter-state yield spread on 10 year fresh issuance was 6 bps in 2019-20, the same as observed in 2018-19, reflecting their continued disconnect from the fiscal health of issuing states.

Cash Management of State Governments

VII.28 Following the recommendations of the Advisory Committee on WMA scheme for state governments (Chairman: Shri Sumit Bose), the WMA limit was set at ₹32,225 crore for all states/UTs together until the next review in 2020-21. Currently, a new Committee (Chairman: Shri Sudhir Shrivastava) is reviewing these limits. Pending its recommendations, it was decided on April 1, 2020 to increase the WMA limit by 30 per cent from its existing level to enable states/UTs to tide over COVID-19. On April 17, 2020, the Reserve Bank decided to further increase the WMA limit by 60 per cent over and above the level as on March 31, 2020. This interim measure will remain valid till September 30, 2020. Relaxation in the overdraft (OD) scheme has been given to state governments/UTs to tide over mismatches in cash flows by increasing the number of days for OD, effective April 7, 2020, till September 30, 2020. Sixteen states availed the Special Drawing Facility (SDF) in 2019-20. Thirteen states resorted to WMA and ten states availed OD.

VII.29 Over the years, states have been accumulating a sizeable cash surplus in the form of intermediate treasury bills (ITBs) and auction treasury bills (ATBs), which, however, entail a negative carry cost, *i.e.*, there is a negative spread of 524 bps as at end-March 2020 between the average borrowing cost of states (7.24 per cent) and the average rate of return on ATBs/ITBs (2 per cent). The outstanding investment of states in ITBs was ₹1,54,757 crore at end-March 2020, while outstanding investment in ATBs was ₹33,504 crore (Table VII.5).

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

(Amount in ₹ crore)

Item	Outstanding as on March 31				
	2016-17	2017-18	2018-19	2019-20	2020-21*
1	2	3	4	5	6
14-Day ITBs	1,56,050	1,50,871	1,22,084	1,54,757	1,47,243
ATBs	36,603	62,108	73,927	33,504	38,297
Total	**1,92,653**	**2,12,979**	**1,96,011**	**1,88,261**	**1,85,540**

*: As on June 30, 2020.
Source: RBI.

Investments in Consolidated Sinking Fund/Guarantee Redemption Fund

VII.30 The Reserve Bank manages two reserve fund schemes on behalf of state governments (SGs) – the Consolidated Sinking Fund (CSF) and the Guarantee Redemption Fund (GRF) [Box VII.1]. These reserve funds are built up from the contributions made by the SGs voluntarily and

Box VII.1
Consolidated Sinking Fund (CSF) and Guarantee Redemption Fund (GRF) Schemes of States: Relevance in Current Scenario

Sinking funds represent an alternative to manage refinancing risk by setting aside money over and above those required for debt service payments and these are invested in sovereign securities. IMF recommends such schemes to manage refinancing risk of sovereigns (Jonasson and Papaioannou, 2018). Debt managers across the world also manage the risk through various methods including setting up of sinking funds. Even though CSF/GRF schemes of states in India cannot be strictly compared with sinking funds of other countries, it does have similarity in that these are ultimately reserve funds which can be relied upon in case of an exigency. Countries like South Africa, Turkey, Denmark and Spain manage the exposure of debt stock by forming a natural hedge called ‘Liquidity Buffer’. Liquidity buffers have proved to be effective in mitigating risk relating to public debt. In order to cover expected loss of the treasury guarantees, a risk account was established in 2003 at the central bank of the Republic of Turkey. The revenues of the account consist of guarantee/on-lent fees, interest income and repayments by beneficiary institutions related to undertaken loans. In Denmark, a level of cash reserves is maintained to service one year of debt repayments (Koc, 2014).

In India, over the years, the aggregate investment in both the funds have been showing an increasing trend. As at end-March 2020, CSF constituted 2.6 per cent of the previous year’s outstanding liabilities and GRF constituted 1.7 per cent of outstanding guarantees of states. Only 8 states maintain CSF to the desirable level of above 5 per cent of their outstanding liabilities and 11 states maintain GRF above 5 per cent of their outstanding guarantees. Yearly utilisation of these funds by states, *vis-à-vis* balances during last few years are given in Table 1.

Measures Undertaken by the Reserve Bank to Make CSF/GRF Attractive

- Following the recommendation made by the Advisory Committee on WMA (2016) [Chairman: Shri Sumit Bose], incremental investment in CSF/GRF is allowed for availing SDF without any limit (*i.e.,* not limited to WMA limit).

Table 1: Utilisation of CSF and GRF by States/UT

(Amount in ₹ crore)

Year	Outstanding Balances at end-March		Withdrawal during the Year	
1	2		3	
	CSF	GRF	CSF	GRF
2017-18	99,271	5,439	427	-
2018-19	1,14,701	6,514	1,201	21
2019-20	1,30,431	7,486	47	-
2020-21*	1,31,356	7,595	1,750	-

-: Nil. *As on June 30, 2020.
Source: RBI.

(Contd...)

- Reserve Bank lowered the rate of interest on SDF availed against the incremental investment in CSF/GRF, from 100 bps below the repo rate to 200 bps below the repo rate in June 2018 to incentivise maintenance of these funds by the SGs.
- In light of the financial stress caused to SGs due to the COVID-19 pandemic, as an interim measure, it was decided on May 22, 2020 to liberalise the withdrawal norms of the CSF scheme. As against the extant rule of limiting withdrawal to accrued interest, under the relaxed norms, states are permitted to withdraw up to 75 per cent of their total balance in CSF outstanding as on March 31, 2020, with the quantum of withdrawal restricted to the redemption due towards market borrowing in the current financial year 2020-21. This relaxation would make available an additional sum of about ₹13,300 crore with the SGs for meeting their redemption requirements during 2020-21. Together with the normally permissible limit, this additional amount will cover about 45 per cent of their redemptions for 2020-21. Eleven states would be able to cover 100 per cent of their redemption in 2020-21 as per the relaxed guidelines as against 6 states as per the extant rules. State governments will continue to retain a sizeable corpus in their CSF even after utilising this additional amount released for withdrawal.

Buffer funds like CSF/GRF increases investor confidence in state's issuances which may, in turn, have a positive impact on the borrowing cost of the SGs. In times of economic stress, states can drawdown from CSF which, in turn, may reduce the need for further borrowings for repayments of earlier borrowings. Any default on state government's borrowing/liability could have adverse market impact, and reserve funds like CSF and GRF can provide a cushion in times of stress. The importance of these two reserve funds in the current situation of COVID-19 cannot be over-emphasised when states/UT are facing difficulties with their finances. However, there are some drawbacks in keeping such reserve funds. If these funds are built up from borrowed funds, maintaining reserve funds will increase states' borrowings to that extent. Currently investments under the CSF scheme are made primarily in central government securities (more than 95 per cent) with remaining in SDLs of other states. Since, central government yields are less compared to SDL yields of comparable tenor, there is a negative carry on these investments. Further, the fund in CSF cannot be utilised before the lock-in period of 5 years. However, experience suggests that advantages of maintaining such buffer funds outweigh the disadvantages.

Reference:

1. Jonasson, Thordur and Papaioannou, Michael (2018), 'A Primer on Managing Sovereign Debt-Portfolio Risks', *IMF Working Paper No.* WP/18/74, April.
2. Koc, Fatos (2014), 'Sovereign Asset and Liability Management Framework for DMOs: What Do Country Experiences Suggest', *United Nations Conference on Trade and Development (UNCTAD)*, January.

are being managed as per the schemes notified by SGs. CSF is an amortisation fund and was introduced in 1999 to meet repayment obligations of the SGs. After a 5-year lock-in period, states are eligible to withdraw the interest accrued and accumulated up to the close of previous financial year (FY). A working group in 2012 recommended to build up a minimum corpus of 3 to 5 per cent of state liabilities within next 5 years. So far, 24 states and one union territory, *i.e.*, Puducherry have set up CSF. GRF is constituted by SGs for meeting their obligations arising out of the guarantees issued on behalf of state level entities. The Reserve Bank circulated the scheme of GRF to the SGs in August 2001 for voluntary adoption and it envisaged an initial contribution of at least 1.0 per cent of outstanding guarantees at the end of the previous year and thereafter minimum 0.5 per cent every year to achieve a minimum level of 3 per cent in next five years. Accretions in the Fund can be utilised only towards payment of guarantees issued by the SGs and invoked by the beneficiary. Presently, 18 states are members of the GRF. States can also avail a special drawing facility (SDF) at a discounted rate from the Reserve Bank against their incremental annual investment in CSF and GRF. Outstanding investment by states in the CSF and GRF at end-March 2020 was ₹1,30,431 crore and ₹7,486 crore, respectively, as against ₹1,14,701 crore and ₹6,513.73 crore at end-March 2019. Total investment in CSF/GRF was ₹23,464 crore in 2019-20. Total disinvestment by states from CSF and GRF was ₹47.40 crore during 2019-20.

3. Agenda for 2020-21

VII.31 The Union Budget 2020-21 projects gross market borrowing through dated securities at ₹7,80,000 crore (3.5 per cent of GDP), higher by about 9.9 per cent than ₹7,10,000 crore in 2019-20. Net market borrowing [including short-term debt and repayment of Post Office Life Insurance Fund (POLIF)] is budgeted at ₹5,35,870 crore, financing 67.3 per cent of the GFD in 2020-21 [65.1 per cent in 2019-20 (RE)]. After reviewing the cash position and requirements of the central government, the Government of India (GoI) in consultation with the Reserve Bank of India, decided to modify the indicative calendar for issuance of G-sec for the remaining part of the first half of the fiscal 2020-21 (May 11-September 30, 2020) and revised the gross market borrowings to ₹12 lakh crore for the full year 2020-21. Further, in order to provide additional resources to the states in view of COVID-19, the borrowing limits of the state governments has also been increased from the existing 3 per cent to 5 per cent of GSDP, subject to conditions.

VII.32 Given these requirements, the market borrowing programme is proposed to be conducted with the following strategic milestones so as to achieve the overall goals of debt management set out in the beginning of this chapter:

- Introduction of separate trading of registered interest and principal securities (STRIPS) in SDLs as announced in the Reserve Bank's Statement on Developmental and Regulatory Policies of August 7, 2019 (*Utkarsh*);
- Ease of doing business in the G-sec market-hiving off servicing of compensation bonds issued in physical forms to state treasuries (*Utkarsh*);
- Complete the process of mirroring of gilt accounts in *e-Kuber;* examine the feasibility of lien marking by banks for loans against G-sec in the Reserve Bank's *e-Kuber* portal; and review guidelines on subsidiary general ledger (SGL)/ constituent subsidiary general ledger (CSGL);
- Consolidation of debt through calendar-driven, auction-based switches and buyback operations along with reissuance of securities to augment liquidity in G-sec market and facilitate fresh issuances;
- Explore the possibilities for optimising the market borrowings; develop the methodology for building up of liquidity buffer for better cash management; and consolidation of public debt data (including data on market borrowings, valuations and special securities) in the Reserve Bank's data warehouse;
- Undertake best practices in data reporting to improve quality and veracity of data; and
- Conduct capacity building programmes for sensitising the state governments about the prudent measures of cash and debt management.

4. Conclusion

VII.33 In sum, during 2019-20, combined gross market borrowings of centre and states were conducted successfully in line with the guiding principles of debt management. The Reserve Bank has also announced a number of interim measures to manage the stress on the finances of both centre and states in the wake of the COVID-19 pandemic. Going ahead, consolidation of government debt will be the key area of focus of the Reserve Bank.

VIII CURRENCY MANAGEMENT

During the year under review, the Reserve Bank ensured an adequate supply of clean banknotes of various denominations to the public. Other important developments were integration of currency management functions with the Bank's core banking solution (e-Kuber), replacement of Currency Verification and Processing Systems (CVPS) across Regional Offices and a mobile application (MANI) to enable visually impaired persons identify denominations of banknotes. The Reserve Bank maintained adequate supply of clean banknotes to the public in the face of augmented COVID-19 related demand.

VIII.1 The year 2019-20 was marked by strengthening of internal work processes within the Reserve Bank's mandate in the area of currency management. They, *inter alia,* involved upgradation of Currency Verification and Processing Systems (CVPS) across offices of the Reserve Bank and replacement of the Integrated Computerised Currency Operations and Management System (ICCOMS) application with an improved currency management module (CyM) integrated with the Reserve Bank's Core Banking Solution (*e-Kuber*).

VIII.2 The demand for currency started to increase in the wake of heightened uncertainty caused by COVID-19 pandemic. The Reserve Bank took a series of measures in order to meet the enhanced demand. In addition, note printing presses, paper mills and banks were also directed to put in place a business continuity plan/contingency plan to avoid any disruption in continuous supply of currency.

VIII.3 Against this backdrop, the rest of the chapter is organised into four sections. The immediately following section 2 presents the important developments in currency in circulation during the year. Section 3 covers the implementation status of the agenda for 2019-20 and section 4 sets out the agenda for 2020-21. The chapter ends with a conclusion.

2. Developments in Currency in Circulation

VIII.4 Currency in circulation (CiC) includes banknotes and coins. At present, the Reserve Bank issues notes in denominations of ₹2, ₹5, ₹10, ₹20, ₹50, ₹100, ₹200, ₹500 and ₹2,000. Coins in circulation comprise 50 paise and ₹1, ₹2, ₹5, ₹10 and the recently launched coin of ₹20 denomination. In terms of value, banknotes accounted for the major share of the total CiC (around 99 per cent).

Banknotes

VIII.5 The value and volume of banknotes in circulation increased by 14.7 per cent and 6.6 per cent, respectively, during 2019-20. In value terms, the share of ₹500 and ₹2,000 banknotes together accounted for 83.4 per cent of the total value of banknotes in circulation at end-March 2020, with a sharp increase in the share of ₹500 banknotes. In volume terms, ₹10 and ₹100 banknotes constituted 43.4 per cent of total banknotes in circulation at end-March 2020 (Table VIII.1).

Coins

VIII.6 The total value of coins in circulation increased by 1.8 per cent in 2019-20 while the total volume increased by only 1.2 per cent. As on March 31, 2020, coins of ₹1, ₹2 and ₹5 together

Table VIII.1: Banknotes in Circulation (end-March)

Denomination (₹)	Volume (lakh pieces)			Value (₹ crore)		
	2018	2019	2020	2018	2019	2020
1	2	3	4	5	6	7
2 and 5	1,14,253 (11.2)	1,13,025 (10.4)	1,12,203 (9.7)	4,433 (0.2)	4,372 (0.2)	4,331 (0.2)
10	3,06,449 (29.9)	3,12,598 (28.7)	3,04,022 (26.2)	30,645 (1.7)	31,260 (1.5)	30,402 (1.3)
20	1,00,160 (9.8)	87,127 (8.0)	82,994 (7.2)	20,032 (1.1)	17,425 (0.8)	16,599 (0.7)
50	73,430 (7.2)	86,015 (7.9)	86,009 (7.4)	36,715 (2.0)	43,007 (2.0)	43,004 (1.8)
100	2,22,150 (21.7)	2,00,738 (18.5)	1,99,021 (17.2)	2,22,150 (12.3)	2,00,738 (9.5)	1,99,021 (8.2)
200	18,526 (1.8)	40,005 (3.7)	53,646 (4.6)	37,053 (2.1)	80,010 (3.8)	1,07,293 (4.4)
500	1,54,690 (15.1)	2,15,176 (19.8)	2,94,475 (25.4)	7,73,429 (42.9)	10,75,881 (51.0)	14,72,373 (60.8)
1,000	661 (…)	- -	- -	6610 (0.4)	- -	- -
2,000	33,632 (3.3)	32,910 (3.0)	27,398 (2.4)	6,72,642 (37.3)	6,58,199 (31.2)	5,47,952 (22.6)
Total	**10,23,951**	**10,87,594**	**11,59,768**	**18,03,709**	**21,10,892**	**24,20,975**

-: Not applicable. …: Negligible.
Note: 1. Figures in parentheses represent the percentage share in total volume/value.
2. Figures in parentheses may not add up to 100 due to rounding-off of numbers.
Source: RBI.

constituted 83.7 per cent of the total volume of coins in circulation, while in value terms, these denominations accounted for 78.3 per cent (Table VIII.2).

Table VIII.2: Coins in Circulation (end-March)

Denomination (₹)	Volume (lakh pieces)			Value (₹ crore)		
	2018	2019	2020	2018	2019	2020
1	2	3	4	5	6	7
Small coins	1,47,880 (12.4)	1,47,880 (12.3)	1,47,880 (12.1)	700 (2.7)	700 (2.7)	700 (2.7)
1	4,96,360 (41.7)	5,03,260 (41.8)	5,08,878 (41.8)	4,964 (19.4)	5,033 (19.5)	5,089 (19.3)
2	3,28,550 (27.6)	3,31,540 (27.6)	3,35,158 (27.5)	6,571 (25.7)	6,631 (25.6)	6,703 (25.5)
5	1,66,500 (14.0)	1,71,510 (14.2)	1,75,992 (14.4)	8,325 (32.5)	8,575 (33.2)	8,800 (33.5)
10	50,490 (4.3)	49,050 (4.1)	50,130 (4.1)	5,049 (19.7)	4,905 (19.0)	5,013 (19.1)
Total	**11,89,780**	**12,03,240**	**12,18,038**	**25,609**	**25,844**	**26,305**

Note: 1. Figures in parentheses represent the percentage share in total volume/value.
2. Figures in parentheses may not add up to 100 due to rounding-off of numbers.
Source: RBI.

Currency Management Infrastructure

VIII.7 The functions relating to issuance of currency (both banknotes and coins) and their management are performed by the Reserve Bank through its issue offices, currency chests and small coin depots spread across the country. As on March 31, 2020, the State Bank of India accounted for the highest share (58.3 per cent) of currency chests (Table VIII.3).

Indent and Supply of Currency

VIII.8 The indent of banknotes for 2019-20 was lower by 13.1 per cent than that of a year ago. The supply of banknotes during 2019-20 was also lower by 23.3 per cent than in the previous year mainly due to the disruptions caused by the outbreak of COVID-19 and the ensuing lockdown (Tables VIII.4).

VIII.9 The indent and supply of coins for 2019-20 was lower by 44.5 per cent and 49.3 per cent, respectively, from their levels in the previous year, reflecting lower demand for coins in the economy (VIII.5).

Table VIII.3: Currency Chests and Small Coin Depots (as at end-March 2020)

Category	No. of Currency Chests	No. of Small Coin Depots
1	2	3
State Bank of India	1,962	1,689
Nationalised Banks	1,180	908
Private Sector Banks	206	168
Cooperative Banks	8	7
Foreign Banks	4	3
Regional Rural Banks	6	6
Reserve Bank of India	1	1
Total	**3,367**	**2,782**

Source: RBI.

Disposal of Soiled Notes

VIII.10 The processing of soiled notes was expedited during the year through continuous monitoring and optimal utilisation of the CVPS/ Shredding and Briquetting System (SBS). As a

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

(pieces in crore)

Denomination (₹)	2017-18		2018-19		2019-20	
	Indent	Supply	Indent	Supply	Indent	Supply
1	2	3	4	5	6	7
5	-	-	-	-	-	1
10	424	431	392	429	147	147
20	246	205	5	21	125	134
50	378	279	423	404	240	234
100	807	317	633	641	330	327
200	269	283	262	273	205	196
500 (new design)	921	969	1,169	1,147	1,463	1,200
2,000	15	15	5	5	-	-
Total	**3,060**	**2,500**	**2,888**	**2,919**	**2,510**	**2,239**

-: Not Applicable.
Note: Figures in the columns may not add up to the total due to rounding-off of the numbers.
BRBNMPL: Bharatiya Reserve Bank Note Mudran Private Limited.
SPMCIL: Security Printing and Minting Corporation of India Limited.
Source: RBI.

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

(pieces in crore)

Denomination	2017-18		2018-19		2019-20	
	Indent	Supply	Indent	Supply	Indent	Supply
1	2	3	4	5	6	7
₹1	183	201	200	255	10	11
₹2	118	154	100	129	80	80
₹5	170	154	113	68	100	100
₹10	300	76	200	161	120	115
₹20	-	-	-	-	30	5
Total	**771**	**585**	**613**	**613**	**340**	**311**

-: Not Applicable.
Source: RBI.

result, soiled notes processed increased by 18.2 per cent on a year-on-year basis (Table VIII.6).

Counterfeit Notes

VIII.11 During 2019-20, out of the total Fake Indian Currency Notes (FICNs) detected in the banking sector, 4.6 per cent were detected at the Reserve Bank and 95.4 per cent by other banks (Table VIII.7).

VIII.12 Compared to the previous year, there was an increase of 144.6 per cent, 28.7 per cent, 151.2 per cent and 37.5 per cent in counterfeit notes detected in the denominations of ₹10, ₹50, ₹200 and ₹500 [Mahatma Gandhi (New) Series], respectively. Counterfeit notes detected in the denominations of ₹20, ₹100 and ₹2000 declined by 37.7 per cent, 23.7 per cent and 22.1 per cent, respectively (Table VIII.8).

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

(pieces in lakh)

Denomination (₹)	2017-18	2018-19	2019-20
1	2	3	4
2000	1	6	1,768
1000	68,467	22	0
500	2,00,237	154	1,645
200	-	1	318
100	1,054	37,945	44,793
50	827	8,352	19,070
20	1,137	11,626	21,948
10	4,975	65,239	55,744
Up to 5	83	591	1,244
Total	**2,76,782**	**1,23,935**	**1,46,530**

-: Not Applicable.
Note: Figures in the columns may not add up to the total due to rounding-off of the numbers.
Source: RBI.

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

(number of pieces)

Year	Detection at the Reserve Bank	Other Banks	Total
1	2	3	4
2017-18	1,88,693 (36.1)	3,34,090 (63.9)	5,22,783 (100.0)
2018-19	17,781 (5.6)	2,99,603 (94.4)	3,17,384 (100.0)
2019-20	13,530 (4.6)	2,83,165 (95.4)	2,96,695 (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.
Source: RBI.

Expenditure on Security Printing

VIII.13 The total expenditure incurred on security printing during July 1, 2019 to June 30, 2020 was ₹4,377.84 crore as against ₹4,810.67 crore in the previous year mainly due to lower indent placed during the year.

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

(number of pieces)

Denomination (₹)	2017-18	2018-19	2019-20
1	2	3	4
2 and 5	1	..	22
10	287	345	844
20	437	818	510
50	23,447	36,875	47,454
100	2,39,182	2,21,218	1,68,739
200	79	12,728	31,969
500 (MG Series)	1,27,918	971	11
500 [MG (New) Series]	9,892	21,865	30,054
1,000	1,03,611	717	72
2,000	17,929	21,847	17,020
Total	**5,22,783**	**3,17,384**	**2,96,695**

.. : Nil.
Source: RBI.

3. Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

VIII.14 Last year, the Department had set out the following goals:

- Introduction of Varnished Banknotes - Field Trial (*Utkarsh*) [Para VIII.15];
- Procurement of New Security Features for Indian Banknotes (*Utkarsh*) [Para VIII.16];
- Procurement of Currency Verification and Processing Systems (CVPS) (*Utkarsh*) [Para VIII.17];
- Implementation of the Recommendations of Committees on Currency Management Aspects (*Utkarsh*) [Para VIII.18];
- Integration of Currency Management Functions with Core Banking Solution (*e-Kuber*) (*Utkarsh*) [Para VIII.19];
- Aiding Visually Impaired in Identification of Denomination of Banknotes (Para VIII.20);
- Banknote Survey of Consumers (Para VIII.21);
- Issuance of Visually Impaired Series Coins (Para VIII.22); and
- Other Areas of Focus (Para VIII.23).

Implementation Status of Goals

Introduction of Varnished Banknotes - Field Trial

VIII.15 The Reserve Bank has undertaken several initiatives to introduce varnished banknotes in ₹100 denomination on a field trial basis. However, the process of printing of these notes has been delayed due to disruptions caused by the COVID-19 pandemic and certain other developments.

Procurement of New Security Features for Indian Banknotes

VIII.16 A Global Pre-Qualification Bid Notice was issued in July 2017 incorporating the "Make in India" clause (to the extent feasible) in terms of Government of India's Public Procurement (Preference to Make in India) Order 2017, for procurement of security features for Banknotes. The Reserve Bank is actively involved in taking the process forward.

Procurement of Currency Verification and Processing Systems (CVPS)

VIII.17 The Reserve Bank procured 50 new CVPS machines through a global tender. The process of supply, installation and commissioning of these new machines in all the 19 Regional Offices has been completed. The Reserve Bank also undertook an exercise to upgrade the infrastructure of CVPS rooms to state-of-the-art/ international norms, creating a risk-free, hygienic and aesthetically designed workplace.

Implementation of the Recommendations of Committees on Currency Management Aspects

VIII.18 Recommendations relating to standardisation of raw material procurement, quality assurance, note printing processes and security features across all presses and paper mills, made by a Group of Experts[1] (Chairman: Shri C. Krishnan) were pursued for implementation during the year. Pursuant to the recommendations of the High Level Committee on Currency Storage and Movement (HLCCSM)[2] [Chairman: Shri N. S. Vishwanathan] and the Committee on Currency Movement (CCM)[3] [Chairman: Shri Deepak Mohanty], the Reserve Bank actively engaged in scaling up direct remittance of banknotes to currency chests, remittance tracking system and standardisation of container fleets for sending treasure in a safe, optimum and secure manner. Recommendations to strengthen the process of mopping up of soiled notes, last mile distribution of banknotes along with other recommendations of the HLCCSM, CCM and Group of Experts are in various stages of implementation.

Integration of Currency Management Functions with Core Banking Solution (e-Kuber)

VIII.19 A currency management module (CyM) in *e-Kuber* is being developed to improve the management information system for currency operations and to ensure that accounting of currency chest transactions are reflected in the Reserve Bank's book in near real time basis. The functionalities of CyM module are being rolled out in 3 phases. Phases I and II involved on-boarding of all 19 Regional Offices (ROs) and all the active currency chests (CCs) in CyM module and were completed by June 2019. With this new module, the accounting of currency transaction is now being carried out on T+0 basis as against T+1 basis under ICCOMS, the erstwhile currency management application of the Reserve Bank. Phase III of CyM module, which includes development of user reports and certain other functionalities, is in progress.

Aiding Visually Impaired in Identification of Denomination of Banknotes

VIII.20 The Reserve Bank launched MANI (Mobile Aided Note Identifier), a mobile application for aiding visually impaired persons to identify the denomination of Indian banknotes, which was inaugurated by the Governor on January 1, 2020 (Box VIII.1).

Banknote Survey of Consumers

VIII.21 The Department launched a Banknote Survey of Consumers in October 2019 with the objective of (a) assessing the demand for cash as well as denomination preferences at consumer level; (b) measuring the awareness of people about various security features of the banknotes; and (c) gauging the level of satisfaction with the current banknotes and coins for normal as well as visually impaired people. Fieldwork, however, had to be postponed due to the lockdown.

Issuance of Visually Impaired Series Coins

VIII.22 The new series of visually impaired friendly coins, which was introduced in March 2019, was put into circulation over the counter at Issue Offices of the Reserve Bank. This new series was also remitted to currency chests for wider distribution to public.

1 The Report was submitted to the Reserve Bank in 2018.
2 It was an Interim Report.
3 The Report was submitted to the Reserve Bank in 2017.

Box VIII.1
Mobile Aided Note Identifier (MANI) for the Visually Impaired

Indian banknotes have several features like intaglio printing, tactile mark, variable banknote size, large numerals, variable colour, monochromatic colours and patterns, which enable the visually impaired (colour blind, partially sighted and blind people) to identify them. In its Statement on Developmental and Regulatory Policies of June 6, 2018, the Reserve Bank announced its intention to explore the feasibility of developing a suitable device or mechanism for improving further the identification of Indian banknotes by the visually impaired. Accordingly, the Reserve Bank developed and launched a mobile application called MANI (Mobile Aided Note Identifier) on January 1, 2020 with the following features:

- Capable of identifying the denominations of Mahatma Gandhi Series and Mahatma Gandhi (New) Series banknote by checking front or reverse side/part of the note, including half folded notes at various holding angles and broad range of light conditions (normal light/ day light/low light/*etc.*).
- Ability to identify the denomination through audio notification in Hindi/English and non-sonic mode such as vibration (suitable for those with vision and hearing impairment).
- After installation, the mobile application does not require internet and works in offline mode.
- Ability to navigate the mobile application *via* voice controls for accessing the application features wherever the underlying device and operating system combination supports voice enabled controls.
- The application is free and can be downloaded from the Android Play Store and iOS App Store without any charges/payment.
- The mobile application does not authenticate a note as being either genuine or counterfeit.

In the USA, a similar application called EyeNote was developed by the Bureau of Engraving and Printing (BEP) and was put in place for public for free.

References:

1. RBI press releases.
2. Bureau of Engraving and Printing (BEP), US Department of the Treasury.

Other Areas of Focus

VIII.23 As part of the medium-term strategy framework, the Reserve Bank continued to focus on other areas of currency management like bringing improvements in the processing capabilities and logistics for efficient inventory management of currency and fine-tuning the models for estimation of demand for banknotes and coins.

Bharatiya Reserve Bank Note Mudran Private Ltd. (BRBNMPL)

VIII.24 BRBNMPL is a wholly owned subsidiary of the Reserve Bank, which runs two banknote printing presses in Mysuru and Salboni with a total capacity of printing 16 billion note pieces per year on a two-shift basis. Since its inception, the company has enabled the Reserve Bank to bridge the gap between the supply and demand for banknotes in the country. BRBNMPL along with Security Printing and Minting Corporation of India Limited (SPMCIL) has set up the Bank Note Paper Mill India Private Limited (BNPMIPL) in Mysuru, an entity producing Cylinder mould VAT made Watermarked Bank Note (CWBN) paper required for banknote production, with a production capacity of 12,000 metric tonnes per annum. BRBNMPL has also set up an ink factory at Mysuru with an annual production capacity of 1,500 metric tonnes, which has started its commercial production from August 2018.

4. Agenda for 2020-21

VIII.25 During the year, the Department will focus on the following:

- Automation of Banknote Handling Process (*Utkarsh*)

- Upgrade the infrastructure and processes for currency management by inducting modern technology.

- Microsite for Bank notes
  - Continue the process of designing and developing a microsite to host basic information on features of banknotes and information relating to currency management – information on banknotes will be presented through various multimedia with simple and efficient navigation;
  - Displaying 360-degree view of the design and security features of banknotes through explanatory videos and animation;
  - Informative materials on exchanging banknotes/Note Refund Rules; and
  - Interactive games and posters.

5. Conclusion

VIII.26 In sum, in spite of challenges caused by COVID-19 pandemic, the Reserve Bank successfully managed to maintain adequate supply of clean currency notes in the economy. The Reserve Bank has also made sustained efforts to combat the menace of forged notes in circulation and to create public awareness about various aspects of banknotes. Going ahead, strengthening the currency management infrastructure, enhancing public awareness on different features of Indian banknotes and fine-tuning the models for estimation of demand for banknotes will be the areas of focus for the Reserve Bank.

IX PAYMENT AND SETTLEMENT SYSTEMS AND INFORMATION TECHNOLOGY

During the year, the Reserve Bank continued to ensure safe, secure, quick and affordable e-payment options, with greater competition and customer confidence in the payment ecosystem of the country. Implementing round-the-clock NEFT was a significant milestone in this journey. Going forward, the Reserve Bank's endeavour would be to reach out to the hitherto excluded sections of society with a bouquet of e-payment options, supported by an efficient regulatory environment and robust consumer protection; the focus will also now be on the next generation financial messaging system and wireless technology for banks.

IX.1 The Reserve Bank's efforts have been geared towards developing efficient and secure payment and settlement systems with focus on their greater penetration through availability of user-friendly platforms at affordable cost. The Payment and Settlement Systems Vision 2019-21, prepared by the Department of Payment and Settlement Systems, sets out the future path in this direction. Further, the Department of Information Technology continued its endeavour to build a dynamic, robust and secured digital platform to ensure smooth functioning of the payment and settlement systems in the country. Against this backdrop, the following section covers developments in the areas of payment and settlement systems during the year and also takes stock of the implementation status of the agenda for 2019-20. Section 3 provides various measures undertaken by the DIT during the year *vis-à-vis* the agenda set for 2019-20. These departments have also set out an agenda for 2020-21. The chapter has been summarised at the end.

2. DEPARTMENT OF PAYMENT AND SETTLEMENT SYSTEMS (DPSS)

IX.2 The Reserve Bank's Payment and Settlement Systems Vision 2019-21 document envisaged empowering every Indian with access to a bouquet of e-payment options that is safe, secure, convenient, quick and affordable. The various initiatives undertaken by the Reserve Bank in the payments ecosystem during the year were oriented towards encouraging healthy **competition,** improving customer **convenience** at affordable **cost** and increasing customer **confidence** in the payment systems. The overarching goal is to ensure deepening of digital payments across the country, both in terms of adoption and penetration, supported by customer-centric measures to enhance the safety and security of payment systems.

Payment Systems

IX.3 The payment and settlement systems recorded a robust growth during 2019-20, growing by 44.1 per cent in terms of volume on top of the expansion by 55.8 per cent in the previous year. In terms of value, it increased by 5.4 per cent on top of 14.2 per cent in the previous year, mainly due to lower growth observed in the large value system, *viz.*, Real Time Gross Settlement (RTGS) system. The share of digital transactions in the total volume of non-cash retail payments increased to 97.0 per cent during 2019-20, up from 95.4 per cent in the previous year (Table IX.1). However, the extended period of lockdown

Table IX.1: Payment System Indicators – Annual Turnover (April-March)

Item	Volume (Lakh)			Value (₹ Crore)		
	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
1	2	3	4	5	6	7
A. Settlement Systems						
CCIL Operated Systems	35	36	36	10,74,80,202	11,65,51,038	13,41,50,192
B. Payment Systems						
1. Large Value Credit Transfers – RTGS	**1,244**	**1,366**	**1,507**	**11,67,12,478**	**13,56,88,187**	**13,11,56,475**
Retail Segment						
2. Credit Transfers	**58,793**	**1,18,750**	**2,06,661**	**1,88,14,287**	**2,60,97,655**	**2,85,72,100**
2.1 AePS (Fund Transfers)	6	11	10	300	501	469
2.2 APBS	12,980	15,032	16,805	55,949	86,734	99,448
2.3 ECS Cr	61	54	18	11,864	13,235	5,145
2.4 IMPS	10,098	17,529	25,792	8,92,498	15,90,257	23,37,541
2.5 NACH Cr	7,031	9,021	11,406	5,20,992	7,36,349	10,52,187
2.6 NEFT	19,464	23,189	27,445	1,72,22,852	2,27,93,608	2,29,45,580
2.7 UPI	9,152	53,915	1,25,186	1,09,832	8,76,971	21,31,730
3. Debit Transfers and Direct Debits	**3,788**	**6,382**	**8,957**	**3,99,300**	**6,56,232**	**8,26,036**
3.1 BHIM Aadhaar Pay	20	68	91	78	815	1,303
3.2 ECS Dr	15	9	1	972	1,260	39
3.3 NACH Dr	3,738	6,299	8,768	3,98,211	6,54,138	8,24,491
3.4 NETC (Linked to Bank Account)	15	6	97	39	20	203
4. Card Payments	**47,486**	**61,769**	**73,012**	**9,19,035**	**11,96,888**	**15,35,765**
4.1 Credit Cards	14,052	17,626	21,773	4,58,965	6,03,413	7,30,895
4.2 Debit Cards	33,434	44,143	51,239	4,60,070	5,93,475	8,04,870
5. Prepaid Payment Instruments	**34,591**	**46,072**	**53,318**	**1,41,634**	**2,13,323**	**2,15,558**
6. Paper-based Instruments	**11,713**	**11,238**	**10,414**	**81,93,493**	**82,46,065**	**78,24,821**
Total – Retail Payments (2+3+4+5+6)	1,56,371	2,44,211	3,52,362	2,84,67,748	3,64,10,163	3,89,74,281
Total Payments (1+2+3+4+5+6)	1,57,615	2,45,577	3,53,869	14,51,80,226	17,20,98,350	17,01,30,756
Total Digital Payments (1+2+3+4+5)	**1,45,902**	**2,34,339**	**3,43,455**	**13,69,86,734**	**16,38,52,285**	**16,23,05,934**

Note: 1. RTGS system includes customer and inter-bank transactions only.
2. Settlements of CBLO, government securities and forex transactions are through the Clearing Corporation of India Ltd. (CCIL). Government Securities include outright trades and both legs of repo transactions and triparty repo transactions. With effect from November 5, 2018, CCIL discontinued CBLO and operationalised triparty repo under securities segment.
3. The figures for cards are for payment transactions at point of sale (POS) terminals and online.
4. Figures in the columns might not add up to the total due to rounding off of numbers.

Source: RBI.

arising on account of the COVID-19 pandemic resulted in subdued economic activity and lower discretionary payments, thereby leading to a fall in digital transactions (Box IX.1).

Digital Payments

IX.4 Amongst the electronic modes of payments, transactions under the RTGS system expanded by 10.3 per cent, with their value at ₹1,311.6 lakh crore, however, dipping by 3.3 per cent from the previous year, mainly on account of decline in large value transactions of corporates in line with slowdown in economic activity. At the end of March 2020, the RTGS facility was available through 1,53,605 branches of 218 banks. Transactions in the National Electronic Funds Transfer (NEFT) system rose by 18.3 per cent during the year. At the end of March 2020, the NEFT facility was available through 1,53,687 branches of 217 banks.

Box IX.1
COVID-19 Crisis: Implications for Payment Systems

The COVID-19 pandemic has led to a diminution in digital transactions in India. In corroboration, the growth of currency with the public in India accelerated from 11.2 per cent on February 28 to 14.5 per cent as on March 31, to 21.3 per cent as on June 19, 2020 (12.8 per cent a year ago). At the same time, the cumulative value of digital transactions during January-May 2020 declined by 25.5 per cent (y-o-y) as compared with a strong growth of 20.6 per cent a year ago. Of this, digital retail transaction value growth contracted by 10.6 per cent as compared with an increase of 31.3 per cent last year. However, both these indicators recovered in the month of May 2020. In digital payments, the retail RTGS volume, which had registered healthy growth (y-o-y) since July 2019 due to waiving of RTGS charges by the Reserve Bank, declined in March (-12.3 per cent), April (-52.5 per cent) and May (-27.5 per cent). While they regained traction in May, transactions through Immediate Payment Service (IMPS) had started declining in February 2020 and the drop became sharper in April 2020. Unified Payments Interface (UPI) transaction volume declined by 5.9 per cent in March 2020 and further by 19.8 per cent in April 2020 to slightly less than one billion transactions. However, it recovered as the lockdown was gradually lifted and logged a record 1.34 billion transactions in June 2020. The ratio of *RuPay* card transactions at e-commerce portals to point-of-sale (PoS) jumped to 237 per cent in April 2020 from 76.8 per cent in February 2020, reflecting the effect of social distancing. Apart from low demand during the lockdown, the suspension of operations by leading users of digital payments such as e-commerce and BigTechs could have contributed to a decline in small value digital payments.

The decline in digital transactions during the lockdown period is indicative of the integration of the digital economy with the real economy. Empirical analysis for the period 2009-19 supported statistically significant unidirectional Granger causal relationship from the growth of nominal GDP and private final consumption expenditure (PFCE) to the growth of digital and retail transaction value (Table 1).

Table 1: Interlinkage between Digital Transactions and Economic Activity (Sample: 2009Q2 to 2019Q4)

Null Hypothesis (Ho)	F Stat (Prob)	Accept / Reject Ho
1	2	3
Growth of total value of digital (retail) transaction does not Granger Cause growth of nominal private consumption spending	0.83 (0.52)	Accept
Growth of nominal private consumption spending does not Granger Cause growth of total value of digital (retail) transaction	6.48 (0.00)	Reject
Growth of total value of digital transaction does not Granger Cause growth of nominal GDP	0.51 (0.73)	Accept
Growth of nominal GDP does not Granger Cause growth of total value of digital transaction	3.42 (0.02)	Reject

Source: RBI staff estimates.

This analysis also reveals a long-run relationship between digital retail transactions and PFCE in an auto-regressive distributed lag model (ARDL) framework. Digital transactions are expected to pick up when economic activity gathers momentum, with enabling conditions for uninterrupted growth of digital payments such as spread of seamless digital connectivity within consumers, local traders, distributors, producers and other stakeholders.

Source: RBI.

IX.5 During 2019-20, the number of card payment transactions carried out through credit cards and debit cards increased by 23.5 per cent and 16.1 per cent, respectively, while the value increased by 21.1 per cent and 35.6 per cent to ₹7.3 lakh crore and ₹8.0 lakh crore, respectively. Prepaid Payment Instruments (PPIs) recorded a volume growth of 15.7 per cent on top of the 33.2 per cent a year ago, while transactions value at ₹2.2 lakh crore increased by little more than 1.0 per cent. The acceptance infrastructure witnessed substantial growth; the number of Point of Sale (PoS) terminals increased by 38.2 per cent to 51.4 lakh and the number of *Bharat* QR codes deployed increased by 74.6 per cent to 20.28 lakh as at end-March 2020. Further, during the same period, the number of ATMs increased from 2.22 lakh to 2.34 lakh.

Authorisation of Payment Systems

IX.6 Payments System Operators (PSOs) comprise PPI issuers, cross-border inbound money transfer service providers, White Label ATM (WLA) operators, Trade Receivables Discounting System (TReDS) platform operators, ATM networks, Instant Money Transfer service providers, card payment networks and *Bharat* Bill Payment Operating Units (BBPOUs), besides Clearing Corporation of India Ltd. (CCIL) and National Payments Corporation of India (NPCI) [Table IX.2.]

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

IX.7 In last year's Annual Report, the Department had set out the following goals under *Utkarsh*:

Table IX.2: Authorisation of Payment System Operators (as at end-June)

(Number)

Entities	2019	2020
1	2	3
A. Non-Banks – Authorised		
PPI Issuers	47	43
WLA Operators	8	8
Instant Money Transfer Service Providers	1	1
BBPOUs	9	9
TReDS Platform Operators	3	3
Cross Border Money Transfer Service Scheme Operators	9	9
Card Networks	5	5
ATM Networks	2	2
B. Banks – Approved		
PPI Issuers	61	56
BBPOUs	39	37
Mobile Banking Providers	490	547
ATM Networks	3	3

Note: Validity period of Certificate of Authorisation (CoA) granted to two non-bank PPI issuers was not extended further, while two non-bank PPI issuers voluntarily surrendered their CoA.
Source: RBI.

- Leadership and facilitating roles in regional cooperation in payment systems (Para IX.9);
- To prepare a policy paper on authorisation of new retail payment systems to address the concentration risk (Para IX.10);
- To provide 'on tap' authorisation facility to entities desirous to function/operate/ provide platforms for BBPOU, TReDS and WLAs (Para IX.11);
- To create Payments Infrastructure Development Fund (PIDF) [Para IX.14];
- To put in place a framework for harmonising Turn Around Time (TAT) for resolution of customer complaints and compensation (Para IX.19);
- Broaden scope of information system (IS) Audit of entities (Para IX.28);
- To prepare a detailed framework on oversight of Financial Market Infrastructures (FMIs) and retail payment systems (Para IX.29); and
- Creation of a Central Payments Fraud Information Registry (Para IX.30).

Implementation Status of Goals

IX.8 In the 'Payment and Settlement Systems in India: Vision 2019-21 (Vision)', DPSS had identified four elements, *viz.,* competition, cost, convenience and confidence, for achieving its Vision.

Encouraging Healthy Competition

Global Outreach of Payment Systems

IX.9 In less than four years since its launch in 2016, the Unified Payments Interface (UPI) has grown in volume terms to eclipse all other payment modes. The UPI has unique features: open and interoperable platform; two factor authentication; facility for payment service providers to build on top of existing infrastructure; linking of multiple bank accounts in a single application; e-mandate; and compatibility with bank accounts and wallets, all of which gives it cross-border appeal too. Similarly, the growth of domestic card network – *RuPay* – also provides an opportunity for its global expansion. The Vision envisaged enhancing the global outreach of its payment systems, including remittance services, through active participation and cooperation in international and regional fora by collaborating and contributing to standard-setting. The Reserve Bank, in close collaboration with the government and NPCI, is working in the direction of expanding the reach of UPI and *RuPay* globally, apart from Bhutan, Singapore and prospectively in South Korea and UAE.

Concentration Risk in Retail Payment Systems

IX.10 A policy paper on Authorisation of New Retail Payment Systems was released to encourage more players to participate and promote pan-India payment platforms so as to give a fillip to innovation and competition in the sector as also to minimise the concentration risk in retail payment systems. Subsequently, a 'draft framework for authorisation of a pan-India New Umbrella Entity (NUE) for retail payment systems' was placed on the Reserve Bank's website on February 10, 2020 inviting public comments. The feedback received is being examined.

On-tap Authorisation

IX.11 'On tap' authorisation to entities desirous to function/operate/provide platforms for BBPOU, TReDS, and WLAs was enabled on October 15, 2019 to encourage innovation and competition through increased participation by new authorised players.

Payment and Settlement Systems Innovation Contest

IX.12 The Reserve Bank conducted a Payment and Settlement Systems Innovation Contest in collaboration with the Institute for Development and Research in Banking Technology (IDRBT). The objective of the contest was to provide a platform to encourage, recognise and promote innovations and ideas in the payment and settlement systems arena as well as to foster new developments by entrepreneurs, start-ups and similar entities in the payments space. The themes covered in the contest, *inter alia*, included cross-border remittances, next generation payments and automated payment processing. The shortlisted applicants were invited to present their innovations to an eminent jury. The outstanding innovators were awarded prizes and all shortlisted applicants were provided certificates of appreciation.

Approval to Department of Posts (DoP) for Participating in Various Payment Systems

IX.13 In July 2016, the DoP was granted approval for enabling two-way interoperability of ATMs installed by it with ATMs connected to the National Financial Switch. Taking this further, DoP was permitted to participate in payment systems such as NEFT, RTGS, Immediate Payments Service (IMPS), debit cards at PoS/e-commerce (e-com), UPI and *Aadhaar* Enabled Payment System (AePS), subject to adherence to all relevant regulatory instructions of the Reserve Bank as applicable to banks, with subsequent transfer of these activities to India Post Payment Bank (IPPB).

Ensuring Affordable Costs

Setting up Payments Infrastructure Development Fund

IX.14 As announced in the Reserve Bank's Statement on Developmental and Regulatory Policies of October 4, 2019, and also envisaged in the Vision, an Acceptance Development Fund (ADF) [renamed as Payments Infrastructure Development Fund (PIDF)] was created for increasing the acceptance infrastructure (both physical and digital PoS) in the country. This Fund will subsidise acquirers for deploying PoS acceptance infrastructure with a focus on Tier III to Tier VI centres and the north-eastern part of the country and address the supply side issues, in order to pivot the ecosystem from issuance to acceptance, which is crucial for increasing the digital footprints.

IX.15 The contribution to the corpus will be made by the Reserve Bank, card issuing banks and card networks operating in the country and the fund will be administered by the Reserve Bank.

Revised Framework for ATM Charges and Fees

IX.16 Consequent upon the announcement made in the Reserve Bank's Statement on Developmental and Regulatory Policies of June 6, 2019 and with a view to provide a fillip to the ATM deployment in the country, a Committee was constituted in July 2019 to review the entire gamut of ATM charges and fees. The Committee, chaired by the Chief Executive, Indian Banks' Association, included representatives from NPCI, SBI, HDFC Bank, Confederation of ATM Industry and Tata Communications Payment Solutions Ltd. The recommendations of the Committee are being examined by the Reserve Bank.

Incentive for Digital Payments Usage

IX.17 With effect from July 1, 2019, the Reserve Bank waived the charges collected by it from member banks towards the centralised payment system (processing charges in NEFT and processing and time varying charges in RTGS). The member banks were also advised to extend similar benefits to their customers. Further, with effect from January 1, 2020, member banks were mandated not to levy any charge on their savings bank account holders for fund transfers in NEFT initiated online (*viz.*, through internet banking and / or mobile apps of the banks).

Payment Aggregators (PA)/Payment Gateway (PG) Authorisation/Regulation

IX.18 A typical online payment transaction requires the involvement of several intermediaries like banks and non-banks, which act as merchant aggregators. PAs and PGs are entities that facilitate e-commerce sites and merchants to accept various payment instruments from the customers for completing their payment obligations without the need for merchants to create a separate payment integration system of their own. In the process, while PAs handle funds, the PGs provide technical infrastructure without handling funds. While banks and other PSOs are directly regulated by the Reserve Bank, the PAs and PGs are not. Given the critical role of these intermediaries, guidelines on regulation of payment aggregators and payment gateways were issued on March 17, 2020 to regulate online PAs and provide baseline technology-related recommendations to PGs.

Improving Customer's Convenience

Framework for Harmonising Turn Around Time (TAT) for Resolution of Customer Complaints and Compensation

IX.19 A framework harmonising TAT and customer compensation for failed transactions in ATMs, UPI, IMPS, PPIs and card payments to bring uniformity and discipline in reversing such failed transactions came into effect from October 15, 2019. The framework prescribed TAT for failed transactions as also a compensation framework providing *suo moto* compensation to customers for delay in executing the reversal of such transactions.

Availability of NEFT on a 24x7x365 Basis

IX.20 NEFT, which was operating in 23 half-hourly batches was made available 24x7x365, with effect from December 16, 2019. The system now operates in 48 half hourly batches with the first batch of the day starting at 0030 hours and the last batch of the day ending at 00:00 hours. NEFT 24x7 is a unique retail system in the world, which not only runs round the clock, but also has a settlement which is not "deferred" and prescribes no floor or ceiling on the amount that can be transferred.

E-Mandates/Standing Instructions on Cards/PPIs/UPI

IX.21 A framework to facilitate e-mandates on cards and PPIs was issued in August 2019 to encourage digitisation of recurring payments like monthly subscriptions, insurance premia payments, systematic investment plans and bill payments. Such a measure combines convenience with safety features like Additional Factor of Authentication (AFA) during e-mandate registration, modification and revocation, as also for the first transaction. This framework was also extended later to cover UPI-based transactions.

Increase in Operating Hours of RTGS

IX.22 The Reserve Bank manages and operates the RTGS, the systemically important large value funds transfer system. As part of the initiatives aimed at increasing the time-based availability of payment systems, the timings for customer transactions in RTGS were enhanced. RTGS is now available for customer transactions between 0700 hours and 1800 hours as against 0800 hours and 1630 hours earlier.

Expansion of Biller Categories under Bharat Bill Payment System (BBPS)

IX.23 In order to give impetus to digital payment of utility bills, the scope and coverage of BBPS was extended in September 2019 to include all categories of billers who raise recurring bills (except prepaid recharges) as eligible participants, on a voluntary basis. It aims at leveraging the availability of a standard platform and greater digitisation of cash-based repetitive payments. Advantages accruing to customers in the new segments are standardised bill payment experience in an interoperable manner, large number of customer touch points, centralised customer grievance redressal mechanism and pre-defined customer convenience fee.

Introduction of a New Type of Semi-Closed Prepaid Payment Instrument (PPI)

IX.24 A new type of PPI was introduced in December 2019, which can be loaded/re-loaded only from a bank account and/or a credit card and can be issued based on essential minimum details sourced from the customer. It seeks to ease the issuance and usage of small value PPIs. Such PPIs can be used only for purchase of goods and services and not for funds transfer. Limits were placed for amount loaded in such PPIs during any month and the amount outstanding at any point of time. The KYC requirement of purchaser of gift PPIs through credit cards was also made on par with requirements for debit to bank accounts.

Enhancing the Usage of National Electronic Toll Collection (NETC) System

IX.25 In December 2019, the Reserve Bank permitted all authorised payment systems and instruments (non-bank PPIs, cards and UPI) for linking with the FASTags (tags affixed on a vehicle's windscreen used for identifying the vehicle). The purpose was to further broad-base the NETC system by allowing a bouquet of payment choices for customers, as well as to foster competition among the system participants. NETC system was also enhanced to allow it to be used for parking fee and fuel payments, in an interoperable manner.

Cash Withdrawal Facility using PoS terminals/UPI

IX.26 Facility of small value cash withdrawal at PoS terminal was eased by doing away with the requirement of seeking one-time approval from the Reserve Bank. The facility of cash withdrawal at merchant locations was also extended to UPI.

Enhancing Customer Awareness

IX.27 Digital payments penetration and adoption needs to be supported by digital literacy. Several initiatives which were undertaken in this regard include allocating nodal officers from the Department for co-ordinating with the Regional Offices of the Reserve Bank; standardising material for educating various target categories such as students, banks and merchants; participating in media workshops; conducting payment system related programmes in the Reserve Bank's training establishments and IDRBT. During 2019-20 (July-June), 192 e-BAAT (electronic Banking Awareness and Training) programmes were organised by the Regional Offices of the Reserve Bank, sharing various aspects of electronic payment systems, including benefits and cyber security concerns, amongst bank staff, customers, students and the common man. In addition, the Reserve Bank also released digital awareness material through print, audio-visual media as also online through its flagship programme, "RBI Says." Further, in order to enhance public awareness about digital safety, all authorised payment system operators and participants were advised, in June 2020, to undertake targeted multi-lingual campaigns by way of SMSs and advertisements in print/visual media to educate their users on safe and secure use of digital payments.

Increasing Customer Confidence

Review of Scope and Coverage of System Audit of Authorised PSOs

IX.28 The scope of the System Audit Report (SAR) - Authorised PSOs are required to furnish it annually - was reviewed and enhanced to ensure standardisation and comprehensive coverage of all relevant areas of information system processes and applications to be covered as part of the audit. SAR now includes, *inter alia*, information security governance, access control, network and data security, IT outsourcing risk management, physical and environmental security, human resource security, business continuity planning and management, vendor management, incident management, change management and patch management. To avoid conflict of interest of the auditor, it was mandated that the concerned audit firm or any of its sister concern should not have been engaged for providing other services to the audited entity in the last two financial years.

Oversight Framework for Authorised Payment Systems

IX.29 The Reserve Bank had adopted the "Principles for Financial Market Infrastructures (PFMIs)" and "Central Bank Oversight of Payment and Settlement Systems" for implementation by its regulated FMIs, through issuance of policy document on "Regulation and Supervision of FMIs regulated by RBI" in June 2013. The policy described in detail the criteria for designating as FMI, applicability of the PFMIs to the FMIs, oversight of FMIs and other related aspects. Over a period of time, the Reserve Bank continued its efforts in digitisation of payments which resulted in continuous expansion of payment landscape not only in terms of growth in payment infrastructure but also in terms of volume and value of digital payment transactions. The policy document was revised as "Oversight Framework for FMIs and Retail Payment Systems" and released on June 14, 2020. The framework describes the approach for oversight of the Reserve Bank's regulated FMIs and Retail Payment Systems functioning in India and broadly covers the legal framework for oversight, definition and scope of oversight, oversight activities, and cooperation with other regulatory authorities.

Creation of a Central Payments Fraud Information Registry

IX.30 A web-based reporting platform to facilitate online payment fraud reporting by system participants was developed with registry of all payment related frauds.

Framework for Imposing Monetary Penalty on Authorised PSOs

IX.31 The Reserve Bank reviewed the framework for imposition of monetary penalty and compounding of contraventions/offences under Sections 30 and 31, respectively, of the Payment and Settlement Systems Act, 2007 (PSS Act) to ensure that the authorised PSOs conform to regulatory requirements. The revised framework continued to centre around objectivity and transparency in the decision-making process.

Enhancing Security of Card Transactions

IX.32 Over the last few years, the use of cards has been growing. In order to enhance the security of card transactions, the Reserve Bank continuously evaluates the systems in place and to provide more safety to cardholders and the card transaction chain, the following additional safety measures were mandated in January 2020: (a) enable cards for use only at contact-based point (ATMs, PoS) at the time of issue/reissue; (b) provide a 24x7 facility to all cardholders for switching on/off transaction rights and for setting/modifying transaction limits; and (c) send alerts to the cardholder as and when there is any change in status of the card. Given the extraordinary situation due to the COVID-19 pandemic, the issuers have been given time till September 30, 2020 to implement the circular's provisions.

Internal Ombudsman for PPI Issuers

IX.33 An Internal Ombudsman Scheme was put in place under section 18 of the PSS Act to cover large non-bank PPI issuers with more than one crore outstanding PPIs to start with. Complaints of customers are redressed at the level of the PSO itself – by the highest-level authority of its grievance redressal mechanism. The Internal Ombudsman is required to work at an arm's length distance from the PSO. The eligible PSOs were required to make the scheme operational by January 20, 2020.

Other Developments

Supervision

IX.34 During 2019-20, onsite inspection of 27 entities, *viz*., CCIL, NPCI, 22 PPI issuers and 3 WLA operators was carried out by the Reserve Bank under Section 16 of the PSS Act.

Inspection of CCIL

IX.35 On-site inspection of CCIL was undertaken during September-October 2019. The scope of the inspection was confined to the activities of CCIL as a Central Counterparty (CCP) and a Trade Repository (TR) and its performance was assessed against the 24 Principles for Financial Market Infrastructures (PFMIs) of the Committee on Payments and Market Infrastructures-International Organisation of Securities Commissions (CPMI-IOSCO) – Assessment Methodology template. As in the previous year, CCIL was found to have 'Observed' 18 principles and 'Broadly Observed' 4 principles, while 2 principles were 'Not Applicable' to it.

Inspection of NPCI

IX.36 The on-site inspection of NPCI was conducted during November-December 2019, based on the PFMIs. The scope of the inspection involved functional assessment of various retail payment systems operated by NPCI, robustness of risk management framework, governance and oversight, business impact analysis, and compliance with the terms and conditions of the Certificate of Authorisation (CoA) issued by the Reserve Bank.

Dissemination of Granular Payment System Data

IX.37 The Reserve Bank has been publishing data on transactions carried out using various payment systems operated by it and the authorised PSOs. In view of the rapid developments in the payments eco-system and evolution of new systems, products and channels to undertake digital payment transactions, the Reserve Bank reviewed the definition of digital payment transactions and enhanced the scope and coverage of Payment System Indicators published in the monthly RBI Bulletin to include recent payment systems and granular details of payment transactions. Payment transactions undertaken using different payment channels and details of payment system infrastructure were also disseminated. The data in the revised form and structure is being published in the RBI Bulletin since January 2020, covering data from November 2019 onwards. Further, in order to facilitate better research and contribute to innovations in payment systems, the Reserve Bank commenced dissemination of payment systems data on a daily frequency from June 1, 2020.

Developments in CCIL

IX.38 During the year, CCIL finalised implementation of clearing member structure in securities segment, introduced FX-Retail platform for providing an anonymous and order-driven dealing in the USD/INR currency pair for the customers of banks, extended forex trading beyond market hours, improved its risk management by implementing higher concentration margin based on second set of thresholds on breach of the first set. CCIL TR was notified by the government to act as a collecting agent for the purpose of stamp duty on transactions reported to it.

Closure of ECS/Regional ECS/National ECS Centres Operated by the Reserve Bank

IX.39 The Electronic Clearing Service (ECS) was in use at a few of the Reserve Bank's locations with most of the other locations successfully migrating to the National Automated Clearing

House (NACH). NACH system facilitates handling of bulk payments towards distribution of subsidies, dividends, interest, salary and pension, and for bulk receipts towards collection of utility payments, loans, investments in mutual funds and insurance premia, with online mandate management and centralised clearing service at a pan-India level. The last of the ECS centres was migrated to NACH effective January 31, 2020. The shift from ECS to NACH was smooth and non-disruptive. With this, the life of ECS and its variants (Regional-ECS and National-ECS) came to an end, after having served the nation gloriously for 25 years.

Business Continuity Plan during COVID-19 Lockdown

IX.40 In view of the situation arising out of COVID-19, a host of measures were undertaken since March 2020 to ensure continuous availability of not only the payment systems operated by the Reserve Bank (RTGS and NEFT), but also payment systems operated by NPCI, CCIL and other PSOs. The coordinated efforts with Government, PSOs and Regulated Entities (REs), including banks and non-banks, ensured uninterrupted functioning of all payment and settlement systems operating across the country. The Government Direct Benefit Transfer (DBT) payments to help the poor and marginalised commenced on a large scale in April 2020 which were smoothly facilitated by the NACH – *Aadhaar* Payment Bridge System (APBS) wherein bulk transfers were made to bank accounts based on the beneficiary *Aadhaar* number. Certain relaxations were given to REs to allow them to cope with the restrictions in physical movements and reduced availability of support services. This pandemic has been a litmus test for evaluating the robustness of the payments infrastructure and the regulatory framework, working under constrained resources for extended periods with close monitoring; the lessons learnt for the payments system users and providers are many. It is a matter of pride that the payment systems have functioned unhindered and were available round the clock for use during the nation-wide lockdown.

Agenda for 2020-21

IX.41 The proposed action items under the goal-posts identified in the 'Payment and Settlement Systems in India: Vision 2019-21' are set out below:

Encouraging Healthy Competition

- *Offline Payment Systems*: Offline payments through mobile devices and stored value component on cards will be made available to boost digital payment modes, and a pilot scheme will be tested to gain experience for a fuller roll-out of the scheme.

Improving Customer Convenience

- *Online Dispute Resolution (ODR):* A phased approach to implementing an ODR system across various payment systems is proposed to be undertaken, beginning with implementation for failed transactions for all authorised payment systems *(Utkarsh)*;
- *Self-Regulatory Organisation:* A framework for creation of a Self-Regulatory Organisation (SRO) for engaging with the regulator/ supervisor and also responsible for setting and enforcing rules for the PSOs as announced in the Reserve Bank's Statement on Developmental and Regulatory Policies of February 6, 2020, will be formalised;

- *Survey for Digital Payment Awareness*: A detailed survey will be conducted across all states/UTs to help orient policies and operations to ensure that digital footprints reach the remotest area and strata of the country, besides (a) operationalising the PIDF; (b) contributing to the one-district-in-a-state to be fully digital enabled initiative; and (c) understanding overall digital penetration by merchants, service providers and users; and
- *Pan India Cheque Truncation System*: All Express Cheque Clearing System (ECCS) centres will be merged with the Cheque Truncation System (CTS) grids to facilitate cheque collection services by banks.

Ensuring Affordable Cost

- *Legal Entity Identifier (LEI)***:** The use of LEI to identify payment system participants, agents and distributors in respect of cross border services, particularly for large value payments, including expanding the implementation across all the identified segments will be explored.

Increasing Confidence

- *Digital Payments Index*: The Reserve Bank in its Statement on Developmental and Regulatory Policies of February 6, 2020 announced that the Reserve Bank would construct and periodically publish a composite "Digital Payments Index (DPI)".

3. DEPARTMENT OF INFORMATION TECHNOLOGY (DIT)

IX.42 The Department of Information Technology (DIT) continued its endeavour to meet the dynamic demand for developing agile, robust and secured digital platform to ensure smooth functioning of the critical and systemically important payment and settlement systems in the country, along with enhanced operational efficiency, responsiveness and customer satisfaction. During the year, there was a rapid ubiquitous digitisation of financial services in the country through facilitation of NEFT 24x7 and securing the unsecured, if any, through adoption of globally recognised international standard ISO 27001: 2013 in the Reserve Bank. The rapid growth of innovative IT solutions is leading to a paradigm shift in transforming the way businesses are performed, and the Reserve Bank moved in tandem by quickly adopting state-of-the-art Information and Communication Technology (ICT) in its day-to-day operations.

Business Continuity Plan (BCP) Post COVID-19 Pandemic

IX.43 COVID-19 posed a challenge to business continuity, primarily arising from the need to ensure availability of an adequate contingent of healthy, and highly skilled personnel to maintain operations. In the unprecedented pandemic situation, the Reserve Bank under its business continuity plan (BCP) acted proactively through a slew of measures to ensure uninterrupted and smooth functioning of the Reserve Bank's critical services such as - (i) payment systems – NEFT 24x7; and RTGS; (ii) core banking solution e-*Kuber*; (iii) treasury operations for money and forex market; (iv) debt management for the governments (centre and states); (v) the Reserve Bank's website; (vi) e-mail and video conferencing services; (vii) salary, pension and HR functions; (viii) IT, network and cyber security; (ix) maintenance and monitoring of network infrastructure at all locations of the Reserve Bank; (x) important business applications of business departments; and (xi) helpdesk and support to stakeholders and constituents (Box XI.2: RBI's BCP for COVID-19 Pandemic, Chapter XI).

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

IX.44 In last year's Annual Report, the Department had set out the following goals under *Utkarsh*:

- Consolidation of network and storage for easier manageability and monitoring (Para IX.45)*;* and
- Adopting zero trust framework for IT security (Para IX.46).

Implementation Status of Goals

Consolidation of Network and Storage for Easier Manageability and Monitoring

IX.45 During the year, the Reserve Bank moved towards a centralised network and implemented uniform system configuration, facilitating uninterrupted accessibility to the Reserve Bank's web applications hosted on Internet with services from three different Internet Service Providers (ISPs) and fallback secondary paths from three other ISPs to make the connectivity stable. A Centralised Storage Solution to augment the storage capacity and meet demand for existing as well as upcoming applications will back this endeavour.

Network Administration Control (NAC) and Network Operation Centre (NOC)-Zero Trust Framework for IT Security

IX.46 Network Administration Control (NAC) solution is implemented for ensuring security hygiene of all the end points across the Reserve Bank by continuous security posture assessment, strengthened user authentication, authorisation to network and improved context visibility of all users and network devices. Network Operation Centre (NOC), a centralised tool for monitoring and management of IT network infrastructure, provides a single view of organisational infrastructure across the Reserve Bank offering timely fault resolution and thereby improving efficiency of the network. NOC proactively monitors, analyses and responds to incidents related to network services across all offices of the Reserve Bank.

Positive Confirmation for Customer RTGS Transactions

IX.47 The Reserve Bank introduced a credit notification mechanism between RTGS participants, whereby the receiver participant of RTGS notifies the sender participant of the payment instruction after the successful completion of the transaction.

NEFT 24x7

IX.48 The Reserve Bank implemented NEFT system on a 24x7 basis from December 2019 as announced in its Statement on Developmental and Regulatory Policies of August 7, 2019 to facilitate a swift and round the clock retail payment systems (Box IX.2).

Agenda for 2020-21

IX.49 The Department's goals for 2020-21 are set out below:

- *Next Generation Structured Financial Messaging System (NGSFMS):* The proposed NGSFMS will revamp the existing Structured Financial Messaging System (SFMS) platform and simplify the architecture, bringing in scalability and flexibility and at the same time promoting enterprise framework of message communication among internal applications such as RTGS, core banking solution (CBS) of banks and NEFT *(Utkarsh);*

Box IX.2
NEFT 24x7

National Electronic Funds Transfer (NEFT), an electronic funds transfer system managed by the Reserve Bank since 2005, enables bank customers in India to transfer funds between any two NEFT-enabled bank accounts on a one-to-one basis. As of March 31, 2020, NEFT facilities were available at 1,53,311 branches/offices of 217 banks across the country. In April 2016, the Reserve Bank reduced settlement time to half-hourly batches with 23 settlements occurring between 8:00 am and 7:00 pm on weekdays, and the first, third and fifth saturday of a calendar month. Keeping in view customer convenience and to give increased thrust to digitisation, the High-Level Committee on Deepening of Digital Payments (Chairman: Shri Nandan Nilekani) recommended the need for extending availability of NEFT on a 24x7 basis to facilitate funds transfer beyond the banking hours. Accordingly, at the stroke of midnight of December 15, 2019, the Reserve Bank launched the NEFT 24x7x365.

It is expected to revolutionise the payment systems in India. The facility brings India into the elite club of nations which operate a 24x7 electronic funds transfer system with settlement of funds on round-the-clock basis. The new facility provides enhanced menu of options, convenience and redundancy to the end customer. Now, Indians have got ANYTIME payment facility to transfer money out of their account balance.

The project warranted multilevel integration between various applications namely SFMS-Hub, SFMS-PAD, SFMS-MI (at all 217-member banks), NEFT application and multiple modules of *e-Kuber*. It also involved introduction of new processes within the Reserve Bank as well as at the member banks to facilitate 24x7 operations. NEFT 24x7 has increased the efficiency of the payment systems with 48 batch settlements a day. The volume of transactions has increased from 2,194.6 lakh in November 2019 to 2,605.6 lakh in January 2020, and further to 2,624.0 lakh in March 2020.

Source: RBI.

- *Augmentation and Modernisation of Infrastructure Security Layer:* Consolidation, Augmentation and Automation of security layers, comprising internal and perimeter Firewalls and Intrusion Management solution [*i.e.,* governance, risk management and compliance (GRC)] will be undertaken to enhance cyber resilience and strengthen security of the Reserve Bank;
- *Next Generation Wireless Technology Wifi-6 Across the Reserve Bank:* The adoption of new emerging technology Wifi-6 will be initiated across the Reserve Bank for upgradation of the Wi-fi infrastructure wherein new access points (available with next generation wireless technology, *i.e.,* Wifi-6) will be deployed; and
- *Reserve Bank as Aggregator for Tax Information Network (TIN2.0):* The Central Board of Direct Taxes (CBDT) is implementing a new payment system, *i.e.*, Tax Information Network (TIN2.0), while subsuming the erstwhile OLTAS (Online Tax Accounting System) in the new system. The new system in *e-Kuber* will facilitate the Reserve Bank's functions both as the collecting bank and as an aggregator for amounts received by the authorised agency banks.

4. Conclusion

IX.50 In sum, the Reserve Bank's endeavour to develop efficient, affordable and secure payment and settlement systems in the country, with a focus to providing every Indian with an access to a bouquet of e-payment options, yielded results during the year. The Reserve Bank would further attempt to reach out to the hitherto excluded sections of society with state-of-the-art technology and payment systems based on an efficient regulatory environment and robust consumer protection.

X COMMUNICATION, INTERNATIONAL RELATIONS, RESEARCH AND STATISTICS

The Reserve Bank adopted various innovations in its communication strategy, sharpened economic and statistical policy analysis and research, and strengthened information management during the year. International relations were deepened and diversified, high points being India taking the Chair of the SAARCFINANCE, co-chairing the G-20's Framework Working Group (FWG) and planning to take the BRICS Chair in 2021. Effective cash management services on behalf of the government and sound management of foreign exchange reserves were concurrent objectives. A number of legislative initiatives/amendments were pursued during the year to ensure a robust legal framework necessary for a sound and efficient financial system in the economy.

X.1 This chapter discusses the implementation status of the agenda for 2019-20 in the areas of communication, research, statistics, international relations, banking services, foreign reserves management, and legal services. It also outlines the agenda for 2020-21 in these functional areas. Section 2 presents major initiatives of the Reserve Bank with regard to its communication strategy and processes. Section 3 discusses the Reserve Bank's international relations, including with international organisations and multilateral bodies. Section 4 dwells on the activities of the Reserve Bank as a banker to governments and banks. Section 5 reviews the conduct of foreign exchange reserves management with a focus on safety, liquidity and returns. Section 6 sets out research activities, including statutory reports and frontline research publications. Section 7 profiles the activities of the Department of Statistics and Information Management. Section 8 covers the activities of the Strategic Research Unit. Section 9 presents the activities of the Legal Department. The chapter ends with a conclusion.

2. COMMUNICATION PROCESSES

X.2 The Department of Communication (DoC) is driven by the goals of transparent communication, clear interpretation and precise articulation in the dissemination of the Reserve Bank's policies. The objective is to build public confidence and anchor expectations. For this purpose, it employs the Reserve Bank's website, media interfaces including regional, informal workshops, and social media tools for effective communication and public awareness. This also involves strategies for communicating during vulnerable, uncertain, complex and ambiguous (VUCA) times through closed door briefings in order to enhance a shared understanding of the Reserve Bank's policy actions and stance.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

X.3 Last year, the Department had set out the following goals under *Utkarsh*:

- Expanding engagement with the multi-lingual and multi-cultural society through its public awareness campaign (Para X.7 - X.10); and
- Organise workshops for national and regional media (Para X.11).

Implementation Status of Goals

X.4 The Reserve Bank strengthened the search functionality of its website to make it more user-friendly and provided direct access to its Complaint Management System (CMS) portal on the home page of its website (www.rbi.org.in) to make the grievance redressal procedure easier and faster. The 'Mobile Aided Note Identifier' (popularly known as MANI), a mobile application for aiding visually impaired persons to identify the denomination of Indian banknotes, was launched on January 1, 2020 and its link was also placed on the homepage of the Reserve Bank's website for ease of navigation. Digitised versions of the Reserve Bank's publications, namely, Annual Reports, Monthly Bulletins, Committee Reports, Development Research Group (DRG) Studies, Occasional Papers, Report on Currency and Finance, Staff Studies, Statistical Tables Relating to Banks in India and Report on Trend and Progress of Banking in India, dating back to as early as 1930s, were made available on the Reserve Bank's website.

Monetary Policy Communication

X.5 Under the Monetary Policy Framework introduced in October 2016, the Reserve Bank communicates the resolutions of the Monetary Policy Committee (MPC) on its website immediately after the MPC's meeting. This is followed by Governor's post-policy press conferences, which is also disseminated through YouTube along with live streaming on the Reserve Bank's website, Twitter handle and business television channels. During 2019-20, this protocol was assiduously followed under a pre-announced bi-monthly schedule as well as for off-cycle meetings on March 27 and May 22, 2020 necessitated by the unprecedented situation caused by COVID-19. Audio and transcripts of the press conferences were uploaded on the Reserve Bank's website. The minutes of the MPC's meetings were uploaded on the website on the 14th day after every meeting of the MPC as provided under Section 45ZL of the Reserve Bank of India Act, 1934. Post policy briefing sessions were also organised for media, researchers and analysts.

X.6 During March 22 - May 26, 2020, due to nation-wide lockdown induced by COVID-19 pandemic, Governor's announcements on Monetary Policy and other regulatory and developmental measures were broadcast live from the Reserve Bank's official YouTube channel and Twitter handle for simultaneous dissemination to all the media and general public.

Public Awareness Campaigns

X.7 During the year, the Reserve Bank carried out 360 degrees multi media public awareness campaigns on Risk *vs* Returns. Films on farmers and MSMEs were broadcast on All India Radio and *Doordarshan* during two financial literacy weeks. Various modes of mass communication, *viz.*, print media, television, radio, websites, hoardings, cinemas and SMS were used to propagate awareness messages. Films on Safe Digital Banking, Limited Liability, Banking Ombudsman and banking facilities for senior citizens were also broadcast in popular events such as *Kaun Banega Crorepati* (KBC), Pro *Kabaddi* League and Road Safety Series on television during the year. Films on financial education and other useful areas, featuring cricketers and badminton players, who are employees of the Reserve Bank, were also released on the *Doordarshan* and All India Radio as a part of a year-long campaign.

X.8 In a special video message to the Indian citizens, Governor advocated the increased use of various digital modes of payment as part of social distancing in view of COVID-19 pandemic. A special campaign on "Pay Digital, Stay Safe" starring Shri Amitabh Bachchan, was released in digital and social media in April 2020 as part of COVID-19 public awareness measures. It was followed by a relay of the message on major television channels and radio channels.

X.9 Apart from films and print advertisements, messages were also released through SMS and Interactive Voice Response System (IVRS) [Box X.1].

Social Media

X.10 The Reserve Bank's Twitter handle @RBI with its 8,92,000 followers as on June 30, 2020, is the largest among the central banks of the world. The Reserve Bank's YouTube channel had 56,100 subscribers as on June 30, 2020. During the year, the Reserve Bank also launched its second Twitter handle and Facebook page under the title @RBIsays to ensure wider dissemination and circulation of public awareness messages, benefitting the public. The awareness campaign started with a message from the Reserve Bank's Governor on the importance of using digital

Box X.1
Public Awareness Campaign through SMS

The Reserve Bank's public awareness campaign through SMS was launched on November 10, 2017. The aim of the campaign is to broaden the reach in creating awareness among people on financial and banking matter without meeting physically. The unique feature of the SMS campaign is the missed call element: upon giving a missed call to the Reserve Bank's short code number 14440, the caller will receive a call back to get more information on the subject of the SMS. The details of topic of SMSs released under this campaign during the year are provided below.

SMSs Broadcast between July 2019 and June 2020

SMS 1: Fast and high returns scheme? It may involve risk! Complain at www.sachet.rbi.org.in if any entity defaults in repaying deposits. To know more, call on 14440.

SMS 2: For identification of banknotes by visually impaired persons, download RBI's MANI app from bit.ly/RBI-MANI. To know more, call on 14440.

SMS 3: Would you be willing to provide feedback on RBI's public awareness messages? If yes, click on http://nmc.sg/b2FrYT.

SMS 4: Complaint against Bank, NBFC, system participant not redressed? Lodge complaint on RBI's Complaint Management System @https://cms.rbi.org.in. To know more, call on 14440.

SMS 5: Repeat of the MANI App campaign.

SMS 6: Fraudulent transaction in your bank account? Limit your loss. Notify your bank immediately. For more details, give a missed call on 14440.

Details of outreach through SMS campaign are set out in Table 1 below.

Table 1: SMS Campaign - Outreach

(As on June 30, 2020, in lakhs)

Details	SMS 1	SMS 2	SMS 3	SMS 4	SMS 5	SMS 6
1	2	3	4	5	6	7
Total Unique Messages Sent	6,157	6,263	127	6,443	4,573	5,370
Total Unique Messages Delivered	4,002	4,259	115	4,511	3,441	4,154
Total SMS Parts Sent	11,782	12,665	127	12,728	7,305	9,641
Total SMS Parts Delivered	7,296	8,377	115	8,771	5,449	7,407

Source: RBI.

The SMS on MANI App has a link to the App store/Play store to enable easy download of the App. The SMS on Complaint Management System (CMS) also provided a link to the CMS portal, resulting in a spike in the number of complaints lodged. The SMS on Risk *vs* Returns has a link to the 'Sachet' portal for lodging complaints against companies coming out with dubious schemes to defraud the public. An impact survey to gauge the feedback on the SMS campaign was carried out in February 2020. The SMS had a link to a page on the Reserve Bank's website with five questions. The result of the survey was positive and encouraging.

Source: RBI.

modes of payments: 'Pay Digital, Stay Safe'. It was followed by dissemination of Graphics Interchange Formats (GIFs) and caricatures on social media handles conveying messages in English, Hindi and eleven regional languages.

Workshops for Media Persons

X.11 During the year, the Department conducted three workshops at Bengaluru, Patna and Jaipur as part of its awareness programme for regional media. One workshop for national media was also conducted in Mumbai.

The RBI Museum

X.12 The RBI Museum located at 6, Council House Street, Kolkata celebrated its first anniversary on March 11, 2020. The Museum has interesting sections on stories of money, gold and the genesis of the Reserve Bank, explained through artefacts and interactive exhibits. The mezzanine floor of the museum houses an interactive gaming zone. Since its inauguration on March 11, 2019 till March 19, 2020[1], 8,463 people visited the Museum. In addition to its regular exhibits, a special exhibition of rare collection of currency, including banknotes and commemorative coins, was also organised at the Museum.

Agenda for 2020-21

X.13 In 2020-21, the Department will focus on the following goals under *Utkarsh*:

- Conduct workshops/sessions for the media on important regulatory and banking related issues;
- Deepen its engagement with the society through public awareness programmes and social media presence; and
- In line with international experience, efforts will be made to create a 'Social Media Command Centre' for social media monitoring and listening.

3. INTERNATIONAL RELATIONS

X.14 During 2019-20, the Reserve Bank strengthened economic and financial relations, especially with the international organisations and multilateral bodies, through its International Department (ID). Engagements in several bilateral and multilateral dialogues, focusing on enhancing cooperation among central banks fostered international relations. Several regional initiatives were undertaken in terms of capacity building, providing technical support and strengthening information dissemination through databases and surveys.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

X.15 Last year, the Department had set out the following goals:

- Strengthen international cooperation in the area of Finance Track under G20 (Para X.16 - X.19);
- Focus on the agenda of international financial architecture (*Utkarsh*) [Para X.20 - X.22];
- Successful completion of Article IV 2019 discussions with the IMF (*Utkarsh)* [Para X.23];
- Provide analytical policy briefs at BIS and CGFS meetings (Para X.24 - X.25);
- Contribute inputs for the FSB related issues (Para X.26);
- Strengthen macroeconomic research capacity of the BRICS CRA (*Utkarsh*) [Para X.27];
- Consider revising framework on Currency Swap Arrangement for SAARC countries

[1] With restrictions imposed under the pandemic, the Museum was unavailable to visitors since March 20, 2020.

in consultation with Government of India and other SAARC central banks (*Utkarsh*) [Para X.28];

- Carry forward the agenda under the SAARCFINANCE roadmap in terms of capacity building, providing technical support and undertaking collaborative studies (*Utkarsh*) [Para X.28]; and
- Other initiatives (Para X.29 - X.31).

Implementation Status of Goals

Saudi Arabia's 2020 Presidency of G20

X.16 An important engagement in 2019-20 was the G20 Finance Ministers and Central Bank Governors (FMCBG) and Finance and Central Bank Deputies (FCBD) Meetings of G20 under Saudi Arabia's Presidency in 2020, around the theme of 'Realising Opportunities of the 21st Century for All'. India supported the G20 Finance Track work program aimed at empowering people through access to opportunities for all and shaping new frontiers by reaping benefits of innovation, including through digital financial inclusion. India supported the work program, with the Reserve Bank's contributions in the form of financial inclusion initiatives such as a 24x7x365 retail payment system based on inter-operability achieved with the help of Unified Payment Interface (UPI) and the use of digital technologies. India also supported the G20 initiative to develop a roadmap for enhancing global cross-border payments arrangements, especially remittances.

X.17 In coordination with the government, the Department participated in the meetings of various working groups of the G20 such as the Framework Working Group (FWG), the Infrastructure Working Group (IWG) and the International Financial Architecture (IFA) Working Group.

X.18 On the financial sector related issues, the G20 focused on transition of inter-bank offered rates (IBOR) benchmarks with the planned discontinuation of LIBOR at end-2021 besides issues relating to RegTech, SupTech and BigTech. India's view was that notwithstanding the steady progress towards the adoption of overnight (near) risk-free rates (RFRs) [*e.g.,* Secured Overnight Financing Rate (SOFR) in the US, the European Short-term Rate (ESTER) in the Euro area, and Sterling Overnight Index Average (SONIA) in the UK], much remained to be done for a smooth transition away from the LIBOR, including outreach to stakeholders.

X.19 The Department provided inputs for the virtual FMCBG meetings held against the backdrop of the COVID-19 pandemic. India, being a co-chair of the G20's FWG, took the lead in formulating the Action Plan to tackle COVID-19 crisis.

IMF and IFA Related Issues

X.20 At the Annual Fund-Bank meeting in October 2019, it was clear that requisite support among the membership for a change in IMF quotas under the 15th General Review of Quotas (GRQ) was not coming forth as the US expressed its inability to contribute to any quota increase under the 15th GRQ. In February 2020, the Board of Governors of the IMF formally concluded the 15th GRQ with no increase in quotas and decided that the 16th GRQ will continue beyond December 15, 2020 and shall be concluded no later than December 15, 2023. During this extended period, the IMF would revisit the adequacy of quotas and continue with the process of governance reforms, including a new quota formula as a guide, and ensure the primary role of quotas in the IMF resources. The Board also called on the participants in the New Arrangements to Borrow

(NAB) for doubling of the NAB, effective January 1, 2021.

X.21 It has been felt that the IMF should continue to maintain its lending resources at least at the current level despite the fact that there was no quota increase under the 15th GRQ. Accordingly, India upheld support for the extension of 2016 Note Purchase Agreement (NPA) by one year under 2016 Bilateral Borrowing Agreements (BBAs) amounting to USD 10 billion, which will continue to be in effect till end-December 2020.

X.22 In the virtual International Monetary and Financial Committee (IMFC) meeting on March 27, the Reserve Bank proposed a non-stigmatised short-term liquidity swap facility that could be rapidly enacted for support to the member countries. The proposal gained traction and resulted in the IMF Executive Board approving a new “swap-like” Short-term Liquidity Line (SLL) that could be availed by countries with strong fundamentals, sound policies and institutional framework, facing international capital market volatility. The Department helped articulate India’s stance on various proposals relating to the IMF.

X.23 The Department also facilitated the successful completion of 2019 Article IV exercise, which is held under Article IV of the IMF’s Articles of Agreement. The IMF’s Staff Report was released in December 2019.

BIS Activities

X.24 With the Governor of Reserve Bank of India currently on the Board of the BIS, the Reserve Bank played an important role in shaping several new horizons of the BIS activities, with support and analytical inputs from the Department in Governor’s bi-monthly meetings of the BIS, including such virtual meetings conducted by the BIS in response to the spread of COVID-19.

X.25 The Department provided support to top management for various other meetings of the BIS Committees, especially the Committee on the Global Financial System (CGFS).

FSB Initiatives on Global Financial Regulation

X.26 The Financial Stability Board (FSB) assesses vulnerabilities in the global financial system and promotes international financial stability by coordinating with central banks, other national financial authorities and international standard-setting bodies. The Department prepared inputs for formulating India’s stance in the FSB on issues relating to the global financial system and associated risks to financial stability. The Department also coordinated with other units within the Reserve Bank and the regulatory bodies on India’s input to the FSB’s annual Non-Bank Financial Intermediation (NBFI) monitoring exercise and other surveys. The Department organised the FSB’s Regional Consultative Group (RCG) for Asia Conference call. The Department also contributed to reporting and discussions on major initiatives taken by the FSB to fight against the COVID-19 crisis.

BRICS, SAARC and Bilateral Cooperation

X.27 During the period under review, the BRICS central banks successfully conducted the second Contingency Reserve Arrangement (CRA) test-run. Operational aspects of the BRICS Bond Fund (BBF) were examined and mapped. Cooperation and dialogue on various areas like payment and settlement systems and information security, among the BRICS countries, were begun under the BRICS Russia Chair.

X.28 The Reserve Bank took over the Chair of the SAARCFINANCE (SF) from October 2019 for a period of one year. The Department engaged in enhancing the cooperation among the SAARC central banks through various initiatives. These initiatives included work on development of SF Sync, a portal to facilitate a closed and secure channel for intra-SAARC central banks communication. The SF scholarship scheme for higher studies for officials in central banks and ministries of finance in SAARC countries, which was instituted in June 2013, was revised in May 2020. Under the revised scheme, *inter alia*, the ambit of eligible courses has been expanded and the scholarship amount and the number of scholarships that may be granted in a year have been enhanced. The recipient of the first SF scholarship in 2014 completed a Ph.D. from Jawaharlal Nehru University in 2019. The SF scholarship for 2019 was offered to two officials from Nepal Rastra Bank and Da Afghanistan Bank to pursue doctorate and post-graduation degrees in India, respectively. Technical support and exposure were provided to some member central banks under the SF roadmap of cooperation. Work towards standardising and enhancing SF database progressed. A SF Survey on FinTech and Financial Inclusion was conducted, which enabled a stocktaking of FinTech and Financial Inclusion amongst SAARC countries. Based on this survey, the Reserve Bank has initiated a collaborative study on FinTech and Financial Inclusion with participation from all SAARC central banks, with a seminar in Udaipur in February 2020. With a new Framework on Currency Swap Arrangement for SAARC countries being put in place for the period 2019-22 (Box X.2), a swap agreement was signed with Royal Monetary Authority of Bhutan (RMAB) in January 2020 and swap support was extended in February. India also extended a swap line to Maldives in April 2020 and Sri Lanka in July to help bridge dollar liquidity needs on account of a collapse in tourism receipts and other disruptions in the aftermath of COVID-19.

Other Activities

X.29 The Terms of Engagement (ToE) between the Reserve Bank and the Bank of Japan (BOJ) to foster dialogue and cooperation were signed on November 4, 2019. The first RBI-BOJ senior

Box X.2

Framework on Currency Swap Arrangement for SAARC Countries, 2019-22

Bilateral and multilateral swap arrangements have become an integral part of the Global Financial Safety Net (GFSN). India, in consultation with other SAARC countries, put in place a bilateral Currency Swap Arrangement for SAARC countries in 2012 for a period of three years, which has been extended two times so far. The current Currency Swap Arrangement for SAARC countries is valid for a three-year period starting from November 14, 2019 till November 13, 2022. Under this framework, the Reserve Bank will continue to provide liquidity support to the tune of USD 2.0 billion under a swap facility to SAARC central banks. Within this overall amount, each SAARC country is allocated a maximum eligible swap amount that has been decided on the basis of various economic parameters of that country. Drawals can be made in US dollar, Euro or Indian Rupee (INR) and in multiple tranches under the overall eligible limit.

A 'Standby Swap Arrangement' (SSA) was incorporated in the framework on December 20, 2018, under which, additional swap amounts aggregating up to USD 400 million could be provided to individual countries beyond their specified limits by operating on the unutilised balances available within the overall size of the facility. There are concessions for swap drawals in INR in terms of waiting period and second rollover. The RMAB and Central Bank of Sri Lanka (CBSL) entered into a bilateral swap agreement with the Reserve Bank under the new Framework on January 31 and July 24 of 2020, respectively.

Source: RBI.

level dialogue under this ToE was held in Mumbai on November 4, 2019. The third meeting of the Joint Technical Coordination Committee (JTCC) – an Executive Director level forum between the Reserve Bank and the Nepal Rastra Bank (NRB) – to discuss and resolve issues of mutual concern, was held in Mumbai during September 5-6, 2019.

X.30 The Department continued its close engagements with the Ministry of Commerce and Industry, Government of India, and participated in the deliberations that culminated in India's draft report of the World Trade Organisation (WTO) Secretariat for the 7th Review of the Trade Policies and Practices of India (TPR) by the WTO. The Department also undertook engagements with the World Bank on issues relating to regulation, supervision and payment systems.

X.31 The Reserve Bank continued its active engagement with South Asia Regional Training and Technical Assistance Centre (SARTTAC) and the South East Asian Central Banks (SEACEN) Centre. It also extended support for the G24 and G30. Deliberations at the South East Asia, New Zealand and Australia (SEANZA) central bank forum culminated in a resolution – backed by a majority of the members – to wind it down, particularly keeping in view the emergence of other regional fora/capacity building institutions, such as the SEACEN, IMF training institutes and the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP), while acknowledging its immeasurable contribution towards central bank cooperation and human resource development since the late 1950s.

Agenda for 2020-21

X.32 In 2020-21, the Department will focus on the following:

- Follow up on issues relating to the international financial architecture (IFA), including the 16th GRQ, Bilateral Borrowing Agreements (BBAs) and New Arrangements to Borrow (NAB) of the IMF (*Utkarsh*);
- Completion of its activities as the current SAARCFINANCE Chair including swap support, capacity building, and joint research (*Utkarsh*);
- Strengthening cooperation amongst the BRICS central banks through BBF, CRA and other initiatives with India taking over the BRICS Chair in 2021 (*Utkarsh*);
- Article IV consultations with the IMF;
- Intensify its engagement with the G20 in the run-up to its taking over the Presidency in 2022;
- Continue to provide inputs to the various G20 working groups;
- Providing inputs to Governor for activities relating to the BIS Board and the Governors' bi-monthly meetings;
- Contributing inputs for other meetings such as those of Committee on the Global Financial System and on FSB related issues, including FSB's annual monitoring exercise 2020 to assess global trends and risks from non-bank financial intermediation; and
- Providing inputs on enhancing cross-border payments, digital economy, FinTech and BigTech for technology-enabled supervisory and regulatory solutions.

4. GOVERNMENT AND BANK ACCOUNTS

X.33 The Department of Government and Bank Accounts (DGBA) oversees the functions of the Reserve Bank as banker to banks and banker to governments, besides formulating internal accounting policies of the Reserve Bank.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

X.34 Last year, the Department had set out the following goals:

- Integration of *e-Kuber* with the systems of central government as well state governments/UTs for direct collection of their e-receipts and making e-payments (*Utkarsh*) [Para X.35];
- Integrate all agency banks for e-receipts reporting to *e-Kuber* (*Utkarsh*) [Para X.36];
- Strengthening the Goods and Services Tax (GST) framework by extending the current online Memorandum of Error process of the central government to all state governments (*Utkarsh*) [Para X.37];
- Revamping the inspection process for government transactions conducted by agency banks (*Utkarsh*) [Para X.38];
- Automation of calculating daily position of government balances (*Utkarsh*) [Para X.39];
- Discontinuing the P2F arrangement in a phased manner (Para X.40); and
- Other initiatives (Para X.41 - X.43).

Implementation Status of Goals

X.35 During the year, three state governments were newly on-boarded to the Reserve Bank's core banking solution portal – *e-Kuber* – for e-payments and three state governments were migrated to the enhanced version of the e-payments portal. Integration with *e-Kuber* for e-receipts and e-payments was pursued with the remaining state governments, after which certain state governments have shown willingness and are examining the technical documents for integration. In the case of the central government, the Indian Customs Electronic Gateway (ICEGATE) system of Central Board of Indirect Taxes and Customs (CBIC) was integrated with *e-Kuber* and implemented from July 1, 2019 for collection of indirect taxes [other than goods and services tax (GST)] by the Reserve Bank through national electronic funds transfer (NEFT)/ real-time gross settlement (RTGS).

Integration of Agency Banks with e-Kuber for Online Reporting of Government Receipts

X.36 All agency banks are integrated with *e-Kuber* for online reporting to the Reserve Bank of GST receipts collected by them. Banks which facilitate state government transactions were also on-boarded to *e-Kuber* for online reporting of receipts to the Reserve Bank.

Extension of Memorandum of Error (MoE) Process in GST Framework to All State Governments

X.37 During the year, while the online MoE process was extended to three state governments for reconciliation of GST transactions, three state governments have completed the testing for the same and are expected to go live shortly. However, the COVID-19 pandemic has slowed the testing process between the Reserve Bank and state governments. The Reserve Bank is actively pursuing the quick on-boarding of the remaining state governments.

Oversight of Agency Banks

X.38 A detailed check-list on issues to be considered during inspections was prepared and necessary instructions were issued to the regional offices of the Reserve Bank, as part of revamping process of oversight on agency banks.

Automation of Daily Position Process

X.39 After the commencement of NEFT operations on a 24x7 basis from December 16, 2019 and extension of this service to government transactions, there was a need to bring some changes in the operational process for calculating daily position of government balances. Accordingly, the contours of this goal are being reviewed and necessary revisions are being carried out.

Discontinuation of Paper-to-Follow (P2F) Arrangement for State Governments

X.40 The P2F arrangement for clearing of government cheques was discontinued in 13 states, based on the consent given by the state governments.

Other Initiatives

X.41 The agency commission rates for eligible government transactions were revised with effect from July 1, 2019. The centralised system of reimbursement of GST on agency commission paid to agency banks was stopped and, with effect from July 1, 2019, GST at applicable rates is paid along with agency commission claims at the regional offices of the Reserve Bank. A framework has also been put in place to have tax deducted at source (TDS) under GST as per applicable laws at the time of making agency commission payments.

X.42 In order to strengthen the responsibility of the agency banks for timely reporting of government transactions and also to ensure correctness of submission of their agency commission claims, agency banks are required to submit certificates by the bank official and by Chartered Accountant certifying the correctness of agency commission claim and that no government receipt is pending for remittance while submitting agency commission claims with effect from August 1, 2019. Subsequently, agency banks were also enabled to provide such certificate from Cost Accountants with effect from September 25, 2019.

X.43 From February 2020, the Reserve Bank began participating in the National Automated Clearing House (NACH) system of the National Payments Corporation of India (NPCI). Credit transactions of a state government were migrated to NACH system.

Agenda for 2020-21

X.44 For 2020-21, the Department proposes the following agenda under *Utkarsh*:

- Integrating the central government's systems with *e-Kuber* for direct collection of their e-receipts and making e-payments (Box X.3);
- Integrating remaining state governments' systems (excluding Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura) with *e-Kuber;*
- Putting in place an efficient reporting system for Non-GST transactions;
- Putting in place Dashboard for government transactions; and
- Integrating remaining state governments for online MoE resolution process for reconciliation of GST transactions.

5. MANAGING FOREIGN EXCHANGE RESERVES

X.45 The Department of External Investments and Operations (DEIO) manages the country's foreign exchange reserves (FER), with safety, liquidity and returns – in that order – as its strategic objectives. During the year, FER increased by 17.7 per cent in June 2020 as compared with 5.9 per cent in the corresponding period of the previous

Box X.3
***e-Kuber* and Tax Information System (TIN) 2.0: Integration for Direct Taxes**

The existing process of collection of direct taxes through Online Tax Accounting System (OLTAS) is being migrated to Tax Information System (TIN) 2.0, which is hosted by the Income Tax Department and Office of the Principal Chief Controller of Accounts (Pr. CCA), Central Board of Direct Taxes (CBDT). The accounting of government transactions will now be facilitated through "PRAKALP' (*Pratayaksh Kar Lekhankan Pranali*), an application of Public Financial Management System (PFMS) under Office of the Controller General of Accounts (CGA). Besides CBDT and CGA, authorised banks and the Reserve Bank are also part of this TIN 2.0 eco-system. The Reserve Bank will work as a collecting bank as well as aggregator for accounting and settlement of direct taxes through *e-Kuber*, which will be integrated with the systems of agency banks, TIN and PRAKALP.

TIN 2.0, which is broadly based on the Goods and Services Tax (GST) structure, requires taxpayers to generate online challans from a centralised system, thus doing away with preparation and handling of physical challans. It enables tax payers to use various payment options such as Internet Banking of authorised banks, Over-the-Counter (OTC) payment through branches of authorised banks including designated offices of the Reserve Bank, payment through NEFT/RTGS through any bank directly to the Reserve Bank and payment through approved instruments like Internet Banking, Debit Card, UPI/BHIM of any bank.

With the introduction of TIN 2.0, the challan generation information and confirmation of taxes received will be shared in real-time with all concerned stakeholders. Just like in the case of GST, all tax payments received by agency banks will be aggregated by the Reserve Bank so that funds received from agency banks can be credited to the respective government accounts along with OTC/NEFT collections by the Reserve Bank, as per prescribed timelines. The Reserve Bank will also provide necessary accounting and settlement related reports to the government systems.

Source: RBI.

year. As a diversification strategy similar to last year, gold was purchased and added to the FER during the year.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

X.46 Last year, the Department had set out the following goals:

- Efforts to be made to enhance the repo and forex swap capabilities (*Utkarsh*) [Para X.47];
- Undertake a review of risk management practices (Para X.47); and
- Enhancement of IT infrastructure and security measures for cyber risks (Para X.47).

Implementation Status of Goals

X.47 During the year, a comprehensive review of existing risk management practices was conducted, given the scaling up of operations in the instruments like repo and forex swap. Internal systems were fortified to enhance cyber security. The Society for Worldwide Interbank Financial Telecommunication (SWIFT) system was upgraded to the latest version of SWIFT Alliance Access in line with the recommendations of the SWIFT. Security cover was enhanced with the adoption of additional payment control services under the SWIFT.

Agenda for 2020-21

X.48 For 2020-21, the Department will focus on the following goals:

- An enhanced risk management framework (*Utkarsh*);
- Dedicated research inputs (*Utkarsh*); and

- Effective diversification of reserves through gainful deployment without compromising the safety of investments.

6. ECONOMIC AND POLICY RESEARCH

X.49 As the knowledge centre of the Reserve Bank with a focus on issues relating to the economy and the financial system, the Department of Economic and Policy Research (DEPR) strives to provide research inputs and management information system (MIS) services for policy formulation. The Department also generates primary national level data, prepares the Reserve Bank's statutory reports, brings out frontline research publications, promotes collaborative policy-oriented research with external experts and provides technical support to various operational departments and to technical groups/committees constituted by the Reserve Bank from time to time.

X.50 While fully adhering to the "work-from-home" guidelines to ensure utmost safety of all staff, and despite certain logistic constraints during the period, the Department provided all information and analytical inputs required for policy measures on time. Research and analysis related work continued without much disruption, and all research related publications were released on time. The Central Library facilitated uninterrupted remote access to various databases and other reference resources required for undertaking research. The Department also hosted a number of knowledge sharing sessions on online platforms.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

X.51 Last year, the Department had set out the following goals:

- Release various statutory and flagship publications (Para X.52);
- Compile and disseminate primary and secondary data (Para X.53);
- Deepening analysis and research on important areas of central banking *(Utkarsh)* [Para X.54];
- Explore big data applications for improving inflation and growth projections *(Utkarsh)* [Para X.54];
- Extend accessibility of digitised contents of the Central Library (Para X.55); and
- Organise events and expert talks (Para X.56 - X.57).

Implementation Status of Goals

X.52 During the year, the Department brought out the flagship publications, *viz.*, the Annual Report, Report on Trend and Progress of Banking in India, and State Finances: A Study of Budgets of 2019-20 in a timely manner. The coverage of the monthly publication – Reserve Bank of India Bulletin – was expanded during the year to include quick research articles on issues of topical interest.

X.53 Compilation and dissemination of primary statistics on monetary aggregates, balance of payments, external debt, effective exchange rates, combined government finances, household financial savings and flow of funds on established timelines and quality standards engaged the Department during the year. This year's State Finances report also contained an 'e-State database' for the benefit of users, providing historical data from 1990-91 to 2019-20. In line with the G-20 Data Gaps Initiative, and also recognising the increasing demand from various stakeholders, the Department released quarterly data on consolidated states' (23 states) finances and combined finances of the centre and states during the year. Similarly, the data on Financial

Stocks and Flows of the Indian Economy from 2011-12 to 2017-18, a compilation of sectoral accounts, for the first-time, included sector-wise outstanding positions in line with the international standards.

X.54 During 2019-20, the Department expanded and deepened the scope of research activities by creating two new divisions, *viz.,* Payment Systems Division (PSD) and New Frontiers Unit (NFU). The Department published 54 research papers/articles during the year, of which 17 were published outside the Reserve Bank in international and domestic journals; and 10 working papers were posted on the Reserve Bank's website. The published studies covered a wide range of issues like macroeconomic forecasting; big data analytics; inflation dynamics; banking sector; financial cycle; investment behaviour; payments system and fiscal issues. Furthermore, the DEPR Study Circle, an in-house discussion forum, organised 46 seminars/presentations during the year on diverse research themes, of which 11 were hosted online during the lockdown period. The Department also brought out two issues of the RBI Occasional Papers (Volume 40, Number 1 & 2), a peer-reviewed research journal of the Reserve Bank.

X.55 The Central Library and the Reserve Bank of India Archives (RBIA) are two key units of DEPR that provide reference materials on various subjects for conducting research and publishing reports, including the Reserve Bank's history. The Library has a comprehensive collection of books/e-books, including some rare books, journals/e-journals, and online databases on banking, economics and finance. The efforts during the year were focused on providing a unified interface for its users of online resources such as books, journals and data. The RBIA is responsible for implementation of the Archival and Records Management Policy in the Reserve Bank. It also provides research facilities to the Reserve Bank's staff as well as to scholars from different parts of the country and abroad. The Archives has digitised 5 lakh more pages in 2019-20, taking the total digitised pages to 13 lakh.

X.56 The Department organised a number of events/expert talks during the year, including two memorial lectures. The 17th L. K. Jha Memorial Lecture was delivered by Shri N. K. Singh, Chairman, 15th Finance Commission on "Fiscal Federalism: Ideology and Practice" on November 22, 2019. On January 7, 2020, the 3rd Suresh Tendulkar Memorial Lecture was delivered by Mr. Tharman Shanmugaratnam, Senior Minister, Republic of Singapore on "Broad-based Prosperity: Tackling the Fundamentals".

X.57 The expert talks organised by the Department during the year included talks by Professor Arvind Panagariya, Columbia University on "A Reform Agenda for a New India" on July 11, 2019 and Shri Amitabh Kant, CEO of NITI Aayog on "Reaccelerating India's Economic Growth" on January 22, 2020. On November 26, 2019, researchers of the Reserve Bank had a fruitful interactive session with the Nobel Laureate Professor Robert Engle.

Agenda for 2020-21

X.58 The Department's agenda for 2020-21 will focus on the following goals:

- Analysis and research – exploring alternative models for improving inflation and growth projections, and a study on municipal finances *(Utkarsh*);
- Release of data on bilateral trade in services *(Utkarsh*);
- Studies in the areas of contemporary relevance such as spillover effects of

non-deliverable forward (NDF) market on onshore forex market in India; rural-urban inflation dynamics; determinants of discretionary spending of the states; and relationship between volatility index (VIX) and stock index;

- Revival of the publication titled the Report on Currency and Finance with the theme of "Reviewing Monetary Policy Framework";
- Release of the History of the Reserve Bank, Volume-5 for the period spanning 1997 to 2008;
- Easy access to the Central Library's digitised contents for the public; and
- Development of a document management software for better management of digital records available in the Archives.

7. STATISTICS AND INFORMATION MANAGEMENT

X.59 The Department of Statistics and Information Management (DSIM) provides high quality statistical services, including compilation, analysis and dissemination of macro-financial statistics to the public, and statistical support and analytical inputs for meeting the policy and operational needs of the Reserve Bank. DSIM maintains multi-dimensional statistical systems related to banking, corporate and external sectors; undertakes structured surveys relating to enterprises and households as inputs for monetary policy formulation; manages the centralised submission of returns through XBRL system and dissemination through the Reserve Bank's data warehouse; and provides statistical analysis and forecasts.

X.60 The COVID-19 outbreak posed challenges on the data collection process, which was impacted mainly due to the non-availability of granular data that comes from primary sources. During the initial phases of lockdown with travel restrictions, instead of computer aided personal interview (CAPI) method for conducting household/ enterprise surveys, telephonic mode was used, which resulted in considerably lower responses than the usual one. Regarding the data reported by regulated entities, the Reserve Bank extended the timeline for submission, thereby, the timeliness of data availability was compromised to some extent. In addition, the pandemic has also slowed down the work related to operationalisation of the Centralised Information Management System (CIMS) – a next generation data warehouse of the Reserve Bank. Notwithstanding these difficulties, processing of data, which were already submitted, was continued with full vigour and dissemination of core statistics and forwarding of data to international agencies was carried out in accordance with schedule.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

X.61 Last year, the Department had set out the following goals:

- Implementation of CIMS towards full operationalisation with Granular Data Access Lab (GDAL) and regulatory sandbox environment (*Utkarsh*) [Para X.62];
- Development of a system for creating Public Credit Registry (PCR) (*Utkarsh*) [Para X.63];
- Deepening research and analysis using big data analytics (*Utkarsh*) [Para X.64];
- Expand the coverage of Central Information System for Banking Infrastructure (CISBI) (Para X.65);

- Examine the scope of extending the coverage of IESH to rural and semi-urban areas (Para X.66);
- Development of Central Fraud Registry (CFR) portal for primary urban cooperative banks (Para X.67); and
- Release of regular publications (Para X.68).

Implementation Status of Goals

X.62 The implementation of the Centralised Information Management System (CIMS) was taken forward in a phased manner under the guidance of Technical Advisory Group (TAG) (Chairman: Professor G. Sivakumar) towards its operationalisation. Extensive consultations were held with the stakeholders, and Control Specification Documents (CSDs), including Functional Specification Documents (FSDs) of stakeholder departments, were prepared. Also, Hardware infrastructure, Data Structure Definitions (DSDs) for Statistical Data and Metadata Exchange (SDMX) implementation and selection of third-party vendor for performance test (PT), user acceptance test (UAT) and Data Migration Audit (DMA) were completed. A sandbox environment was created and operationalised with 16 returns from 10 banks on a pilot basis. However, the applicable returns from other banks are also being brought under its ambit.

X.63 With a draft Public Credit Registry (PCR) of India Bill under finalisation, implementation of PCR was initiated during the year.

X.64 The Department undertook research and analysis using advanced forecasting and nowcasting techniques for assessment of macroeconomic developments. The Department also applied big data analytics, artificial intelligence (AI) and machine learning (ML) techniques to gauge media sentiments on economic indicators. In this regard, the assessment of food inflation based on online retail prices was completed using a big data approach.

X.65 The CISBI, which supports banking network and financial inclusion policies, was expanded during the year by including co-operative banks, ATMs and fixed-location business correspondents (BCs). The database of the external commercial borrowings (ECBs) was shifted to the Commonwealth Secretariat's MERIDIAN application for debt management to meet the new global definitions/standards.

X.66 A pilot round of the Inflation Expectations Survey of Households (IESH) was conducted to explore the issue of extending the coverage of IESH to rural and semi-urban areas.

X.67 A new XBRL web-logic environment with the feature of digitally-signed return filing workflow was made operational. This would obviate paper-based submission of statutory returns in a phased manner. The environment was extended to returns relating to non-banking financial companies (NBFCs). The Central Fraud Registry (CFR) portal of SCBs was augmented with new features like e-mail based login, removing threshold-amount based processing and facilitating better user management by bank administration. The CFR portal for primary urban cooperative banks is in the advanced stage of development.

X.68 During the year, the Department brought out its regular publications, *viz.,* Handbook of Statistics on the Indian Economy, 2018-19; Statistical Tables Relating to Banks in India, 2018-19; Basic Statistical Returns of SCBs in India (BSR1, BSR2 and BSR7), Weekly Statistical Supplement (WSS) and the 'Current Statistics' portion of the Reserve Bank's Bulletin in a timely manner.

Agenda for 2020-21

X.69 Going ahead, the Department will focus on the following goals:

- To make CIMS fully operational and migrate the existing databases – advanced analytic environments for use in GDAL and Data Science Lab (DSL) will be taken up; and element-based repository will be implemented in a phased manner following Statistical Data and Metadata eXchange (SDMX) standards, which will lead to operationalisation of metadata driven data maintenance and dissemination system (*Utkarsh*);
- Develop an end-to-end system for PCR and roll out of the registry in a phased manner *(Utkarsh)*;
- Undertake policy-related research in the areas of modelling, nowcasting and forecasting of macroeconomic indicators, including the use of web-crawling using AI, ML, and big data analytics (*Utkarsh*);
- Operationalise the Data Sciences Lab (DSL) (*Utkarsh*);
- Develop a state-of-the-art single searchable CFR portal consisting of frauds reported by SCBs, UCBs and NBFCs to assist them in taking informed decision on providing credit; and
- Extend the consumer confidence survey (CCS) to all the urban centres, where IESH is currently being conducted.

8. STRATEGIC RESEARCH UNIT

X.70 The Strategic Research Unit (SRU) was established in February 2016 with the objective of undertaking research on contemporary issues that are relevant across various verticals of the Reserve Bank. The Unit's research agenda consists of short, medium, and long-term goals.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

X.71 Last year, the Unit had set out the following goals:

- Focus on data-intensive policy research (*Utkarsh*) [Para X.72];
- Address policy research questions (Para X.72);
- Continue to monitor macroeconomic developments (Para X.73); and
- Publish research findings and conduct joint studies with other departments (Para X.74).

Implementation Status of Goals

X.72 The Unit closely monitored different sectors of the economy and provided in-depth research inputs for bi-monthly Monetary Policy Strategy Meetings. During the year, the major output of the Unit included a dynamic factor model-based indicator for India that nowcasts overall GDP growth using available high-frequency data on the Indian economy. In addition, the bi-monthly presentations covered regular surveillance and market intelligence.

X.73 The medium-term research of the Unit involved analysis of issues relating to monetary policy transmission, financial market, India's growth outlook and financial vulnerability. The research findings were regularly presented to the top management and operational departments such as Department of Supervision (DoS) and Financial Market Regulation Department (FMRD).

X.74 SRU's collaboration with other departments included research on 'Price

Discrimination in Over-the-Counter (OTC) Currency Derivatives'; yield curve forecasting; overnight index swap (OIS) surprises; and the impact of recent policy instruments such as Long-term Repo Operations (LTRO) and Operation Twist. As part of its long-term research agenda, SRU regularly disseminates its research findings with the academic and policy community.

Agenda for 2020-21

X.75 Going ahead into 2020-21, the Unit will continue to focus on the following:

- Issues of contemporary importance – tracking real time economic outlook/ sentiment based on machine learning tools (*Utkarsh*);
- In-depth micro-analysis of the impact of policy reforms, *e.g.,* green finance in India (*Utkarsh*); and
- Deepening collaborations with other operational and research departments within the Reserve Bank as well as outside scholars.

9. LEGAL ISSUES

X.76 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. The Department vets 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. The Department provides the secretariat to the First Appellate Authority under the Right to Information Act and represents the Bank in the hearing of cases before the Central Information Commission, with the assistance of operational departments. The Department also extends legal support and advice to the Deposit Insurance and Credit Guarantee Corporation (DICGC), CAFRAL, and other RBI-owned institutions on legal issues, litigation and court matters.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

X.77 Last year, the Department had set out the following goals:

- Pursue the scope of amendments to various Acts of the Reserve Bank (Para X.78 - X.80);
- Manage litigation on behalf of the Reserve Bank (Para X.81 - X.87); and
- Continue to advise various departments of the Reserve Bank on legal matters (Para X.81 - X.87).

Implementation Status of Goals

X.78 Several important legislations/regulations concerning the financial sector were brought in/ amended during the year. The Finance Act (No. 2), 2019, *inter alia,* amended the Reserve Bank of India (RBI) Act, 1934 and the National Housing Bank Act, 1987. The amendment in the RBI Act incorporated an increase in the threshold of net owned funds of NBFCs and empowered the Reserve Bank to (a) remove directors and supersede the board of directors of NBFCs; (b) take action against auditors of NBFCs; (c) frame schemes for resolution of NBFCs; and (d) direct NBFCs to furnish statements relating to group companies of NBFCs. The amendment in NHB Act conferred powers to the Reserve Bank for regulation of Housing Finance Companies (HFCs). The above amendments came into force on August 9, 2019.

X.79 The Insolvency and Bankruptcy Code (Amendment) Ordinance, 2019 was promulgated on December 28, 2019. The Ordinance was replaced by the Insolvency and Bankruptcy (Amendment) Act, 2020. The Amendment Act introduces an additional threshold for certain classes of financial creditors such as allottees under real estate projects for initiating corporate insolvency resolution process and empowers the resolution professional to require suppliers to continue providing goods and services. It also provides that the company will not be liable for any offence committed prior to the insolvency resolution process, if there is a change in the management or control of the company. The Personal Data Protection Bill, 2019 was introduced in Parliament on December 12, 2019. The Bill has been referred to a Joint Parliamentary Committee for detailed examination. The Bill seeks to bring out (a) protection of personal data of individuals; (b) the role and responsibility of data fiduciaries in processing personal and sensitive personal data; (c) a framework for processing such personal data; and (d) a Data Protection Authority for the purpose of monitoring and enforcement.

X.80 The Banking Regulation (Amendment) Ordinance, 2020 was promulgated by the President of India on June 26, 2020. The Ordinance amends the Banking Regulation Act, 1949 as applicable to cooperative banks with a view to protect the interests of depositors and strengthen cooperative banks. By this Ordinance, the regulatory and supervisory powers of the Reserve Bank over cooperative banks stand substantially expanded. The Ordinance has also brought about certain minor changes in Section 45 of the Banking Regulation Act.

X.81 The Supreme Court *vide* its decision dated March 4, 2020 in the case of Internet and Mobile Association of India v. Reserve Bank of India has, on the ground of proportionality, set aside the Reserve Bank's direction in dealing with virtual currencies, where entities regulated by the Reserve Bank were directed not to deal in virtual currencies or provide services for facilitating any person or entity in dealing with or settling virtual currencies and to exit the relationship with such persons or entities, if they were already providing such services to them.

X.82 In another landmark decision, the Supreme Court, held *vide* its decision dated May 5, 2020 that SARFAESI Act is applicable to cooperative banks.

X.83 On an application filed by certain banks in the case of Reserve Bank of India v. Jayantilal N. Mistry & Anr, the Supreme Court directed the Reserve Bank *vide* order dated December 18, 2020 not to release Inspection Reports/Risk Assessment Reports/Annual Financial Inspection Reports of certain banks, including the State Bank of India, until further orders.

X.84 In a few writ petitions filed before the High Court of Bombay challenging the directions issued by the Reserve Bank against Punjab and Maharashtra Co-operative Bank, the Court *vide* order dated December 5, 2019, declined to interfere, observing that the business of banking and its regulation should be left to the wisdom of the Reserve Bank.

X.85 The High Court of Kerala *vide* order dated November 29, 2019, dismissed the challenge on the approval given by the Reserve Bank for amalgamating thirteen District Central Cooperative Banks (DCCBs) in Kerala with the Kerala Bank.

X.86 Three writ petitions were filed before the Bombay High Court against the order dated April 28, 2020 passed by the Reserve Bank cancelling the banking license issued to the CKP Cooperative Bank Limited (CKP). The interim reliefs sought against the operation of the order of the Reserve Bank were declined by the court.

X.87 As on June 30, 2020, thirty three writ petitions have been filed in various High Courts and the Supreme Court, either challenging the Reserve Bank's circulars dated March 27, 2020, April 17, 2020 and May 23, 2020 related to COVID-19 pandemic or seeking relief under them. The Reserve Bank has taken necessary steps to clarify its position before various courts.

Agenda for 2020-21

X.88 In 2020-21, the Department will continue to focus on the following:

- Automate its workflow process and function, which in turn will enhance research, e-discovery and data analytics (*Utkarsh*);
- Provide a guidance note for its Central Public Information Officers to discharge their functions more effectively and expeditiously, keeping in view the Department's responsibilities as a secretariat to the Appellate Authority under the Right to Information Act (*Utkarsh*);
- Proactively perform its functions in close coordination with the operational departments of the Reserve Bank; and
- Manage litigation on behalf of the Reserve Bank.

10. Conclusion

X.89 In sum, the Reserve Bank adopted several innovative channels of communication during the year, in order to enhance shared understanding of the Reserve Bank's policy actions and stance, necessary to build public confidence. In the international arena, the Reserve Bank strengthened economic and financial relations, especially with the international organisations, multilateral bodies and other central banks, especially in the SAARC region. More state governments were integrated with the Reserve Bank's Core Banking Solution – *e-Kuber,* along with other agency banks for processing Goods and Services Tax (GST) transactions. Foreign exchange reserves were managed and guided by the consideration of safety, liquidity and returns. During the year, research activities were sustained by undertaking studies on a wide range of contemporary issues. Statistics and information management system was further strengthened by implementation of CIMS, expanding CISBI and usage of big data, among others. In order to ensure a robust legal framework for the banking and financial sector, a number of financial laws/bills were introduced/amended during the year.

XI GOVERNANCE, HUMAN RESOURCES AND ORGANISATIONAL MANAGEMENT

The Reserve Bank upgraded its human resources through various innovative in-house and external training programmes during the year, along with a focus on building up risk modelling and risk reporting capabilities. In response to the COVID-19 pandemic, the priorities had to shift to securing critical business processes and ensuring business continuity, especially the safety and health of the Reserve Bank's human resources.

XI.1 This chapter discusses developments in the areas of governance, human resources, risk monitoring, and corporate strategy during 2019-20 *vis-à-vis* the goals set at the beginning of the year, and also sets out priorities for 2020-21.

XI.2 In pursuance of the goals set for 2019-20, human resources were strengthened through new recruitments, in-house trainings, external trainings, mid-career development programmes and e-Learning. Under the Enterprise-Wide Risk Management (ERM) framework adopted in 2012, risk modelling and risk reporting capabilities were built up during the year under review. The Basel III Standardised Approach and the new Standardised Approach for assessing economic capital for credit risk of forex portfolio (which also covers the off-balance sheet exposures) and operational risk, respectively, were adopted on the basis of the recommendations of the Expert Committee to review the Economic Capital Framework of the Reserve Bank (Chair: Dr. Bimal Jalan). Dashboards for risk monitoring in the most important areas of the Reserve Bank's functioning were prepared. A Control Self-Assessment Audit (CSAA) module in Audit Management and Risk Monitoring System (AMRMS) was launched across all offices of the Reserve Bank. The Inspection Department issued Project Audit Guidelines for monitoring timely and cost-effective implementation of high value Information Technology (IT) and non-IT projects.

XI.3 The Reserve Bank's first medium-term strategy document, christened '*Utkarsh* 2022', articulating the Vision, Mission and Core Purpose of the Reserve Bank was rolled out in July 2019. With the outbreak of COVID-19, however, securing critical business processes and ensuring business continuity in the Reserve Bank assumed the highest priority, especially the safety and health of human resources. Human Resource Management Department (HRMD) introduced work-from-home (WFH) across Central Office Departments and Regional Offices of the Reserve Bank and released a document containing standards for efficiency and best practices protocol to be followed by employees for creating an effective WFH model. The Standard Operating Procedure (SOP) for handling disasters at Reserve Bank's residential colonies, which outlines the basic details for handling any disaster, was prepared by HRMD and the SOP for Business Continuity Plan was prepared by Corporate Strategy and Budget Department (CSBD). Regional Offices (ROs) were advised to prepare specific SOPs for residential colonies under their purview.

XI.4 Alongside, the Rajbhasha Department organised several training programmes, seminars and workshops during 2019-20 to promote the use of Hindi. The Premises Department pursued its mandate of creating, maintaining and upgrading the Reserve Bank's physical infrastructure. Generation of renewable energy through solar power generation plants, rain water harvesting systems, sewage treatment and waste water treatment systems were installed at various offices and residential colonies under the Reserve Bank's 'Green Initiative'. All new building projects of the Reserve Bank have been certified as 'Green Compliant' by the Indian Green Building Council (IGBC).

XI.5 The chapter is organised into nine sections. Each section evaluates the outcomes *vis-à-vis* the goals set in the respective areas of the Reserve Bank's functions, apart from setting out the agenda for 2020-21. The immediately following section details developments relating to the governance structure of the Reserve Bank. Section 3 sets out the initiatives undertaken by the HRMD during the year in the areas of human resources. Developments relating to the risk management framework and strategy are addressed in section 4. The activities of the Inspection Department during the year are discussed in section 5. The functioning of the CSBD, which coordinates and develops strategies and annual action plans for the Reserve Bank, are the subject of section 6. The activities and accomplishments of the Rajbhasha and Premises Departments are laid out in sections 7 and 8, respectively. The chapter has been summarised at the end.

2. GOVERNANCE STRUCTURE

XI.6 The Central Board of Directors is the apex body in the governance structure of the Reserve Bank. It comprises the Governor as the Chairperson, Deputy Governors, Directors nominated by the Central Government and Government Directors. There are four Local Boards for the northern, southern, eastern and western regions of the country, which focus on local issues. The Government of India (GoI) nominates/appoints Directors of the Central Board and Members of the Local Boards in accordance with the Reserve Bank of India Act, 1934.

XI.7 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 five Sub-Committees: the Audit and Risk Management Sub-Committee (ARMS); the Human Resource Management Sub-Committee (HRM-SC); the Building Sub-Committee (BSC); the Information Technology Sub-Committee (IT-SC) and the Strategy Sub-Committee. These sub-committees are typically headed by an external Director.

Meetings of the Central Board and CCB

XI.8 The Central Board held seven meetings during July-June 2019-20 in New Delhi (two meetings), Mumbai (two meetings), Chandigarh and Bhubaneswar and one meeting through video conferencing at Mumbai. The Finance Minister of India addressed the post-Budget meetings held in New Delhi on July 8, 2019 and February 15, 2020.

XI.9 The CCB held 46 meetings during July-June 2019-20, 38 of which were held through electronic mode. The CCB attended to the current business of the Reserve Bank, including approval of its Weekly Statement of Affairs.

XI.10 The Western, Eastern and Northern Area Local Board held four meetings each during July-June 2019-20. The Southern Area Local Board could not convene any meeting in this period due to the lack of a required quorum. The Standing Committee of the Central Board was set up in 2014-15 to examine issues relating to Urban Cooperative Banks (UCBs), Non-Banking Financial Companies

(NBFCs), currency management and other issues relevant to the regions where meeting of the Local Boards could not be convened. Accordingly, the Standing Committee of the Central Board held two meetings during July-June 2019-20 in lieu of the Southern Area Local Board (details of participation of Directors/Members in meetings of the Central Board, its Committees and Sub-Committees, Local Boards and Standing Committee of the Central Board for the Southern Area are given in Annex Tables XI.1-5).

Central Board/Local Boards

XI.11 Dr. Viral V. Acharya, Deputy Governor, demitted office on July 23, 2019.

XI.12 On July 2, 2019, the Central Government, reappointed Shri N. S. Vishwanathan as Deputy Governor, Reserve Bank of India till July 3, 2020 or until further orders, whichever is earlier. Shri N. S. Vishwanathan relinquished charge as Deputy Governor on March 31, 2020.

XI.13 On January 14, 2020, the Central Government appointed Dr. Michael Debabrata Patra as the Deputy Governor, Reserve Bank of India till January 14, 2023 or until further orders, whichever is earlier.

XI.14 On March 28, 2020, the Central Government reappointed Shri B. P. Kanungo as Deputy Governor, Reserve Bank of India for a further period of one year with effect from April 3, 2020 or until further orders, whichever is earlier, upon completion of his existing term on April 2, 2020.

XI.15 The Central Government nominated Shri Atanu Chakraborty, Secretary, Department of Economic Affairs, Ministry of Finance, Government of India, as a Director on the Central Board of Directors of the Reserve Bank of India with effect from July 29, 2019 and until further orders *vice* Shri Subhash Chandra Garg. Shri Atanu Chakraborty demitted office on April 30, 2020 and in his place, the Government of India appointed Shri Tarun Bajaj, Secretary, Department of Economic Affairs to the Central Board of the Reserve Bank of India with effect from May 5, 2020 and until further orders.

XI.16 The Central Government nominated Shri Debasish Panda, Secretary, Department of Financial Services, Ministry of Finance, Government of India, as a Director on the Central Board of Reserve Bank of India with effect from March 11, 2020 and until further orders *vice* Shri Rajiv Kumar.

XI.17 The terms of two Central Board Directors, namely, Shri Bharat Doshi and Shri Sudhir Mankad ended on March 3, 2020. On June 20, 2020, the Central Government re-nominated Shri Natarajan Chandrasekaran as a part-time non-official Director on the Central Board of the Reserve Bank of India for a further period of two years beyond March 3, 2020, or until further orders, whichever is earlier.

Executive Directors

XI.18 Among Executive Directors, demitting office, Smt. Surekha Marandi, retired on July 31, 2019, Smt. Uma Shankar on October 31, 2019, Smt. Parvathy V. Sundaram on November 29, 2019, Smt. Malvika Sinha and Shri S. Ganesh Kumar on February 28, 2020, Shri Deepak Mohanty on May 29, 2020 and Dr. Janak Raj on June 30, 2020. Smt. Nanda S. Dave was promoted as Executive Director, effective from July 1, 2019, Shri Anil K. Sharma on August 1, 2019, Shri S. C. Murmu with effect from November 1, 2019, Shri T. Rabi Sankar with effect from December 2, 2019, Dr. Janak Raj from January 24, 2020, Shri P. Vijaya Kumar and

Smt. Indrani Banerjee with effect from March 2, 2020, Dr. O. P. Mall from June 1, 2020 and Dr. Mridul Kumar Saggar from July 1, 2020.

Developments Relating to the Central Board

XI.19 The constitution of a Strategy Sub-Committee was approved by the Central Board in its meeting held on July 8, 2019. The Sub-Committee shall provide control and oversight over the implementation of the Reserve Bank's medium-term strategic goals laid out in the '*Utkarsh* 2022'. It will also review strategic goals and milestones, and the medium-term strategy document.

Agenda for 2019-20: Implementation Status

Goal Set for 2019-20

XI.20 Secretary's Department had set out the following goal under *Utkarsh*:

- To have a new software solution for all meetings of the Board and its Committees as well as Committees of Top Management (Para XI.21).

Implementation Status of Goal

XI.21 The Department achieved the goal under *Utkarsh* by implementing a suitable software solution.

3. HUMAN RESOURCE DEVELOPMENT INITIATIVES

XI.22 The Human Resource Management Department (HRMD) plays the role of an enabler and a facilitator, enhancing staff efficiency, and creating an atmosphere of teamwork by tapping potential capabilities of employees, necessary for their effectiveness at work. As part of its mandate, it carries out various activities pertaining to training, recruitment and staff welfare. Major developments in these and other areas undertaken during the year are highlighted below.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

XI.23 Last year, the Department had set out the following goals under *Utkarsh*:

- Moving further towards a paperless, presence-less and cashless mode of comprehensive HR interface within the Reserve Bank (Para XI.24);
- Taking up base work for setting up a supervisory and regulatory cadre (Para XI.25);
- Simplified internal processes for maximising efficiency and effectiveness, without diluting checks and balances (Para XI.26);
- Capacity building of Regional Offices to bring out more research-oriented analytical papers (Para XI.27);
- Training policy to enable effective implementation of the Vision Document (Para XI.28); and
- Improving skill set of officers to prepare them for relevant and higher roles (Para XI.29).

Implementation Status of Goals

XI.24 All modules of *Samadhan* went live during the year, thereby promoting a paperless, presence-less and cashless mode of comprehensive HR interface.

XI.25 The base work to facilitate setting up of the specialized supervisory and regulatory cadre (SSRC) was initiated and officers in Grade 'B' and above were advised to indicate their preference for the new cadre.

XI.26 A complete review of internal processes, returns and reports was carried out as part of the Business Process Re-engineering (BPR) exercise conducted in December 2019 with inputs from Regional Offices (ROs) and implementation of accepted changes was taken up under the supervision of Central Office Departments (CODs) concerned.

XI.27 Personnel posted to DEPR/DSIM in ROs were deputed for trainings to enhance their skills thereby aiding in better quality research output on topical issues.

XI.28 Major initiatives undertaken for making training sessions more effective and meaningful included revising the training needs analysis framework, conducting impact assessment of select programmes, launching mid-career mandatory training programme-level II (MCMTP) for eligible officers in Grade 'E' and revamping the induction training programme for newly recruited Grade 'B' (DRs).

XI.29 Workshops were conducted for senior officers focusing on the need for continuous conversation at the work place. Sessions on effective communication were included in training programmes conducted by the Reserve Bank's training establishments with minimum duration of three days and courses on public speaking were added to the list of courses eligible under the Reserve Bank's incentive scheme.

Major Developments

In-house Training

XI.30 The Reserve Bank's training infrastructure is driven by the objectives of upgradation of technical and behavioural skills of employees, and actualisation of personal growth, both of which influence their effectiveness at work. A number of programmes were conducted during the year by the Reserve Bank's training establishments and Zonal Training Centres (ZTCs), which are at the forefront of this endeavour (Table XI.1).

RBI Academy

XI.31 During the year under review, the Academy conducted workshops on 'Conversations that Count' for select senior officers of the Reserve Bank. A programme for visually impaired employees in collaboration with SBI Foundation and another on employee engagement in collaboration with Drucker Institute, USA were also organised during the year.

Table XI.1: Programmes Conducted at Reserve Bank's Training Establishments*

Training Establishment	2017-18		2018-19		2019-20	
	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
RBI Academy	18	620 (24)	22	546 (38)	21	476 (2)
RBSC, Chennai	147	3,583 (281)	152	3,125 (499)	110	2,826 (85)
CAB, Pune	184	6,488 (42)	179	5,542 (51)	126	3,891 (37)
ZTCs (Class I)	115	2,271	116	2,271	92	1,667
ZTCs (Class III)	100	2,109	76	1,877	94	2,648
ZTCs (Class IV)	36	802	46	1,158	30	604

*: July-June. RBSC: Reserve Bank Staff College. CAB: College of Agricultural Banking.
Note: Figures in parentheses pertain to foreign participants and/or participants from external institutions.
Source: RBI.

Training at External Institutions

XI.32 The Reserve Bank deputed its officers to attend specific training programmes, seminars and conferences in India and abroad in order to tap expertise available in external institutes (Table XI.2). Class III and IV employees were also deputed for training in external institutions in India.

Study Schemes

XI.33 Four officers of the Reserve Bank availed of the scheme for pursuing higher studies overseas (other than the Reserve Bank's Golden Jubilee Scheme). A total of 440 employees pursued select part-time/distance education courses under the Reserve Bank's incentive scheme.

Other Initiatives

e-Learning

XI.34 A distinguishing feature of training initiatives in 2019 was the focus on e-Learning. As part of the drive to promote e-Learning and blended learning approaches, the RBI Academy went live with its learning management system (LMS) in February 2020. The LMS has functionalities like hosting courses, live webinars, discussion forums, online assessments and reporting tools. It is designed to facilitate 'any time, any place, any pace' access to learning content leading to improved engagement by participants. The blended learning approach provides instructors with the option of customising their courses in such a way that basic concepts are taught online using LMS, while classroom teaching focuses on the application of concepts using case studies, simulation and role plays. The Reserve Bank Staff College, Chennai has already developed 23 e-Learning courses on different functional areas of the Reserve Bank. The RBI Academy is in the process of acquiring online courses being offered by leading global and Indian Universities/Institutes.

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

Year	Trained in India (External Institutions)	Trained Abroad
1	2	3
2017 - 18	1,041	410
2018 - 19	952	378
2019 - 20	696	139

Source: RBI.

Internship Scheme

XI.35 During the year, 156 students were provided apprenticeship in the Reserve Bank as part of its summer internship scheme.

Grants and Endowments

XI.36 As part of its mission to promote research, training and consultancy in the banking and financial sector, the Reserve Bank provided financial support amounting to ₹27.8 crore to the Indira Gandhi Institute of Development Research (IGIDR), Mumbai; ₹7.74 crore to the Centre for Advanced Financial Research and Learning (CAFRAL), Mumbai; ₹3.48 crore to National Institute of Bank Management (NIBM), Pune; ₹1.03 crore to the Indian Institute of Bank Management (IIBM), Guwahati; and ₹0.67 crore to the London School of Economics (LSE) India Observatory and the IG Patel Chair.

Industrial Relations

XI.37 Industrial relations in the Reserve Bank remained harmonious during the year. Periodic meetings were held with recognised associations/federations of officers and employees/workmen on various matters related to service conditions and welfare measures for employees. During the year, HRMD, Central Office, held eight meetings with Central Units of recognised Union Associations.

Table XI. 3: Recruitments by the Reserve Bank in 2019*

Category of Recruitment	Category-wise Strength						
	Total	*of which*			Per cent of Total		
		SC	ST	OBC	SC	ST	OBC
1	2	3	4	5	6	7	8
Class I	194	28	10	61	14.43	5.15	31.44
Class III	600	92	59	215	15.33	9.83	35.83
Class IV							
(a) Office Attendant	156	12	2	71	7.69	1.28	45.51
(b) Maintenance Attendant	-	-	-	-	-	-	-
(c) Others	-	-	-	-	-	-	-
Total	**950**	**132**	**71**	**347**	**13.89**	**7.47**	**36.53**

*: January to December. -: Nil.
Source: RBI.

As per the extant instructions, ROs also hold meetings with local units of recognised trade unions at quarterly/half yearly intervals.

The RBI Policy Challenge

XI.38 The fifth edition of the RBI Policy Challenge, a national level competition designed to enhance knowledge regarding monetary policy making amongst students pursuing undergraduate/post-graduate courses, got underway in August 2019. More than 250 entries from educational institutions across the country were received. Teams from the Institute of Management Technology, Ghaziabad (North Zone); Indian Institute of Management, Indore (West Zone); Sri Sathya Sai Institute of Higher Learning (South Zone); and Indian Institute of Management, Ranchi (East Zone) qualified for the National Finals to be held at Central Office, Mumbai. The winners would be given a cash prize of ₹1 lakh along with a trophy. They are also offered the option of an internship with the Reserve Bank for a period of three months.

Recruitments and Staff Strength

XI.39 During 2019 (January-December), the Reserve Bank recruited a total of 950 employees in various cadres (Table XI.3).

XI.40 The total staff strength of the Reserve Bank as on December 31, 2019 was 13,456, a reduction of 2.44 per cent from a year ago on account of large-scale retirement and the court case on feeder channel for recruitment of Class III employees (Table XI.4).

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

Category	Total Strength		Category-wise Strength						Per cent to Total Strength		
			SC		ST		OBC		SC	ST	OBC
	2018	2019	2018	2019	2018	2019	2018	2019	2019		
1	2	3	4	5	6	7	8	9	10	11	12
Class I	6,522	6,670	988	1,051	415	435	949	1,147	15.76	6.52	17.20
Class III	3,497	3,264	537	487	195	199	840	892	14.92	6.10	27.33
Class IV	3,774	3,522	1,027	877	321	291	635	682	24.90	8.26	19.36
Total	**13,793**	**13,456**	**2,552**	**2,415**	**931**	**925**	**2,424**	**2,721**	**17.95**	**6.87**	**20.22**

*: End December.
Source: RBI.

Table XI.5: Total Strength of Ex-Servicemen and PWD (End-December 2019)

Category	Total Strength	Ex-Servicemen (ESM)	PWD (Persons with Disabilities)			
			Visually Impaired (VI)	Hearing Impaired (HI)	Orthopedically Handicap (OH)	Intellectual Disabilities* (ID)
1	2	3	4	5	6	7
Class I	6,670	212	38	3	118	-
Class III	3,264	168	35	7	60	4
Class IV	3,522	567	8	3	57	-

-: Nil.
*: As per Rights of Persons with Disability Act, 2016, intellectual disability is a condition characterised by significant limitation both in intellectual functioning (reasoning, learning and problem solving) and in adaptive behaviour, which covers a range of every day, social and practical skills, including 'specific learning disabilities' and 'autism spectrum disorder'.
Source: RBI.

XI.41 As of June 30, 2020, number of full-time employees in the Reserve Bank stood at 12,811. Of these, 6,412 were in Class I, 3,145 in Class III and 3,254 in Class IV.

XI.42 During 2019 (January-December), four meetings were held between the management and representatives of the All India Reserve Bank Scheduled Castes/Scheduled Tribes and the Buddhist Federation to discuss issues relating to the implementation of the Reserve Bank's reservation policy. Two meetings were also held with the representatives of the Other Backward Class (OBC) Association.

XI.43 The total strength of ex-servicemen in the Reserve Bank stood at 947 at end-December 2019, while the total number of differently abled employees stood at 333 (Table XI.5).

Table XI.6: Recruitment of Ex-servicemen and Persons with Disabilities during 2019*

Category	Ex-Service-men (ESM)	PWD (Persons with Disabilities)			
		Visually Impaired (VI)	Hearing Impaired (HI)	Orthopedically Handicap (OH)	Intellectual Disabilities (ID)
1	2	3	4	5	6
Class I	-	1	-	-	-
Class III	1	6	-	5	-
Class IV	122	-	-	1	-

*: January to December. -: Nil.
Source: RBI.

XI.44 A total of 123 ex-servicemen and 13 persons with disabilities (PWD) were recruited during the year (Table XI. 6).

Prevention of Sexual Harassment of Women at the Workplace

XI.45 A formal grievance redressal mechanism for prevention of sexual harassment of women at the workplace has been in place since 1998. It was strengthened with the issue of a new comprehensive set of guidelines in 2014-15 in accordance with the Sexual Harassment of Women at Workplace (Prohibition, Prevention and Redressal) Act and Rules, 2013. During January-December 2019, two complaints were received and one was resolved. During January-June 2020, one complaint was received which is under process. Several awareness programmes on the subject were organised at various ROs for sensitising the staff, including those newly recruited, vendors and contractual employees. The 8th All India Seminar on 'Prevention, Prohibition and Redressal of Sexual Harassment at the Workplace' was organised at Indore, Madhya Pradesh during February 21-23, 2020 with representation from members of 35 Complaints Committees as well as the Central Complaints Committee.

Right to Information (RTI)

XI.46 The Reserve Bank received 17,094 requests for information and 1,475 appeals under the RTI Act during 2019-20. Three training programmes on the RTI Act were also conducted by the Reserve Bank Staff College, Chennai, and Zonal Training Centre, Chennai during the year.

Response to COVID-19 Pandemic

XI.47 Starting March 2020, the Department undertook a series of steps as part of its efforts to maintain business continuity and ensure staff welfare during the pandemic. Some of the major initiatives included facilitating staff engaged in critical activities to work from offsite location; introducing work-from-home (WFH) across CODs and ROs of the Reserve Bank alongside releasing a document containing standards for efficiency and best practices protocol to be followed by employees for creating an effective WFH model; released a standard operating procedure to be followed by various stakeholders at CODs/ROs for tackling positive cases of COVID-19; and making an arrangement with M/s Apollo Hospitals for providing rooms in hotels in select cities for the purpose of quarantine of COVID-19 related cases. The Reserve Bank's training establishments were advised to meet training needs of the staff through online mode. Care was taken to intensify sanitisation related measures and to ensure social distancing within the office premises as also in the Reserve Bank's residential colonies.

Agenda for 2020-21

XI.48 The roadmap for the year would include the following milestones for the Department under *Utkarsh*:

- Reviewing the performance appraisal system and the current training policy;
- Continuing the process of providing aid for setting up of specialized supervisory and regulatory cadre; and
- Designing a competency mapping framework for select category of officers.

4. ENTERPRISE-WIDE RISK MANAGEMENT

XI.49 The Enterprise-wide Risk Management (ERM) framework was adopted by the Reserve Bank in February 2012 to develop an integrated assessment for the management of risk exposures, marking a move from a 'silo-based' approach to a 'whole-of-business' perspective on risk management. The Risk Monitoring Department (RMD) is the nodal Department for the formulation and operationalisation of ERM in the Reserve Bank.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

XI.50 Last year, the Department had set out the following goals under *Utkarsh*:

- Modelling Credit Risk and Operational Risk in the Reserve Bank (Para XI.51); and
- Preparing Risk Dashboards for Risk Reporting (Para XI.52).

Implementation Status of Goals

Modelling Credit Risk and Operational Risk

XI.51 Under the earlier economic capital framework of the Reserve Bank, credit risk was being assessed using the modified Basel II Standardised Approach whereas operational risk was being assessed using the Basel II basic indicator approach (BIA). During the year under review, the Reserve Bank accepted the recommendation of the Expert Committee to review the Economic Capital Framework of the Reserve Bank (Chair: Dr. Bimal Jalan), for the adoption of the Basel III Standardised Approach and the new Standardised Approach, for assessing economic capital for credit risk of forex portfolio (which also covers the off-balance sheet exposures) and operational risk, respectively. The assessment of economic capital for operational risk under the New Standardised Approach would be based on the actual operational loss data of the Reserve Bank. Under the newly adopted economic capital framework, the credit and operational risk shall be dealt with by maintaining adequate economic capital/risk provisions so as to absorb these risks.

Risk Dashboards for Risk Reporting

XI.52 With the objective of improving risk reporting to the top management and to facilitate better risk monitoring, Risk Dashboards for important operational risk areas were prepared. Major risk areas pertaining to the Reserve Bank's functioning have been identified and Risk Dashboards constituting different parameters were established for assessing the identified risks and monitoring them periodically.

Implication of COVID-19 Pandemic

XI.53 Owing to larger than normal balance sheet expansion, as a result of the recent policy actions and liquidity infusion measures adopted by the Reserve Bank to mitigate the adverse shock induced by the COVID-19 outbreak, the risk provisioning required for the year (in accordance with the newly adopted economic capital framework) was higher than the previous years.

Agenda for 2020-21

XI.54 For the year, the following goals for the Department have been proposed:

- Review of the existing Risk Tolerance Framework (*Utkarsh*);
- A portfolio-based Credit Value at Risk/ Expected Shortfall (VaR/ES) model would be developed as an additional risk monitoring/reporting tool, with the objective of facilitating effective oversight of credit risk (*Utkarsh*); and
- A stress testing framework would be developed for robust assessment of the Reserve Bank's credit risk.

5. INTERNAL AUDIT / INSPECTION

XI.55 The Inspection Department of the Reserve Bank evaluates the internal control and governance processes, and provides risk assurance reports to top management and the Central Board under the Risk-Based Internal Audit (RBIA) framework. It is also the Secretariat to the Audit and Risk Management Sub-Committee (ARMS) of the Central Board and to the Executive Directors' Committee (EDC) in overseeing the internal audit function.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

XI.56 Last year, the Department had set out the following goals:

- Focus on knowledge and capacity building across the Reserve Bank after successful roll out of RBIA, Concurrent Audit (CA) and Control Self-Assessment Audit (CSAA) application in Audit Management and Risk Monitoring System (AMRMS) application (*Utkarsh*) [Para XI.57];
- Endeavour to achieve 80 per cent convergence of risk-rating as per Risk

Assessment Methodology for Operational Risk (RAM-OR) and Inspection Department methodology with respect to RBIA (*Utkarsh*) [Para XI.57];

- Introduction of Project Audit across the Reserve Bank (*Utkarsh*) [Para XI.58]; and
- Reviewing the risk rating and scoring methodology adopted for RBIA (Para XI.60).

Implementation Status of Goals

XI.57 In pursuit of the goals set for the year, the automation of the audit process was taken forward with the launch of the CSAA module in AMRMS across all the offices of the Reserve Bank. The AMRMS now provides a platform for hosting RBIA, Concurrent Audit (CA) and CSAA related functions, *viz*., planning and conduct of audit; uniformity and standardisation in audit reporting; submission, processing and monitoring of compliances; data analytics and reporting dashboards on key performance indicators (KPIs), documentation and record management, and alerts in an integrated manner. The AMRMS has also created synergy among the internal audit operations, risk management and risk assurance functions by bringing in enhanced internal audit efficacy, operational efficiency, confidentiality, evidence-based reporting, paper-less environment (reduced carbon footprint) and straight-through-processing (STP). User workshops have been conducted, covering all the Central Office Departments (CODs), ROs, training establishments and associate institutions of the Reserve Bank. Compliance audit has been introduced to ensure sustenance of compliance of RBIA observations in a qualitative manner. The Department had also achieved the targeted convergence with the risk-rating as per RAM-OR with respect to RBIA.

Project Audit

XI.58 Project Audit has assumed significance in recent times due to its growing adoption by central banks. It is an independent and objective project risk assessment function under which the performance of stakeholders, ownership, as well as service providers, is assessed regarding risks related to a project in terms of cost, time and deliverables; measurement of effectiveness and efficiency; fiduciary requirements such as reliability of information, compliance with internal and external policies and rules; and adherence to international standards in project management. Project Audit will help in pointing out the feasibility, shortcomings/deficiencies in the implementation of the project and assist in course correction in order to save cost and time. An important development during the year was the issue of Project Audit Guidelines for timely and cost-effective implementation of high value IT and non-IT projects in the Reserve Bank.

XI.59 The conduct of the RBIA and Project Audit has been adversely impacted due to the restrictions imposed across the country due to the COVID-19 outbreak.

XI.60 A review of RBIA risk scoring/rating methodology was also undertaken during the year to have a more realistic and objective assessment of risk across auditee units. The revised methodology will facilitate effective decision-making regarding determining periodicity of the conduct of RBIA, more granular risk mapping and peer comparison, categorisation of auditee offices as per their risk profile, size and nature of functioning.

Agenda for 2020-21

XI.61 During the year, the Department will focus on the following:

- Implementing Project Audit for all the identified high value IT and non-IT projects of the Reserve Bank (*Utkarsh*);
- Enhanced convergence with risk-rating as per RAM-OR with respect to RBIA (*Utkarsh*);
- Leveraging on AMRMS data mining, analytics and Management Information System (MIS) reporting dashboards capabilities for effective risk assurance to the ARMS and top management (*Utkarsh*);
- Knowledge and capacity building through training programmes (*Utkarsh*); and
- Implementing the revised risk rating and scoring methodology across the Reserve Bank.

6. CORPORATE STRATEGY AND BUDGET MANAGEMENT

XI.62 The Corporate Strategy and Budget Department (CSBD) coordinates and formulates the Reserve Bank's strategies, prepares its annual budget and monitors its expenditure with a view to ensuring budgetary discipline. The Department is also responsible for robust Business Continuity Plans (BCPs) for crisis situations. It is also invested with governance of External Funded Institutes (EFIs).

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

XI.63 Last year, the Department had set out the following goals under *Utkarsh*:

- Enhancing internal control functions in order to minimise gap between target and actual realisation - both in terms of strategy and budget (Para XI.64);
- Setting up a Sub-Committee of Central Board for apex level monitoring of strategy implementation (Para XI.65); and
- Developing a Dashboard for facilitating early warnings for potential non-achievement of strategic goals (Para XI.66).

Implementation Status of Goals

XI.64 In pursuance of the goals set for the year, internal financial control mechanisms were reinforced by overhauling budgetary and expenditure processes to rationalise expenses within the ambit of organisational objectives. A new framework was put in place to address under-utilisation of capital expenditure. This framework, which will come into force starting from the Reserve Bank's accounting year 2020-21, monitors capital expenditure in terms of the three-year moving average of the last five years' actual utilisation. Any unforeseeable exigencies are met from a capital expenditure buffer, which is a global contingency arrangement and not a part of regular budget.

XI.65 A Strategy Sub-Committee of the Central Board of Directors was formed for regular monitoring of the milestones set under the Reserve Bank's medium-term strategy framework - *Utkarsh* 2022. The Department is working as the Secretariat for this Strategy Sub-Committee. The progress made towards achieving milestones during 2019-20 under *Utkarsh* is set out in Box XI.1.

XI.66 Work on a Dashboard for centralised monitoring of strategy implementation has commenced. This will facilitate early warnings on potential non-achievements of strategic goals.

Box XI.1
Progress on Implementation of Strategy Framework - *Utkarsh* 2022

In July 2019, the Reserve Bank launched its medium-term strategy framework, namely '*Utkarsh* 2022', re-articulating its mission statement, core purpose and values, setting 153 goals and 358 milestones to fulfil its core purposes. These goals and milestones feed into the following visions set by the Reserve Bank for the medium-term:

- Vision 1: Excellence in performance of statutory and other functions.
- Vision 2: Strengthened trust of citizens and other institutions in the Reserve Bank.
- Vision 3: Enhanced relevance and significance in national and global roles.
- Vision 4: Transparent, accountable and ethics driven internal governance.
- Vision 5: Best-in-class and environment friendly digital as well as physical infrastructure.
- Vision 6: Innovative, dynamic and skilled human resources.

While setting the medium-term goals, the Reserve Bank recognises the dynamic and fast changing environment in which a central bank operates. Accordingly, several steps were taken to sensitise and internalise the strategy framework during the year, such as distribution of a brochure on '*Utkarsh* 2022' among CODs and ROs; organising video conferences and meetings with the stakeholders for outlining the approach to be followed in achieving the milestones; workshops on '*Utkarsh* 2022' at ZTC, Belapur for ROs in December 2019 and at CAB, Pune for CODs in February 2020; and also conducting annual conference of CSBD on theme '*Utkarsh* 2022' in January 2020.

Implementation of '*Utkarsh* 2022' is being guided and monitored by a sub-committee of the Central Board, namely the Strategy Sub-Committee (Chair: Dr. P. K. Mohanty). Monitoring of the milestones is done through a key performance indicator (KPI) framework. The KPI framework will help in the quantitative assessment of the implementation of the milestones as well as monitoring the sustenance of the milestones. Besides, work on a Dashboard for centralised monitoring of strategy implementation has also commenced.

The unprecedented COVID-19 pandemic *albeit* posed challenges in achieving the set milestones, yet 112 out of 199 milestones have been fully implemented during the year (Chart 1).

Chart 1: Milestones Completed Status (End-June 2020)

Source: RBI.

XI.67 As the nodal Department for Business Continuity Management (BCM) of the Reserve Bank, the CSBD took the lead in responding to the outbreak of COVID-19 pandemic (Box XI.2). A BCM Manual and a Standard Operating Procedure (SOP) on invocation of BCP were prepared during the year for strengthening the BCM framework. The Enterprise Content Management System (ECMS) portal of the Reserve Bank's intranet enables faster dissemination of BCM-related information, including the profiles of key resource personnel. After imposition of lockdown following COVID-19 outbreak, the Department has been functioning on work-from-home basis, and select officers of the Department attended office on a periodic basis for carrying out core banking solution (CBS) related transactions.

XI.68 As part of the oversight of External Funded Institutions (EFIs), the Department continued to

Box XI.2
Reserve Bank's Business Continuity Plan (BCP) for COVID-19 Pandemic

In response to the outbreak of the COVID-19 pandemic on March 11, 2020, Business Continuity Committee of the Reserve Bank decided to set up multiple teams of trained personnel who can operate the time-sensitive critical activities (TSCAs) of the Reserve Bank. On March 17, 2020, the high-level crisis management team (CMT) decided that an Alternative Work Area Site (AWAS) be set up for all TSCAs. As directed by the CMT, a dedicated team was deployed to man these operations, sequestered in a sterile building. Another team was kept in hot stand-by mode for moving in at short notice.

With critical business processes having been secured, departments and branch offices were pre-emptively required to work-from-home with effect from March 18, 2020, with personnel in office premises whittled down to the barest minimum. When the Government of India ordered a 21-day nation-wide lockdown on March 24, 2020, the Reserve Bank was already operating its critical operations from its AWAS and running other operations on a work-from-home basis. Simultaneously, precautionary measures such as cleansing and sanitisation of surfaces, use of face masks and hand sanitisers, and maintaining social distancing were put in place to contain the spread of the virus in workplaces. Safeguards on personal hygiene and sanitisation were also beefed up in residential colonies, besides sensitising employees and their family members through circulars and guidelines detailing 'Do's and Don'ts' issued by various government bodies and the WHO. This model has served the Reserve Bank well in dealing with the COVID-19 pandemic. With suitable modifications, this model could become a template for dealing with future pandemics.

IT infrastructure at data centres (DCs) forms the backbone of the Reserve Bank's infrastructure for the financial system of the economy. In order to keep the DCs and IT infrastructure running for smooth functioning of critical systems, the Reserve Bank took on nature's version of a zero-day malware in the form of COVID-19, and activated business resilience/continuity plans for DCs seamlessly from an isolated location. Resource personnel from IT, DCs, business departments, service partners/associates including security, support and maintenance staff were also isolated near the respective DCs. Further, the BCP was continuously fine-tuned to be ready with remediation plan for smooth flow of operations, staffing, key resources, crisis management groups, while keeping all insulated from exposure to the fast-changing environment.

The swift and comprehensive response of the Reserve Bank to COVID-19 through BCP strategy was promptly picked up by the media, and was extensively reported. Prominent national and financial dailies reported the move with headlines like 'How RBI set up war-room in just one day amid coronavirus outbreak', 'War room set up to save the country's economy' and 'RBI chalks out contingency plan for smooth functioning of services'.

Taking a cue from the Reserve Bank's BCP strategy on COVID-19, several banks and financial institutions set up similar arrangements. The uninterrupted functioning of NEFT/RTGS, ATMs and general banking services across the country during the lockdown was possible due to such prompt and coordinated response by various stakeholders in the financial system.

Source: RBI.

reinforce their governance by facilitating meetings of their Governing Boards and sub-committees, implementation of the recommendations of their Review Committees and selection of Directors when vacancies arose.

Agenda for 2020-21

XI.69 The Department's agenda for the year includes the following:

- Operationalising a Dashboard to implement the KPIs-based framework for monitoring and assessing the implementation of strategic goals/milestones (*Utkarsh*);
- Strengthening of internal governance of EFIs; and
- Renewal of the memoranda of understanding (MoUs) with IGIDR and CAFRAL with the goal of enhancing the collaboration with these institutes.

7. RAJBHASHA

XI.70 The Rajbhasha Department is entrusted with the responsibility of ensuring compliance with the Official Language Act, 1963 in the Reserve Bank. This covers a wide range of activities in Hindi being performed by the ROs and CODs as per the instructions of the Government of India and the Committee of Parliament on Official Language. The Department provides support to ROs and CODs and coordinates with them to ensure effective implementation of the official language policy of the Government of India in the Reserve Bank.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

XI.71 Last year, the Department had set out the following goals:

- Implementation of the Integrated Rajbhasha Reporting System (Para XI.72); and
- Publication of an e-book on 'Hindi Workshop related to Training Material' for faculty members (Para XI.73).

Implementation Status of Goals

Integrated Rajbhasha Reporting System

XI.72 The Integrated Rajbhasha Reporting System (IRRS) is a package for collecting, processing, reporting and storing of data related to use of Hindi in the Reserve Bank. IRRS enables Rajbhasha Department's mission to collate and disseminate data regarding use of Hindi to be used for submission and review at various platforms, including to the government. Adopting 'less paper' and virtual internal workflows is a strategy followed by the Reserve Bank to achieve its medium-term strategy '*Utkarsh* 2022' and IRRS package created a conducive environment while heading towards it. Various reports such as Quarterly Progress Report, Annual Report, Hindi Advisory Committee Report, Annual Assessment Report, Town Official Language Implementation Committee (TOLIC) Report and Roster of Hindi knowledge are generated through this package, a virtual platform. It is useful in preparing responses to the Parliamentary Committee on Official Language. One module of the IRRS package has gone live this year whereas the work for other modules is in progress.

Publication of an e-Book

XI.73 The Department published an e-book on 'Hindi Workshop related to Training Material' in June 2020 for the use of Rajbhasha officers while conducting Hindi workshops across CODs and ROs of the Reserve Bank.

Major Developments

XI.74 During the year, 146 staff members passed the *Pragya*[1] and 190 passed the *Parangat*[2] examination. In order to enhance the use of Hindi on computers, staff members were trained to work in Hindi on computers. 149 Hindi workshops were conducted across the Reserve Bank during July 2019 to June 2020 including workshops organised for senior officers at CODs and ROs, which helped in increasing the use of Hindi in notings and correspondences.

[1] The examination is conducted for those who do not have the working knowledge of Hindi.

[2] The highest examination to acquire proficiency in Hindi.

XI.75 CODs and ROs observed a 'Hindi Fortnight', organised Hindi *Samaroh* and seminars in Hindi on various banking topics, held talks in Hindi and arranged various competitions and programmes in order to create a conducive environment for use of Hindi. As part of the strategic plan for the year 2019-20, the Rajbhasha Department successfully prepared specific glossaries for various departments. The publication of a booklet on official notings in Hindi for senior officers has been completed. Work related to maintenance of Hindi library, publication of Hindi magazines and organising Hindi Day function were streamlined.

Training

XI.76 In pursuance of Reserve Bank's vision statement '*Utkarsh* 2022' which speaks about enhancing the skills of human resources for current and emerging challenges, one batch of Rajbhasha Officers was imparted training under the Management Development Programme. A translation workshop was conducted at the RBSC, Chennai related to legal documents, financial and banking terminologies. The CAB, Pune conducted Hindi workshop for personal secretaries of the Reserve Bank and ZTC, Kolkata organised a training on general banking for the Rajbhasha officers.

Publications

XI.77 The statutory publications of the Reserve Bank, *viz*., Annual Report, Report on Trend and Progress of Banking in India, Monetary Policy Report and other publications like the Financial Stability Report, Weekly Statistical Supplement and monthly Reserve Bank of India Bulletin were published in bilingual form and are available on the Reserve Bank's website. *Rajbhasha Samachar*, covering the progressive use of Hindi in the Reserve Bank, was published by the Department, besides its Hindi journal, *Banking Chintan Anuchintan*. The latest March 2020 issues of both these half yearly publications of Rajbhasha Department were released in e-format amidst the COVID-19 outbreak in a 'work from home' environment.

Compliance of Assurances Given to the Committee of Parliament on Official Language

XI.78 The Committee of Parliament on Official Language visits the Reserve Bank's Central Office and ROs to review the progress made in the use of Hindi. The Reserve Bank's Central Official Language Implementation Committee monitors the compliance of the assurances given to the Committee. During the year, concerted efforts were made towards monitoring expenditure on Hindi advertisements, training more staff for *Parangat*, filling up vacant Hindi posts, attending the meetings of TOLIC by the Officers-in-Charge of concerned departments, and increasing usage of computer for Hindi work.

Agenda for 2020-21

XI.79 During the year, the Department plans to focus on the following:

- Updating Banking Glossary;
- Implementation of Annual Programme and other guidelines issued by Government of India from time to time;
- Preparation of department-specific terminologies to promote the use of Hindi;
- Commencing Hindi magazine competitions for the ROs in order to enhance creativity in Hindi among employees;
- Conducting Hindi workshops for senior officers at ROs/CODs in order to update them with the latest instructions/guidelines regarding use of Hindi; and

- Conducting a lecture series on banking topics in Hindi.

8. PREMISES DEPARTMENT

XI.80 The vision of the Premises Department is to provide 'best in class' and environment friendly physical infrastructure by integrating architectural excellence and aesthetic appeal with green ratings in the Reserve Bank's premises while ensuring the highest level of cleanliness.

Agenda for 2019-20: Implementation Status

Goals Set for 2019-20

XI.81 Last year, the Department had set out the following goals:

- Getting relevant green rating from GRIHA[3]/ IGBC[4] for at least two buildings (*Utkarsh*) [Para XI.82];
- Attaining 1.5 per cent of power consumption from renewable sources (*Utkarsh*) [Para XI.82];
- Attaining 1.25 per cent of energy savings (*Utkarsh*) [Para XI.82];
- Attaining 2.5 per cent water conservation/ savings (*Utkarsh*) [Para XI.82];
- Digitising inventory and assets tracking in association with ReBIT (*Utkarsh*) [Para XI.82];
- Completion of construction of quarters at New Delhi and Chennai (Para XI.83);
- Completion of drawings of residential colony in Jammu (Para XI.83); and
- Commencement of construction of new office buildings at Dehradun and *Naya* Raipur and residential quarters at Dehradun (Para XI.83).

Implementation Status of Goals

XI.82 In 2019-20, developments were inspired by the vision, as the Department endeavoured to fulfill the goals set in these areas. Several of the milestones set under *Utkarsh* have been achieved by the Department. First, the Reserve Bank received green ratings from IGBC for two of its buildings (one each at Bengaluru and Hyderabad) as on January 1, 2020. Second, as against the target of achieving 1.5 per cent power consumption by all Reserve Bank premises from renewable sources, power consumption from renewable sources was 3.34 per cent. Third, the Reserve Bank achieved 10.2 per cent of energy savings as against the target of 1.25 per cent. Finally, the water conservation/savings stood at 5.62 per cent as against the target of 2.5 per cent. However, digitising inventory and assets tracking system could not be implemented during the year due to tepid response of vendors during tendering process. This tracking system would be implemented during the current year by December 2020.

XI.83 The construction of residential projects at Hauz Khas, New Delhi and Anna Nagar, Chennai are at advanced stages of completion. The drawings for the residential colony in Jammu have been completed. The construction of office premises at Dehradun has commenced and the construction of office premises at *Naya* Raipur and

[3] Green Rating for Integrated Habitat Assessment.

[4] Indian Green Building Council.

residential premises at Dehradun are at advanced stages of planning and approval.

Other Construction Activities

XI.84 The construction to house the CAFRAL at Mumbai is under progress, with the RCC structural work of the institutional portion of the project having been completed. Among various projects on deposit work basis with the Central Public Works Department (CPWD), the construction of office premises at Imphal (boundary wall) has commenced. Projects at Kharghar in Navi Mumbai (residential premises), office premises for Agartala (boundary wall) and Ranchi (boundary wall) are at advanced stages of planning and approval.

Maintenance Activities

XI.85 As part of efficient maintenance management of the Reserve Bank's iconic office and residential buildings across India, guidelines for safety and stability of buildings have been issued and are being implemented through yearly visual and maintenance inspection. The condition assessment of structures through structural audit (using non-destructive tests) has been taken up to decide the course of retrofitting or otherwise.

Impact of COVID-19

XI.86 The progress of various projects and the maintenance work were affected due to COVID-19 pandemic related lockdown and restricted movement of labour. However, the Department undertook necessary measures for creating contactless environment for the safety of employees attending office for maintenance and related work during the lockdown period.

Green Initiatives

XI.87 The Department has taken various measures as part of green initiatives in the Reserve Bank. All new building projects have been certified as green compliant by the IGBC. The Reserve Bank has generated renewable energy through solar power generation plants installed at various offices and residential colonies. The solar power generation capacity has been enhanced to 1,910 kwp in March 2020 from 1,440 kwp in March 2019, which enhanced further to 2,034 kwp in June 2020. Rainwater harvesting systems, sewage treatment and wastewater treatment plants have been installed in various premises for conservation and efficient use of water. Similarly, organic waste converters have also been installed in many office and residential premises.

Other Initiatives

XI.88 As part of the Reserve Bank's effort to reduce plastic pollution to help the environment and move towards environmentally sustainable products, the Department issued guidelines on phasing out of single use plastics in the Reserve Bank for implementation across all its offices.

Agenda for 2020-21

XI.89 For the year, the Department has set up the following goals:

- Green rating certification from GRIHA/ IGBC for at least one office and five existing residential buildings in addition to all the new building projects (*Utkarsh*);
- Attaining 3.0 per cent of power consumption from renewable sources (*Utkarsh*);
- Attaining 2.5 per cent of energy savings (*Utkarsh*);
- Attaining 5.0 per cent of water conservation/ savings (*Utkarsh*);
- Digitising inventory and assets tracking in association with ReBIT (*Utkarsh*);

- Completion of the residential projects at Chennai, Mumbai and Delhi and construction of boundary walls at Agartala, Imphal and Ranchi;
- Commencing construction of office premises at *Naya* Raipur and residential projects at Dehradun, Kharghar in Navi Mumbai and Jammu; and
- Reviewing and revising the contract architecture[5] and implementation of the project management tools[6] for monitoring of the projects.

9. Conclusion

XI.90 In sum, this chapter discussed developments in the areas of governance, human resources and also measures adopted during the year for strengthening risk monitoring and internal audit mechanism in the Reserve Bank. Human resources were upgraded through various innovative training programmes introduced by the HRMD. While the Rajbhasha Department ensured compliance with the statutory provisions of the Official Language Act of the Government of India, the Premises Department continued with its efforts to provide environment friendly physical infrastructure. The departments described in this chapter have not only evaluated their goals set for the year, but also set out priorities for 2020-21. With the outbreak of COVID-19, the Reserve Bank responded swiftly and comprehensively for securing critical business processes and ensured business continuity in the financial system.

[5] Refers to the framework covering planning to completion of construction projects.

[6] These are software solutions that help in monitoring and efficiently managing the projects.

Annex

Table XI.1: Attendance in the Meeting of the Central Board of Directors during July 1, 2019 – June 30, 2020

Name of the Member	Appointed/Nominated under RBI Act, 1934	No. of Meetings Held	No. of Meetings Attended
1	2	3	4
Shaktikanta Das	8(1)(a)	7	7
N. S. Vishwanathan[X]	8(1)(a)	6	4
Viral V. Acharya[@]	8(1)(a)	1	1
B. P. Kanungo	8(1)(a)	7	6
Mahesh Kumar Jain	8(1)(a)	7	7
Michael Debabrata Patra[#]	8(1)(a)	3	3
Prasanna Kumar Mohanty	8(1)(b)	7	6
Dilip S. Shanghvi	8(1)(b)	7	5
Revathy Iyer	8(1)(b)	7	7
Sachin Chaturvedi	8(1)(b)	7	6
Natarajan Chandrasekaran	8(1)(c)	7	7
Bharat N. Doshi[*]	8(1)(c)	6	6
Sudhir Mankad[*]	8(1)(c)	6	6
Ashok Gulati	8(1)(c)	7	5
Manish Sabharwal	8(1)(c)	7	7
Satish Kashinath Marathe	8(1)(c)	7	6
Swaminathan Gurumurthy	8(1)(c)	7	5
Subhash Chandra Garg[$]	8(1)(d)	1	1
Atanu Chakraborty^	8(1)(d)	5	3
Rajiv Kumar^^	8(1)(d)	6	5
Debasish Panda[&]	8(1)(d)	1	1
Tarun Bajaj[%]	8(1)(d)	1	1

X: Deputy Governor till March 31, 2020. @: Deputy Governor till July 23, 2019.
#: Deputy Governor *w.e.f* January 15, 2020. *: Director till March 3, 2020.
$: Director till July 29, 2019. ^: Director *w.e.f* July 29, 2019 till April 30, 2020.
^^: Director till February 28, 2020. &: Director *w.e.f* March 11, 2020.
%: Director *w.e.f* May 5, 2020.

Table XI.2: Attendance in the Meeting of the Committees of the Central Board during July 1, 2019 – June 30, 2020

Name of the Member	Appointed /Nominated under RBI Act,1934	No. of Meetings Held	No. of Meetings Attended
1	2	3	4
I. Committee of the Central Board (CCB)			
Shaktikanta Das	8 (1) (a)	46	43
N. S. Vishwanathan$	8 (1) (a)	34	20
Viral V. Acharya@	8 (1) (a)	2	1
B. P. Kanungo	8 (1) (a)	46	33
Mahesh Kumar Jain	8 (1) (a)	46	39
Michael Debabrata Patra#	8 (1) (a)	22	22
Prasanna Kumar Mohanty	8 (1) (b)	13	13
Dilip S. Shanghvi	8 (1) (b)	16	14
Revathy Iyer	8 (1) (b)	16	16
Sachin Chaturvedi	8 (1) (b)	16	10
Natarajan Chandrasekaran	8 (1) (c)	9	1
Bharat N. Doshi*	8 (1) (c)	12	6
Sudhir Mankad*	8 (1) (c)	10	9
Ashok Gulati	8 (1) (c)	15	14
Manish Sabharwal	8 (1) (c)	17	15
Satish Kashinath Marathe	8 (1) (c)	16	8
Swaminathan Gurumurthy	8 (1) (c)	16	1
Atanu Chakraborty^	8 (1) (d)	23	23
Tarun Bajaj%	8 (1) (d)	7	7

@: Deputy Governor till July 23, 2019. #: Deputy Governor *w.e.f* January 15, 2020. ^: Director *w.e.f* July 29, 2019 till April 30, 2020.
*: Director till March 3, 2020. %: Director *w.e.f* May 5, 2020. $: Deputy Governor till March 31, 2020.

II. Board for Financial Supervision (BFS)			
Shaktikanta Das	Chairman	8	8
Mahesh Kumar Jain	Vice-Chairman	8	8
N. S. Vishwanathan$	Member	7	5
B. P. Kanungo	Member	8	4
Viral V. Acharya#	Member	1	1
Michael Debabrata Patra*	Member	2	2
Bharat N. Doshi@	Member	7	6
Sudhir Mankad@	Member	7	7
Ashok Gulati	Member	8	7
Satish Kashinath Marathe	Member	8	6
Sachin Chaturvedi^	Member	1	1

#: Member till July 23, 2019. *: Member *w.e.f* January 15, 2020. @: Member till March 03, 2020.
^: Member *w.e.f* May 14, 2020. $: Member till March 31, 2020.

Table XI.2: Attendance in the Meeting of the Committees of the Central Board during July 1, 2019 – June 30, 2020 *(Concld.)*

Name of the Member	Appointed /Nominated under RBI Act,1934	No. of Meetings Held	No. of Meetings Attended
1	2	3	4
III. Board for Regulation and Supervision of Payment and Settlement Systems (BPSS)			
Shaktikanta Das	Chairman	2	2
B. P. Kanungo	Vice-Chairman	2	2
N. S. Vishwanathan$	Member	1	0
Mahesh Kumar Jain	Member	2	2
Michael Debabrata Patra*	Member	1	1
Natarajan Chandrasekaran	Member	1	0
Manish Sabharwal	Member	2	2

$: Member till March 31, 2020. *: Member *w.e.f* January 15, 2020.

Table XI.3: Attendance in the Meeting of the Sub-Committees of the Board during July 1, 2019 – June 30, 2020

Name of the Member	Appointed/Nominated under RBI Act, 1934	No. of Meetings Held	No. of Meetings Attended
1	2	3	4
I. Audit & Risk Management Sub-Committee (ARMS)			
Bharat N. Doshi[@]	Chairman	6	6
Sudhir Mankad[@]	Member	6	6
Revathy Iyer	Member	6	5
N. S. Vishwanathan[$]	Member	6	5
Viral V. Acharya[#]	Invitee	1	1
B. P. Kanungo	Invitee	6	4
Mahesh Kumar Jain	Invitee	6	6
Michael Debabrata Patra	Invitee	3	2
@: Member till March 3, 2020. $: Member till March 31, 2020. #: Member till July 23, 2019.			
II. Building Sub-Committee (BSC)			
Dilip S. Shanghvi	Chairman	1	1
Prasanna Kumar Mohanty	Member	1	1
Mahesh Kumar Jain	Member	1	1
III. Human Resource Management Sub-Committee (HRM-SC)			
Manish Sabharwal	Chairman	4	4
Dilip Shanghvi	Member	4	2
Mahesh Kumar Jain	Member	4	3
IV. Information Technology Sub-Committee (IT-SC)			
Manish Sabharwal	Chairman	3	3
Sachin Chaturvedi	Member	3	3
B. P. Kanungo	Member	3	1
V. Strategy Sub-Committee			
Prasanna Kumar Mohanty	Chairman	1	1
Manish Sabharwal	Member	1	1
Revathy Iyer	Member	1	1
N. S. Vishwanathan[$]	Member	1	0
B. P. Kanungo	Member	1	1
Mahesh Kumar Jain	Member	1	1
Michael Debabrata Patra	Member	1	1

$: Member till March 31, 2020.

Table XI.4: Attendance in the Meeting of Standing Committee of the Central Board of Directors for the Southern Area during July 1, 2019 - June 30, 2020

Name of the Member	No. of Meetings Held	No. of Meetings Attended
1	2	3
Prasanna Kumar Mohanty, Chairman	2	2
Satish Kashinath Marathe, Member	2	2

Table XI.5: Attendance in the Meetings of Local Boards during July 1, 2019 - June 30, 2020

Name of the Member	Appointed/Nominated under RBI Act, 1934	No. of Meetings Held	No. of Meetings Attended
1	2	3	4
Sachin Chaturvedi, EALB	Section 9(1)	4	4
Sunil Mitra, EALB	Section 9(1)	4	4
Dilip S. Shanghvi, WALB	Section 9(1)	4	4
V. R. Bhanshali, WALB	Section 9(1)	4	4
Revathy Iyer, NALB	Section 9(1)	4	4
R. N. Dubey, NALB	Section 9(1)	4	4
P. K. Mohanty, SALB^	Section 9(1)	0	0

EALB: Eastern Area Local Board.
WALB: Western Area Local Board.
NALB: Northern Area Local Board.
SALB: Southern Area Local Board.
^: SALB could not function due to lack of a required quorum.

XII THE RESERVE BANK'S ACCOUNTS FOR 2019-20

The balance sheet size of the Reserve Bank increased by 30.02 per cent as on June 30, 2020. The gross total income for the year 2019-20 amounted to ₹1,496.72 billion as compared to ₹1,930.36 billion in 2018-19. The previous year's income included a write back of excess provision from Contingency Fund amounting to ₹526.37 billion. A comparison excluding the same from previous year's income, shows a marginal increase in the income for 2019-20. The expenditure of the Reserve Bank for the year 2019-20 is ₹925.40 billion which includes a risk provision of ₹736.15 billion towards Contingency Fund as compared to an expenditure of ₹170.45 billion in 2018-19. The year ended with an overall surplus of ₹571.28 billion.

XII.1 The balance sheet of the Reserve Bank plays a critical role in the functioning of the country's economy largely reflecting 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 2019-20 (July - June) are set out in the following paragraphs.

XII.2 The balance sheet increased by ₹12,318.88 billion, *i.e.,* 30.02 per cent from ₹41,029.05 billion as on June 30, 2019 to ₹53,347.93 billion as on June 30, 2020. The increase on the asset side was due to increase in domestic and foreign investments by 18.40 per cent and 27.28 per cent, respectively, increase in loans and advances by 245.76 per cent and increase in gold by 52.85 per cent. On the liability side, the increase was due to increase in Notes issued, Other Liabilities and Provisions, and Deposits by 21.52 per cent, 30.47 per cent and 53.72 per cent, respectively. Domestic assets constituted 28.75 per cent while the foreign currency assets and gold (including gold deposit and gold held in India) constituted 71.25 per cent of total assets as on June 30, 2020 as against 28.03 per cent and 71.97 per cent, respectively as on June 30, 2019.

XII.3 A provision of ₹736.15 billion was made and transferred to Contingency Fund (CF). No provision was made towards Asset Development Fund (ADF). The trends in income, expenditure, net disposable income and the surplus transferred to the central government are given in Table XII.1.

Table XII.1: Trends in Income, Expenditure and Net Disposable Income

(₹ billion)

Item	2015-16	2016-17	2017-18	2018-19	2019-20
1	2	3	4	5	6
a) Income	808.70	618.18	782.81	1,930.36	1,496.72
b) Total Expenditure@	149.90#	311.55^	282.77&	170.45*	925.40**
c) Net Disposable Income (a-b)	658.80	306.63	500.04	1,759.91	571.32
d) Transfer to Funds@@	0.04	0.04	0.04	0.04	0.04
e) Surplus Transferred to the Central Government (c-d)	658.76	306.59	500.00	1,759.87	571.28

@ : Includes provision towards CF and ADF.

: Includes a provision of ₹10 billion towards additional capital contribution in BRBNMPL.

^ : Includes a provision of ₹0.50 billion towards additional capital contribution in the Reserve Bank's subsidiary ReBIT and a provision of ₹131.40 billion towards transfer to CF.

& : Includes a provision of ₹141.90 billion towards transfer to CF.

* : Includes a provision of ₹0.64 billion towards transfer to ADF.

** : Includes a provision of ₹736.15 billion towards transfer to CF.

@@: An amount of ₹0.01 billion 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.

XII.4 The Independent Auditors' Report, the Balance Sheet and the Income Statement for the year 2019-20 along with the schedules, statement of Significant Accounting Policies and supporting Notes to Accounts are as follows:

INDEPENDENT AUDITORS' REPORT

To
The President of India

Report on Audit of Financial Statements

Opinion

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 on June 30, 2020 and the Income Statement for the year ended on that date (hereinafter referred to as "financial statements"), which have been audited by us.

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 Reserve Bank of India Act, 1934 and Regulations framed thereunder so as to exhibit true and correct view of the state of affairs of the Bank as on June 30, 2020 and its results of operations for the year ended on that date.

Basis for Opinion

We conducted our audit in accordance with the Standards on Auditing (SAs) issued by the Institute of Chartered Accountants of India (ICAI). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Bank in accordance with the ethical requirements that are relevant to our audit of the financial statements, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on the financial statements.

Information Other than the Financial Statements and Auditor's Report Thereon

The Management is responsible for the other information. The other information comprises the information included in the Notes to the accounts, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

The Bank's Management and Those Charged with Governance for the Financial Statements are 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 also includes maintenance of adequate accounting records and preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgements and estimates that are reasonable and prudent and 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.

In preparing the financial statements, management is responsible for assessing the Bank's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Bank or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are also responsible for overseeing the Bank's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit 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 financial control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Bank's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Bank to cease to continue as a going concern.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Other Matters

The audit of the financial statements of the Bank for the year ended June 30, 2019, was carried out and reported jointly by M/s Chhajed & Doshi and M/s G. P. Kapadia & Co., Chartered Accountants, vide their unmodified audit report dated August 26, 2019, whose report has been furnished to us by the management and which has been relied upon by us for the purpose of our audit of the financial information. Our opinion is not modified in respect of this matter.

We report that we have called for information and explanations from the Bank considered necessary for the purpose of our audit and such information and explanations have been given to our satisfaction.

We also report that the financial statements include the accounts of twenty-two accounting units of the Bank which have been audited by Statutory Branch Auditors and we have relied on their report in this regard.

For Prakash Chandra Jain & Co.
Chartered Accountants
(ICAI Firm Registration
No. 002438C)

Pratibha Sharma
Partner
Membership No. 400755
UDIN: 20400755AAAABU3505

For Haribhakti & Co., LLP
Chartered Accountants
(ICAI Firm Registration
No. 103523W/ W100048)

Hemant J. Bhatt
Partner
Membership No.036834
UDIN: 20036834AAAAEB7640

Place: Mumbai
Date: August 14, 2020

RESERVE BANK OF INDIA
BALANCE SHEET AS ON JUNE 30, 2020

(Amount in ₹ billion)

Liabilities	Schedule	2018-19	2019-20	Assets	Schedule	2018-19	2019-20
Capital		0.05	0.05	**Assets of Banking Department (BD)**			
Reserve Fund		65.00	65.00	Notes, Rupee Coin, Small Coin	5	0.09	0.13
Other Reserves	1	2.30	2.32	Gold Coin and Bullion	6	882.98	1,428.75
Deposits	2	7,649.22	11,758.60	Investments-Foreign-BD	7	6,964.53	10,234.00
Other Liabilities and Provisions	3	11,624.51	15,166.21	Investments-Domestic-BD	8	9,898.77	11,720.27
				Bills Purchased and Discounted		0.00	0.00
				Loans and Advances	9	931.87	3,222.07
				Investment in Subsidiaries	10	19.64	19.64
				Other Assets	11	643.20	367.32
Liabilities of Issue Department				**Assets of Issue Department (ID)**			
Notes Issued	4	21,687.97	26,355.75	Gold Coin and Bullion (as backing for Note issue)	6	792.04	1,131.46
				Rupee Coin		8.28	7.85
				Investment-Foreign-ID	7	20,887.65	25,216.44
				Investment-Domestic-ID	8	0.00	0.00
				Domestic Bills of Exchange and other Commercial Papers		0.00	0.00
Total Liabilities		**41,029.05**	**53,347.93**	**Total Assets**		**41,029.05**	**53,347.93**

Nirmal Chand	M. D. Patra	M. K. Jain	B.P. Kanungo	Shaktikanta Das
Chief General Manager-in-Charge	Deputy Governor	Deputy Governor	Deputy Governor	Governor

RESERVE BANK OF INDIA
INCOME STATEMENT FOR THE YEAR ENDED JUNE 2020

(Amount in ₹ billion)

INCOME	Schedule	2018-19	2019-20
Interest	12	1,068.37	1,093.33
Other income	13	861.99	403.39
Total		**1,930.36**	**1,496.72**
EXPENDITURE			
Printing of Notes		48.11	43.78
Expenditure on Remittance of Currency		0.88	0.87
Agency Charges	14	39.10	38.76
Employee Cost		68.51	89.28
Interest		0.01	0.01
Postage and Telecommunication Charges		1.03	1.17
Printing and Stationery		0.22	0.20
Rent, Taxes, Insurance, Lighting, *etc.*		1.26	1.36
Repairs and Maintenance		0.98	0.88
Directors' and Local Board Members' Fees and Expenses		0.02	0.02
Auditors' Fees and Expenses		0.05	0.06
Law Charges		0.17	0.09
Miscellaneous Expenses		7.97	10.71
Depreciation		1.50	2.06
Provisions		0.64	736.15
Total		**170.45**	**925.40**
Available Balance		**1,759.91**	**571.32**
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
(c) Others Amount transferred to the Central Government during the year		280.00	0.00
Surplus payable to the Central Government		**1,479.87**	**571.28**

1. *These funds are maintained by the National Bank for Agriculture and Rural Development (NABARD).*

Nirmal Chand	M. D. Patra	M. K. Jain	B.P. Kanungo	Shaktikanta Das
Chief General Manager-in-Charge	Deputy Governor	Deputy Governor	Deputy Governor	Governor

SCHEDULES FORMING PART OF BALANCE SHEET AND INCOME STATEMENT

(Amount in ₹ billion)

		2018-19	2019-20
Schedule 1:	**Other Reserves**		
	(i) National Industrial Credit (Long Term Operations) Fund	0.28	0.29
	(ii) National Housing Credit (Long Term Operations) Fund	2.02	2.03
	Total	**2.30**	**2.32**
Schedule 2:	**Deposits**		
	(a) Government		
	(i) Central Government	1.01	1.00
	(ii) State Governments	0.42	0.43
	Sub total	***1.43***	***1.43***
	(b) Banks		
	(i) Scheduled Commercial Banks	5,129.26	4,376.17
	(ii) Scheduled State Co-operative Banks	39.98	52.08
	(iii) Other Scheduled Co-operative Banks	90.29	71.38
	(iv) Non-Scheduled State Co-operative Banks	24.91	24.72
	(v) Other Banks	209.64	184.14
	Sub total	***5,494.08***	**4,708.49**
	(c) Financial Institutions outside India		
	(i) Repo borrowing - Foreign	0.00	0.00
	(ii) Reverse Repo Margin - Foreign	0.00	0.00
	Sub total	***0.00***	***0.00***
	(d) Others		
	(i) Administrators of RBI Employee PF A/c	46.38	45.49
	(ii) Depositors' Education and Awareness Fund	257.47	331.14
	(iii) Balances of Foreign Central Banks	19.05	16.80
	(iv) Balances of Indian Financial Institutions	2.13	23.47
	(v) Balances of International Financial Institutions	3.38	3.52
	(vi) Mutual Funds	0.01	0.01
	(vii) Others	1,825.29	6,628.25
	Sub total	***2,153.71***	***7,048.68***
	Total	**7,649.22**	**11,758.60**
Schedule 3:	**Other Liabilities and Provisions**		
	(i) Contingency Fund (CF)	1,963.44	2,640.34
	(ii) Asset Development Fund (ADF)	228.75	228.75
	(iii) Currency and Gold Revaluation Account (CGRA)	6,644.80	9,771.41
	(iv) Investment Revaluation Account-Foreign Securities (IRA-FS)	157.35	538.34
	(v) Investment Revaluation Account-Rupee Securities (IRA-RS)	494.76	934.15
	(vi) Foreign Exchange Forward Contracts Valuation Account (FCVA)	13.04	0.00
	(vii) Provision for Forward Contracts Valuation Account (PFCVA)	0.00	59.25
	(viii) Provision for Payables	22.81	26.00
	(ix) Gratuity and Superannuation Fund	206.10	256.39
	(x) Surplus Payable to the Central Government	1,759.87	571.28
	(xi) Bills Payable	0.08	0.02
	(xii) Miscellaneous	133.51	140.28
	Total	**11,624.51**	**15,166.21**
Schedule 4:	**Notes Issued**		
	(i) Notes held in the Banking Department	0.09	0.13
	(ii) Notes in Circulation	21,687.88	26,355.62
	Total	**21,687.97**	**26,355.75**

			2018-19	2019-20
Schedule 5:	**Notes, Rupee Coin, Small Coin**			
	(i) Notes		0.09	0.13
	(ii) Rupee Coin		0.00	0.00
	(iii) Small Coin		0.00	0.00
		Total	**0.09**	**0.13**
Schedule 6:	**Gold Coin and Bullion**			
	(a) Banking Department			
	(i) Gold Coin and Bullion		882.98	1,393.77
	(ii) Gold Deposit		0.00	34.98
		Sub Total	***882.98***	***1,428.75***
	(b) Issue Department (as backing for Note issue)		792.04	1,131.46
		Total	**1,675.02**	**2,560.21**
Schedule 7:	**Investments - Foreign**			
	(i) Investments - Foreign - BD		6,964.53	10,234.00
	(ii) Investments - Foreign - ID		20,887.65	25,216.44
		Total	**27,852.18**	**35,450.44**
Schedule 8:	**Investments - Domestic**			
	(i) Investments - Domestic - BD		9,898.77	11,720.27
	(ii) Investments - Domestic - ID		0.00	0.00
		Total	**9,898.77**	**11,720.27**
Schedule 9:	**Loans and Advances**			
	(a) Loans and Advances to :			
	(i) Central Government		265.31	0.00
	(ii) State Governments		26.66	46.24
		Sub total	***291.97***	***46.24***
	(b) Loans and Advances to:			
	(i) Scheduled Commercial Banks		572.00	2,855.77
	(ii) Scheduled State Co-operative Banks		0.00	0.00
	(iii) Other Scheduled Co-operative Banks		0.00	0.00
	(iv) Non-Scheduled State Co-operative Banks		0.00	0.00
	(v) NABARD		0.00	221.23
	(vi) Others		67.90	98.83
		Sub total	***639.90***	***3,175.83***
	(c) Loans and Advances to Financial Institutions outside India:			
	(i) Repo Lending - Foreign		0.00	0.00
	(ii) Repo Margin - Foreign		0.00	0.00
		Sub total	***0.00***	***0.00***
		Total	**931.87**	**3,222.07**
Schedule 10:	**Investment in Subsidiaries/Associates**			
	(i) Deposit Insurance and Credit Guarantee Corporation(DICGC)		0.50	0.50
	(ii) Bharatiya Reserve Bank Note Mudran (P) Ltd.(BRBNMPL)		18.00	18.00
	(iii) Reserve Bank Information Technology (P) Ltd.(ReBIT)		0.50	0.50
	(iv) National Centre for Financial Education (NCFE)		0.30	0.30
	(v) Indian Financial Technology & Allied Services (IFTAS)		0.34	0.34
		Total	**19.64**	**19.64**

		2018-19	2019-20
Schedule 11:	**Other Assets**		
	(i) Fixed Assets (net of accumulated depreciation)	6.51	8.16
	(ii) Accrued income (a + b)	330.81	345.35
	a. on loans to employees	*3.27*	*3.47*
	b. on other items	*327.54*	*341.88*
	(iii) Swap Amortisation Account (SAA)	0.00	0.00
	(iv) Revaluation of Forward Contracts Account (RFCA)	13.04	0.00
	(v) Miscellaneous	292.84	13.81
	Total	**643.20**	**367.32**
Schedule 12:	**Interest**		
	(a) **Domestic Sources**		
	(i) Interest on holding of Rupee Securities	583.43	703.04
	(ii) Net Interest on LAF Operations	10.46	-130.53
	(iii) Interest on MSF Operations	1.35	1.49
	(iv) Interest on Loans and Advances	14.98	35.57
	Sub total	***610.22***	***609.57***
	(b) Foreign Sources		
	(i) Interest Income from Foreign Securities	278.11	330.25
	(ii) Net Interest on Repo / Reverse Repo Transactions	-0.04	0.09
	(iii) Interest on Deposits	180.08	153.42
	Sub total	**458.15**	***483.76***
	Total	**1,068.37**	**1,093.33**
Schedule 13:	**Other Income**		
	(a) Domestic Sources		
	(i) Exchange	0.00	0.00
	(ii) Discount	0.00	7.35
	(iii) Commission	22.72	24.31
	(iv) Rent Realised	0.07	0.09
	(v) Profit/Loss on sale and redemption of Rupee Securities	0.40	12.52
	(vi) Depreciation on Rupee Securities inter portfolio transfer	-0.27	-0.09
	(vii) Amortisation of premium/discount of Rupee Securities	21.45	16.81
	(viii) Profit / Loss on sale of Bank's property	0.01	0.01
	(ix) Provision no longer required and Miscellaneous Income	526.18	2.49
	Sub total	***570.56***	***63.49***
	(b) Foreign Sources		
	(i) Amortisation of premium/discount of Foreign Securities	-15.31	-27.42
	(ii) Profit/Loss on sale and redemption of Foreign Securities	16.76	67.39
	(iii) Exchange gain/loss from Foreign Exchange transactions	289.98	299.93
	Sub total	***291.43***	***339.90***
	Total	**861.99**	**403.39**
Schedule 14:	**Agency Charges**		
	(i) Agency Commission on Government Transactions	38.17	37.88
	(ii) Underwriting Commission paid to the Primary Dealers	0.74	0.61
	(iii) Sundries (Handling charges and turnover commission paid to banks for Relief / Savings Bonds subscriptions; SBLA *etc.*)	0.02	0.06
	(iv) Fees paid to the External Asset Managers, Custodians, *etc.*	0.17	0.21
	Total	**39.10**	**38.76**

STATEMENT OF SIGNIFICANT ACCOUNTING POLICIES FOR THE YEAR ENDED JUNE 30, 2020

(a) General

1.1 Among other things, the Reserve Bank of India was established under the Reserve Bank of India 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 and coins.

b) Acts as monetary authority and formulates, implements and monitors the monetary policy.

c) Regulation and supervision of the financial system.

d) Regulation and supervision of the payment and settlement systems.

e) Acts as manager of foreign exchange.

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) Developmental functions to support national objectives.

1.3 The Act requires that the issue of Bank notes should be conducted by the Reserve 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 Reserve Bank of India 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 except for the change in the valuation frequency for foreign securities and gold. The said valuation frequency has been changed from 'monthly' to 'weekly and monthly' during the year.

2.2 Revenue Recognition

(a) Income and expenditure are recognised on accrual basis except penal interest charged from the banks 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 accounting years in certain transit accounts including Drafts Payable Account, Payment Orders Account, Sundry Deposits Account-Miscellaneous, Remittance Clearance Account, Earnest Money Deposit Account and Security 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.

(d) Exchange gains / losses on sale of foreign currencies and gold are accounted for using the weighted average cost method for arriving at the cost.

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 (including gold deposits) is revalued on the last business day of each week and month at ninety (90) per cent of the London Bullion Market Association (LBMA) gold price in US dollar and Rupee-US dollar market exchange rate on the valuation days. Unrealised valuation gains/ losses are accounted for in 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 market exchange rates on the last business day of each week and month. Unrealised gains and losses arising from such translation of foreign currency assets and liabilities are accounted for in the CGRA.

Foreign securities, other than Treasury Bills (T-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 as on the last business day of each week and month. Unrealised gains/ losses on revaluation are recorded in the ‘Investment Revaluation Account- Foreign Securities’ (IRA-FS). Credit balance in IRA-FS is carried forward to the subsequent year. Debit balance, if any, at the end of the year in IRA-FS is charged to the CF and the same is reversed on the first working day of the following accounting year.

Foreign T-Bills and commercial papers are carried at cost as adjusted by amortisation of discount/ premium. Premium or discount on foreign securities is amortised daily. Profit/ loss on sale of foreign securities is recognised with respect to the book value. On sale/ redemption of foreign dated securities, valuation gain/ loss in relation to the securities sold/ redeemed, lying in IRA-FS, is transferred to Income Account.

c) Forward/Swap Contracts

Forward contracts entered into by the Reserve Bank are revalued on a half yearly basis. While marked-to-market net gain is credited to the 'Foreign Exchange Forward Contracts Valuation Account' (FCVA) with contra debit to 'Revaluation of Forward Contracts Account' (RFCA), marked-to-market net loss is debited to FCVA with contra credit to the 'Provision for Forward Contracts Valuation Account' (PFCVA). On maturity of the contract, the actual gain or loss is recognised in the Income Account and the unrealised gains/ losses previously recorded in the FCVA, RFCA and PFCVA are reversed. At the time of half yearly revaluation, the balance in FCVA and RFCA or PFCVA as on that day is reversed and fresh revaluation is done for all the outstanding forward contracts.

Debit balance in FCVA, if any, on June 30, is charged to the CF and reversed on the first working day of the following year. The balance in the RFCA and PFCVA represents the net unrealised gains and losses, respectively, on valuation of the 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', RFCA and SAA form part of 'Other Assets'.

2.4 Transactions in Exchange Traded Currency Derivatives (ETCD)

The ETCD transactions undertaken by the Reserve Bank as part of its intervention operations are marked-to-market on daily basis and the resultant gain/ loss is booked in income account.

2.5 Domestic Investments

(a) Rupee securities and oil bonds except those mentioned in (d) are marked-to-market as on the last business day of each month. The unrealised gains/ losses on revaluation is accounted for in 'Investment Revaluation Account-Rupee Securities' (IRA-RS). Credit balance in IRA-RS is carried forward to the following accounting year. Debit balance, if any, at the end of the year in IRA-RS is charged to the CF and the same is reversed on the first working day of the following accounting year. On sale/ redemption of rupee securities/ oil bonds, valuation gain/ loss in respect of rupee securities and oil bonds sold/ redeemed, lying in IRA-RS, is transferred to income account. Rupee securities and oil bonds are also subjected to daily amortisation.

(b) T-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, Provident Fund, Leave Encashment, Medical Assistance Fund) and Depositors' Education and Awareness Fund (DEA Fund) are treated as 'Held-to-Maturity' and are held at amortised cost.

(e) Transactions in domestic investment are accounted for on settlement date basis.

2.6 Liquidity Adjustment Facility (LAF) Repo/ Reverse Repo and Marginal Standing Facility (MSF)

Repo transactions under LAF and MSF are treated as lending and are accordingly being shown under 'Loans and Advances', whereas Reverse Repo transactions under LAF are being treated as deposits and shown under 'Deposit-Others'.

2.7 Fixed Assets

(a) Fixed Assets are stated at cost less depreciation except art and paintings and freehold land which are held at cost.

(b) Depreciation on Fixed Assets, other than land and buildings, acquired and capitalised during the year (July 01 to June 30) would be reckoned on a monthly pro-rata basis from the month of capitalisation and effected on a half yearly basis at prescribed rates depending upon the useful life of the assets applied.

(c) Depreciation on the following fixed assets (costing more than ₹0.10 million) is provided on a straight-line basis depending on the useful life of an asset in the following manner:

Asset Category	Useful life (Rate of Depreciation)
Electrical installations, UPS, Motor Vehicles, Furniture, Fixture, CVPS/ SBS Machines, *etc.*	5 years (20 per cent)
Computers, Servers, Micro-processors, Printers, Software, Laptops, e-book reader/ i-Pad, *etc.*	3 years (33.33 per cent)

(d) Fixed Assets, costing up to ₹0.10 million (except easily portable electronic assets like Laptop/ e-book reader) 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 on monthly pro-rata basis at the applicable rate.

(e) Individual items of computer software costing ₹0.10 million and above are capitalised and depreciation is calculated on monthly pro-rata basis at applicable rates.

(f) Depreciation is provided on half year-end balances of Fixed Assets on monthly pro-rata basis. In case of additions /deletions of assets other than land and building, depreciation is provided for on monthly pro-rata basis including the month of addition/deletion of such assets.

(g) Depreciation on subsequent expenditure:

i. Subsequent expenditure incurred on an existing fixed asset which has not been fully depreciated in the books of accounts, is depreciated over the remaining useful life of the principal asset; and

ii. Subsequent expenditure incurred on modernisation/ addition/ overhauling of an existing fixed 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.

(h) Land and building: The accounting treatment in respect of land and building is as follows:

Land

i. Land acquired on leasehold basis for a period of more than 99 years is treated as if it is on a perpetual lease basis. Such leases are considered as freehold properties and accordingly not subjected to amortisation.

ii. Land acquired on lease up to 99 years is amortised over the period of the lease.

iii. Land acquired on a freehold basis is not subject to any amortisation.

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 thirty years) depreciation is charged on a 'straight-line' basis over the lease period of the land.

ii. Impairment of buildings: For assessment of impairment, buildings are classified into two categories, as under:

   a. *Buildings which are in use but have been identified for demolition in future or 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 charged as depreciation.

   b. *Buildings which have been discarded/ vacated*: These buildings are shown at realisable value (net selling price-if the asset is likely to be sold in future) or scrap value less demolition cost (if it is to be demolished). If the resultant amount is negative, then the carrying value of such buildings is shown at ₹1. The difference between the book value and realisable value (net selling price)/ scrap value less demolition cost is charged as depreciation.

2.8 Employee Benefits

a. The Reserve Bank contributes monthly at a determined rate to Provident Fund for the eligible employees and these contributions are charged to Profit and Loss Account in the year to which it relates.

b. Other liability on account of long-term employee benefits is provided based on an actuarial valuation under the 'Projected Unit Credit' method.

NOTES TO ACCOUNTS

XII.5 LIABILITIES OF THE RESERVE BANK

XII.5.1 Capital

The Reserve Bank was constituted as a private shareholders' bank in 1935 with an initial paid-up capital of ₹0.05 billion. The Reserve Bank was nationalised with effect from January 1, 1949 and its entire ownership remains vested with the Government of India. The paid-up capital continues to be ₹0.05 billion in terms of Section 4 of the Reserve Bank of India (RBI) Act, 1934.

XII.5.2 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 as the unrealised gain/loss on account of valuation of gold and foreign currency is since being booked in the CGRA which appears under 'Other Liabilities and Provisions'.

XII.5.3 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, in terms of Section 46C of the RBI Act, 1934 with an initial corpus of ₹0.10 billion. The fund witnessed annual contributions from the Reserve Bank for financial assistance to eligible financial institutions. Since 1992-93, a token amount of ₹0.01 billion is being contributed each year to the Fund from the Reserve Bank's income. The balance in the fund stood at ₹0.29 billion as on June 30, 2020.

b) *National Housing Credit (Long Term Operations) Fund*

   This fund was set up in January 1989 in terms of Section 46D of the RBI Act, 1934 for extending financial accommodation to the National Housing Bank (NHB). The initial corpus of ₹0.50 billion has been enhanced by annual contributions from the Reserve Bank thereafter. From the year 1992-93, only a token amount of ₹0.01 billion is being contributed each year from the Reserve Bank's income. The balance in the fund stood at ₹2.03 billion as on June 30, 2020.

   Note: Contribution to other Funds

   There are two other Funds constituted in terms of 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 ₹0.01 billion each is set aside and transferred to NABARD every year.

XII.5.4 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 of India (EXIM Bank) and NABARD, Foreign Central Banks, International Financial Institutions, balances in Administrator of RBI Employees' Provident Fund, Depositors' Education and Awareness Fund (DEA Fund), amount outstanding against Reverse Repo, Medical Assistance Fund (MAF), *etc.*

Total deposits increased by 53.72 per cent from ₹7,649.22 billion as on June 30, 2019 to ₹11,758.60 billion as on June 30, 2020.

a. *Deposits – Government*

   The Reserve Bank acts as the 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 21A of the RBI Act, 1934. Accordingly, the central and state governments maintain deposits with the Reserve Bank. The balances held by the central and state governments were ₹1.00 billion and ₹0.43 billion, respectively, as on June 30, 2020 as compared to ₹1.01 billion and ₹0.42 billion, respectively, as on June 30, 2019.

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 decreased by 14.30 per cent from ₹5,494.08 billion as on June 30, 2019 to ₹4,708.49 billion as on June 30, 2020.

c. *Deposits - Others*

'Deposits- Others' consists of balances of Administrator of RBI Employees Provident Fund, balance in Depositors' Education and Awareness Fund (DEA Fund), balances of Foreign Central Banks, Indian and International Financial Institutions, Medical Assistance Fund, amount outstanding under Reverse Repo, *etc.* The amount under 'Deposits-Others' increased by 227.28 per cent from ₹2,153.71 billion as on June 30, 2019 to ₹7,048.68 billion as on June 30, 2020, primarily due to increase in reverse repo deposits with the Reserve Bank.

XII.5.5 Other Liabilities and Provisions

The major components of 'Other Liabilities and Provisions' are risk provisions and revaluation accounts. 'Other Liabilities and Provisions' increased by 30.47 per cent from ₹11,624.51 billion as on June 30, 2019 to ₹15,166.21 billion as on June 30, 2020, primarily due to increase in CGRA.

i. *Risk Provisions*

There are two risk provisions of the Reserve Bank, *viz.,* CF and ADF. The provisions made towards these funds are made in terms of Section 47 of the RBI Act, 1934. The details are as under:

a. *Contingency Fund (CF)*

This is a specific provision meant 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 Reserve Bank. As on June 30, 2020, an amount of ₹59.25 billion was charged to CF on account of debit balance of FCVA. The charge to CF is reversed on the first working day of the following year. Further, a provision of ₹736.15 billion was made towards CF. Accordingly, the balance in CF as on June 30, 2020 was ₹2,640.34 billion as compared to ₹1,963.44 billion as on June 30, 2019.

b. *Asset Development Fund (ADF)*

The ADF was created in 1997-98 and the balance therein represents provision specifically made till date towards investments in subsidiaries and associate institutions and to meet internal capital expenditure. It is also treated as part of risk provisions of the Reserve Bank. No provision was made for transferring to ADF in the year 2019-20. Hence, the balance in ADF remains at ₹228.75 billion as on June 30, 2020 (Table XII.2).

ii. Revaluation Accounts

The unrealised marked-to-market gains/ losses are recorded in the revaluation heads,

Table XII.2: Balances in Risk Provisions

(₹ billion)

As on June 30	Balance in CF	Balance in ADF	Total	CF and ADF as Percentage to Total Assets
1	2	3	4=(2+3)	5
2016	2,201.83[@]	227.61	2,429.44	7.5
2017	2,282.07[#]	228.11	2,510.18	7.6
2018	2,321.08[^]	228.11	2,549.19	7.05
2019	1,963.44[&]	228.75	2,192.19	5.34
2020	2,640.34*	228.75	2,869.09	5.38

@ : *The decline in the CF is due to charging of the debit balance in the FCVA on account of marked-to-market loss on forward contracts as on June 30, 2016.*

: *Increase in CF is the net impact of provision of ₹ 131.40 billion and charging of the debit balance of IRS and FCVA amounting to ₹ 65.85 billion as on June 30, 2017.*

^ : *Increase in CF is the net impact of provision of ₹ 141.90 billion and charging of the debit balance of IRA-FS amounting to ₹ 168.74 billion as on June 30, 2018.*

& : *The decline in the CF is due to writing back of excess provision of ₹ 526.37 billion as on June 30, 2019.*

* : *Increase in CF is the net impact of provision of ₹ 736.15 billion and charging of the debit balance in the FCVA on account of marked-to-market loss on forward contracts amounting to ₹ 59.25 billion as on June 30, 2020.*

viz., CGRA, IRA-FS, IRA-RS and FCVA. The details are as under:

a. *Currency and Gold Revaluation Account (CGRA)*

The major sources of market risk faced by the Reserve Bank are currency risk, interest rate risk and movement in gold prices. Unrealised gains/ losses on valuation of Foreign Currency Assets (FCA) and Gold are not taken to the Income Account but instead accounted for in the CGRA. Net balance in CGRA, therefore, varies with the size of the asset base, its valuation and movement in the exchange rate and price of gold. CGRA provides a buffer against exchange rate/ gold price fluctuations. It can come under pressure if there is an appreciation of the rupee *vis-à-vis* major currencies or a fall in the price of gold. When CGRA is not sufficient to fully meet exchange losses, it is replenished from the CF. During 2019-20, the balance in CGRA increased from ₹6,644.80 billion as on June 30, 2019 to ₹9,771.41 billon as on June 30, 2020 mainly due to depreciation of rupee and the rise in the international price of gold.

b. *Investment Revaluation Account-Foreign Securities (IRA-FS)*

The foreign dated securities are marked-to-market on the last business day of each week and month and the unrealised gains/ losses arising therefrom are transferred to the IRA-FS. The balance in IRA-FS increased from ₹157.35 billion as on June 30, 2019 to ₹538.34 billion as on June 30, 2020.

c. *Investment Revaluation Account–Rupee Securities (IRA-RS)*

Rupee securities and oil bonds (with exception as mentioned under Significant Accounting Policy) held as assets of the Banking Department are marked-to-market as on the last business day of each month and the unrealised gains/ losses arising therefrom are booked in IRA-RS. The balance in IRA-RS increased from ₹494.76 billion as on June 30, 2019 to ₹934.15 billion as on June 30, 2020 due to increase in portfolio of rupee securities and decline in yields on Government of India securities held by the Reserve Bank during the year.

d. *Foreign Exchange Forward Contracts Valuation Account (FCVA)*

Marking-to-market valuation of outstanding forward contracts as on June 30, 2020 resulted in a net unrealised loss of ₹59.25 billion, which was debited to the FCVA with contra credit to PFCVA. As per the extant policy, the debit balance of ₹59.25 billion in FCVA was adjusted against the CF on June 30, 2020 and reversed on the first working day of the following year. Accordingly, the balance in FCVA was NIL as against a balance of ₹13.04 billion on June 30, 2019. Also, as per the policy, the balance in the FCVA and PFCVA as on the first working day of the following year is reversed on the maturity of the contracts.

iii. Provision for Forward Contracts Valuation Account (PFCVA)

Marked-to-market net loss on outstanding forward contracts was credited to PFCVA as explained above. The balance in PFCVA as on June 30, 2020 was ₹59.25 billion, as against NIL balance on June 30, 2019.

The balances in Revaluation Accounts and PFCVA for the last five years is given in Table XII.3.

Table XII.3: Balances in CGRA, FCVA, PFCVA, IRA-FS and IRA-RS

(₹ billion)

As on June 30	CGRA	FCVA	PFCVA	IRA-FS	IRA-RS
1	2	3	4	5	6
2016	6,374.78	0.00	14.69	132.66	391.46
2017	5,299.45	0.00	29.63	0.00	570.90
2018	6,916.41	32.62	0.00	0.00	132.85
2019	6,644.80	13.04	0.00	157.35	494.76
2020	9,771.41	0.00	59.25	538.34	934.15

iv. Provision for Payables

This represents the year end provisions made for expenditure incurred but not defrayed and income received in advance/ payable, if any. The balance under this head increased by 13.99 per cent from ₹22.81 billion as on June 30, 2019 to ₹26 billion as on June 30, 2020.

v. Surplus Payable to the Central Government

Under Section 47 of the RBI Act, 1934 after making provisions for bad and doubtful debts, depreciation in assets, contribution to staff and superannuation funds 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 Reserve Bank is not liable to pay income tax or super tax on any of its income, profits or gains. Accordingly, after adjusting the expenditure, provision for CF and contribution of ₹0.04 billion to four statutory funds, the surplus payable to the central government for the year 2019-20 amounted to ₹571.28 billion (including ₹6.32 billion as against ₹7.16 billion in the previous year payable towards the difference in interest expenditure borne by the Government of India, consequent on conversion of special securities into marketable securities).

vi. 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 decreased from ₹0.08 billion as on June 30, 2019 to ₹0.02 billion as on June 30, 2020.

vii. Miscellaneous

This is a residual head representing items such as interest earned on earmarked securities, amounts payable on account of leave encashment, medical provisions for employees, global provision, *etc.* The balance under this head increased from ₹133.51 billion as on June 30, 2019 to ₹140.28 billion as on June 30, 2020.

XII.5.6 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 'Notes Issued' increased by 21.52 per cent from ₹21,687.97 billion as on June 30, 2019 to ₹26,355.75 billion as on June 30, 2020. The increase is on account of the continued efforts of Reserve Bank to supply adequate quantity of banknotes to meet the transactional needs of the public. Also, an amount of ₹107.20 billion, representing the value of Specified Bank Notes (SBNs) not paid was transferred to 'Other Liabilities and Provisions' as on June 30, 2018. In terms of Gazette Notification issued by the Government of India on May 12, 2017, the Reserve Bank has made payments to the extent of ₹0.06 billion towards exchange value of SBNs to eligible tenderers during the year ended June 30, 2020.

XII.6 ASSETS OF THE RESERVE BANK

XII.6.1 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, 2020 was ₹0.13 billion as against ₹0.09 billion as on June 30, 2019.

ii) Gold Coin and Bullion

As on June 30, 2020, the Reserve Bank holds 661.41 metric tonnes of gold as compared to 618.16 metric tonnes as on June 30, 2019. The increase is on account of addition of 43.25 metric tonnes of Gold during the year.

Of 661.41 metric tonnes, 292.30 metric tonnes as on June 30, 2020 is held as backing for notes issued and shown separately as an asset of Issue Department. The balance 369.11 metric tonnes as on June 30, 2020 as compared to 325.86 metric tonnes on June 30, 2019 is treated as an asset of Banking Department (Table XII.4). The value of gold

Table XII.4: Physical Holding of Gold

	As on June 30, 2019	As on June 30, 2020
	Volume in metric tonnes	Volume in metric tonnes
1	2	3
Gold held for backing notes issued (held in India)	292.30	292.30
Gold held as asset of Banking Department (held abroad)	325.86	369.11
Total	**618.16**	**661.41**

held as asset of Banking Department increased by 61.81 per cent from ₹882.98 billion as on June 30, 2019 to ₹1,428.75 billion as on June 30, 2020, on account of addition of 43.25 metric tonnes of gold during the year as well as rise in the international price of gold.

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 2019-20; consequently, there was no such asset in the books of the Reserve Bank as on June 30, 2020.

iv) Investments-Foreign-Banking Department (BD)

The FCA of the Reserve Bank include: (i) deposits with other central banks; (ii) deposits with the Bank for International Settlements (BIS); (iii) deposits with commercial banks overseas; (iv) investments in foreign T-Bills and securities; and (v) Special Drawing Rights (SDR) acquired from the Government of India.

The FCA is reflected under two heads in the Balance Sheet: (a) 'Investments-Foreign-BD' shown as an asset of Banking Department and (b) 'Investments-Foreign-ID' shown as an asset of Issue Department.

Investments-Foreign-ID are the FCA, eligible as per Section 33(6) of the RBI Act, 1934, used for backing of Notes Issued. The remaining of FCA constitutes 'Investments-Foreign-BD'.

The position of FCA for the last two years is given in Table XII.5.

v) Investments-Domestic-Banking Department (BD)

Investments comprise dated Government Rupee Securities, T-Bills and Special Oil Bonds. The Reserve Bank's holding of domestic securities increased by 18.40 per cent, from ₹9,898.77 billion as on June 30, 2019 to ₹11,720.27 billion as on June 30, 2020. The increase was on account of liquidity management operations conducted by way of net purchase of government securities

Table XII.5: Details of FCA

(₹ billion)

Particulars		As on June 30	
		2019	2020
1		2	3
I	Investments-Foreign –ID	20,887.65	25,216.44
II	Investments-Foreign –BD*	6,964.53	10,234.00
	Total	**27,852.18**	**35,450.44**

**: includes Shares in BIS and SWIFT and SDRs transferred from GoI valued at ₹112.11 billion as on June 30, 2020 compared to ₹103.21 billion as on June 30, 2019.*

Note:

1. *The Reserve Bank has agreed to make resources available under the IMF's New Arrangements to Borrow (NAB). Currently India's commitment under NAB stands at SDR 4.44 billion (₹462.59 billion / US$ 6.13 billion). As on June 30, 2020, investments amounting to SDR 0.22 billion (₹22.91 billion / US$0.30 billion) have been made under the NAB.*
2. *The Reserve Bank has agreed to invest up to an amount, the aggregate of which shall not exceed US$5 billion (₹377.55 billion), in the bonds issued by India Infrastructure Finance Company (UK) Limited. As on June 30, 2020, the Reserve Bank has invested US$1.86 billion (₹140.68 billion) in such bonds.*
3. *In terms of the Note Purchase Agreement 2016 entered into by the Reserve Bank with IMF, the Reserve Bank would purchase SDR denominated Notes of IMF for an amount up to the equivalent of US$10 billion (₹755.10 billion).*
4. *During the year 2013-14, the Reserve Bank and Government of India entered into a MoU for transfer of SDR holdings from Government of India to the Reserve Bank in a phased manner. As on June 30, 2020, SDR 1.05 billion (₹109.01 billion/ US$1.44 billion) were held by the Bank.*
5. *With a view to strengthening regional financial and economic cooperation, the Reserve Bank 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, 2020, Swap with Bhutan and Maldives, amounting to US$0.19 billion (₹14.28 billion) and US$0.15 billion (₹11.33 billion) respectively, is outstanding.*

amounting to ₹1,815.03 billion (face value).

A part of Investments-Domestic-BD is also earmarked for various staff funds and DEA Fund as explained in para 2.5(d). As on June 30, 2020, ₹676.09 billion (face value) was earmarked for staff funds and DEA Fund taken together.

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 Government of India and in case of state governments, the limits are fixed based on the recommendations of Advisory Committee/ Group constituted for this purpose. Loans and advances to the central government decreased from ₹265.31 billion as on June 30, 2019 to NIL as on June 30, 2020 as the central government was in surplus on that day whereas loans and advances to state governments increased from ₹26.66 billion as on June 30, 2019 to ₹46.24 billion as on June 30, 2020.

b) *Loans and advances to Commercial and Co-operative Banks; NABARD; and others*

- *Loans and advances to Commercial and Co-operative Banks:*

These include amounts outstanding against Repo under LAF, MSF and special liquidity facility to banks. The amount outstanding increased from ₹572 billion as on June 30, 2019 to ₹2,855.77 billion as on June 30, 2020 primarily due to increase in amount outstanding against Repo to banks.

- *Loans and advances to NABARD:*

The Reserve Bank can extend loans to NABARD under Section 17 (4E) of the RBI Act, 1934. The balance under this head increased from NIL as on June 30, 2019 to ₹221.23 billion as on June 30, 2020.

- *Loans and advances to others:*

The balance under this head represents loans and advances to National Housing Bank (NHB) and liquidity support provided to Primary Dealers (PDs). The balance under this head increased by 45.55 per cent from ₹67.90 billion as on June 30, 2019 to ₹98.83 billion as on June 30, 2020 primarily due to increase in loans and advances to NHB.

vii) Investment in Subsidiaries/ Associates

Total holding of the Reserve Bank in its subsidiaries/associate institutions amounted to ₹19.64 billion as on June 30, 2020 same as that in the previous year. The detail is given in Table XII.6.

viii) Other Assets

'Other Assets' comprises of fixed assets (net of depreciation), accrued income, balances held in SAA and RFCA, and miscellaneous

Table XII.6: Holdings in Subsidiaries/ Associates in 2019-20

Subsidiaries/Associates	Amount (₹ billion)	Per cent holding as on June 30, 2020
1	2	3
a) Deposit Insurance and Credit Guarantee Corporation (DICGC)	0.50	100
b) Bharatiya Reserve Bank Note Mudran (P) Ltd. (BRBNMPL)	18.00	100
c) Reserve Bank Information Technology (P) Ltd. (ReBIT)	0.50	100
d) National Centre for Financial Education (NCFE)	0.30	30
e) Indian Financial Technology & Allied Services (IFTAS)	0.34	100
Total	**19.64**	

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' decreased by 42.89 per cent from ₹643.20 billion as on June 30, 2019 as compared to ₹367.32 billion as on June 30, 2020.

a. *Swap Amortisation Account (SAA)*

In 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 balance held in this account is to be reversed on maturity of the outstanding contracts. As on June 30, 2020, there are no outstanding contracts.

b. *Revaluation of Forward Contracts Account (RFCA)*

As per the extant policy, the forward contracts are marked-to-market on a half yearly basis and the net gain is recorded in FCVA with contra entry in the RFCA. RFCA had NIL balance as on June 30, 2020 as compared to ₹13.04 billion as on June 30, 2019.

XII.6.2 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, Investments - Foreign - ID, Government of India Rupee Securities and Domestic Bills of Exchange. The Reserve Bank holds 661.41 metric tonnes of gold, of which 292.30 metric tonnes are held as backing for notes issued as on June 30, 2020 (Table XII.4). The value of gold held as backing for notes issued increased by 42.85 per cent from ₹792.04 billion as on June 30, 2019 to ₹1,131.46 billion as on June 30, 2020 on account of rise in the international price of gold. Consequent upon the increase in notes issued, Investments-Foreign-ID held as backing for notes issued increased by 20.72 per cent from ₹20,877.65 billion as on June 30, 2019 to ₹25,216.44 billion as on June 30, 2020. The balance of Rupee Coins held by the Issue Department decreased by 5.19 per cent from ₹8.28 billion as on June 30, 2019 to ₹7.85 billion as on June 30, 2020.

XII.7 FOREIGN EXCHANGE RESERVES (FER)

XII.7.1 FER comprises of FCA, Gold, SDRs and Reserve Tranche Position (RTP). The SDR (other than the amount acquired from Government of India and included under 'Investment-Foreign-BD') does not form a 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 FER as on June 30, 2019 and June 30, 2020 in Indian Rupees and the US dollar, which is the numéraire currency for our FER, is furnished in Tables XII.7 (a) and (b).

Table XII.7(a): Foreign Exchange Reserves (FER)

(₹ billion)

Components	As on June 30		Variation	
	2019	2020	Absolute	Per Cent
1	2	3	4	5
Foreign Currency Assets (FCA)	27,616.45^	35,175.14#	7,558.69	27.37
Gold	1,675.02@	2,560.21*	885.19	52.85
Special Drawing Rights (SDR)	100.36	109.23	8.87	8.84
Reserve Tranche Position (RTP) in IMF	231.69	341.12	109.43	47.23
Foreign Exchange Reserves (FER)	**29,623.52**	**38,185.70**	**8,562.18**	**28.90**

^ : *Excludes (a) SDR Holdings of the Reserve Bank amounting to ₹ 100.36 billion, which is included under the SDR holdings, (b) Investment of ₹ 128.39 billion in bonds issued by IIFC (UK), and (c) ₹ 6.98 billion lent to Bhutan under a Currency Swap arrangement made available for SAARC countries.*

#: *Excludes (a) SDR Holdings of the Reserve Bank amounting to ₹ 109.01 billion, which is included under the SDR holdings, (b) Investment of ₹ 140.68 billion in bonds issued by IIFC (UK), and (c) ₹ 14.28 billion lent to Bhutan and ₹ 11.33 billion lent to Maldives under a Currency Swap arrangement made available for SAARC countries.*

@: *Of this, Gold valued at ₹ 792.04 billion is held as an asset of Issue Department and Gold valued at ₹ 882.98 billion is held under asset of Banking Department.*

* : *Of this, Gold valued at ₹ 1,131.46 billion is held as an asset of Issue Department and Gold valued at ₹ 1,428.75 billion is held under asset of Banking Department.*

Table XII.7(b): Foreign Exchange Reserves (FER)

(US$ billion)

Components	As on June 30		Variation	
	2019	2020	Absolute	Per Cent
1	2	3	4	5
Foreign Currency Assets (FCA)	400.71*	465.83**	65.12	16.25
Gold	24.30	33.90	9.60	39.51
Special Drawing Rights (SDR)	1.46	1.45	(-) 0.01	(-) 0.68
Reserve Tranche Position (RTP) in IMF	3.36	4.52	1.16	34.52
Foreign Exchange Reserves (FER)	**429.83**	**505.70**	**75.87**	**17.65**

* : *Excludes (a) SDR Holdings of the Reserve Bank amounting to US$ 1.46 billion, which is included under the SDR holdings, (b) US$ 1.86 billion invested in bonds of IIFC (UK) and (c) BTN equivalent to US$ 0.1 billion equivalent of INR currency lent to Bhutan under a Currency Swap arrangement made available for SAARC countries.*

**: *Excludes (a) SDR Holdings of the Reserve Bank amounting to US$ 1.44 billion, which is included under the SDR holdings, (b) US$ 1.86 billion invested in bonds of IIFC (UK) and (c) BTN equivalent to US$ 0.19 billion equivalent of INR currency lent to Bhutan and US$ 0.15 billion lent to Maldives under a Currency Swap arrangement made available for SAARC countries.*

ANALYSIS OF INCOME AND EXPENDITURE

XII.8 INCOME

XII.8.1 The components of the Reserve Bank's income are 'Interest Receipts', which forms the major portion and 'Other Income' including (i) Discount; (ii) Exchange; (iii) Commission; (iv) Amortisation of Premium/ Discount on Foreign and Rupee Securities; (v) Profit/ Loss on Sale and Redemption of Foreign and Rupee Securities; (vi) Depreciation on Rupee Securities inter portfolio transfer; (vii) Rent Realised; (viii) Profit or loss on sale of Bank's property; and (ix) Provisions no longer required and Miscellaneous Income. Certain items of income such as interest on LAF repo, Repo in foreign security and exchange gain/

loss from foreign exchange transactions are reported on net basis.

Earnings from Foreign Sources

XII.8.2 The income from foreign sources, increased by 9.88 per cent from ₹749.58 billion in 2018-19 to ₹823.66 billion in 2019-20 on account of increase in the level of FCA, movement in the exchange rates and a general rise in yield/ interest rates across all currencies in the first half of the year. The rate of earnings on foreign currency assets was at 2.65 per cent in 2019-20 as compared with 2.79 per cent in 2018-19 (Table XII.8).

Earnings from Domestic Sources

XII.8.3 The income from domestic sources amounted to ₹673.06 billion in 2019-20 as compared to ₹1,180.78 billion in 2018-19. The previous year's income included a write back of excess provision in CF amounting to ₹526.37 billion. A comparison excluding the same from previous year's income, shows a marginal increase in the income for 2019-20 (Table XII.9). The current year's income has also been impacted by the net interest outgo on interest under LAF/ MSF due to absorption of surplus liquidity in the banking system.

XII.8.4 *Interest on holding of Rupee Securities and oil bonds* increased by 20.50 per cent from ₹583.43 billion in 2018-19 to ₹703.04 billion in 2019-20 on account of increase in the Reserve Bank's holding of government securities as a result of net purchase of ₹1,815.03 billion (face value) in 2019-20.

XII.8.5 *The net interest income from LAF/MSF operations* decreased from ₹11.81 billion in 2018-19 to ₹(-)129.04 billion in 2019-20 due to absorption of surplus liquidity in the banking system leading to net interest outgo under LAF/ MSF. The higher banking system surplus was due to pro-active liquidity management operations carried out by the Reserve Bank to augment system-level liquidity and to channelise liquidity to specific sectors facing funding constraints on account of disruptions caused due to COVID-19 pandemic.

XII.8.6 *Profit on sale and redemption of Rupee Securities* increased from ₹0.40 billion in 2018-19 to ₹12.52 billion in 2019-20 primarily on account of higher sale operations amounting to ₹421.11 billion (face value) in 2019-20 as compared to ₹0.60 billion (face value) in 2018-19.

XII.8.7 *Premium/Discount on amortisation of Rupee Securities and Oil Bonds:* The rupee securities and oil bonds, held by the Reserve Bank are amortised on daily basis during the period of residual maturity and the premium/ discount is booked in the income head. The net income from premium/discount on amortisation of domestic securities decreased by 21.63 per cent

Table XII.8: Earnings from Foreign Sources

(₹ billion)

Item			Variation	
	2018-19	2019-20	Absolute	Per Cent
1	2	3	4	5
Foreign Currency Assets (FCA)	27,852.18	35,450.44	7,598.26	27.28
Average FCA	26,896.92	31,103.66	4,206.74	15.64
Earnings from FCA (interest, discount, exchange gain/loss, capital gain/loss on securities)	749.58	823.66	74.08	9.88
Earnings from FCA as per cent of average FCA	2.79	2.65	-0.14	-5.02

Table XII.9: Earnings from Domestic Sources

(₹ billion)

Item	2018-19	2019-20	Variation	
			Absolute	Per cent
1	2	3	4	5
Earnings (I+II+III+IV)	**1,180.78**	**673.06**	**-507.72**	**-43.00**
I. Earnings from Rupee Securities and Discounted Instruments				
i) Interest on holding of Rupee Securities and Oil Bonds	583.43	703.04	119.61	20.50
ii) Profit on Sale and Redemption of Rupee Securities	0.40	12.52	12.12	3,030.00
iii) Depreciation on Rupee Securities inter Portfolio Transfer	-0.27	-0.09	0.18	66.67
iv) Amortisation of Premium/Discount on Rupee Securities and Oil Bonds	21.45	16.81	-4.64	-21.63
v) Discount	0.00	7.35	7.35	-
Sub total (i+ii+iii+iv+v)	**605.01**	**739.63**	**134.62**	**22.25**
II. Interest on LAF/MSF				
i) Net Interest on LAF Operations	10.46	-130.53	-140.99	-1,347.90
ii) Interest on MSF Operations	1.35	1.49	0.14	10.37
Sub total (i+ii)	**11.81**	**-129.04**	**-140.85**	**-1,192.63**
III. Interest on Other Loans and Advances				
i) Government (Central & States)	12.85	23.14	10.29	80.08
ii) Banks & Financial Institutions	1.47	11.75	10.28	699.32
iii) Employees	0.66	0.68	0.02	3.03
Sub total (i+ii+iii)	**14.98**	**35.57**	**20.59**	**137.45**
IV. Other Earnings				
i) Exchange	0.00	0.00	0.00	0.00
ii) Commission	22.72	24.31	1.59	7.00
iii) Rent Realised, Profit or Loss on Sale of Bank's Property, Provisions No Longer Required and Miscellaneous	526.26	2.59	-523.67	-99.51
Sub total (i+ii+iii)	**548.98**	**26.90**	**-522.08**	**-95.10**

from ₹21.45 billion during 2018-19 to ₹16.81 billion for 2019-20.

XII.8.8 *Discount-Domestic:* During the year 2019-20, the Reserve Bank earned ₹7.35 billion on holding of discounted instruments [T-Bills and Cash Management Bills (CMBs)]. The Reserve Bank did not hold any discounted instruments during 2018-19.

XII.8.9 *Interest on loans and advances*

a. *Central and State Government:*

Interest income on Ways and Means Advances (WMA)/Overdraft (OD) extended to central and state governments increased by 80.08 per cent from ₹12.85 billion during 2018-19 to ₹23.14 billion in 2019-20. Of the total, interest income received from the Centre on account of WMA/OD increased by 100.09 per cent from ₹10.65 billion in 2018-19 to ₹21.31 billion in 2019-20 and interest income received from the states on account of WMA/OD/Special Drawing Facility (SDF) decreased by 16.82 per cent from ₹2.20 billion in 2018-19 to ₹1.83 billion in 2019-20. The net increased earning was on account of higher utilisation of WMA/OD facility by central government in 2019-20.

b. *Banks & Financial Institutions*: Interest on loans and advances to banks and financial institutions increased by 699.32 per cent from ₹1.47 billion in 2018-19 to ₹11.75 billion in 2019-20.

c. *Employees*: Interest on loans and advances to employees increased by 3.03 per cent from ₹0.66 billion in 2018-19 to ₹0.68 billion in 2019-20.

XII.8.10 *Commission:* The commission income increased by 7.00 per cent from ₹22.72 billion in 2018-19 to ₹24.31 billion in 2019-20 primarily on account of increase in management commission received for servicing outstanding central and state governments loan including savings bonds, government securities, T-Bills and CMBs.

XII.8.11 *Rent Realised, Profit or Loss on Sale of Bank's Property, Provisions No Longer Required and Miscellaneous Income:* Earnings from these income heads decreased from ₹526.26 billion in 2018-19 to ₹2.59 billion in 2019-20. The income was higher in 2018-19 due to write back of excess risk provision from CF to 'Provision No Longer Required' in the previous year.

XII.9 EXPENDITURE

XII.9.1 The Reserve Bank incurs expenditure in the course of performing its statutory functions by way of agency charges/ commission, printing of notes, expenditure on remittance of currency besides staff related and other expenses. The total expenditure of the Bank increased from ₹170.45 billion in 2018-19 to ₹925.40 billion in 2019-20 (Table XII.10), primarily on account of (a) risk provision towards CF amounting to ₹736.15 billion, and (b) increase in employee cost primarily on account of actuarial valuation.

Table XII.10: Expenditure

(₹ billion)

Item	2015-16	2016-17	2017-18	2018-19	2019-20
1	2	3	4	5	6
i. Interest Payment	0.01	0.01	0.01	0.01	0.01
ii. Employee Cost	44.77	46.21	38.48	68.51	89.28
iii. Agency Charges/ Commission	47.56	40.52	39.03	39.10	38.76
iv. Printing of Notes	34.21	79.65	49.12	48.11	43.78
v. Provisions	10.00	131.90	141.90	0.64	736.15
vi. Others	13.35	13.26	14.23	14.08	17.42
Total (i+ii+iii+iv+v+vi)	**149.90**	**311.55**	**282.77**	**170.45**	**925.40**

i) Interest payment

During 2019-20, an amount of ₹0.01 billion was paid as interest to Dr. B.R. Ambedkar Fund (set up for giving scholarship to wards of staff) and Employees Benevolent Fund.

ii) Employee cost

The total employee cost for the year 2019-20 increased by 30.32 per cent from ₹68.51 billion in 2018-19 to ₹89.28 billion in 2019-20. The increase was due to net impact of increase in the Reserve Bank's expenditure towards accrued liabilities of various superannuation funds in 2019-20.

iii) Agency Charges/Commission

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 receipts and payments. The Reserve Bank pays commission to these agency banks at prescribed rates. These rates were revised with effect from July

1, 2019. The agency commission paid on account of government business decreased marginally by 0.76 per cent from ₹38.17 billion in 2018-19 to ₹37.88 billion in 2019-20. The marginal decrease of ₹0.29 billion is due to the dual impact of increased transaction processing by the Reserve Bank through *e-Kuber* integration as well as possible decrease in underlying government transactions on account of COVID-19 pandemic related situation.

b. *Underwriting Commission paid to Primary Dealers*

The Reserve Bank of India paid total underwriting commission of ₹0.61 billion to Primary Dealers during 2019-20 as compared to ₹0.74 billion during 2018-19. The period July 2019-June 2020 witnessed an increased G-sec borrowing program and uncertainty caused by COVID-19 pandemic during the last quarter. However, a possible spike in yields due to these events was adequately negated by a combination of factors throughout the year. During the first two quarters, economic conditions were fairly stable with reduced volatility. Reduction in the policy repo rate and market interventions by the Reserve Bank ensured availability of adequate liquidity in the system. On the international front too, crude prices were fairly steady and trade disputes between major economies were diminished. During the last quarter, measures undertaken by the Reserve Bank such as policy rate cuts and timely intervention to ensure sufficient liquidity in the system by means of Open Market Operations (OMOs), Long Term Repo Operations (LTRO) and Targeted LTRO (TLTRO) resulted in considerable softening of yields across the yield curve. This was further aided by global factors like substantial drop in crude oil prices and a similar accommodative stance exhibited by central banks across the globe. Further, the announcement of various economy boosting measures by the Government of India and the Reserve Bank contributed to a positive outlook in the market. Hence, throughout the year, the domestic debt market conditions were stable, leading to a reduced possibility of devolvement resulting in the PDs demanding for a lesser commission to underwrite the securities in comparison with the previous year.

c. *Sundries*

This includes the expenses incurred on handling charges, turnover commission paid to banks for Relief/ Savings Bonds subscriptions and Commission paid on Securities Borrowing and Lending Arrangement (SBLA), *etc.* The commission paid under this head increased from ₹0.02 billion in 2018-19 to ₹0.06 billion in 2019-20.

d. *Fees paid to the External Asset Managers, Custodians, etc*.

Fees paid for custodial services increased from ₹0.17 billion in 2018-19 to ₹0.21 billion in 2019-20.

iv) Printing of Notes

The supply of notes during the year 2019-20 at 22,388 million pieces (mpcs) was 23.31 per cent lower than that of the year 2018-19 (29,191 mpcs). Therefore, the expenditure incurred on printing of banknotes decreased by 9.00 per cent from ₹48.11 billion in the year 2018-19 to ₹43.78 billion during the year 2019-20.

v) Provisions

In 2019-20, a provision of ₹736.15 billion was made towards CF.

vi) Others

Other expenses consisting of expenditure on remittance of currency, printing and stationery, audit fees and related expenses, miscellaneous expenses, *etc.* increased by 23.72 per cent from ₹14.08 billion in 2018-19 to ₹17.42 billion in 2019-20.

XII.10 CONTINGENT LIABILITIES

XII.10.1 Total contingent liabilities of the Reserve Bank amounted to ₹11.68 billion. The main component of it being partly paid shares, denominated in SDR, of the BIS held by the Reserve Bank. The uncalled liability on partly paid shares of the BIS as on June 30, 2020 was ₹9.30 billion. The balances are callable at three months' notice by a decision of the BIS Board of Directors.

XII.11 PRIOR PERIOD TRANSACTIONS

XII.11.1 For the purpose of disclosure, prior period transactions of ₹0.01 million and above only have been considered. The prior period transactions under expenditure and income amounted to ₹(-) 0.01 billion and ₹0.36 billion, respectively.

XII.12 PREVIOUS YEAR'S FIGURES

XII.12.1 Figures for the previous year have been rearranged, wherever necessary, to make them comparable with the current year.

XII.13 AUDITORS

XII.13.1 The statutory auditors of the Reserve 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 2019-20 were audited by M/s Prakash Chandra Jain & Co., Mumbai and M/s Haribhakti & Co., LLP, Mumbai, as the Statutory Central Auditors and M/s Kothari & Co., Kolkata, M/s Suri & Co., Chennai and M/s Bansal & Co. LLP, New Delhi as Statutory Branch Auditors.

ANNEX I

CHRONOLOGY OF MAJOR POLICY ANNOUNCEMENTS: JULY 2019 TO JUNE 2020[1]

Date of Announcement	Policy Initiative
Monetary Policy Department	
August 7, 2019	The policy repo rate was reduced by 35 bps to 5.40 per cent.
October 4, 2019	The policy repo rate was reduced by 25 bps to 5.15 per cent.
February 6, 2020	Cash reserve ratio (CRR) exemption to scheduled commercial banks (SCBs) for a period of 5 years (from the date of origination of the loan or the tenure of the loan, whichever is earlier) for the amount equivalent to the incremental credit extended as retail loans for automobiles, residential housing and loans to micro, small and medium enterprises (MSMEs) during January 31, 2020 and July 31, 2020.
March 27, 2020	• The policy repo rate was reduced by 75 bps to 4.4 per cent. The reverse repo rate was reduced by 90 bps to 4.0 per cent creating an asymmetrical corridor[2]. • CRR reduced[3] by 100 bps to 3.0 per cent of NDTL effective March 28, 2020 for a period of one year ending on March 26, 2021. • Effective March 28, 2020, requirement of minimum daily CRR balance maintenance reduced from 90 per cent to 80 per cent of the prescribed CRR. This dispensation, initially available up to June 26, was further extended up to September 25, 2020[4]. • Increase in marginal standing facility (MSF) borrowing from 2 per cent of statutory liquidity ratio (SLR) to 3 per cent effective March 28, 2020. This measure was initially available up to June 30, 2020 and later extended up to September 30, 2020.
April 17, 2020	• The reverse repo rate was reduced by 25 bps to 3.75 per cent. • Special refinance facilities for a total amount of ₹50,000 crore were provided to NABARD, SIDBI and NHB to enable them to meet sectoral credit needs[5].
May 22, 2020	• The policy repo rate was reduced by 40 bps to 4.0 per cent. • The reverse repo rate was reduced by 40 bps to 3.35 per cent. • A line of credit of ₹15,000 crore was extended to EXIM bank for a period of 90 days from the date of availment with rollover up to a maximum period of one year to enable it to avail a US dollar swap facility to meet its foreign exchange requirements.

[1] The list is indicative in nature and details are available on the Reserve Bank's website.

[2] The purpose of this measure relating to reverse repo rate is to make it relatively unattractive for banks to passively deposit funds with the Reserve Bank and instead, to use these funds for on-lending to productive sectors of the economy.

[3] This reduction in the CRR released primary liquidity of about ₹1,37,000 crore uniformly across the banking system in proportion to liabilities of constituents rather than in relation to holdings of excess SLR.

[4] This measure was announced taking cognisance of hardships faced by banks in terms of social distancing of staff and consequent strains on reporting requirements.

[5] This comprised ₹25,000 crore to NABARD for refinancing regional rural banks (RRBs), cooperative banks and micro finance institutions (MFIs); ₹15,000 crore to SIDBI for on-lending/refinancing; and ₹10,000 crore to NHB for supporting housing finance companies (HFCs). Advances under this facility were provided at the Reserve Bank's policy repo rate.

Date of Announcement	Policy Initiative
Financial Inclusion and Development Department	
August 1, 2019	Master Direction on priority sector lending was issued for small finance banks (SFBs).
August 13, 2019	Lending by banks to NBFCs (other than MFIs) for 'on-lending' under specific categories was made eligible for classification under priority sector lending up to the limits prescribed.
September 20, 2019	The sanctioned limits towards export credit for domestic SCBs were enhanced to boost credit to export sector.
October 7, 2019	With a view to expanding and deepening the digital payments ecosystem, State/UT Level Bankers' Committee Convenor banks were advised to identify one district in their respective States/UTs to make the district 100 per cent digitally enabled within one year.
February 5, 2020	Modification in operational guidelines on interest subvention scheme (ISS) for MSMEs was issued.
March 31, 2020	Circular on short-term crop loans eligible for ISS and prompt repayment incentive (PRI) extending timeline till June 30, 2020 in view of the COVID-19 pandemic, for converting all short-term crop loans into KCC loans.
June 4, 2020	Circular on ISS and PRI for short-term crop loans during the years 2018-19 and 2019-20 extending moratorium period till August 31, 2020 in view of the COVID-19 pandemic.
Financial Markets Regulation Department	
November 28, 2019	Units of debt exchange traded fund (ETF) were permitted as eligible security for repo.
January 1, 2020	• Client transactions in currency derivatives above a threshold of USD 1 million were mandated to be reported to the trade repository. With effect from January 6, 2020, all client transactions in currency derivatives have been mandated to be reported to the trade repository. • Six benchmarks administered by Financial Benchmarks India Private Limited (FBIL) were notified by the Reserve Bank as 'significant benchmarks' under the Financial Benchmark Administrators (Reserve Bank) Directions, 2019, dated June 26, 2019.
January 6, 2020	Authorised Dealers (AD) Category-I banks were permitted to voluntarily undertake client and inter-bank transactions beyond onshore market hours.
January 20, 2020	Rupee derivatives with settlement in foreign currency were allowed to be traded in international financial services centres (IFSCs), starting with exchange traded currency derivatives (ETCD).
January 23, 2020	• The short-term investment limit for Foreign Portfolio Investors (FPIs) in both corporate bonds and government securities were revised to 30 per cent from the existing 20 per cent. Also, debt instruments issued by asset reconstruction companies and by an entity under the corporate insolvency resolution process under the Insolvency and Bankruptcy Code, 2016 were exempted from the short-term investment limit. • Investment cap for FPIs under voluntary retention route (VRR) scheme was increased to ₹1,50,000 crore from the existing ₹75,000 crore. FPIs under the VRR scheme were also permitted to transfer their investments made under the general investment limit to VRR. Exchange traded funds that invest only in debt instruments were allowed under VRR.
March 27, 2020	• AD Category-I banks in India which operate international financial services centre (IFSC) banking units (BUs) were permitted to offer non-deliverable derivative contracts involving the rupee, or otherwise, to persons not resident in India, with effect from June 1, 2020.

Date of Announcement	Policy Initiative
	• The timeline for implementation of legal entity identifier (LEI) in non-derivative markets was extended till September 30, 2020, in view of the challenges posed by the outbreak of the COVID-19 pandemic.
March 30, 2020	A separate route, *viz*., fully accessible route (FAR) for investment by non-residents in specified securities issued by the Government of India (GoI) was introduced.
April 3, 2020 followed by April 16 and April 30, 2020	The trading hours for various markets under the Reserve Bank's regulation were revised to ensure that market participants maintain adequate checks and controls while optimising their resources and ensuring safety of personnel amid COVID-19 pandemic.
April 7, 2020	The existing facilities for non-residents and residents to hedge foreign exchange risk have been reviewed to ease access to the domestic foreign exchange market, ensure protection for the retail customer and promote innovation for the sophisticated customers.
April 15, 2020	The investment limits for the FPIs in debt securities under medium term framework (MTF) for the financial year 2020-21 were announced.
May 18, 2020	• All non-deliverable derivative contracts involving the rupee, or otherwise, were mandated to be reported to the trade repository. All IFSC Banking Units were mandated to report all OTC foreign exchange, interest rate and credit derivative transactions (both inter-bank and client transactions) undertaken by them to the trade repository with effect from June 1, 2020. • The implementation date for the directions on hedging of foreign exchange risk (dated April 7, 2020) was deferred to September 1, 2020 from June 1, 2020 in view of the difficulties arising from the outbreak of COVID-19.
May 22, 2020	FPIs that were allotted investment limits under the VRR scheme between January 24, 2020 and April 30, 2020 were allowed an additional time of three months to invest 75 per cent of their committed portfolio size (CPS) in view of the COVID-19 pandemic.
Financial Markets Operations Department	
December 13, 2019	In order to facilitate smooth settlement of NEFT transactions in a 24x7 environment, an additional collateralised intra-day liquidity facility called liquidity support (LS) was provided to member banks.
December 19, 2019	The Reserve Bank announced conducting simultaneous purchase of long-term and sale of short-term government securities under open market operations (OMOs). The first such auction was conducted on December 23, 2019.
February 6, 2020	• The Reserve Bank revised its liquidity management framework based on the report of the Internal Working Group set up to review the liquidity management framework and comments/feedback received from stakeholders and members of the public. • The Reserve Bank augmented its liquidity management toolkit by announcing the long-term repo operations (LTROs) at fixed rate with a view to assuring banks about the availability of durable liquidity and facilitate the transmission of monetary policy actions and flow of credit to the economy. The first such LTRO was conducted on February 17, 2020.
March 12, 2020	The Reserve Bank announced to undertake 6-month US Dollar sell/buy swap auctions to provide US Dollar liquidity to the foreign exchange market. The first such auction was conducted on March 16, 2020[6].

[6] This measure was announced as financial markets worldwide were facing intense selling pressures on extreme risk aversion due to the spread of COVID-19 infections.

Date of Announcement	Policy Initiative
March 27, 2020	The Reserve Bank announced conducting targeted long-term repo operations (TLTROs) at a floating rate linked to the policy repo rate. Liquidity availed under the scheme by banks had to be deployed in investment grade corporate bonds, commercial paper, and non-convertible debentures. The first such TLTRO auction was conducted on March 27, 2020.
March 30, 2020	Taking into account the impact of disruptions caused by COVID-19, it was decided to extend the window timings of fixed rate reverse repo and MSF operations as an interim measure so as to provide eligible market participants with greater flexibility in their liquidity management.
April 17, 2020	The Reserve Bank announced conducting targeted long-term repo operations (TLTROs) 2.0 at the policy repo rate. Liquidity availed under the scheme by banks is to be deployed in investment grade corporate bonds, commercial paper, and non-convertible debentures with at least 50 per cent of the total amount availed going to small and mid-sized NBFCs and MFIs. Investments made under this facility would be classified as held to maturity (HTM) even in excess of 25 per cent of total investment permitted to be included in the HTM portfolio. Exposures under this facility would also not be reckoned under the large exposure framework (LEF). The first such TLTRO 2.0 auction was conducted on April 23, 2020.
April 27, 2020	In order to ease the liquidity pressure on mutual funds, it was decided to open a special liquidity facility for mutual funds (SLF-MF). Liquidity availed under the scheme by banks is to be deployed exclusively for meeting needs of mutual funds. Liquidity availed under the facility would be classified as HTM even in excess of 25 per cent of total investment permitted to be included in the HTM portfolio. Exposures under this facility would also not be reckoned under the LEF. The first such SLF-MF auction was conducted on April 27, 2020.
April 30, 2020	It was decided to extend regulatory benefits announced under the SLF-MF scheme to all banks, irrespective of whether they avail funding from the Reserve Bank or deploy their own resources to meet liquidity requirements of mutual funds.
Foreign Exchange Department	
July 30, 2019	In consultation with the Government of India (GoI), the Reserve Bank relaxed the end-use restrictions on external commercial borrowing (ECB) proceeds, with a view to further liberalise the ECB framework.
August 16, 2019	In order to bring in consistency in statutory provisions/regulations relating to commercial papers (CPs), sub-regulation (3) of Regulation 6 of FEMA 5(R)/2016-RB was deleted *vide* GoI Notification No. FEMA 5(R)(2)/2019-RB dated July 16, 2019.
October 17, 2019	Consequent to the notification of Foreign Exchange Management (Non-Debt Instrument) Rules, 2019 by GoI, the Reserve Bank issued “Foreign Exchange Management (Mode of Payment and Reporting of Non-Debt Instruments) Regulations, 2019” relating to mode of payment and reporting requirements for investment in India by a person resident outside India.
November 22, 2019	• With a view to promote the usage of INR products by persons resident outside India, the scope of special non-resident rupee accounts (SNRR) was expanded, in consultation with the GoI. • The guidelines on re-export of unsold rough diamonds from special notified zone of customs were modified. As per the revised instructions, bill of entry shall be filed by the buyer for the lot(s) of imported rough diamonds meant to be traded by diamond mining companies and these are to be cleared at the centre(s), which are duly notified under Customs Act, 1962.

Date of Announcement	Policy Initiative
December 9, 2019	In order to smoothen the process of obtaining permission of the Reserve Bank for re-exporting of leased aircraft/helicopter and/or engines/auxiliary power units (APUs) re-possessed by the overseas lessor, they were exempted from submission of export declaration form (EDF).
January 23, 2020	With a view to further facilitate merchanting trade transactions (MTT), the existing guidelines on MTT were reviewed.
March 17, 2020	Japanese Yen was permitted as currency of settlement under Asian Clearing Union (ACU) mechanism. The Foreign Exchange Management (Manner of Receipt and Payment) Regulations, 2016 were amended accordingly.
April 1, 2020	Consequent to the COVID-19 pandemic, it was decided, in consultation with GoI, to increase the present period of realisation and repatriation to India of the amount representing the full export value of goods or software or services exported, from nine months to fifteen months from the date of export, for the exports made up to or on July 31, 2020.
April 3, 2020	It was decided, in consultation with the GoI, to permit receipt of foreign inward remittances from non-residents through the overseas exchange houses in favour of the 'Prime Minister's Citizen Assistance and Relief in Emergency Situations (PM-CARES) Fund', subject to the condition that AD Category-I banks shall directly credit the remittances to the 'PM-CARES Fund' and maintain the full details of the non-residents sending the donations/contributions under rupee drawing arrangement (RDA).
May 22, 2020	In view of the disruptions due to the COVID-19 pandemic, the time period for completion of remittances against normal imports, *i.e.*, excluding import of gold/diamonds and precious stones/jewellery, (except in cases where amounts are withheld towards guarantee of performance, *etc.*) was extended from six months to twelve months from the date of shipment for such imports made on or before July 31, 2020.
Department of Regulation: Commercial Banks	
July 5, 2019	Banks were permitted to reckon the increase in facility to avail liquidity for liquidity coverage ratio (FALLCR) of 1.0 per cent of the bank's NDTL as Level 1 high quality liquid assets (HQLA) for computing liquidity coverage ratio (LCR) [0.50 per cent each on August 1 and December 1, 2019], to the extent of incremental outstanding credit to NBFCs and Housing Finance Companies (HFCs) over and above the amount of credit to NBFCs/HFCs outstanding on their books as on July 5, 2019.
August 2, 2019	• Banks were instructed that they shall not charge foreclosure charges/pre-payment penalties on any floating rate term loan sanctioned, for purposes other than business, to individual borrowers with or without co-obligant(s). • Revised guidelines on 'fit and proper' criteria for shareholder directors in the public sector banks (PSBs) were issued thereby aligning them with the eligibility requirements applicable for other directors.
August 7, 2019	The bank rate was revised downwards by 35 bps from 6.00 per cent to 5.65 per cent with effect from August 7, 2019. Accordingly, all penal interest rates on shortfall in reserve requirements, which are specifically linked to the bank rate, also stand revised as bank rate plus 3.0 percentage points (8.65 per cent) or bank rate plus 5.0 percentage points (10.65 per cent), depending on the duration of the shortfalls.

Date of Announcement	Policy Initiative
August 9, 2019	Consequent to GoI notifying amendment to the Prevention of Money-laundering (Maintenance of Records) Rules, 2005 on May 28, 2019, Master Direction was amended to the effect that, where the individual is a prisoner in a jail, the signature or thumb print shall be affixed in presence of the officer in-charge of the jail and the said officer shall certify the same under his signature and the account shall remain operational on annual submission of certificate of proof of address issued by the officer in-charge of the jail.
August 13, 2019	The Reserve Bank of India placed on its website the final 'Enabling Framework for Regulatory Sandbox', after taking into consideration comments/feedback from various stakeholders including FinTech entities, banks, multilateral agencies, industry associations, payment aggregators, audit and legal firms, government departments and individuals on various aspects of the framework.
August 16, 2019	Two changes were brought in the Gold Monetisation Scheme, 2015 - (i) Banks may identify at least one branch in a State/Union Territory where they have presence to accept the deposits under the Scheme and (ii) all designated banks shall give adequate publicity to the scheme through their branches, websites and other channels.
September 4, 2019	Based on the recommendations of an internal study group constituted to examine various aspects of the marginal cost of funds-based lending rate (MCLR) system, banks were mandated to link all new floating rate personal or retail loans (housing, automobile, *etc.*) and floating rate loans to micro and small enterprises to an external benchmark from October 1, 2019, like Reserve Bank's policy repo rate, GoI three/six months' treasury bill yield published by the Financial Benchmarks India Private Limited (FBIL) or any other benchmark market interest rate published by the FBIL.
September 12, 2019	• The risk weight for consumer credit, including personal loans, but excluding credit card receivables was reduced to 100 per cent. Earlier, consumer credit, including personal loans and credit card receivables but excluding educational loans, attracted a higher risk weight of 125 per cent or higher, if warranted by the external rating of the counterparty. • The exposure limit of banks to a single NBFC (excluding gold loan companies) was harmonised with the general single counterparty limit under the LEF by increasing the limit on exposure to a single NBFC from 15 per cent to 20 per cent of bank's eligible capital base. Bank finance to NBFCs predominantly engaged in lending against gold will continue to be governed by the limits prescribed earlier.
October 4, 2019	The bank rate was revised downwards by 25 bps from 5.65 per cent to 5.40 per cent.
October 14, 2019	Banks were permitted to lend to Infrastructure Investment Trusts (InvITs) subject to certain safeguards which include a Board approved policy on exposures to InvITs, assessment of all critical parameters including sufficiency of cash flows at InvIT level, overall leverage of the InvITs and the underlying special purpose vehicles (SPVs) to be within the leverage permitted under the Board approved policy, monitoring of performance of the underlying SPVs on an ongoing basis and lending to only those InvITs where none of the underlying SPVs are facing financial difficulty.
November 1, 2019	RRBs were allowed to issue perpetual debt instruments (PDIs) eligible for inclusion as Tier-I capital with the prescription of terms and conditions for their issue.
November 4, 2019	• Opening of the first cohort under the regulatory sandbox (RS), with retail payments as the theme and a window for submission of application were announced. The innovative products/services which, among others, shall be considered for inclusion under RS are: mobile payments including feature phone-based payment services, offline payment solutions and contactless payments.

Date of Announcement	Policy Initiative
	• Revised final guidelines on compensation of whole time directors/chief executive officers/material risk takers and control function staff for private sector banks were issued with salient features like inclusion of share-linked instrument such as employee stock ownership plans (ESOPs) as a component of variable pay and imposition of malus for divergence in NPA/provisioning. The revised guidelines were issued to better align with Financial Stability Board (FSB) guidelines on compensation practices. This was made applicable for pay cycles beginning from/after April 1, 2020.
November 18, 2019	Banks were advised that on a voluntarily winding up application by Aditya Birla Idea Payments Bank Limited, the Hon'ble Bombay High Court passed an order on September 18, 2019 for liquidation and a liquidator was appointed.
November 28, 2019	Vijaya Bank and Dena Bank were excluded from the Second Schedule to the Reserve Bank of India Act, 1934 with effect from April 1, 2019 since, after amalgamation with Bank of Baroda, they ceased to carry on banking business.
December 5, 2019	The Reserve Bank released on its website, "Guidelines for 'on tap' licensing of small finance banks (SFBs) in the private sector with some important features like minimum paid-up voting equity capital/ net worth requirement of ₹200 crore, considering voluntary transition of primary (Urban) co-operative banks (UCBs) into SFBs with initial requirement of net worth of ₹100 crore and giving scheduled bank status to SFBs immediately upon commencement of operations.
December 23, 2019	IFSC Banking Units (IBUs) were permitted to open current accounts (including escrow accounts) for their corporate borrowers subject to provisions of FEMA, 1999 to accept fixed deposits in foreign currency of tenor less than one year from non-bank entities and also repay fixed deposits prematurely without any time restrictions.
January 9, 2020	Master Direction on know your customer (KYC) was updated to align it with the amendments brought in the prevention of money laundering (PML) Rules by the GoI *vide* Gazette Notifications issued on August 19, 2019 and November 13, 2019. Video based customer identification process (V-CIP) was also introduced by the Reserve Bank as a consent based alternate method of establishing the customer's identity, for customer on-boarding.
January 21, 2020	IFSC Banking Units (IBUs) were permitted to participate in exchange traded currency derivatives on rupee (with settlement in foreign currency) listed on stock exchanges set up at IFSCs.
February 6, 2020	RRBs were allowed to act as merchant acquiring banks using *Aadhaar* Pay – BHIM app and point of sale (POS) terminals subject to certain conditions.
February 7, 2020	Project loans in commercial real estate (CRE) sector were permitted to be restructured, without a downgrade in the asset classification, by way of revision of date of commencement of commercial operation (DCCO) up to one additional year (*i.e.,* total 2 years extension from the original DCCO), as in the case of projects in non-infrastructure sectors. The asset classification benefit will be subject to certain conditions.
February 11, 2020	A one-time restructuring of loans to MSMEs that were in default but 'standard' as on January 1, 2020, was permitted, without an asset classification downgrade, subject to certain conditions like aggregate exposure, including non-fund based facilities, of banks and NBFCs to the borrower not exceeding ₹25 crore as on January 1, 2020 and the borrower's account is in default but is a 'standard asset' as on January 1, 2020 and continues to be classified as a 'standard asset' till the date of implementation of the restructuring. The borrowing entity has to be GST-registered. However, this condition will not apply to MSMEs that are exempt from GST-registration.

Date of Announcement	Policy Initiative
February 26, 2020	With a view to further strengthening monetary transmission, it was decided to link pricing of all new floating rate loans by SCBs for the medium enterprises also to the external benchmarks effective April 1, 2020 and accordingly, guidelines were issued to banks.
March 17, 2020	• On account of inclusion of affordable housing under the harmonised master list (HML) for infrastructure sub-sectors by GoI, the definition of lending to affordable housing was re-aligned with that provided in the HML. Accordingly, for the purpose of issue of long terms bonds, the revised definition would include housing loans, eligible to be classified under priority sector lending (as updated from time to time) and to individuals for acquiring dwelling units within the prescribed threshold under the affordable housing definition in the HML. • Banks were permitted to treat investment fluctuation reserve (IFR), being at least 2 per cent built up out of profit on sale of securities under the held for trading (HFT) and available for sale (AFS) portfolios on a continuous basis, as part of Tier-II capital without the cap of 1.25 per cent of total credit risk weighted assets.
March 23, 2020	A clarification was issued to the banks that exposure can be shifted from the credit risk mitigation (CRM) provider to the original counterparty, even if the counterparty was a person resident outside India, if CRM benefits like shifting of exposure/risk weights are not derived by that bank. The exposures thus shifted to a person resident outside India, will attract a minimum risk weight of 150 per cent. The date of applicability of the LEF guidelines to non-centrally cleared derivatives exposures was also deferred by one year to April 1, 2021.
March 27, 2020	• The implementation of the last tranche of 0.625 per cent of capital conservation buffer (CCB) shall stand deferred from March 31, 2020 to September 30, 2020. Accordingly, minimum capital conservation ratios as applicable from March 31, 2018, will also apply for a further period of six months from March 31, 2020 till the CCB attains the level of 2.5 per cent on September 30, 2020. Further, the pre-specified trigger for loss absorption through conversion/write-down of additional tier 1 instruments (perpetual non-cumulative preference shares and perpetual debt instruments) shall remain at 5.5 per cent of risk-weighted assets (RWAs) and will rise to 6.125 per cent of RWAs on September 30, 2020. • The implementation of net stable funding ratio (NSFR), was deferred by six months from April 1, 2020 to October 1, 2020. • Certain regulatory measures were announced to mitigate the burden of debt servicing brought about by disruptions on account of COVID-19 pandemic and to ensure the continuity of viable businesses. The salient features included rescheduling of payments for term loans and working capital facilities, easing of working capital financing and exemption from classification of special mention account (SMA) and non-performing assets (NPA) on account of implementation of the above reliefs. • The bank rate was revised downwards by 75 bps from 5.40 per cent to 4.65 per cent with immediate effect. All penal interest rates on shortfall in reserve requirements, which are specifically linked to the bank rate, also stand revised, accordingly, depending on duration of shortfalls *i.e.*, bank rate plus 3.0 percentage points (7.65 per cent from the earlier 8.40 per cent) or bank rate plus 5.0 percentage points (9.65 per cent instead of the earlier rate of 10.40 per cent).
March 28, 2020	Guidelines for on-tap licensing of SFBs in private sector were modified to extend certain norms to existing SFBs like granting of general permission to open banking outlets subject to adherence to unbanked rural centre norms and exemption from seeking prior approval of the Reserve Bank for undertaking such non-risk sharing simple financial service activities, which do not require any commitment of own fund, after three years of commencement of business of SFBs. Some clarifications were also provided on promoters and paid up equity capital.

Date of Announcement	Policy Initiative
March 30, 2020	As announced in the scheme of amalgamation of certain public sector banks by GoI dated March 4, 2020, Oriental Bank of Commerce/United Bank of India/Andhra Bank/Corporation Bank/Syndicate Bank/Allahabad Bank (transferor banks) will be excluded from the Second Schedule to the RBI Act as they would cease to carry on banking business w.e.f., April 1, 2020. Consequently, all their branches will function as branches of their respective transferee bank (Punjab National Bank/Union Bank of India/Canara Bank/Indian Bank) from April 1, 2020 and their customers, including depositors, will be treated as customers of respective transferee banks with effect from April 1, 2020.
March 31, 2020	• Based on the review of certain instructions regarding appointment of managing director and chief executive officer (MD and CEO)/CEO/part-time chairperson (PTC) in private sector banks and foreign banks, the 'Declaration and Undertaking' to be obtained from candidate and specimen of 'Form A' (Application by bank for amendment in its appointment related provisions) as well as 'Form B' (Application for approval of appointment/re-appointment) were revised. Two other changes were also introduced, *viz.*, submission of application to the Reserve Bank by banks for re-appointment of MD and CEO at least six months (as against four months) before the expiry of the term of office and submission of proposals for appointment of a new MD and CEO with a panel of at least two names (as against three, currently) in the order of preference, at least four months before the expiry of the term of the present incumbent. • In order to make the doorstep banking services for senior citizens and differently abled persons effective, banks were advised to offer these services on pan India basis by developing a Board approved framework for determining the nature of branches where these services will be provided mandatorily and those where it will be provided on a best effort basis. Banks have to update the list of such branches on its website regularly, make the policy and charges in this regard public and give adequate publicity on the availability of such services in their public awareness campaigns. The progress made in this regard has to be reported to the Customer Service Committee of their Board every quarter and banks were advised to ensure compliance to the instructions by April 30, 2020.
April 1, 2020	• Based on the review and empirical analysis of counter cyclical capital buffer (CCyB) indicators, it was decided not to activate CCyB (framework for which was put in place in terms of guidelines issued on February 5, 2015, with pre-announcement of the decision to activate it as and when circumstances warranted) for a period of one year or earlier, as may be necessary. • Amendment to the Master Direction on KYC dated February 25, 2016 was made to align it with the amendment brought in the PML Rules by the GoI through a gazette notification dated March 31, 2020. The amendment pertains to small accounts, opened for customers unable to furnish officially valid documents (OVDs) to banks, for which the limitations and conditions have been provided in the PML rules itself. The amendment was carried out to enable the Government to transfer the direct benefit transfer (DBT) amounts to the beneficiaries' accounts and allow the beneficiaries to withdraw the amount for their needs in the current pandemic situation due to COVID-19, without causing any hardships due to the KYC requirements.
April 17, 2020	• It was decided that in respect of all accounts for which lending institutions decide to grant moratorium or deferment, and which were standard as on March 1, 2020, the 90-day NPA norm shall exclude the moratorium period, *i.e.*, there would be an asset classification standstill for all such accounts from March 1, 2020 to May 31, 2020. At the same time, with the objective of ensuring that banks maintain sufficient buffers and remain adequately provisioned to meet future challenges, they will have to maintain higher provision of 10 per cent on all such accounts under the standstill, spread over two quarters, *i.e.*, March, 2020 and June, 2020. These provisions can be adjusted later on against the provisioning requirements for actual slippages in such accounts.

Date of Announcement	Policy Initiative
	• Under Reserve Bank's prudential framework of resolution of stressed assets dated June 7, 2019, in the case of large accounts under default, SCBs are currently required to hold an additional provision of 20 per cent if a resolution plan has not been implemented within 210 days from the date of such default. Recognising the challenges to resolution of stressed assets in the current volatile environment, it has been decided that the period for resolution plan shall be extended by 90 days. • With a view to conserve capital of banks to retain their capacity to support the economy and absorb losses in an environment of heightened uncertainty, it was decided that in view of the COVID-19-related economic shock, SCBs shall not make any further dividend payouts from profits pertaining to the financial year ended March 31, 2020 until further instructions. This restriction shall be reviewed on the basis of the financial position of banks for the quarter ending September 30, 2020. • In order to ease the liquidity position at the level of individual institutions, the LCR requirement for SCBs is being brought down from 100 per cent to 80 per cent with immediate effect. The requirement shall be gradually restored back in two phases – 90 per cent by October 1, 2020 and 100 per cent by April 1, 2021.
April 20, 2020	Master Direction on KYC was updated regarding internal risk assessment by regulated entities (REs) relating to money laundering/terrorist financing to further align the Reserve Bank's instructions to the provisions of financial action task force (FATF) Recommendation 1. The internal risk assessment carried out by REs should be commensurate to their size, geographical presence, complexity of activities/structure, *etc*. REs shall have to apply a Risk Based Approach (RBA) for mitigation and management of the identified risk and should have Board approved policies, controls and procedures in this regard. The assessment will have to be properly documented and the outcome should be reported to the Board or any Committee of the Board.
April 23, 2020	Banks were permitted to issue electronic cards, with their Board approved policy, to natural persons having overdraft accounts that are in the nature of personal loan without any specific end-use restrictions, only for domestic online/non-cash transactions. However, restrictions on cash transaction shall not apply to *Pradhan Mantri Jan-Dhan Yojana* (PMJDY) overdraft facility. The card shall be issued for a period not exceeding the validity of the facility and instructions on terms and conditions, security aspects, *etc.*, as applicable for debit cards, will be applicable to these cards.
April 29, 2020	In order to mitigate the difficulties in timely submission of various regulatory returns, due to disruptions on account of COVID-19 pandemic, the timelines for the submission was extended for the regulated entities, permitting a delay of up to 30 days from the due date, which will be applicable to regulatory returns required to be submitted up to June 30, 2020. However, no extension is permitted for submission of statutory returns, *i.e.*, returns prescribed under the Banking Regulation Act, 1949, RBI Act, 1934 or any other Act (for instance, returns related to CRR/SLR).
May 13, 2020	Interest equalisation scheme on pre- and post-shipment rupee export credit was extended by GoI for one year, *i.e.*, up to March 31, 2021, with same scope and coverage, and all extant operational instructions issued by the Reserve Bank under the said scheme shall continue to remain in force up to March 31, 2021.
May 22, 2020	The bank rate was revised downwards by 40 bps from 4.65 per cent to 4.25 per cent with effect from May 22, 2020. Accordingly, all penal interest rates on shortfall in reserve requirements, which are specifically linked to the bank rate, also stand revised as bank rate plus 3.0 percentage points (7.25 per cent from the earlier 7.65 per cent) or bank rate plus 5.0 percentage points (9.25 per cent instead of the earlier rate of 9.65 per cent), depending on the duration of the shortfalls.

Date of Announcement	Policy Initiative
May 23, 2020	• With a view to facilitate greater flow of resources to corporates that faced difficulties in raising funds from the capital market and predominantly dependent on bank funding, caused by market uncertainties due to COVID-19 pandemic, a bank's exposure under the Large Exposure Framework, to a group of connected counterparties was increased from 25 per cent to 30 per cent of the eligible capital base of the bank. The increased limit will be applicable up to June 30, 2021. • Taking forward the COVID-19 regulatory package released in March and April 2020, additional measures were announced, providing relaxations in repayment pressures and improving access to working capital by mitigating the burden of debt servicing, for preventing the transmission of financial stress to the real economy, and ensuring the continuity of viable businesses and households on continuous economic disruption due to extension of lockdown. • Further extension of the resolution timelines, prescribed in the Prudential Framework for Resolution of Stressed Assets dated June 7, 2019, was provided after a review in continuation of the earlier instructions of April 2020, on account of continued challenges to resolution of stressed assets in a volatile environment. This was applicable in respect of accounts which were within and past the review period as on March 1, 2020, subject to conditions. • To alleviate genuine difficulties being faced by exporters in their production and realisation cycles, the maximum permissible period of pre-shipment and post-shipment export credit sanctioned by banks was increased from one year to 15 months, for disbursements made up to July 31, 2020. This was in line with the permission already granted for increase in the period of realisation and repatriation of the export proceeds to India from nine months to 15 months from the date of export in respect of exports made up to July 31, 2020.
June 21, 2020	As credit facilities to MSME borrowers, extended under the emergency credit line guarantee scheme of GoI guaranteed by National Credit Guarantee Trustee Company (NCGTC), are backed by an unconditional and irrevocable guarantee provided by the GoI, member lending institutions, *viz*., SCBs (including scheduled RRBs), NBFCs (including HFCs as eligible under the scheme) and all India financial institutions (AIFIs), were permitted to assign zero per cent risk weight on the credit facilities extended under these schemes to the extent of guarantee coverage.
Department of Regulation: Cooperative Banks	
August 30, 2019	The Meghalaya Co-operative Apex Bank Limited was included in the Second Schedule to the Reserve Bank of India Act, 1934.
November 29, 2019	The amalgamation of 13 District Central Co-operative Banks (DCCBs) in the state of Kerala with Kerala State Co-operative Bank was undertaken.
December 19, 2019	Banking license was issued to Supaul District Central Co-operative Bank, Supaul, Bihar.
December 27, 2019	The guidelines on reporting of large exposures to central repository of information on large credits (CRILC) issued to urban co-operative banks.
December 31, 2019	The guidelines on Board of Management were issued to urban co-operative banks.
January 6, 2020	• The revised guidelines on supervisory action framework for urban co-operative banks were issued. • Shivalik Mercantile Co-operative Bank Limited was granted 'in principle' approval for grant of an SFB license.

Date of Announcement	Policy Initiative
March 13, 2020	Guidelines on limits on exposure to single and group borrowers/parties and large exposures and revision in the target for priority sector lending were issued to UCBs.
April 20, 2020	Guidelines related to provisioning on inter-bank exposure of Primary UCBs under all inclusive directions were issued to UCBs.
April 24, 2020	Guidelines on non-achievement of priority sector lending targets by Primary UCBs - contribution to the rural infrastructure development fund (RIDF) and other funds were issued to UCBs.
June 8, 2020	'In-principle' approval was granted to Government of Punjab for the amalgamation of DCCBs in the state with the Punjab State Co-operative Bank, subject to fulfilment of conditions stipulated by the Reserve Bank and additional conditions, if any, imposed by NABARD.
Department of Regulation: NBFCs	
August 2, 2019	Clarification was issued to NBFCs not to charge foreclosure charges/pre-payment penalties on floating rate term loan sanctioned for purposes other than business to individual borrowers, with or without co-obligant(s).
November 4, 2019	Revised liquidity risk management framework for NBFCs and core investment companies (CICs) was issued.
November 8, 2019	• Technical specifications (framed by ReBIT) were prescribed for all the participants of the NBFC-account aggregator (NBFC-AA) ecosystem, regulated by the Reserve Bank. • Household income limits and loan limits for qualifying assets of NBFC-MFIs were increased.
November 11, 2019	Exemptions granted to housing finance institutions from the provisions of Chapter IIIB of RBI Act (except Section 45-IA) were withdrawn.
December 6, 2019	Asset reconstruction companies (ARCs) were advised to acquire financial assets from their lenders, sponsors or group entities through auctions which are conducted in a transparent manner, on arm's length basis and at prices determined by market forces.
December 23, 2019	The aggregate exposure of a lender to all borrowers at any point of time, across all peer-to-peer (P2P) platforms, was increased to ₹50,00,000.
December 31, 2019	Relaxation on minimum holding period (MHP) requirement for securitisation transactions related to loans of original maturity above 5 years, was further extended for six months, *i.e.*, till June 30, 2020.
January 21, 2020	NBFCs were permitted to pool gold jewellery from different branches in a district and auction it at any location within the district, if the first auction has failed.
March 13, 2020	Guidelines related to specific prudential aspects of Ind AS applicable on Ind AS implementing NBFCs and ARCs were issued.
April 17, 2020	Guidelines related to prudential norms on income recognition, asset classification and provisioning pertaining to advances - projects under implementation in commercial real estate (CRE) sectors as applicable to banks were extended, *mutatis mutandis*, to NBFCs.
May 19, 2020	Master Direction on KYC Direction, 2016 was extended to housing finance companies (HFCs).
June 17, 2020	A draft framework reviewing the extant regulations applicable to HFCs was released for public comments.

Date of Announcement	Policy Initiative
June 24, 2020	All SCBs (excluding RRBs) and NBFCs (including HFCs) were advised to adhere to Fair Practices Code and Outsourcing Guidelines for loans sourced over digital lending platforms either through their own or under an outsourcing arrangement.
Department of Supervision	
September 18, 2019	The guidelines on concurrent audit system in commercial banks were revised based on a review undertaken.
December 31, 2019	• Comprehensive cyber security framework for primary UCBs was framed based on a graded approach. • Baseline cyber security controls were mandated for third party ATM switch application service providers through contractual agreements with supervised entities.
March 16, 2020	In the context of COVID-19 outbreak, banks/financial institutions were advised regarding an indicative list of measures to be taken by them as part of their operational and business continuity plans.
Consumer Education and Protection Department	
October 22, 2019	Internal Ombudsman Scheme was extended to non-bank system participants with more than one crore outstanding prepaid payment instruments (PPIs) as on March 31, 2019.
April 3, 2020	The Consumer Education and Protection cells at the Reserve Bank's regional offices and all subordinate offices under the centralised public grievance redress and monitoring system (CPGRAMS) were advised regarding the prompt handling of public grievances pertaining to COVID-19 in line with GoI guidelines.
Internal Debt Management Department	
November 7, 2019	The 'scheme for non-competitive bidding facility in the auction of state development loans' (SDLs) was revised to permit specified stock exchanges to act as aggregators/facilitators (in addition to scheduled banks and primary dealers) to aggregate the bids of their stockbrokers/other retail participants and submit a single consolidated bid under the non-competitive segment of primary auctions of SDLs.
February 6, 2020	It was decided that the Reserve Bank will modify its government securities registry (the PDO-NDS system) to include constituent details in the constituent subsidiary general ledger (CSGL) accounts. This is expected to fuel interest of retail investors to invest in government securities.
April 1, 2020	The ways and means advances (WMA) limit of state governments/union territories (UT) were increased by 30 per cent from the limit existing on March 31, 2020, to enable the state governments to tide over the fiscal stress caused by the outbreak of COVID-19 pandemic. The revised limits came into effect from April 1, 2020 and will be valid till September 30, 2020.
April 7, 2020	In order to provide greater flexibility to state governments to tide over their cash-flow mismatches, the 'overdraft (OD) scheme for state governments' was reviewed and the number of days for which a State/UT can be in OD continuously, was increased from 14 working days to 21 working days. Further, the number of days for which a State/UT can be in OD in a quarter, was increased from 36 working days to 50 working days.
April 13, 2020	With a view to facilitate availability of all the current operative instructions on the sovereign gold bond (SGB) scheme of the GoI at one place, consolidated procedural guidelines on the SGB scheme were issued.

Date of Announcement	Policy Initiative
April 17, 2020	With a view to provide greater comfort to state governments in undertaking containment and mitigation efforts for COVID-19, and to enable them to plan their market borrowings, the WMA limit of states was increased further, by 60 per cent over and above the level existing on March 31, 2020. The increased limit will be valid till September 30, 2020.
April 20, 2020	To tide over the situation arising from the outbreak of COVID-19 pandemic, it was decided in consultation with the GoI, that the limit for WMA of GoI for the remaining part of first half of the financial year 2020-21 (April 2020 to September 2020) will be revised from ₹1,20,000 crore to ₹2,00,000 crore.
May 22, 2020	In the light of the COVID-19 pandemic and the consequent stress created on state government finances, the 'scheme for constitution and administration of consolidated sinking fund (CSF)' was reviewed and the rules governing withdrawal from CSF were relaxed, while ensuring that a sizeable corpus is retained in the fund.
June 26, 2020	A new Savings Bonds Scheme - Floating Rate Savings Bonds 2020 (Taxable) was announced to open for subscription from July 1, 2020.
Department of Currency Management	
January 1, 2020	Launch of MANI (Mobile Aided Note Identifier), a mobile application for aiding visually impaired persons to identify the denomination of Indian banknotes.
Department of Payment and Settlement Systems	
August 14, 2019	It was clarified that transactions failed due to technical reasons ascribable to the bank/service provider, invalid PIN/validations, *etc*., shall not form part of free transactions available to a customer. Non-cash withdrawal 'on-us' transactions shall also not form part of free transactions allowed at an ATM.
August 21, 2019	• The availability of RTGS system was increased with operations commencing from 7:00 AM instead of 8:00 AM. • Processing of e-mandate on cards for recurring transactions (merchant payments) was permitted with additional factor of authentication (AFA) during e-mandate registration, modification and revocation, as also for the first transaction.
August 30, 2019	The timeline for conversion of minimum detail prepaid payment instruments (PPIs) to KYC compliant PPIs was extended from 18 months to 24 months.
September 16, 2019	Scope and coverage of *Bharat* Bill Payment Systems (BBPS) was enhanced to include all categories of billers who raise recurring bills (except prepaid recharges) as eligible participants, on a voluntary basis.
September 20, 2019	Framework for turn around time (TAT) and customer compensation for failed transactions using authorised payment systems was prescribed.
October 15, 2019	On-tap authorisation was allowed for *Bharat* bill payment operating units (BBPOU); trade receivables discounting system (TReDS) platforms; and white label ATM (WLA) operators.
December 6, 2019	Modalities of the NEFT 24x7 system and timeline were advised to all member banks.
December 16, 2019	Member banks were advised to waive charges for NEFT transactions initiated online by savings bank account holders.

Date of Announcement	Policy Initiative
December 24, 2019	A new type of semi-closed PPI was introduced with loading only from a bank account, amount loaded during any month restricted to ₹10,000 and usage restricted to purchase of goods and services.
December 30, 2019	All authorised payment systems and instruments were permitted for linking with FASTags under the national electronic toll collection (NETC) system.
January 10, 2020	• Processing of e-mandate on unified payments interface (UPI) for recurring transactions (merchant payments) was permitted with AFA during e-mandate registration, modification and revocation, as also for the first transaction. • Amendment was made to the master circular to enable use of mobile banking for cross-border transactions. • Framework for imposing monetary penalty on authorised payment system operators/banks was revised.
January 15, 2020	Guidelines were issued to improve user convenience and increase security of card transactions.
January 31, 2020	Banks were permitted to provide facility of cash withdrawal at PoS terminals based on approval from their Board.
March 16, 2020	Press release informing the general public about round the clock availability of payment systems that could be used for making payments from comfort of their home by avoiding social contact.
March 17, 2020	Guidelines covering regulation of payment aggregators and payment gateways covering authorisation, capital requirements, governance, merchant on-boarding, settlement and escrow account management, dispute management framework, *etc.*, were issued.
March 24, 2020	Extension of timeline for compliance with various payment system requirements in view of the ongoing COVID-19 situation.
June 4, 2020	Further extension in timeline provided to payment system operators to comply with various payment system requirements in view of the ongoing COVID-19 situation.
June 22, 2020	Authorised payment system operators and participants were advised to undertake targeted multi-lingual campaigns to educate their users on safe and secure use of digital payments.

ANNEX II

CHRONOLOGY OF MAJOR POLICY ANNOUNCEMENTS TO MITIGATE THE IMPACT OF COVID-19

Date of Announcement	Policy Initiative
A. Government of India (GoI)	
February 25, 2020	Export prohibition of specified personal protective equipment (PPE), including clothing and masks (NBR gloves and medical goggles), while exempting some items such as surgical blades, non-woven disposable shoe covers, breathing appliances used by airmen, firemen, divers and mountaineers, gas masks, tarpaulin, PVC conveyer belt and biopsy punch.
March 3, 2020	Export restriction of certain active pharmaceutical ingredients (APIs) and formulations made from them such as paracetamol, acyclovir, vitamins B1, B6 and B12.
March 14, 2020	Norms for assistance from State Disaster Response Fund (SDRF) were issued.
March 19, 2020	Export prohibition of surgical masks/disposal masks (2/3 ply masks), ventilators (including any artificial respiratory apparatus or oxygen therapy or any other breathing appliances/devices), textile raw materials for masks and coveralls.
March 24, 2020	• Relaxations in statutory and compliance matters were made such as extension of deadline for filing income tax/GST returns, payments under *Vivad se Vishwas* scheme and various corporate matters. • Bank charges for digital trade transactions for trade finance consumers were reduced. • Threshold of default under Section 4 of the Insolvency and Bankruptcy Code (IBC) was raised from ₹1 lakh to ₹1 crore to prevent triggering of insolvency proceedings against micro, small and medium enterprises (MSMEs) which are going through a phase of financial distress. • Waiver of charges for cash withdrawal from ATMs using debit cards for three months. • Export prohibition of sanitisers.
March 26, 2020 *(Pradhan Mantri Garib Kalyan Yojana)*	Union Finance Minister announced ₹1.70 lakh crore relief package under *Pradhan Mantri Garib Kalyan Yojana* for the poor to help them fight the battle against COVID-19. Support measures include the following: • 5 kg wheat/rice per member and 1 kg of pulses per family per month would be provided free of cost for 3 months. • *Jan Dhan* women account-holders would be given an *ex-gratia* of ₹500 per month for three months. • Direct benefit transfers would be made to poor *Divyang*, widows and senior citizens. • Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) wages would be increased by ₹20. • Gas cylinders would be provided free of cost for 3 months to poor families. • Medical insurance would be provided to health workers fighting COVID-19. • The first instalment of ₹2,000 due in 2020-21 under the *Pradhan Mantri Kisan Samman Nidhi* (PM-KISAN) will be front-loaded in April 2020. • State governments will be directed to utilise funds available under District Mineral Fund for COVID-19 health response.

Date of Announcement	Policy Initiative
	• State governments will be directed to utilise the 'welfare fund for building and other construction workers' to provide support to construction workers. • Collateral free lending limit for women self-help groups (SHGs) would be increased from ₹10 lakh to ₹20 lakh. • Mandatory employee provident fund (EPF) contribution, on the part of both employee and employer, shall be borne by the government for three months for low wage earners in businesses with less than 100 workers. • EPF regulations will be amended to include pandemic as the reason to allow non-refundable advance of 75 per cent of the amount or three months of wages, whichever is lower, from accounts.
March 28, 2020	Ministry of Agriculture and Farmer's Welfare released a memorandum on extension of dates for conversion of agricultural gold loan and other agricultural accounts into KCC accounts in view of the health emergency due to COVID-19.
March 30, 2020	• Department of Administrative Reforms and Public Grievances advised all Nodal Public Grievance Officers and Government of India departments of the procedure to redress grievances pertaining to COVID-19 expeditiously. • Benefit of 2 per cent interest subvention to banks and 3 per cent prompt repayment incentive for all farmers was extended up to May 31, 2020 for all crop loans up to ₹3 lakh given by banks, due between March 1 and May 31, 2020.
March 31, 2020	• The Taxation and Other Laws (Relaxations of Certain Provisions) Ordinance 2020 provided relaxation in compliance and enforcement of a plethora of economic laws. • Foreign Trade Policy 2015-20 was extended for a year and other relaxations were granted in the field of exports and imports procedures.
April 2, 2020	New features of e-NAM platform introduced to help fight against COVID-19.
April 3, 2020	Advance release of central government's first instalment of State Disaster Risk Management Fund for the year 2020-21, amounting to ₹11,092 crore, with a view to augment funds available with the state governments.
April 4, 2020	• A slew of exemptions and relaxations were granted for agriculture and allied sectors with respect to the 21-day lockdown over the COVID-19 pandemic outbreak so as to ensure that the farmers do not suffer from any adverse fallout. Shops of agricultural machinery, its spare parts (including its supply chain) & repairs and shops for truck repairs on highways, preferably at fuel pumps, were allowed to remain open in order to facilitate transportation of farm produce. Besides, tea industry, including plantations were allowed to function with maximum of 50 per cent workers. • Under Ministry of Rural Development's National Rural Livelihood Mission, face mask production was initiated by SHG members in 24 states covering 399 districts of the country. • Export prohibition of hydroxychloroquine and formulations made from it.
April 8, 2020	• It was announced that all pending income-tax refunds up to ₹5 lakh, and all pending GST and customs refunds would be issued immediately, amounting to total refund of ₹18,000 crore. • Indian railways introduced unhindered services of time tabled parcel trains for nationwide transportation of essential commodities and other goods to boost the supply chain across the country.

Date of Announcement	Policy Initiative
	• NGOs permitted to buy foodgrains directly from food corporation of India (FCI) for relief operations at the open market scheme sale rates without going through the auction process.
April 9, 2020	• ₹15,000 crore was sanctioned for 'India COVID-19 Emergency Response and Health System Preparedness Package'.
	• Foodgrains to be provided to non-National Food Securities Act beneficiaries with ration cards issued by state governments.
April 15, 2020	To facilitate transportation of perishable agricultural products, provisions were made for deployment of railways at fast speed, *Kisan Rath* mobile app and All India Agri Transport Call Centre.
April 18, 2020	The extant Foreign Direct Investment (FDI) policy was amended for curbing opportunistic takeovers/ acquisitions of Indian companies due to COVID-19 pandemic.
May 13, 2020 (*Atmanirbhar Bharat Abhiyan* - Part I)	• ₹3 lakh crore collateral free loans with 100 per cent credit guarantee cover would be extended to standard businesses/MSMEs.
	• ₹20,000 crore subordinate debt with partial credit guarantee support would be extended to non-performing asset (NPA)/stressed MSMEs.
	• Fund of funds with corpus of ₹10,000 crore would be created for equity funding of MSMEs with growth potential and viability.
	• Definition of MSMEs would be revised to extend benefits to larger number of firms.
	• Global tenders for government procurement would be disallowed up to ₹200 crore to support Make in India and e-market linkages for MSMEs will be promoted.
	• MSME receivables from government/central public sector enterprises (CPSEs) will be released in 45 days.
	• ₹2,500 crore EPF support for eligible businesses and workers will be extended for 3 more months (June to August, 2020).
	• For other businesses and workers, EPF contribution will be reduced to 10 per cent each, for 3 months - providing liquidity of ₹6,750 crore.
	• ₹30,000 crore special liquidity scheme will be launched for non-banking financial companies (NBFCs)/housing finance companies (HFCs)/microfinance institutions (MFIs).
	• The partial credit guarantee scheme will be extended to cover borrowings of lower rated NBFCs, HFCs and MFIs.
	• Electricity distribution companies (DISCOMs) will be infused with ₹90,000 crore liquidity.
	• Central public sector generation companies will give rebate to DISCOMS, which shall be passed on to the final consumers (industries).
	• Measures to de-stress real estate and construction will be taken, contracts will be extended up to 6 months by central government agencies.
	• Tax deducted at source (TDS)/Tax collected at source (TCS) rates will be reduced by 25 per cent for remaining period of 2020-21.
	• Dates for filing of income tax return and payment under *Vivad se Vishwas* scheme were further extended.

Date of Announcement	Policy Initiative
May 14, 2020 (*Atmanirbhar Bharat Abhiyan* - Part II)	• Free foodgrains will be provided to migrants who are not beneficiaries of National Food Security Act (NFSA)/State Card, for 2 months. 83 per cent of public distribution system (PDS) population will be covered under 'One Nation One Ration Card' scheme by August 2020 for national portability of PDS benefits (100 per cent by March 2021). • Affordable rental housing complexes (ARHC) will be developed and incentivised for migrant workers/urban poor. • Interest subvention of 2 per cent will be provided for prompt payees of MUDRA-*Shishu* loans for a period of 12 months. • ₹5,000 crore special credit facility will be extended to street vendors. • Credit linked subsidy scheme for middle income group under *Pradhan Mantri Awas Yojana* (PMAY)-Urban will be extended up to March 2021 to provide ₹70,000 crore boost to housing sector. • Compensatory Afforestation Fund Management and Planning Authority (CAMPA) funds to be utilised for afforestation and plantation works to create job opportunities. • ₹30,000 crore additional emergency working capital funding will be provided to farmers through refinance support from NABARD. • ₹2 lakh crore concessional credit will be extended to 2.5 crore farmers through *Kisan* Credit Cards (KCCs).
May 15, 2020 (*Atmanirbhar Bharat Abhiyan* - Part III)	• Financing facility of ₹1,00,000 crore will be provided for funding agriculture infrastructure projects at farm-gate and aggregation points. • ₹10,000 crore scheme will be launched for formalisation of micro food enterprises (MFE). • ₹20,000 crore will be allocated for development of fisheries through *Pradhan Mantri Matsya Sampada Yojana* (PMMSY). • Animal Husbandry Infrastructure Development Fund of ₹15,000 crore will be set-up to support private investment in dairy. • Herbal cultivation and beekeeping initiatives will be promoted. • Operation Greens will be extended from Tomatoes, Onions and Potatoes (TOP) to all fruits and vegetables. • Essential Commodities Act, 1955 will be amended to deregulate certain food items. • Central law will be formulated for barrier free inter-state trade. • Facilitative legal framework that includes risk mitigation, assured returns, and quality standardisation will be framed to enable farmers to engage with processors/aggregators/large retailers.
May 16, 2020 (*Atmanirbhar Bharat Abhiyan* - Part IV)	• Private sector participation in commercial coal production and exploration will be permitted; coal gasification/liquefaction will be incentivised; ease of doing business measures will be undertaken; coal bed methane extraction rights will be auctioned from Coal India Limited's (CIL's) coal mines; concessions in commercial terms will be given to CIL's consumers.

Date of Announcement	Policy Initiative
May 17, 2020 (*Atmanirbhar Bharat Abhiyan* - Part V)	• Infrastructure development of ₹50,000 crore will be undertaken in coal sector. • Seamless composite exploration-cum-mining-cum-production regime will be introduced for enhancing private investments in the mineral sector; 500 mining blocks will be auctioned; bauxite and coal mineral blocks will be jointly auctioned; distinction between captive and non-captive mines will be removed; Mineral Index for different minerals is being developed; stamp duty payable for mining lease will be rationalised. • A list of weapons/platforms with ban on imports will be notified; imported spares will be indigenised; Ordnance Factory Board will be corporatised; foreign direct investment limit in defence manufacturing under automatic route will be raised to 74 per cent; time-bound defence procurement process will be ushered in. • Air-space will be managed efficiently leading to reduction in flying cost by ₹1,000 crore per year; world-class airports will be developed through public-private partnership (PPP). • PPP will be encouraged for establishment of research reactors for production of medical isotopes, irradiation technology for food preservation; and Technology Development cum Incubation Centres will be set up. • Quantum of viability gap funding for private sector investment in social infrastructure projects will be enhanced with outlay of ₹8,100 crore. • New tariff policy for power sector will be released and power utilities in union territories will be privatised. • Private sector will be allowed to use indian space research organisation (ISRO) facilities to improve their capacities; liberal geo-spatial data policy will provide remote-sensing data to tech-entrepreneurs; planetary exploration and outer space travel will be opened for private sector. • Health and wellness centres in rural and urban areas will be ramped up; infectious diseases hospital blocks will be set up in all districts; lab and surveillance network will be strengthened; and National Digital Health Blueprint will be implemented under the National Digital Health Mission. • PM e-*VIDYA* programme, *Manodarpan* for psycho-social support, new National Curriculum and Pedagogical Framework, and National Foundational Literacy and Numeracy Mission will be launched. • Special insolvency resolution framework for MSMEs will be notified; fresh initiation of insolvency proceedings will be suspended up to one year; COVID-19 related debt will be excluded from the definition of "default" under IBC for the purpose of triggering insolvency proceedings; private companies which list non-convertible debentures (NCDs) on stock exchanges will not be regarded as listed; penalties for all defaults for small companies/one-person companies/producer companies/start-ups will be lowered. • Offences (involving minor technical and procedural defaults) under Companies Act will be decriminalised. • List of strategic sectors requiring presence of public sector enterprises (PSEs) in public interest would be notified; in strategic sectors, at least one enterprise will remain in the public sector but private sector will also be allowed; in other sectors, PSEs would be privatised; and to minimise wasteful administrative costs, number of enterprises in strategic sectors will be only one to four.

Date of Announcement	Policy Initiative
	• Borrowing limits of states will be increased from 3 per cent to 5 per cent of gross state domestic product (GSDP) for 2020-21, partly linked to specific reforms, leading to extra resources of ₹4.28 lakh crore. • MGNREGA allocation for 2020-21 will be increased by ₹40,000 crore.
May 23, 2020	Notification on emergency credit line guarantee scheme (ECLGS) for mitigating the economic distress being faced by MSMEs by providing them additional funding of up to ₹3 lakh crore in the form of a fully guaranteed emergency credit line (GECL). The entire funding provided under GECL shall be provided with a 100 per cent credit guarantee by National Credit Guarantee Trustee Company to member lending institutions. Business enterprises/MSMEs with outstanding loan of up to ₹25 crore would be eligible under the scheme for a limited period.
June 1, 2020	Ministry of Agriculture and Farmer's Welfare released a memorandum on extension of repayment date up to August 31, 2020 for short-term loans up to ₹3 lakh advanced for agriculture including animal husbandry, dairy & fisheries by banks, which have become due or shall become due between March 1, 2020 and August 31, 2020 with continued benefit of 2 per cent interest subvention (IS) to banks and 3 per cent prompt repayment incentive (PRI) to farmers.
June 12, 2020	GST relaxations will be provided to small taxpayers through reduction in late fee, and one time extension in period for seeking revocation of cancellation of registration.
June 20, 2020	Under *Garib Kalyan Rojgar Yojana,* provision has been made for additional employment to the returnee migrant workers for 125 days in six states facing high reverse migration.
June 24, 2020	Government of India introduced "Distressed Assets Fund – Subordinate Debt for Stressed MSMEs". A credit guarantee scheme for subordinate debt (CGSSD) was launched under which guarantee coverage would be provided to SCBs which are member lending institutions (MLIs) of CGTMSE for facilitating support to stressed MSMEs. The objective of the credit guarantee scheme is to facilitate loans through banks to the promoters of stressed MSMEs for infusion as equity/*quasi* equity in the business.
June 30, 2020	Free provision of foodgrains under *Pradhan Mantri Garib Kalyan Anna Yojana* was extended till November, 2020.
B. Reserve Bank of India	
Monetary Policy Department	
February 6, 2020	Cash reserve ratio (CRR) exemption to scheduled commercial banks (SCBs) for a period of 5 years (from the date of origination of the loan or the tenure of the loan, whichever is earlier) for the amount equivalent to the incremental credit extended as retail loans for automobiles, residential housing and loans to micro, small and medium enterprises (MSMEs) during January 31, 2020 and July 31, 2020.
March 27, 2020	• Monetary Policy Committee (MPC) advanced its April 2020 meeting to March and reduced the policy repo rate by 75 bps to 4.4 per cent. The reverse repo rate was reduced by 90 bps to 4.0 per cent creating an asymmetrical corridor[1].

[1] The purpose of this measure relating to reverse repo rate is to make it relatively unattractive for banks to passively deposit funds with the Reserve Bank and instead, to use these funds for on-lending to productive sectors of the economy.

Date of Announcement	Policy Initiative
	• CRR reduced[2] by 100 bps to 3.0 per cent of NDTL effective March 28, 2020 for a period of one year ending on March 26, 2021. • Effective March 28, 2020, requirement of minimum daily CRR balance maintenance was reduced from 90 per cent to 80 per cent of the prescribed CRR. This dispensation, initially available up to June 26, was further extended up to September 25, 2020[3]. • Increase in marginal standing facility (MSF) borrowing from 2 per cent of statutory liquidity ratio (SLR) to 3 per cent effective March 28, 2020[4]. This measure was initially available up to June 30, 2020 and later extended up to September 30, 2020.
April 17, 2020	• The reverse repo rate was reduced by 25 bps to 3.75 per cent. • Special refinance facilities for a total amount of ₹50,000 crore were provided to NABARD, SIDBI and NHB to enable them to meet sectoral credit needs[5].
May 22, 2020	• The June 2020 meeting of the MPC was brought forward and the policy repo rate was reduced by 40 bps to 4.0 per cent. • The reverse repo rate was reduced by 40 bps to 3.35 per cent. • A line of credit of ₹15,000 crore was extended to EXIM bank for a period of 90 days from the date of availment with rollover up to a maximum period of one year to enable it to avail a US dollar swap facility to meet its foreign exchange requirements.
Financial Inclusion and Development Department	
March 31, 2020	Circular on short-term crop loans eligible for interest subvention scheme (ISS) and prompt repayment incentive (PRI) extending the timeline till June 30, 2020, for converting all short-term crop loans into KCC loans.
June 4, 2020	Circular on ISS and PRI for short-term crop loans during the years 2018-19 and 2019-20 extending moratorium period till August 31, 2020.
Financial Markets Regulation Department	
March 27, 2020	The timeline for implementation of legal entity identifier (LEI) in non-derivative markets was extended till September 30, 2020.
April 3, 2020 followed by April 16 and April 30, 2020	The trading hours for various markets under the Reserve Bank's regulation were revised to ensure that market participants maintain adequate checks and controls while optimising their resources and ensuring safety of personnel.
May 18, 2020	The implementation date for the directions on hedging of foreign exchange risk (dated April 7, 2020) was deferred to September 1, 2020 from June 1, 2020.

[2] This reduction in the CRR released primary liquidity of about ₹1,37,000 crore uniformly across the banking system in proportion to liabilities of constituents rather than in relation to holdings of excess SLR.

[3] This measure was announced taking cognisance of hardships faced by banks in terms of social distancing of staff and consequent strains on reporting requirements.

[4] Announced in view of the exceptionally high volatility in domestic financial markets, to provide comfort to the banking system.

[5] This comprised ₹25,000 crore to NABARD for refinancing regional rural banks (RRBs), cooperative banks and micro finance institutions (MFIs); ₹15,000 crore to SIDBI for on-lending/refinancing; and ₹10,000 crore to NHB for supporting housing finance companies (HFCs). Advances under this facility were provided at the Reserve Bank's policy repo rate.

Date of Announcement	Policy Initiative
May 22, 2020	Foreign portfolio investors (FPIs) that were allotted investment limits under the voluntary retention route (VRR) scheme between January 24, 2020 and April 30, 2020 were allowed an additional time of three months to invest 75 per cent of their committed portfolio size (CPS).
Financial Markets Operations Department	
February 6, 2020	Announcement of long-term repo operations (LTROs) to provide durable liquidity at policy repo rate for 1-3 years to augment credit flows to productive sectors. The first such LTRO was conducted on February 17, 2020.
March 12, 2020	It was decided to undertake 6-month US Dollar sell/buy swap auctions to provide US Dollar liquidity to the foreign exchange market[6]. The first such auction was conducted on March 16, 2020.
March 18, 2020	Net liquidity amounting to ₹1,63,444 crore was injected by the Reserve Bank from March 18, 2020 to June 2020 *via* open market operation (OMO) including the operations conducted on NDS-OM. The first OMO auction was conducted on March 18, 2020.
March 23, 2020	Announcement of two variable rate term repos amounting to ₹1,00,000 crore. Subsequently, additional variable rate repo operations amounting to ₹75,000 crore were conducted on March 26 and March 31, 2020.
March 24, 2020	The standing liquidity facility (SLF) available to standalone primary dealers (SPDs) was temporarily enhanced from ₹2,800 crore to ₹10,000 crore.
March 27, 2020	Introduced targeted long-term repo operations (TLTROs) under which liquidity availed by banks was to be deployed in investment grade corporate bonds, commercial paper, and non-convertible debentures over and above the outstanding level of their investments in these bonds. The first such TLTRO operation was conducted on March 27, 2020.
March 30, 2020	Extension of the window timings of fixed rate reverse repo and MSF operations as an interim measure so as to provide eligible market participants with greater flexibility in their liquidity management.
April 17, 2020	It was decided to conduct Targeted Long-Term Repo Operations (TLTROs) 2.0 at the policy repo rate. Liquidity availed under the scheme by banks is to be deployed in investment grade corporate bonds, commercial paper, and non-convertible debentures with at least 50 per cent of the total amount availed going to small and mid-sized NBFCs and MFIs. Investments made under this facility would be classified as held to maturity (HTM) even in excess of 25 per cent of total investment permitted to be included in the HTM portfolio. Exposures under this facility would also not be reckoned under the large exposure framework. The first such TLTRO 2.0 auction was conducted on April 23, 2020.
April 27, 2020	In order to ease the liquidity pressure on mutual funds, it was decided to open a special liquidity facility for mutual funds (SLF-MF). Liquidity availed under the scheme by banks is to be deployed exclusively for meeting needs of mutual funds. Liquidity availed under the facility would be classified as HTM even in excess of 25 per cent of total investment permitted to be included in the HTM portfolio. Exposures under this facility would also not be reckoned under the large exposure framework. The first such SLF-MF auction was conducted on April 27, 2020.
April 30, 2020	It was decided to extend regulatory benefits announced under the SLF-MF scheme to all banks, irrespective of whether they avail funding from the Reserve Bank or deploy their own resources to meet liquidity requirements of mutual funds.

[6] This measure was announced as financial markets worldwide were facing intense selling pressures on extreme risk aversion due to the spread of COVID-19 infections.

Date of Announcement	Policy Initiative
Foreign Exchange Department	
April 1, 2020	The period of realisation and repatriation to India of the amount representing the full export value of goods or software or services exported was increased from nine months to fifteen months from the date of export, for the exports made up to or on July 31, 2020.
April 3, 2020	It was decided, in consultation with the GoI, to permit receipt of foreign inward remittances from non-residents through the overseas exchange houses in favour of the 'Prime Minister's Citizen Assistance and Relief in Emergency Situations (PM-CARES) Fund', subject to the condition that Authorised Dealers (AD) Category-I banks shall directly credit the remittances to the 'PM-CARES Fund' and maintain the full details of the non-residents sending the donations/contributions under rupee drawee arrangement (RDA).
May 22, 2020	The time period for completion of remittances against normal imports, *i.e.*, excluding import of gold/ diamonds and precious stones/ jewellery (except in cases where amounts are withheld towards guarantee of performance) was extended from six months to twelve months from the date of shipment for such imports made on or before July 31, 2020.
Department of Regulation	
March 27, 2020	• Announcement of regulatory measures to mitigate the burden of debt servicing and to ensure the continuity of viable businesses. The salient features included rescheduling of payments for term loans and working capital facilities, easing of working capital financing and exemption from classification of special mention account (SMA) and NPA on account of implementation of the above measures. • The implementation of the last tranche of 0.625 per cent of capital conservation buffer (CCB) shall stand deferred from March 31, 2020 to September 30, 2020. Accordingly, minimum capital conservation ratios as applicable from March 31, 2018, will also apply for a further period of six months from March 31, 2020 till the CCB attains the level of 2.5 per cent on September 30, 2020. Further, the pre-specified trigger for loss absorption through conversion/write-down of additional tier 1 instruments (perpetual non-cumulative preference shares and perpetual debt instruments) shall remain at 5.5 per cent of risk weighted assets (RWAs) and will rise to 6.125 per cent of RWAs on September 30, 2020. • The implementation of net stable funding ratio (NSFR) was deferred by six months from April 1, 2020 to October 1, 2020.
April 1, 2020	Based on the review and empirical analysis of counter cyclical capital buffer (CCyB) indicators, it was decided not to activate CCyB (framework for which was put in place in terms of guidelines issued on February 5, 2015, with pre-announcement of the decision to activate it as and when circumstances warranted) for a period of one year or earlier, as may be necessary.
April 17, 2020	• It was decided that in respect of all accounts for which lending institutions decide to grant moratorium or deferment, and which were standard as on March 1, 2020, the 90-day NPA norm shall exclude the moratorium period, *i.e.*, there would be an asset classification standstill for all such accounts from March 1, 2020 to May 31, 2020. At the same time, with the objective of ensuring that banks maintain sufficient buffers and remain adequately provisioned to meet future challenges, they will have to maintain higher provision of 10 per cent on all such accounts under the standstill, spread over two quarters, *i.e.*, March, 2020 and June, 2020. These provisions can be adjusted later on against the provisioning requirements for actual slippages in such accounts.

Date of Announcement	Policy Initiative
	• Under the Reserve Bank's prudential framework of resolution of stressed assets dated June 7, 2019, in the case of large accounts under default, SCBs are currently required to hold an additional provision of 20 per cent if a resolution plan has not been implemented within 210 days from the date of such default. Recognising the challenges to resolution of stressed assets in the current volatile environment, it has been decided that the period for resolution plan shall be extended by 90 days. • With a view to conserve capital of banks to retain their capacity to support the economy and absorb losses in an environment of heightened uncertainty, it was decided that, SCBs shall not make any further dividend payouts from profits pertaining to the financial year ended March 31, 2020 until further instructions. This restriction shall be reviewed on the basis of the financial position of banks for the quarter ending September 30, 2020. • In order to ease the liquidity position at the level of individual institutions, the LCR requirement for SCBs was brought down from 100 per cent to 80 per cent with immediate effect. The requirement shall be gradually restored back in two phases – 90 per cent by October 1, 2020 and 100 per cent by April 1, 2021.
April 29, 2020	In order to mitigate the difficulties in timely submission of various regulatory returns, due to disruptions on account of COVID-19 pandemic, the timelines for the submission were extended for the regulated entities, permitting a delay of up to 30 days from the due date, which will be applicable to regulatory returns required to be submitted up to June 30, 2020. However, no extension is permitted for submission of statutory returns, *i.e.* returns prescribed under the Banking Regulation Act 1949, RBI Act 1934 or any other Act (for instance, returns related to CRR/SLR).
May 13, 2020	Interest equalisation scheme on pre and post shipment rupee export credit was extended by GoI for one year, *i.e.*, up to March 31, 2021, with same scope and coverage and all extant operational instructions issued by the Reserve Bank under the said captioned scheme shall continue to remain in force up to March 31, 2021.
May 22, 2020	The bank rate was revised downwards by 40 bps from 4.65 per cent to 4.25 per cent with effect from May 22, 2020. Accordingly, all penal interest rates on shortfall in reserve requirements, which are specifically linked to the bank rate, also stand revised as bank rate plus 3.0 percentage points (7.25 per cent from the earlier 7.65 per cent) or bank rate plus 5.0 percentage points (9.25 per cent instead of the earlier rate of 9.65 per cent), depending on the duration of the shortfalls.
May 23, 2020	• With a view to facilitate greater flow of resources to corporates that faced difficulties in raising funds from the capital market and predominantly dependent on bank funding, caused by sudden market uncertainties, a bank's exposure under the Large Exposure Framework, to a group of connected counterparties was increased from 25 per cent to 30 per cent of the eligible capital base of the bank. The increased limit will be applicable up to June 30, 2021. • Taking forward the COVID-19 regulatory package released in March and April 2020, additional measures were announced, providing relaxations in repayment pressures and improving access to working capital by mitigating the burden of debt servicing, for preventing the transmission of financial stress to the real economy, and ensuring the continuity of viable businesses and households on continuous economic disruption due to extension of lockdown. • Further extension of the resolution timelines, prescribed in the prudential framework for resolution of stressed assets dated June 7, 2019, was provided after a review in continuation of the earlier instructions of April 2020, on account of continued challenges to resolution of stressed assets in a volatile environment. This was applicable in respect of accounts which were within and past the review period as on March 1, 2020, subject to conditions.

Date of Announcement	Policy Initiative
	• To alleviate genuine difficulties being faced by exporters in their production and realisation cycles, the maximum permissible period of pre-shipment and post-shipment export credit sanctioned by banks was increased from one year to 15 months, for disbursements made up to July 31, 2020. This was in line with the permission already granted for increase in the period of realisation and repatriation of the export proceeds to India from nine months to 15 months from the date of export in respect of exports made up to July 31, 2020.
June 21, 2020	As credit facilities to MSME borrowers, extended under the emergency credit line guarantee scheme of GoI guaranteed by national credit guarantee trustee company (NCGTC), are backed by an unconditional and irrevocable guarantee provided by the GoI, member lending institutions, *viz.*, SCBs (including scheduled RRBs), NBFCs (including HFCs as eligible under the scheme) and AIFIs, were permitted to assign zero per cent risk weight on the credit facilities extended under the scheme to the extent of guarantee coverage.
Department of Supervision	
March 16, 2020	Banks and financial institutions were advised regarding an indicative list of measures to be taken by them as part of their operational and business continuity plans.
Consumer Education and Protection Department	
April 3, 2020	The consumer education and protection cells at the Reserve Bank's ROs and all subordinate offices under the centralised public grievance redress and monitoring system (CPGRAMS) were advised regarding the prompt handling of public grievances pertaining to COVID-19 in line with GoI guidelines.
Internal Debt Management Department	
April 1, 2020	The WMA limit of state governments/union territories (UTs) were increased by 30 per cent from the limit existing on March 31, 2020, to enable the state governments to tide over the fiscal stress. The revised limits came into effect from April 1, 2020 and will be valid till September 30, 2020.
April 7, 2020	In order to provide greater flexibility to state governments to tide over their cash-flow mismatches, the 'overdraft (OD) scheme for state governments' was reviewed and the number of days for which a State/UT can be in OD continuously, was increased from 14 working days to 21 working days. Further, the number of days for which a State/ UT can be in OD in a quarter, was increased from 36 working days to 50 working days.
April 17, 2020	With a view to provide greater comfort to state governments in undertaking containment and mitigation efforts, and to enable them to plan their market borrowings, the WMA limit of states was increased further, by 60 per cent over and above the level existing on March 31, 2020. The increased limit would be valid till September 30, 2020.
April 20, 2020	It was decided in consultation with the GoI, that the limit for WMA of GoI for the remaining part of first half of the financial year 2020-21 (April 2020 to September 2020) will be revised from ₹1,20,000 crore to ₹2,00,000 crore.
May 22, 2020	The 'scheme for constitution and administration of consolidated sinking fund (CSF)' was reviewed and the rules governing withdrawal from CSF were relaxed, while ensuring that a sizeable corpus is retained in the Fund.

Date of Announcement	Policy Initiative
Department of Payment and Settlement Systems	
March 16, 2020	Press release informing the general public about round the clock availability of payment systems that could be used for making payments from comfort of their home by avoiding social contact.
March 24, 2020	Extension of timeline for compliance with various payment system requirements.
June 4, 2020	Further extension in timeline provided to payment system operators to comply with various payment system requirements.
June 22, 2020	Authorised payment system operators and participants were advised to undertake targeted multi-lingual campaigns to educate their users on safe and secure use of digital payments.

APPENDIX TABLE 1: MACROECONOMIC AND FINANCIAL INDICATORS

Item		Average 2003-04 to 2007-08 (5 years)	Average 2009-10 to 2013-14 (5 years)	2017-18	2018-19	2019-20
1		2	3	4	5	6
I. Real Economy						
I.1	Real GDP at market prices (% change)*	7.9	6.7	7.0	6.1	4.2
I.2	Real GVA at basic prices (% change)*	7.7	6.3	6.6	6.0	3.9
I.3	Foodgrains Production (Million tonnes)	213.6	248.8	285.0	285.2	296.7
I.4	a) Food Stocks (Million tonnes at end-March)	18.6	50.0	43.3	72.7	74.0
	b) Procurement	39.4	61.3	68.2	80.4	73.6
	c) Off-take	41.5	56.9	60.3	65.9	62.2
I.5	Index of Industrial Production (% change)	11.2	4.6	4.4	3.8	-0.8
I.6	Index of Eight Core Industries (% change)	5.9	4.9	4.3	4.4	0.4
I.7	Gross Domestic Saving Rate (% of GNDI at current prices)*	33.6	33.9	32.0	29.7	_
I.8	Gross Domestic Investment Rate (% of GDP at current prices)*	35.2	38.0	34.2	32.2	_
II. Prices						
II.1	Consumer Price Index (CPI) Combined (average % change)	_	_	3.6	3.4	4.8
II.2	CPI- Industrial Workers (average % change)	5.0	10.3	3.1	5.4	7.5
II.3	Wholesale Price Index (average % change)[#]	5.5	7.1	2.9	4.3	1.7
III. Money and Credit						
III.1	Reserve Money (% change)	20.4	12.1	27.3	14.5	9.4
III.2	Broad Money (M_3) (% change)	18.6	14.7	9.2	10.5	8.9
III.3	a) Aggregate Deposits of Scheduled Commercial Banks (% change)	20.2	15.0	6.2	10.0	7.9
	b) Bank Credit of Scheduled Commercial Banks (% change)	26.7	16.7	10.0	13.3	6.1
IV. Financial Markets						
IV.1	Interest rates (%)					
	a) Call/Notice Money rate	5.6	7.2	5.9	6.3	5.4
	b) 10 year G-Sec yield	7.0	8.0	7.0	7.7	6.7
	c) 91-Days T-bill yield	-	-	6.2	6.6	5.5
	d) Weighted Average cost of Central Government Borrowings	-	-	7.0	7.8	6.9
	e) Commercial Paper	7.7	8.4	7.0	7.6	6.6
	f) Certificate of Deposits[##]	8.9	8.2	6.6	7.3	5.9
IV.2	Liquidity (₹ lakh crore)					
	a) LAF Outstanding[~]	-	-	-0.6	-1.5	2.6
	b) MSS Outstanding[~~]	-	-	0.0	0.0	0.0
	c) Average Daily Call Money Market Turnover	0.2	0.3	0.3	0.4	0.3
	d) Average Daily G-Sec Market Turnover[###]	0.1	0.2	0.5	0.4	0.6
	e) Variable Rate Repo[$]	-	-	2.6	1.6	0.9
	f) Variable Rate Reverse Repo[$]	-	-	0.2	0.0	1.2
	g) MSF[$]	-	-	0.53	0.94	0.02
V. Government Finances[&]						
V.1	Central Government Finances (% of GDP)					
	a) Revenue Receipts	10.0	9.2	8.4	8.2	8.3
	b) Capital Outlay	1.6	1.6	1.4	1.5	1.5
	c) Total Expenditure	14.9	15.0	12.5	12.2	13.2
	d) Gross Fiscal Deficit	3.7	5.4	3.5	3.4	4.6
V.2	State Government Finances[&&]					
	a) Revenue Deficit (% of GDP)	0.4	0.0	0.1	0.1	0.6
	b) Gross Fiscal Deficit (% of GDP)	2.7	2.2	2.4	2.1	2.8
	c) Primary Deficit (% of GDP)	0.3	0.6	0.7	0.6	1.3

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)	2017-18	2018-19	2019-20
1	2	3	4	5	6
VI. External Sector					
VI.1 Balance of Payments					
a) Merchandise Exports (% change)	25.3	12.2	10.3	9.1	-5.0
b) Merchandise Imports (% change)	32.3	9.7	19.5	10.3	-7.6
c) Trade Balance/GDP (%)	-5.5	-9.1	-6.0	-6.6	-5.5
d) Invisible Balance/GDP (%)	5.2	5.8	4.2	4.5	4.6
e) Current Account Balance/GDP (%)	-0.3	-3.3	-1.8	-2.1	-0.9
f) Net Capital Flows/GDP (%)	4.7	3.8	3.4	2.0	2.9
g) Reserve Changes [(BoP basis) (US$ billion) [(Increase (-)/ Decrease (+)]	-40.3	-6.6	-43.6	3.3	-59.5
VI.2 External Debt Indicators					
a) External Debt Stock (US$ billion)	156.5	359.0	529.3	543.1	558.5
b) Debt-GDP Ratio (%)	17.8	20.9	20.1	19.8	20.6
c) Import cover of Reserves (in Months)	14.0	8.5	10.9	9.6	12.0
d) Short-term Debt to Total Debt (%)	13.6	21.3	19.3	20.0	19.1
e) Debt Service Ratio (%)	8.3	5.6	7.5	6.4	6.5
f) Reserves to Debt (%)	113.7	84.8	80.2	76.0	85.5
VI.3 Openness Indicators (%)					
a) Export plus Imports of Goods/GDP	30.7	41.0	29.3	31.5	27.8
b) Export plus Imports of Goods & Services/GDP	41.3	53.2	41.1	43.8	39.7
c) Current Receipts plus Current Payments/GDP	47.1	59.4	46.5	49.6	45.6
d) Gross Capital Inflows plus Outflows/GDP	37.3	50.4	45.1	38.0	39.6
e) Current Receipts & Payments plus Capital Receipts & Payments/GDP	84.4	109.8	91.6	87.5	85.3
VI.4 Exchange Rate Indicators					
a) Exchange Rate (Rupee/US Dollar)					
End of Period	43.1	51.1	65.0	69.2	75.4
Average	44.1	51.2	64.5	69.9	70.9
b) 36 - Currency REER (% change)	3.1^	0.8	4.5	-4.8	2.4
c) 36 - Currency NEER (% change)	1.7^	-4.9	3.1	-5.6	0.9
d) 6 - Currency REER (% change)	4.4^	1.9	3.2	-5.8	3.3
e) 6 - Currency NEER (% change)	1.6^	-5.4	1.6	-7.1	0.8

- : Not Available.
* : Data are at 2011-12 base year series.
# : Base year for WPI is 2011-12=100 for annual data and 2004-05=100 for average of 5 years inflation.
: 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.
& : Data for 2019-20 are Provisional Accounts.
&& : Data upto 2017-18 pertains to all States and Union Territories. From 2018-19 onwards, data are provisional and pertains to 25 States only.
^ : Average of period 2005-06 to 2007-08.
Note : Real Effective Exchange Rate (REER) are based on CPI (combined).
Source : RBI, National Statistical Office, Ministry of Agriculture & Farmers Welfare, Ministry of Commerce and Industry, Food Corporation of India (FCI), Labour Bureau and Budget documents of the central and state governments.

APPENDIX TABLE 2 : GROWTH RATES AND COMPOSITION OF REAL GROSS DOMESTIC PRODUCT

(At 2011-12 Prices)

(Per cent)

Sector	Growth Rate				Share		
	Average 2013-14 to 2019-20	2017-18	2018-19	2019-20	2017-18	2018-19	2019-20
1	2	3	4	5	6	7	8
Expenditure Side GDP							
1. Private Final Consumption Expenditure	7.0	7.0	7.2	5.3	56.0	56.6	57.2
2. Government Final Consumption Expenditure	7.9	11.8	10.1	11.8	10.2	10.6	11.3
3. Gross Fixed Capital Formation	4.8	7.2	9.8	-2.8	30.8	31.9	29.8
4. Change in Stocks	16.4	76.0	22.5	1.9	1.6	1.9	1.9
5. Valuables	-1.0	27.2	-11.9	13.5	1.5	1.2	1.3
6. Net Exports	-17.1	-257.7	11.8	29.2	-3.6	-3.0	-2.0
a) Exports	3.2	4.6	12.3	-3.6	19.7	20.9	19.3
b) Less Imports	1.5	17.4	8.6	-6.8	23.4	23.9	21.4
7. Discrepancies	-58.4	65.1	-73.9	-25.6	3.5	0.9	0.6
8. GDP	**6.8**	**7.0**	**6.1**	**4.2**	**100.0**	**100.0**	**100.0**
GVA at Basic Prices (Supply Side)							
1. Agriculture, forestry and fishing	**3.6**	**5.9**	**2.4**	**4.0**	**15.1**	**14.6**	**14.6**
2. Industry	**6.4**	**6.8**	**4.5**	**0.8**	**23.4**	**23.1**	**22.4**
of which :							
a) Mining and quarrying	4.6	4.9	-5.8	3.1	3.0	2.7	2.7
b) Manufacturing	6.6	6.6	5.7	0.0	18.1	18.1	17.4
c) Electricity, gas, water supply and other utility services	7.1	11.2	8.2	4.1	2.3	2.3	2.3
3. Services	**7.4**	**6.7**	**7.5**	**5.0**	**61.4**	**62.3**	**62.9**
of which :							
a) Construction	4.1	5.0	6.1	1.3	8.0	8.0	7.8
b) Trade, hotels, transport, communication and services related to broadcasting	7.5	7.6	7.7	3.6	19.1	19.4	19.4
c) Financial, real estate and professional services	8.2	4.7	6.8	4.6	21.6	21.8	21.9
d) Public Administration, defence and other services	8.1	9.9	9.4	10.0	12.7	13.1	13.9
4. GVA at basic prices	**6.5**	**6.6**	**6.0**	**3.9**	**100.0**	**100.0**	**100.0**

Source: National Statistical Office (NSO).

APPENDIX TABLE 3: GROSS SAVINGS

(Per cent of GNDI)

Item	2015-16	2016-17	2017-18	2018-19
1	2	3	4	5
I. Gross Savings	**30.5**	**30.9**	**32.0**	**29.7**
1.1 Non-financial corporations	**12.0**	**11.6**	**11.9**	**10.7**
1.1.1 Public non-financial corporations	1.1	1.1	1.4	1.3
1.1.2 Private non-financial corporations	10.9	10.5	10.6	9.4
1.2 Financial corporations	**2.1**	**2.2**	**2.2**	**1.8**
1.2.1 Public financial corporations	1.3	1.4	1.4	0.9
1.2.2 Private financial corporations	0.8	0.9	0.9	0.9
1.3 General Government	**-1.2**	**-0.8**	**-1.1**	**-0.8**
1.4 Household sector	**17.6**	**17.9**	**18.9**	**17.9**
1.4.1 Net financial saving	7.9	7.3	7.6	6.4
Memo: Gross financial saving	10.7	10.4	11.9	10.4
1.4.2 Saving in physical assets	9.4	10.2	11.0	11.3
1.4.3 Saving in the form of valuables	0.3	0.3	0.2	0.2

GNDI : Gross national disposable income.

Note : Net financial saving of the household sector is obtained as the difference between gross financial savings and financial liabilities during the year.

Source : National Statistical Office (NSO).

APPENDIX TABLE 4: INFLATION, MONEY AND CREDIT

(Per cent)

Inflation									
Consumer Price Index (All India)#	**Rural**			**Urban**			**Combined**		
	2017-18	**2018-19**	**2019-20**	**2017-18**	**2018-19**	**2019-20**	**2017-18**	**2018-19**	**2019-20**
1	2	3	4	5	6	7	8	9	10
General Index (All Groups)	**3.6**	**3.0**	**4.3**	**3.6**	**3.9**	**5.4**	**3.6**	**3.4**	**4.8**
Food and beverages	2.4	0.7	4.8	1.8	0.7	8.1	2.2	0.7	6.0
Housing	…	…	…	6.5	6.7	4.5	6.5	6.7	4.5
Fuel and light	6.5	6.0	1.1	5.6	5.2	1.7	6.2	5.7	1.3
Miscellaneous	4.3	6.3	5.1	3.1	5.4	3.7	3.8	5.8	4.4
Excluding Food and Fuel	4.7	5.7	4.1	4.6	5.9	4.0	4.6	5.8	4.0
Other Price Indices	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**	**2018-19**	**2019-20**
1. Wholesale Price Index (2011-12=100)*									
All Commodities	**8.9**	**7.4**	**5.2**	**1.3**	**-3.7**	**1.7**	**2.9**	**4.3**	**1.7**
Primary Articles	9.8	9.8	9.8	2.2	-0.4	3.4	1.4	2.7	6.8
of which : Food Articles	7.3	9.9	12.3	5.6	2.6	4.0	2.1	0.3	8.4
Fuel and Power	14.0	10.3	7.1	-6.1	-19.7	-0.3	8.2	11.5	-1.8
Manufactured Products	7.3	5.4	3.0	2.6	-1.8	1.3	2.7	3.7	0.3
Non-Food Manufactured Products	7.3	4.9	2.7	2.7	-1.8	-0.1	3.0	4.2	-0.4
2. CPI- Industrial Workers (IW) (2001=100)	**8.4**	**10.4**	**9.7**	**6.3**	**5.6**	**4.1**	**3.1**	**5.4**	**7.5**
of which : CPI- IW Food	6.3	11.9	12.3	6.5	6.1	4.4	1.5	0.6	7.4
3. CPI- Agricultural Labourers (1986-87=100)	**8.2**	**10.0**	**11.6**	**6.6**	**4.4**	**4.2**	**2.2**	**2.1**	**8.0**
4. CPI- Rural Labourers (1986-87=100)	**8.3**	**10.2**	**11.5**	**6.9**	**4.6**	**4.2**	**2.3**	**2.2**	**7.7**
Money and Credit									
	2011-12	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17^**	**2017-18**	**2018-19**	**2019-20**
Reserve Money (RM)	**3.6**	**6.2**	**14.4**	**11.3**	**13.1**	**-12.9**	**27.3**	**14.5**	**9.4**
Currency in Circulation	12.4	11.6	9.2	11.3	14.9	-19.7	37.0	16.8	14.5
Bankers' Deposits with RBI	-15.9	-10.0	34.0	8.3	7.8	8.4	3.9	6.4	-9.6
Currency-GDP Ratio$	12.2	12.0	11.6	11.6	12.1	8.7	10.7	11.3	12.0
Narrow Money (M1)	**6.0**	**9.2**	**8.5**	**11.3**	**13.5**	**-3.9**	**21.8**	**13.6**	**11.2**
Broad Money (M3)	**13.5**	**13.6**	**13.4**	**10.9**	**10.1**	**6.9**	**9.2**	**10.5**	**8.9**
Currency-Deposit Ratio	16.1	15.7	15.1	15.2	16.0	11.0	14.4	15.4	16.3
Money Multiplier (Ratio)##	5.2	5.5	5.5	5.5	5.3	6.7	5.8	5.6	5.5
GDP-M_3 Ratio$##	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Scheduled Commercial Banks									
Aggregate Deposits	13.5	14.2	14.1	10.7	9.3	11.3	6.2	10.0	7.9
Bank Credit	17.0	14.1	13.9	9.0	10.9	4.5	10.0	13.3	6.1
Non-food Credit	16.8	14.0	14.2	9.3	10.9	5.2	10.2	13.4	6.1
Credit-Deposit Ratio	78.0	77.9	77.8	76.6	77.7	72.9	75.5	77.7	76.4
Credit-GDP Ratio$	52.8	52.9	53.4	52.4	52.6	50.9	50.4	51.5	51.0

\# : Base for Consumer Price Index (All India) is 2012=100.
… : CPI Rural for Housing is not compiled.
* : Base for WPI is 2004-05=100 for the period 2011-12 to 2012-13 and 2011-12=100 for the period 2013-14 to 2019-20.
\## : Not expressed in per cent.
^ : March 31, 2017 over April 1, 2016 barring RM and its components.
$: GDP data from 2011-12 onwards are based on new series *i.e.*, base: 2011-12. GDP refers to GDP at Current Market Prices.
Note : Data refer to y-o-y change in per cent unless specified otherwise.
Source: RBI, NSO, Labour Bureau and Ministry of Commerce and Industry.

APPENDIX TABLE 5: CAPITAL MARKET - PRIMARY AND SECONDARY

(Amount in ₹ lakh crore)

Item	2018-19		2019-20 P	
	Number	Amount	Number	Amount
1	2	3	4	5
I. PRIMARY MARKET				
A. Prospectus and Rights Issues				
1. Private Sector (a+b)	**154**	**0.5**	**106**	**0.8**
a) Financial	31	0.4	38	0.2
b) Non-Financial	123	0.1	68	0.6
2. Public Sector (a+b+c)	**4**	**0.0**	**3**	**0.1**
a) Public Sector Undertakings	4	0.0	2	0.0
b) Government Companies	…	…	…	…
c) Banks/Financial Institutions	…	…	1	0.1
3. Total (1+2, i+ii, a+b)	**158**	**0.5**	**109**	**0.9**
Instrument Type				
(i) Equity	133	0.2	75	0.8
(ii) Debt	25	0.4	34	0.1
Issuer Type				
(a) IPOs	123	0.2	58	0.2
(b) Listed	35	0.4	51	0.7
B. Euro Issues (ADRs and GDRs)	**1**	**0.1**	**…**	**…**
C. Private Placement				
1. Private Sector (a+b)	**2,162**	**3.9**	**1,467**	**3.3**
a) Financial	1,911	2.7	1,279	2.3
b) Non-Financial	251	1.2	188	1.0
2. Public Sector (a+b)	**187**	**2.5**	**244**	**3.5**
a) Financial	150	2.1	157	2.2
b) Non-Financial	37	0.4	87	1.4
3. Total (1+2, i+ii)	**2,349**	**6.4**	**1,711**	**6.8**
(i) Equity	14	0.1	13	0.5
(ii) Debt	2,335	6.3	1,698	6.3
D. Qualified Institutional Placement	**14**	**0.1**	**13**	**0.5**
E. Mutual Funds Mobilisation (Net)#		**1.1**		**0.9**
1. Private Sector		0.6		0.2
2. Public Sector		0.5		0.6
II. SECONDARY MARKET				
BSE				
BSE Sensex: End-Period	38,672.9		29,468.5	
Period Average	35,971.8		38,756.7	
Price Earning Ratio@	28.0		17.8	
Market Capitalisation to GDP ratio (%)	79.6		55.8	
Turnover Cash Segment		7.8		6.6
Turnover Derivatives Segment		0.0		2.6
NSE				
S&P CNX Nifty: End-Period	11,623.9		8,597.8	
Period Average	10,859.5		11,488.0	
Price Earning Ratio@	29.0		19.4	
Market Capitalisation to GDP ratio (%)	78.7		55.3	
Turnover Cash Segment		79.5		90.0
Turnover Derivatives Segment		2,376.0		3,445.3

…: Nil. P: Provisional (for 2019-20). **#:** Net of redemptions. @: As at end of the period.

Source: SEBI, NSE, BSE and various merchant bankers.

APPENDIX TABLE 6: KEY FISCAL INDICATORS

(As per cent of 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	4.0	3.2	-0.5	7.7	54.6	60.6
1995-96	0.8	2.5	-1.7	5.0	50.3	58.3
2000-01	0.9	4.0	-0.7	5.6	54.6	60.4
2009-10	3.2	5.3	2.0	6.6	55.4	57.3
2010-11	1.8	3.3	0.2	4.9	51.6	53.2
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	50.5	52.2
2014-15	0.9	2.9	-0.3	4.1	50.1	51.4
2015-16	0.7	2.5	-0.7	3.9	50.1	51.5
2016-17	0.4	2.1	-1.1	3.5	48.4	49.5
2017-18	0.4	2.6	-0.5	3.5	48.3	49.7
2018-19	0.4	2.4	-0.7	3.4	48.4	49.6
2019-20 (RE)#	0.7	2.5	-0.6	3.8	49.9	51.4
2019-20 (PA)	1.6	3.3	0.3	4.6	...	...
2020-21 (BE)	0.4	2.7	-0.4	3.5	49.5	50.7
States*						
1990-91	1.8	0.9	-0.6	3.3	22.2	22.2
1995-96	0.8	0.7	-1.1	2.6	20.8	20.8
2000-01	1.8	2.5	0.1	4.2	28.1	28.1
2009-10	1.2	0.4	-1.4	3.0	26.4	26.4
2010-11	0.4	-0.2	-1.8	2.1	24.4	24.4
2011-12	0.4	-0.3	-1.9	2.0	23.2	23.2
2012-13	0.4	-0.3	-1.8	2.0	22.6	22.6
2013-14	0.7	0.0	-1.5	2.2	22.3	22.3
2014-15	1.1	0.3	-1.2	2.6	22.0	22.0
2015-16	1.5	0.0	-1.6	3.0	23.7	23.7
2016-17	1.8	0.2	-1.4	3.5	25.1	25.1
2017-18	0.7	0.1	-1.6	2.4	25.1	25.1
2018-19	0.6	0.1	-1.4	2.1	22.3	22.3
2019-20 (RE)	1.3	0.6	-0.9	2.8	23.0	23.1
2020-21 (BE)	0.8	0.0	-1.5	2.3	23.3	23.3
Combined*						
1990-91	5.0	4.1	-0.2	9.3	64.0	70.1
1995-96	1.5	3.1	-1.8	6.4	60.4	68.5
2000-01	3.5	6.5	0.7	9.3	69.2	75.0
2009-10	4.6	5.8	0.9	9.5	70.0	71.8
2010-11	2.4	3.3	-1.3	7.0	65.3	66.9
2011-12	3.3	4.2	-0.3	7.8	65.6	67.4
2012-13	2.3	3.5	-1.1	6.9	65.1	66.7
2013-14	1.9	3.3	-1.5	6.7	65.4	67.1
2014-15	2.0	3.3	-1.4	6.7	65.2	66.6
2015-16	2.2	2.5	-2.2	6.9	67.1	68.5
2016-17	2.2	2.3	-2.4	6.9	67.6	68.8
2017-18	1.1	2.7	-2.1	5.8	68.4	69.8
2018-19	0.9	2.5	-2.1	5.4	66.2	67.5
2019-20 (RE)	1.9	3.1	-1.5	6.5	69.0	70.4
2020-21 (BE)	1.1	2.7	-1.9	5.8	69.2	70.5

... : 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.
Columns 6 and 7 are outstanding figures as at end-March of respective years.
* : Data upto 2017-18 pertains to all States and Union Territories. From 2018-19 onwards, data are provisional and pertains to 25 States only.
# : Going by the principle of using latest GDP data for any year, GDP used for 2019-20 (RE) is the latest available Provisional Estimates. In view of this, the fiscal indicators as per cent to GDP given in this Table may at times marginally vary from those reported in the Union Budget documents.

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 figures used in this table are on 2011-12 base, which are the latest available estimates.

Source : Budget documents of central and state governments, Status paper on government debt, 2018-19 and Quarterly report on public debt management (Jan-March, 2020).

APPENDIX TABLE 7: COMBINED RECEIPTS AND DISBURSEMENTS OF THE CENTRAL AND STATE GOVERNMENTS

(Amount in ₹ thousand crore)

Item	2015-16	2016-17	2017-18	2018-19	2019-20 (RE)	2020-21 (BE)
1	2	3	4	5	6	7
1 Total Disbursements	3,760.6	4,266.0	4,515.9	4,592.8	5,384.0	5,891.7
1.1 Developmental	2,201.3	2,537.9	2,635.1	2,561.8	3,136.6	3,399.6
1.1.1 Revenue	1,668.3	1,878.4	2,029.0	1,969.2	2,430.0	2,600.3
1.1.2 Capital	412.1	501.2	519.4	536.1	631.8	701.2
1.1.3 Loans	121.0	158.3	86.7	56.6	74.8	98.1
1.2 Non-Developmental	1,510.8	1,672.7	1,812.5	1,961.3	2,163.6	2,405.7
1.2.1 Revenue	1,379.7	1,555.2	1,741.4	1,851.4	2,049.1	2,283.4
1.2.1.1 Interest Payments	648.1	724.5	814.8	857.0	931.4	1,043.2
1.2.2 Capital	127.3	115.8	69.4	108.9	113.3	121.0
1.2.3 Loans	3.8	1.6	1.7	1.0	1.2	1.4
1.3 Others	48.5	55.4	68.4	69.6	83.9	86.4
2 Total Receipts	3,778.1	4,288.4	4,528.4	4,575.7	5,286.3	5,953.5
2.1 Revenue Receipts	2,748.4	3,132.2	3,376.4	3,422.2	3,938.3	4,364.5
2.1.1 Tax Receipts	2,297.1	2,622.2	2,978.1	3,009.9	3,282.5	3,670.4
2.1.1.1 Taxes on commodities and services	1,441.0	1,652.4	1,853.9	1,844.7	1,970.0	2,232.6
2.1.1.2 Taxes on Income and Property	852.3	965.6	1,121.2	1,162.4	1,308.3	1,433.3
2.1.1.3 Taxes of Union Territories (Without Legislature)	3.9	4.2	3.1	2.8	4.2	4.5
2.1.2 Non-Tax Receipts	451.3	510.1	398.3	412.3	655.8	694.1
2.1.2.1 Interest Receipts	35.8	33.2	34.2	35.1	32.6	30.2
2.2 Non-debt Capital Receipts	59.8	69.1	142.4	138.2	124.1	230.4
2.2.1 Recovery of Loans & Advances	16.6	20.9	42.2	42.6	57.1	16.5
2.2.2 Disinvestment proceeds	43.3	48.1	100.2	95.6	67.0	213.9
3 Gross Fiscal Deficit [1 - (2.1 + 2.2)]	952.4	1,064.7	997.1	1,032.4	1,321.7	1,296.8
3A Sources of Financing: Institution-wise						
3A.1 Domestic Financing	939.7	1,046.7	989.2	1,026.9	1,316.7	1,292.2
3A.1.1 Net Bank Credit to Government	231.1	617.1	144.8	387.1	518.1	…
3A.1.1.1 Net RBI Credit to Government	60.5	195.8	-144.8	326.0	190.2	…
3A.1.2 Non-Bank Credit to Government	708.6	429.6	844.4	639.8	798.6	…
3A.2 External Financing	12.8	18.0	7.9	5.5	4.9	4.6
3B Sources of Financing: Instrument-wise						
3B.1 Domestic Financing	939.7	1,046.7	989.2	1,026.9	1,316.7	1,292.2
3B.1.1 Market Borrowings (net)	673.3	689.8	794.9	750.8	904.0	1,016.9
3B.1.2 Small Savings (net)	-78.5	-105.0	-163.2	-198.6	-311.5	-286.6
3B.1.3 State Provident Funds (net)	35.3	45.7	42.4	40.9	35.8	37.5
3B.1.4 Reserve Funds	-3.3	-6.4	18.4	-18.3	-0.2	3.0
3B.1.5 Deposits and Advances	13.5	17.8	25.1	66.3	32.9	36.0
3B.1.6 Cash Balances	-17.4	-22.5	-12.5	17.1	97.8	-61.8
3B.1.7 Others	316.9	427.3	284.1	368.7	558.0	547.1
3B.2 External Financing	12.8	18.0	7.9	5.5	4.9	4.6
4 Total Disbursements as per cent of GDP	27.3	27.7	26.4	24.2	26.5	26.2
5 Total Receipts as per cent of GDP	27.4	27.9	26.5	24.1	26.0	26.5
6 Revenue Receipts as per cent of GDP	20.0	20.3	19.7	18.0	19.4	19.4
7 Tax Receipts as per cent of GDP	16.7	17.0	17.4	15.9	16.1	16.3
8 Gross Fiscal Deficit as per cent of GDP	6.9	6.9	5.8	5.4	6.5	5.8

… : Not Available. RE: Revised Estimates. BE: Budget Estimates.

Note : Data upto 2017-18 pertains to all States and Union Territories. From 2018-19 onwards, data are provisional and pertains to 25 States only. GDP data are based on 2011-12 base.

Source : Budget Documents of the central and state governments.

APPENDIX TABLE 8: INDIA'S OVERALL BALANCE OF PAYMENTS

(US$ million)

		2015-16	2016-17	2017-18	2018-19	2019-20 (P)
1		2	3	4	5	6
A.	**CURRENT ACCOUNT**					
	1 Exports, f.o.b.	2,66,365	2,80,138	3,08,970	3,37,237	3,20,431
	2 Imports, c.i.f.	3,96,444	3,92,580	4,69,006	5,17,519	4,77,937
	3 Trade Balance	-1,30,079	-1,12,442	-1,60,036	-1,80,283	-1,57,506
	4 Invisibles, Net	1,07,928	98,026	1,11,319	1,23,026	1,32,850
	a) 'Non-Factor' Services of which :	69,676	68,345	77,562	81,941	84,922
	Software Services	71,454	70,763	72,186	77,654	84,643
	b) Income	-24,375	-26,302	-28,681	-28,861	-27,281
	c) Private Transfers	63,139	56,573	62,949	70,601	76,217
	5 Current Account Balance	-22,151	-14,417	-48,717	-57,256	-24,656
B.	**CAPITAL ACCOUNT**					
	1 Foreign Investment, Net (a+b)	31,891	43,224	52,401	30,094	44,417
	a) Direct Investment	36,021	35,612	30,286	30,712	43,013
	b) Portfolio Investment	-4,130	7,612	22,115	-618	1,403
	2 External Assistance, Net	1,505	2,013	2,944	3,413	3,751
	3 Commercial Borrowings, Net	-4,529	-6,102	-183	10,416	22,960
	4 Short Term Credit, Net	-1,610	6,467	13,900	2,021	-1,026
	5 Banking Capital of which :	10,630	-16,616	16,190	7,433	-5,315
	NRI Deposits, Net	16,052	-12,367	9,676	10,387	8,627
	6 Rupee Debt Service	-73	-99	-75	-31	-69
	7 Other Capital, Net$	3,315	7,559	6,213	1,057	18,462
	8 Total Capital Account	41,128	36,447	91,390	54,403	83,180
C.	**Errors & Omissions**	-1,073	-480	902	-486	974
D.	**Overall Balance [A(5)+B(8)+C]**	17,905	21,550	43,574	-3,339	59,498
E.	**Monetary Movements (F+G)**	-17,905	-21,550	-43,574	3,339	-59,498
F.	**IMF, Net**	0	0	0	0	0
G.	**Reserves and Monetary Gold (Increase -, Decrease +)**	-17,905	-21,550	-43,574	3,339	-59,498
	***of which* : SDR allocation**	0	0	0	0	0
	Memo: As a ratio to GDP					
	1 Trade Balance	-6.2	-4.9	-6.0	-6.6	-5.5
	2 Net Services	3.3	3.0	2.9	3.0	3.0
	3 Net Income	-1.2	-1.1	-1.1	-1.1	-1.0
	4 Current Account Balance	-1.1	-0.6	-1.8	-2.1	-0.9
	5 Capital Net (Excld. changes in reserves)	2.0	1.6	3.4	2.0	2.9
	6 Foreign Investment, Net	1.5	1.9	2.0	1.1	1.5

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.

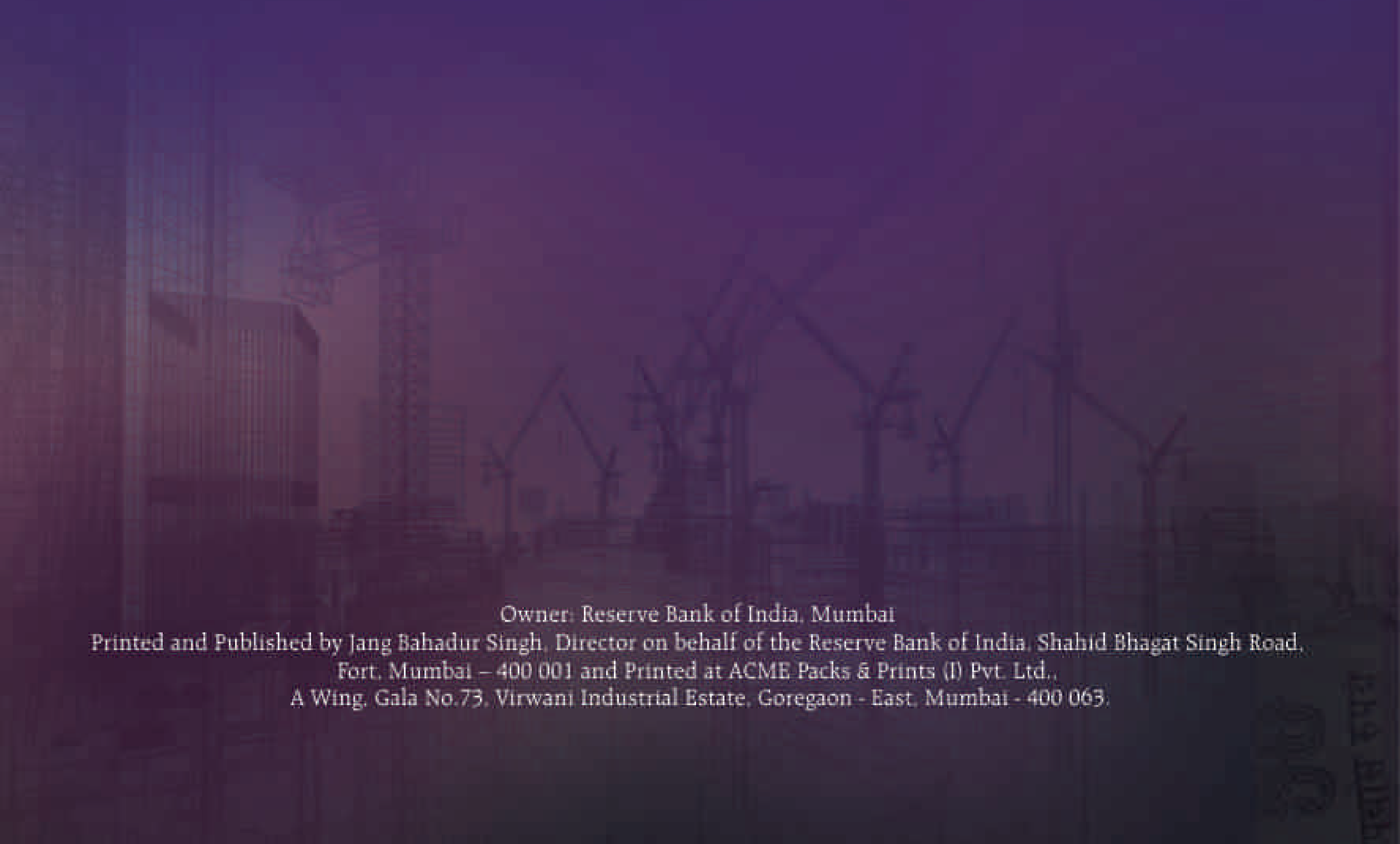
Source : RBI.

APPENDIX TABLE 9: FOREIGN DIRECT INVESTMENT FLOWS TO INDIA: COUNTRY-WISE AND INDUSTRY-WISE

(US$ million)

Source/Industry	2015-16	2016-17	2017-18	2018-19	2019-20 P
1	2	3	4	5	6
Total FDI	**36,068**	**36,317**	**37,366**	**38,744**	**42,629**
Country-wise Inflows					
Singapore	12,479	6,529	9,273	14,632	12,612
Mauritius	7,452	13,383	13,415	6,570	7,498
Netherlands	2,330	3,234	2,677	2,519	5,295
Cayman Islands	440	49	1,140	863	3,496
U.S.A.	4,124	2,138	1,973	2,823	3,401
Japan	1,818	4,237	1,313	2,745	2,308
France	392	487	403	375	1,167
United Kingdom	842	1,301	716	1,211	1,125
South Korea	241	466	293	982	777
Hongkong	344	134	1,044	598	678
Cyprus	488	282	290	161	657
Germany	927	845	1,095	817	443
Belgium	57	172	213	56	388
U.A.E.	961	645	408	853	323
Luxembourg	784	99	243	251	252
UK Virgin Islands	203	212	21	290	250
China	461	198	350	229	162
Others	1,725	1,905	2,498	2,768	1,796
Sector-wise Inflows					
Manufacturing	8,439	11,972	7,066	7,919	8,153
Communication Services	2,638	5,876	8,809	5,365	6,838
Retail & Wholesale Trade	3,998	2,771	4,478	4,311	4,914
Financial Services	3,547	3,732	4,070	6,372	4,326
Computer Services	4,319	1,937	3,173	3,453	4,104
Business services	3,031	2,684	3,005	2,597	3,684
Restaurants and Hotels	889	430	452	749	2,546
Transport	1,363	891	1,267	1,019	2,333
Construction	4,141	1,564	1,281	2,009	1,937
Electricity and other energy Generation, Distribution & Transmission	1,364	1,722	1,870	2,427	1,906
Real Estate Activities	112	105	405	213	564
Education, Research & Development	394	205	347	736	528
Miscellaneous Services	1,022	1,816	835	1,226	443
Mining	596	141	82	247	217
Trading	0	0	0	0	0
Others	215	470	226	102	137

P: Provisional.
Note: Includes FDI through SIA/FIPB and RBI routes only.
Source: RBI.



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